

CHILD TAX CREDIT RECIPIENTS EXPERIENCED A LARGER DECLINE IN FOOD INSECURITY AND A SIMILAR CHANGE IN EMPLOYMENT AS NONRECIPIENTS BETWEEN 2020 AND 2021

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The American Rescue Plan (ARP) Act of 2021 temporarily increased the amount of the child tax credit (CTC) for most families with children. It also directed the IRS to deliver up to half the credit in advance of the tax filing season in monthly payments from July to December 2021. For the first time in the credit's history, even families with very low incomes were eligible to receive the maximum benefit. The sixth and final monthly advanced payment reached the families of more than 61 million children, representing most children eligible for payments.¹

he introduction of the advanced CTC payments was associated with a near immediate decline in child poverty and food insufficiency (a measure of whether households did not have enough to eat in the past week) among households with children (Parolin et al. 2021; Shafer et al. 2022). Recent surveys suggest few parents planned to work less because of the credit and that the payments made it easier for some parents to engage in paid work or work more hours (Burnside 2021; Hamilton et al. 2021). Other research found the payments had no immediate effect on reducing employment (Ananat et al. 2021). Researchers have also produced estimates of the effect a permanent expansion of the credit could have on incentives to work; some suggest modest responses that would still result in dramatic reductions in poverty (Bastian 2022) and others suggest larger employment declines (Corinth et al. 2021).

In this brief, we add to the assessment of how the CTC affects employment and material hardship with data from the 2020 and 2021 rounds of the Urban Institute's Well-Being and Basic Needs Survey (WBNS). We estimate changes in material hardship and employment for adults living with children who received advanced CTC payments and compare them with changes for adults with and without children who did not get the payments. The WBNS allows us to follow the same adults between December 2020 and December 2021, providing insight into how their well-being, work status, and work hours changed after the advanced CTC payments became available in July 2021. Our analysis focuses on adults with annual family incomes in 2020 below 600 percent of the federal poverty level (FPL), about \$103,500 for a single person with one child and \$157,200 for a family of four. The enhanced CTC amount began phasing out at \$112,500 for single parents filing as heads of household and at \$150,000 for married couples filing jointly. The regular CTC amount continued to phase out at \$200,000 for single parents and \$400,000 for married couples. We find the following:

- Between December 2020 and December 2021, adults who received the CTC payments reported a larger decline in household food insecurity than adults who did not receive the payments.
 - Rates of food insecurity (a broad measure of households' inabilities to acquire adequate food over the past year) decreased
 from 26.1 to 20.0 percent for CTC recipients and from 24.7 to 22.4 percent for nonrecipients. The reduction in food
 insecurity for CTC recipients was 3.8 percentage points larger than the reduction for nonrecipients. The drop in food
 insecurity for CTC recipients was 5.0 percentage points larger after accounting for differences in the characteristics of adults
 in each group.
 - Among CTC recipients, the decline in food insecurity was concentrated among adults with family incomes below 200
 percent of FPL; their rate of food insecurity fell from 48.2 to 35.8 percent.
- The change in the employment rate for CTC recipients did not differ from the change for nonrecipients.
 - Among CTC recipients, 70.2 percent were working in December 2020 and 72.6 percent were working in December 2021. Among nonrecipients, 58.1 percent were working in December 2020 and 60.1 percent were working in December 2021.
 - The share of employed adults usually working full time did not change significantly for CTC recipients and nonrecipients during the study period.
- Transitions in employment status and usual weekly hours worked between December 2020 and December 2021 were also similar for CTC recipients and nonrecipients.
 - About 5 percent of adults in both groups were employed in 2020 but not 2021, and 7 percent went from not employed in 2020 to employed in 2021.
 - CTC recipients and nonrecipients who were employed in both years reported similar changes in their work hours.

Though this analysis is not designed to identify a causal relationship between the advanced CTC payments and material hardship and employment, the results highlight improvements in food security for payment recipients and show no significant difference in short-term employment changes for recipients relative to nonrecipients. If Congress expands the CTC, further research will be needed to assess changes in these outcomes over a longer period and by gender, marital status, educational attainment, income, and other characteristics that may be related to hardship or employment.

It will also be important to confirm these findings if the CTC is expanded during periods of less economic volatility. The study period occurred during the COVID-19 pandemic and coincided with a rapid labor market recovery in 2021 that followed a sharp recession in 2020, child care and school closures that presented ongoing barriers to work for many parents, high levels of job turnover, two rounds of stimulus payments in the first half of 2021, and rising inflation throughout 2021. These and other factors may have affected material hardship and employment in different ways for families with and without children.

