



THE EFFECTS OF INCOME ON THE ECONOMIC WELL-BEING OF FAMILIES WITH LOW INCOMES: EVIDENCE FROM THE 2021 EXPANDED CHILD TAX CREDIT

By Natasha Pilkauskas, Katherine Micheltore, and H. Luke Shaefer

INTRODUCTION

Interest in basic income and unconditional cash transfers as a means of improving well-being has grown substantially over the last few years in the United States. There remains much to learn about the causal effects of unconditional cash transfers despite a large evidence base suggesting that income^{1,2,3}, in-kind policies^{4,5,6}, and earnings supplements^{7,8,9} improve well-being.

New evidence from randomized control trial studies of unconditional cash transfers find modest to null effects on material well-being^{10, 11, 12, 13}, raising further questions about the causal link between cash transfers and material well-being. In contrast, a small but growing set of studies of a universal, recurring monthly unconditional cash transfer to families with children – the 2021 monthly Child Tax Credit (CTC) – suggests this policy improved the material well-being of families with children^{14, 15, 16}.

In this brief, we add to this growing literature by summarizing the findings of a [new study](#) of the 2021 monthly Child Tax Credit. Unlike earlier research, our study focuses on families with very low incomes, those living in poverty. Using quasi-experimental techniques, we find robust evidence that the 2021 monthly CTC improved families' material well-being and had little to no impact on their employment.

THE 2021 CHILD TAX CREDIT

In March 2021, Congress passed the American Rescue Plan Act, temporarily expanding the Child Tax Credit. This temporary expansion increased the size of the benefit (including a larger benefit for children under age 6), extended eligibility to households with little or no earnings, and made the credit fully refundable. Finally, half of the credit was disbursed monthly for the final six months of 2021, while the remaining balance was delivered as a lump sum at tax time in early 2022. Removing the earnings minimum and making the credit fully refundable made 26 million children eligible for a larger credit – 6 million of whom were entirely ineligible before the reform because their families' earnings were too low¹⁷. Our study focuses on these children, those at the lowest end of the income distribution and who have historically been excluded from the full benefits of the CTC.

KEY FINDINGS

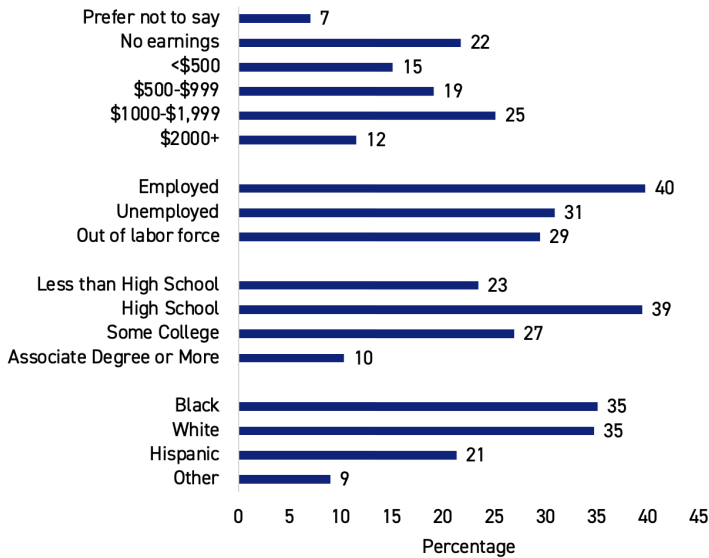
- Across six months in 2021, families reported using the monthly Child Tax Credit (CTC) on **bills, other household expenses, and child-related expenses**.
- We find robust evidence that the **CTC reduced the overall number of material hardships experienced by families, particularly food insecurity**.
- Other evidence suggests that the monthly **CTC reduced medical hardships, inability to pay utility bills, and reliance on friends and family for food**.
- We do not find a statistically significant relationship between the employment behaviors of families in our study and the monthly CTC benefit.