BACKGROUND

The CTC provides a near-universal benefit for families with children. Before the temporary expansion through the ARP in 2021, families could receive a credit of up to \$2,000 per child under age 17. The credit could be used to offset taxes owed. If the credit a family qualified for exceeded taxes owed, families could receive up to \$1,400 as a tax refund. The refund was limited to 15 percent of earnings above \$2,500. Together, these two limitations on the credit amount meant millions of families with low incomes either did not benefit from the credit or received less than \$2,000 per child. This design disproportionately excluded Black and Hispanic/Latinx families from the full credit (Goldin and Michelmore 2020; Greenstein et al. 2018).

The ARP temporarily changed both the maximum credit and how the credit was delivered. Under the ARP, low-income families with children could receive a credit of up to \$3,600 per child under age 6 and \$3,000 per child ages 6 to 17. The credit was made fully refundable; if the credit exceeded taxes owed, families could receive the entire excess amount as a tax refund. Making the credit fully refundable was the most important change to the CTC for families with very low incomes (Acs and Werner 2021).

Families with low incomes typically receive any CTC they are eligible for as part of their tax refunds after filing tax returns. That means that any CTC they qualified for in 2021 would be paid in 2022. Instead of having to wait to receive the CTC in 2022, most

families could receive up to half of the CTC through monthly payments from July to December 2021. The IRS delivered payments automatically to families who appeared eligible for the credit on the basis of information in their 2019 or 2020 tax returns or their claims for an economic impact payment. Families could also claim the CTC via a special IRS web portal.³ From July to December 2021, the number of children in families receiving the CTC increased from 59 to 61 million, suggesting that though families could opt out of advanced payments starting June 21, few did so.⁴ In another analysis, Urban Institute researchers reported that the families most likely to have been left out of advanced payments were those with very low incomes. In many cases, they were likely not required to file tax returns. Reported rates of receipt were lowest amongst Hispanic/Latinx adults and non-Hispanic/Latinx adults who are American Indian/Alaska Native, Native Hawaiian/Pacific Islander, or more than one race (Karpman et al. 2021).

Making the credit fully refundable and delivering the credit as a monthly benefit resulted in near-immediate drops in child poverty and food insufficiency among families with children. Child poverty dropped and remained low through the duration of the payments, but it increased again when the payments stopped in January 2022 (Parolin, Collyer, and Curran 2022). Using data from the US Census Bureau's Household Pulse Survey, researchers estimated that food insufficiency among families with children also declined by nearly 25 percent, and families with very low incomes experienced the largest declines (Parolin, Collyer, and Curran 2022; Shafer et al. 2022).

A debate around the effect of the newly structured CTC on employment also surfaced. One survey suggested that almost 94 percent of parents who expected to receive the CTC planned to work the same amount or more (Hamilton et al. 2021). Those who planned to work less were most likely to be parents of infants and those living with a spouse or partner who said they would use the credit to stay home with children. The researchers concluded that while the credit had a small effect on work, it also allowed parents greater freedom in making child care arrangements. In another survey, about one-quarter of parents reported the CTC monthly payments made it easier for them to engage in paid work (Burnside 2021). This might be because parents used the credit, in some cases, to help pay for child care (Perez-Lopez and Mayol-García 2021). Other studies suggested the credit had no immediate effect on reducing employment (Ananat et al. 2021). Looking longer term, researchers have produced estimates of the effect permanently expanding the credit could have on incentives to work; some suggested modest responses that would still result in dramatic reductions in poverty (Bastian 2022) and others suggested larger employment declines and reduced impacts on poverty (Corinth et al. 2021).

Our analysis adds to the assessment of how the CTC affected employment and material hardship in the short term. By following the same respondents in a nationally representative sample of adults between December 2020 and December 2021, we present new evidence of how these outcomes changed for CTC recipients and nonrecipients after the advanced CTC payments became available.

RESULTS

Between December 2020 and December 2021, adults who received the CTC payments reported a larger decline in food insecurity than adults who did not receive the payments.

Over the study period, the share of adults with family incomes below 600 percent of FPL reporting food insecurity declined, and those declines were greatest among adults who reported receiving the advanced CTC payments between July and December 2021. In December 2020, 26.1 percent of adults with children who would later report receiving the advanced CTC payments reported their households had experienced food insecurity in the past 12 months (figure 1). When interviewed again in December 2021, 20.0 percent of these adults reported food insecurity in the past 12 months, a decline of 6.1 percentage points. Adults who did not receive the advanced payments reported about a 2.3 percentage-point decline in food insecurity, from 24.7 percent in 2020 to 22.4 percent in 2021. Appendix table 1 shows a similar pattern in the change in food insecurity for nonrecipients with children and those without children.

Household Food Insecurity in the Past 12 Months among Adults Ages 18 to 64 with Incomes below 600 Percent of FPL December 2020 and December 2021



By receipt of the advanced child tax credit payments and family income



Source: Well-Being and Basic Needs Survey, December 2020 and December 2021.

Notes: FPL is federal poverty level. CTC is child tax credit. Adults who did not receive the CTC include those with and without children under 18 in the household.

Among CTC recipients, the decline in food insecurity was concentrated among adults with family incomes below 200 percent of FPL in 2020. The share of these adults reporting food insecurity dropped from 48.2 percent in 2020 to 35.8 percent in 2021 (figure 1). Rates of food insecurity also declined among nonrecipients with incomes in this range and did not change significantly among either recipients or nonrecipients with higher incomes.

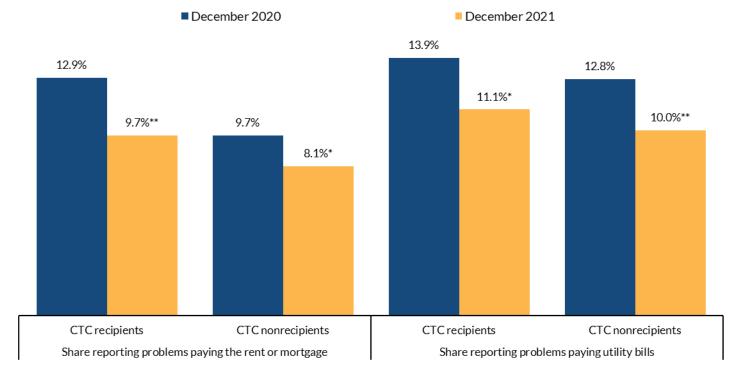
CTC recipients and nonrecipients also became less likely to have problems paying for housing and utility costs. The share of CTC recipients reporting problems paying the rent or mortgage in the past 12 months declined by about 3.1 percentage points, from 12.9 percent in 2020 to 9.7 percent in 2021, and the share with problems paying utility bills fell 2.8 percentage points, from 13.9 to 11.1 percent (figure 2). Nonrecipients reported the same percentage-point change in utility bill problems as recipients and a slightly smaller reduction in problems paying for housing. As with food insecurity, the decrease in problems paying for housing costs was larger among adults with family incomes below twice the federal poverty level in both groups (data not shown).

^{*/**/} Estimate for 2021 differs from estimate for 2020 at the 0.10/0.05/0.01 level, using two-tailed tests.



Problems Paying for Housing Costs in the Past 12 Months among Adults Ages 18 to 64 with Family Incomes below 600 Percent of FPL, December 2020 and December 2021

By receipt of the advanced child tax credit payments



Source: Well-Being and Basic Needs Survey, December 2020 and December 2021.

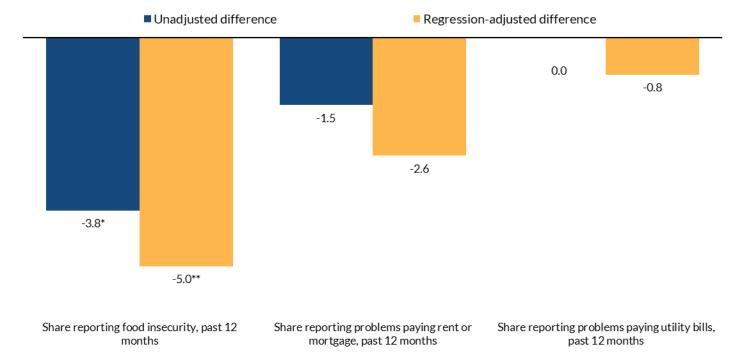
Notes: FPL is federal poverty level. CTC is child tax credit. Adults who did not receive the CTC include those with and without children under 18 in the household.

Some of the differences in changes in hardship may have been affected by differences in the composition of the recipient and nonrecipient groups. Nonrecipients were more likely than recipients to be men, to be older in age, and to have 2020 family incomes below twice the federal poverty level and were less likely to have graduated from college, to be married or living with a partner, and to own their homes (data not shown). Figure 3 compares the changes in measures of material hardship between 2020 and 2021 for CTC recipients and nonrecipients without and with controlling for the composition of these groups. Adults who received the CTC payments reported a reduction in food insecurity 3.8 percentage points larger than the reduction for nonrecipients. When we control for differences in the demographic and socioeconomic characteristics of each group in 2020, the estimated reduction in food insecurity for CTC recipients is 5.0 percentage points larger than that for nonrecipients. This estimate did not change when we also controlled for receipt of other major pandemic assistance, including stimulus checks and unemployment benefits (data not shown). Though the magnitude of the estimated decreases in housing and utility hardship was larger for recipients than for nonrecipients, we did not find statistically significant differences in changes in these measures between groups.

^{*/**/***} Estimate for 2021 differs from estimate for 2020 at the 0.10/0.05/0.01 level, using two-tailed tests.



Percentage-Point Difference in Changes in Material Hardship for Advanced Child Tax Credit Payment Recipients versus Nonrecipients between December 2020 and December 2021



Source Well-Being and Basic Needs Survey, December 2020 and December 2021.

Notes: Estimates are shown for adults with 2020 family incomes below 600 percent of the federal poverty level. A negative difference in the percentage-point change indicates a larger decline in the outcome between 2020 and 2021 for child tax credit (CTC) payment recipients relative to nonrecipients. See the Data and Methods section for details about the regression-adjusted differences.

*/**/*** Estimated difference in the change for CTC recipients versus nonrecipients differs from zero at the 0.10/0.05/0.01 level, using two-tailed tests.

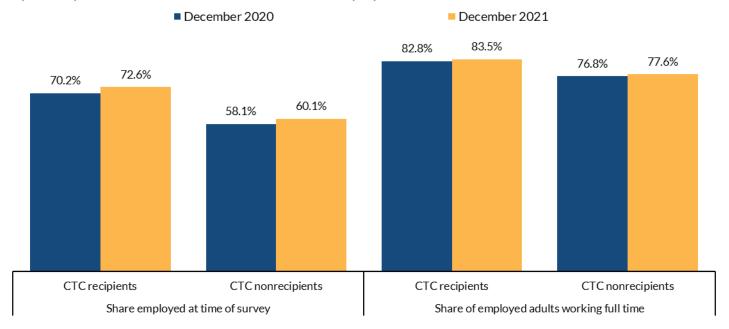
We observed no differences in the change in the employment rate for CTC recipients and nonrecipients.

Researchers and policymakers have expressed concern that removing the CTC's minimum earnings requirement for families with low and moderate incomes will discourage employment. The WBNS data suggest the share of adults employed increased modestly between 2020 and 2021 for both recipients and nonrecipients of the advanced CTC payments. Among recipients, 70.2 percent reported that they were working in December 2020 and 72.6 percent were working in December 2021 (figure 4). These were higher than the employment rates of adults who did not report receiving the advanced payments: 58.1 percent in 2020 and 60.1 percent in 2021. The changes in employment status between 2020 and 2021 for recipients and nonrecipients did not differ significantly with or without accounting for the characteristics of each group. The share of workers reporting full-time work hours also remained steady for each group: 83 to 84 percent of employed CTC recipients reported usually working 35 or more hours per week in each year, compared with 77 to 78 percent of employed nonrecipients.

Employment Status among Adults Ages 18 to 64 with Family Incomes below 600 Percent of FPL, December 2020 and December 2021



By receipt of the advanced child tax credit payments



Source: Well-Being and Basic Needs Survey, December 2020 and December 2021.

Notes: FPL is federal poverty level. CTC is child tax credit. Full time is defined as usually working 35 or more hours per week across all jobs. Adults who did not receive the CTC include those with and without children under 18 in the household.

*/**/ Estimate for 2021 differs from estimate for 2020 at the 0.10/0.05/0.01 level, using two-tailed tests.

Transitions in employment status and usual weekly hours worked between December 2020 and December 2021 were similar for CTC recipients and nonrecipients.

Table 1 shows the share of CTC recipients and nonrecipients who changed their employment statuses between December 2020 and December 2021. About two-thirds of CTC recipients and just over half of nonrecipients were employed in both years. In addition, more than one in five recipients and one in three nonrecipients were not employed in either year. Changes in employment status were less common, but about 5 percent of adults in each group transitioned from being employed in December 2020 to not being employed in December 2021. The reverse was true for about 7 percent of adults in each group.

We also examined changes in usual hours worked per week among adults who were employed in both 2020 and 2021 and reported their usual hours in each year. Among both recipients and nonrecipients working in both years, most were working full time (87 to 89 percent in each group and each year), though about 7 percent of recipients and 11 percent of nonrecipients transitioned from full-time to part-time status or vice versa (data not shown). Given how many adults in each group were already working full time, we only observed a limited share of adults reporting changes in the number of hours worked greater than 10 hours per week. Roughly half of CTC recipients and nonrecipients reported the same number of usual hours in 2020 and 2021, and most of the remaining workers reported small changes of fewer than 10 hours per week. About 10 to 12 percent of workers in each group reported

working 10 or more additional hours per week in 2021 than in 2020, and 8 to 9 percent of workers in each group reported working at least 10 fewer hours per week in 2021 than in 2020.

TABLE 1



Employment Transitions between December 2020 and December 2021 among Adults Ages 18 to 64 with Family Incomes below 600 Percent of FPL

By receipt of advanced child tax credit payments

Category	CTC recipients	CTC nonrecipients
Employment status in 2020 and 2021 (%)		
Working in both years	65.2	52.8 ***
Not working in both years	22.5	34.7 ***
Working in 2020, not working in 2021	4.9	5.2
Not working in 2020, working in 2021	7.4	7.3
Change in hours between 2020 and 2021 among those working	and reporting usual ho	urs in both years (%)
Working 10+ hours more per week in 2021	10.1	11.6
Working 1–9 hours more per week in 2021	15.9	14.3
Working same number of hours per week in 2021	52.2	54.7
Working 1–9 hours less per week in 2021	13.5	10.7
Working 10+ hours less per week in 2021	8.4	8.7
Sample size, all adults	840	1,657
Sample size, adults working and reporting usual hours in both years	392	400

Source: Well-Being and Basic Needs Survey, December 2020 and December 2021.

Notes: FPL is federal poverty level. CTC is child tax credit. Adults who did not receive the CTC include those with and without children under 18 in the household.

DISCUSSION

Consistent with other studies, our data show that the advanced CTC payments were associated with a reduction in food insecurity among adults with children who received CTC payments. The reductions were more pronounced among families with the lowest incomes and were larger than reductions in food insecurity experienced by adults who did not receive the advanced CTC payments. This is consistent with estimates based on the Census Bureau's Household Pulse Survey that showed many families used the payments to purchase food, particularly families with the lowest incomes (Karpman et al. 2021).

Not all families eligible for the advanced CTC payments received them. In particular, families with very low incomes who were not required to file tax returns and had not claimed economic impact payments were at elevated risk of not receiving the CTC payments. After controlling for differences in demographic and socioeconomic characteristics, we still found that adults who reported receiving the payments experienced larger drops in food insecurity than adults who did not report receiving them.

Providing the maximum benefit of the CTC to all families delivered additional benefits to families with the lowest incomes, even those who were not employed. Though some worried that doing so would reduce employment, the findings in this analysis do not suggest that is the case—at least in the near term. We find that employment increased between December 2020 and December 2021 among adults who received the advanced payments, and that change was similar to the change in employment among adults who did not receive the payments. The differences in December 2020 and December 2021 were modest. The temporary nature of

^{*/**/***} Estimate for CTC nonrecipients differs from estimate for CTC recipients at the 0.10/0.05/0.01 level, using two-tailed tests.

the payments and the brief and historically unusual period of study do not necessarily imply that employment patterns for recipients and nonrecipients would remain the same over a longer or qualitatively different period or be constant across various demographic subgroups.

CONCLUSION

The expanded CTC was a key policy in the ARP that directed resources to households with children and very low incomes. The credit's maximum benefit was temporarily increased from \$2,000 per child under age 17 to \$3,600 per child under age 6 and \$3,000 per child ages 6 to 17. The entire credit could be received as a refundable tax credit, which meant even families with very low incomes could receive the maximum benefit. Rather than waiting to deliver the credit at tax time, the IRS delivered up to half of the credit in monthly payments from July through December 2021. The payments went to most families with children. Shortly after payments began, a larger share of adults who received the payments reported declines in food insecurity than adults who did not receive the payments.

If the ARP's temporary changes to the CTC were made permanent, it is unclear whether the credit's design would discourage adults from being employed. Some studies have suggested the credits will discourage employment, and other data suggest families will use the credits to pay for child care or other work-related expenses, encouraging work. We found no significant differences in the changes in employment between December 2020 and December 2021 for adults who received the payments and adults who did not receive the payments.

The advanced credits were correlated with an immediate drop in child poverty, which persisted during the entire advanced payment period. If the enhanced CTC payments had continued or were resumed and produced sustained declines in food insecurity, the payments would likely produce long-term benefits for children's health, well-being, and educational outcomes.

APPENDIX. DATA AND METHODS

Data

This brief draws on data from the December 2020 and December 2021 rounds of the Urban Institute's Well-Being and Basic Needs Survey, a nationally representative, internet-based survey of adults ages 18 to 64 designed to monitor changes in individual and family well-being as policymakers consider changes to federal safety net programs. For each round of the WBNS, we draw a stratified random sample (including a large oversample of adults in households with low incomes) to obtain approximately 7,500 completed interviews with adults from the KnowledgePanel, a probability-based internet panel maintained by Ipsos that includes households with and without internet access. The survey completion rates among panel members sampled for the WBNS were 52 percent in 2020 and 54 percent in 2021. Survey weights adjust for unequal selection probabilities and are poststratified to the characteristics of nonelderly adults based on benchmarks from the Current Population Survey Annual Social and Economic Supplement and the American Community Survey. Participants can complete the survey in English or Spanish. For further information about the survey design and content, see Karpman, Zuckerman, and Gonzalez (2018).⁵

Because samples for each round of the WBNS are drawn from the same online research panel, members of the panel may participate in multiple rounds of the survey; the typical rate of overlap across two consecutive years of data collection is about 30 percent in each core survey sample. In the 2021 round of the survey, we augmented the overlap between the 2020 and 2021 samples by conducting an additional oversample of adults with children who participated in 2020, increasing the rate of overlap to about 40 percent in each year.

Overall, we interviewed 3,277 respondents who participated in both the 2020 and 2021 rounds of the survey, including 1,531 adults who reported living with children under 18 in 2020 and 1,746 who did not report living with children under 18. Participants in this two-period longitudinal sample answered the same questions on material hardship and employment in both December 2020 and

December 2021. The 2021 survey also asked adults living with children whether they received the advanced CTC payments, allowing us to examine outcomes for recipients and nonrecipients before and after the IRS issued advanced monthly payments.

Sample Weights

To reduce the effects of differential attrition and nonresponse, we reweighted the longitudinal sample to reflect the baseline characteristics of adults who participated in the full 2020 core sample. We implemented this reweighting approach within four groups on the basis of whether adults lived with children in the household and reported an annual family income above or below 150 percent of FPL in 2020. We used the same measures we use in the poststratification weighting of the full WBNS: age, gender, race and ethnicity, educational attainment, census region, residence in an urban or rural area, homeownership status, family income as a percentage of FPL, primary language, household internet access, and family composition.

The weights also account for differential nonresponse to the 2021 survey associated with the adults' 2020 material hardship and employment outcomes. Research conducted in 2020 using the Urban Institute's Coronavirus Tracking Survey found that people experiencing economic hardship in the early months of the pandemic were less likely to respond to future waves of the survey (Karpman, Zuckerman, and Kenney 2020). To mitigate nonresponse bias in estimated changes between 2020 and 2021, we adjusted the weights so that the distribution of 2020 hardship and employment outcomes in the longitudinal sample are more aligned with those reported for the full 2020 sample.

Analytic Sample

We focus on three groups: (1) adults living with children under 18 in 2020 who reported receiving the advanced CTC payments in 2021, (2) adults living with children under 18 in 2020 who did not report receiving the payments in 2021, and (3) adults who did not live with children in 2020 or 2021 and were ineligible to receive the CTC payments.⁶ This brief refers to the first group as CTC recipients and the second and third groups as CTC nonrecipients.

We excluded from our analysis respondents with missing data on the number or age of children in their households in 2020 or 2021. We also excluded respondents living with children under 18 in 2020 but not 2021 and respondents not living with children in 2020 but living with children in 2021. Sensitivity analyses indicated these exclusions had little effect on the results (see below).

Our analysis focuses on adults with annual family incomes below 600 percent of FPL in 2020, which was about \$103,500 for a single person with one child and \$157,200 for a family of four. The expanded CTC amount began phasing out at \$112,500 for single parents filing taxes as heads of household and \$150,000 for married couples filing taxes jointly. Our final analytic sample includes 840 adults with children who reported receiving the CTC, 394 adults with children who did not receive the CTC, and 1,263 adults without children who did not receive the CTC.

Key Measures

We focus on three measures of material hardship that reflect difficulty meeting regular expenses for housing, utilities, and food in the past 12 months: household food insecurity, problems paying the rent or mortgage, and problems paying utility bills. Household food insecurity estimates are based on responses to the six-item short form of the US Department of Agriculture's Household Food Security Survey Module (USDA 2012). Food insecurity is a broad measure of households' inabilities to acquire adequate food for one or more members at times in the past year because of a lack of resources. It differs from the measure of food insufficiency used in the Census Bureau's Household Pulse Survey, which measures whether households sometimes or often did not have enough to eat in the past seven days. Estimates of problems paying the rent or mortgage are based on respondents reporting their households did not pay the full amount of the rent or mortgage or were late with a payment because their households could not afford to pay. Problems paying utility bills are defined on the basis of whether the respondent's household was unable to pay the full amount of the gas, oil, or electricity bills.

We also examine changes in work status at the time of the survey and usual weekly hours worked among respondents who were employed in each survey round. Work status estimates are based on a question asking respondents if they are currently working for pay or self-employed. Employed respondents are asked how many hours per week they usually work at their main job and any other jobs. Respondents who report their hours vary are asked if they usually work 35 hours or more per week across all of their jobs. Our analysis focuses on the overall change in employment rates, transitions in employment status (e.g., the share moving from employed to not employed and vice versa), and usual weekly work hours (e.g., the share of respondents working in both years experiencing increases, decreases, or no change in hours worked) between December 2020 and December 2021. Our analysis of transitions in the number of hours worked per week only focuses on employed adults who did not report their usual weekly work hours varied in one or both years.

We assess CTC receipt on the basis of responses to the following question, which we adapted from the Census Bureau's Household Pulse Survey: "In the last 6 months, that is, since July 2021, did you or someone in your household receive one or more monthly child tax credit payments? You may have received the payments as a paper check or as a direct deposit to your bank account."

Analysis

We compare changes in material hardship and employment among adults living with children who received the CTC payments with changes for the full group of CTC nonrecipients (i.e., with and without children). Appendix table 1 also shows the results for nonrecipients by the presence of children in the household.

We estimate both unadjusted and regression-adjusted differences in the changes in hardship and employment outcomes between the two groups. The regression adjustment accounts for differences in the 2020 characteristics of CTC recipients and nonrecipients. We control for the measures used to reweight the sample described above. This adjustment ensures estimated differences in the changes in well-being and work between 2020 and 2021 do not reflect differences in observed baseline characteristics that may be correlated with those outcomes (e.g., a stronger labor market recovery for certain educational attainment groups). We also estimated differences controlling for the receipt of pandemic stimulus checks and unemployment insurance benefits, but this had little effect on the results.

We assessed the results' sensitivity to the exclusion or inclusion of certain groups, such as imputing receipt and nonreceipt of the advanced payments to all excluded adults living with children in 2020 but not 2021; including responses to the CTC questions of excluded adults living with children in 2021 but not 2020; excluding adults living with children in both years who did not know or did not answer whether they received the advanced payments, or imputing receipt on the basis of having filed a tax return or received a stimulus check; and excluding nonparents from the groups of recipients and nonrecipients with children. Though the estimated changes in material hardship and employment varied slightly across these sensitivity tests, the basic patterns remained the same.

APPENDIX TABLE 1



Material Hardship and Employment Status among Adults Ages 18 to 64 with Family Incomes below 600 Percent of FPL, December 2020 and December 2021

By receipt of the advanced child tax credit payments

Category	2020 (%)	2021 (%)	Percentage-point change, 2020–21
CTC recipients			
Food insecurity, past 12 months	26.1	20.0	-6.1
Problems paying rent or mortgage, past 12 months	12.9	9.7	-3.1
Problems paying utility bills, past 12 months	13.9	11.1	-2.8
Employed at time of survey	70.2	72.6	2.4
Full-time hours, if employed	82.8	83.5	0.8
CTC nonrecipients with children			
Food insecurity, past 12 months	29.2	26.5	-2.7
Problems paying rent or mortgage, past 12 months	14.6	12.9	-1.7
Problems paying utility bills, past 12 months	20.1	16.2	-3.9
Employed at time of survey	57.0	59.3	2.3
Full-time hours, if employed	78.7	76.7	-2.0
CTC nonrecipients without children			
Food insecurity, past 12 months	23.3	21.2	-2.1
Problems paying rent or mortgage, past 12 months	8.2	6.6	-1.6
Problems paying utility bills, past 12 months	10.6	8.2	-2.4
Employed at time of survey	58.4	60.3	2.0
Full-time hours, if employed	76.3	77.9	1.7

Source: Well-Being and Basic Needs Survey, December 2020 and December 2021.

Notes: FPL is federal poverty level. CTC is child tax credit. Full time is defined as usually working 35 or more hours per week across all jobs.

Limitations

This analysis has several limitations. First, estimated differences in the changes in well-being and work outcomes between CTC payment recipients and nonrecipients do not represent causal effects of the CTC on material hardship or employment. Though the ARP established near-universal eligibility for the expanded CTC up to the income threshold at which the increased benefit amount phased out, not all eligible families with children received payments. In particular, receipt was lowest among families with low incomes who were not required to file tax returns in previous years, and we do not control for unobserved differences between nonfilers who claimed the credit through the IRS portal and those who did not. We also do not observe prepandemic differences in well-being and employment for recipients and nonrecipients before 2020.

The sample weights likely mitigate but do not eliminate panel attrition and nonresponse error. Approximately 19 percent of participants in the December 2020 WBNS were no longer members of the panel in December 2021. The survey completion rate among the remaining 2020 participants sampled in 2021 was 72 percent. The 2020 participants who left the panel or did not respond in 2021 had higher rates of material hardship in 2020 than those who completed the 2021 survey. The weights adjust for differential nonresponse based on 2020 outcomes; however, lower response rates among people whose economic situations worsened between 2020 and 2021 could still lead to overestimates of the improvement in material hardship.

Our analysis did not show evidence of nonresponse bias among 2020 participants who remained on the panel: no correlation exists between household income in 2021 and nonresponse after controlling for the measures used in weighting. In addition, the remaining nonresponse error after reweighting would not necessarily affect the estimated difference in changes in outcomes between CTC recipients and nonrecipients if the error is not correlated with both CTC receipt and the outcomes of interest.

Survey respondents also report CTC receipt with measurement error. Studies have found that people tend to underreport public benefits in surveys (Meyer, Mok, and Sullivan 2009; Wheaton 2008). IRS data on the number of children who received the advanced CTC payments suggest participants in the WBNS and the Census Bureau's Household Pulse Survey underreported receipt of the advanced CTC payments (Karpman et al. 2021; Parolin et al. 2021). However, mistakenly categorizing CTC recipients as nonrecipients would likely cause us to underestimate the change in material hardship for recipients. In addition, some WBNS participants may have reported material hardship in 2021 on the basis of experiences that occurred before the advanced CTC payments became available in July, since they were asked to report hardship for the past 12 months.

Finally, sample size limitations prevent us from detecting small differences in the changes in material hardship and employment for subgroups of CTC recipients and nonrecipients. Estimated differences in the change in food insecurity by CTC receipt appeared to be larger among women, adults who had not attended college, and adults with low incomes, and estimated differences in the change in employment by CTC receipt were generally smaller among these groups. Data sources with larger sample sizes could provide greater insight into how well-being and employment change for different groups of people following the implementation of new child benefits such as the expanded CTC.

NOTES

- US Department of the Treasury, "Treasury and IRS Disburse Sixth Monthly Child Tax Credit to Families of 61 Million Children," news release, December 15, 2021, https://home.treasury.gov/news/press-releases/jy0533.
- Studies of the child tax credit that draw on data from the Census Bureau's Household Pulse Survey have measured food insufficiency. Our analysis instead focuses on food insecurity, which is a broader measure of households' inabilities to acquire adequate food for one or more members at times in the past year because of a lack of resources.
- The Treasury Department estimates that it sent advanced CTC payments to 729,000 children because their families had used the IRS nonfiler portal to claim economic impact payments. See White House, "Fact Sheet: Biden-Harris Administration Whole-of-Government Efforts to Ensure Child Tax Credit Reaches All Eligible Families," news release, September 15, 2021, https://www.whitehouse.gov/briefing-room/statements-releases/2021/09/15/fact-sheet-biden-harris-administration-whole-of-government-effort-to-ensure-child-tax-credit-reaches-all-eligible-families/.
- US Department of the Treasury, "Treasury and IRS Disburse Sixth Monthly Child Tax Credit to Families of 61 Million Children"; US Department of the Treasury, "Treasury and IRS Announce Families of Nearly 60 Million Children Receive \$15 Billion in First Payments of Expanded and Newly Advanceable Child Tax Credit," news release, July 15, 2021, https://home.treasury.gov/news/press-releases/Treasury-and-IRS-Announce-Families-of-Nearly-60-Million-Children-Receive-%2415-Billion-Dollars-in-First-Payments-of-Expanded-and-Newly-Advanceable-Child-Tax-Credit; and "IRS Updated the 2021 Child Tax Credit and Advance Child Tax Credit Frequently Asked Questions," Internal Revenue Service, March 2022, https://www.irs.gov/pub/taxpros/fs-2022-17.pdf.
- ⁵ The 2020 and 2021 WBNS instruments are available at https://www.urban.org/policy-centers/health-policy-center/projects/well-being-and-basic-needs-survey.
- The 2021 WBNS asked some adults without children whether they received the advanced CTC payments because they reported having children under 18 who live outside their households. Our analysis only included adults without children who did not receive the CTC, and we excluded one respondent living without children in their household in 2020 and 2021 who reported receiving the CTC for children outside their household.
- Affirmative responses to the six-item short form of the US Department of Agriculture's Household Food Security Survey Module include reporting that it was often or sometimes true that the food the household bought just didn't last, and the household didn't have money to get more; it was often or sometimes true that the household could not afford to eat balanced meals; adults in the household ever cut the size of meals or skipped meals because there was not enough money for food; meals were cut or skipped almost every month or some months but not every month; the respondent ate less than they felt they should because there wasn't enough money for food; and the respondent was ever hungry but didn't eat because there wasn't enough money for food. Respondents with two to four affirmative responses are defined as having low household food security, and respondents with five to six affirmative responses are defined as having very low household food security. These groups are jointly defined as being food insecure.
- "Food Security in the U.S.: Measurement," US Department of Agriculture, accessed April 7, 2022, https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/measurement/.

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ACKNOWLEDGMENTS

This brief was funded by the Doris Duke Charitable Foundation and the Robert Wood Johnson Foundation. The Robert Wood Johnson Foundation also funded the Well-Being and Basic Needs Survey. We are grateful to them and to all our funders, who make it possible for the Urban-Brookings Tax Policy Center to advance its mission.

The views expressed are those of the authors and should not be attributed to the Urban-Brookings Tax Policy Center, the Urban Institute, the Brookings Institution, their trustees, or their funders.

The authors thank Greg Acs for his review of an earlier version of this paper, Timothy Triplett for guidance on the development of survey weights and assessment of survey nonresponse, Lillian Hunter for help with formatting this brief, and Rachel Kenney for editing the brief.

The Tax Policy Center is a joint venture of the Urban Institute and Brookings Institution. For more information, visit taxpolicycenter.org or email info@taxpolicycenter.org.

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