THE DATA AND APPROACH

Poverty Solutions partnered with [Propel](#), creators of the [Providers](#) app, which helps more than 5 million families manage their Supplemental Nutrition Assistance Program (SNAP) benefits, encompassing about one-quarter of all SNAP users. Every month, Propel invites a random national sample of its users to take an online survey on a variety of topics related to household financial well-being, including a number of questions related to the expanded CTC. Roughly 4,000-6,000 users respond to the survey each month from all 50 states, about half of whom live in households with children under the age of 18 – the focus of our study. We use data from surveys conducted between June 2021 and January 2022 to study the effects of the 2021 monthly CTC on the economic well-being of families with children.

Figure 1 provides information on the characteristics of parents in our study sample. Monthly earnings of families are very low: 22% reported having no household earnings and another 15% had less than \$500 in monthly earnings. Additionally almost one-third of parents were unemployed and another 29% were out of the labor force. Sixty-two percent of parents in our study have a high school degree or less. The sample is racially diverse: 35% of parents are Black, 35% are White, 21% are Hispanic and 9% report an "other" race/ethnicity.

Figure 1: Characteristics of the sample



We compare families before and after the implementation of the credit, using differences in the number and ages of children to estimate the impacts of the monthly credit on families with low incomes. In this brief, we present our estimates of the impacts of the expanded CTC based on our most conservative statistical modeling approach¹⁸. We have the most confidence in our findings that are substantively similar and statistically significant across our statistical modeling approaches. We refer to these as “robust.” When the results are similar but not significant across all models, we say they are “suggestive.” As we have documented in previous [research briefs](#)^{19,20}, many families did not receive the monthly CTC (only 66% in this sample). Here we estimate the impact of the CTC for those who did receive the CTC²¹. For more detail on our methodological approach, see our full working paper.

HOW DO FAMILIES REPORT SPENDING THE 2021 MONTHLY CTC?

We first present findings from an open-ended question that asked respondents who received the 2021 monthly CTC how they spent their credit. The results, in Table 1, indicate families spent the money in ways that should improve their material well-being and reduce hardships. The vast majority of families (about 75%) reported using the money to “pay bills” in every survey month. Families also used the money for other basic necessities such as paying rent (9%) and buying food (8%). Many parents used the money on child-related expenses, buying school supplies (especially in the late summer months) and children’s clothing. Thus, based on these responses, we expect to find that the credit reduced material hardships as well.

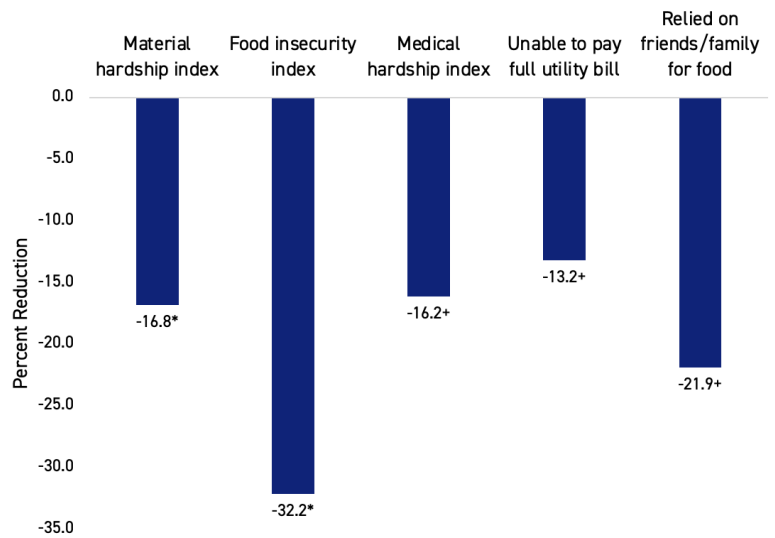
DID THE EXPANDED CTC IMPROVE ECONOMIC WELL-BEING?

In Figure 2, we show the results from our statistical model of the effects of the 2021 monthly Child Tax Credit on material hardship outcomes. We present the percent reduction in each outcome based on a \$500 monthly CTC, the average CTC amount received by families in our study.

We find robust evidence that the CTC reduced the overall number of material hardships experienced by families and children with low incomes. Our statistical model indicates that a \$500 monthly CTC reduced the number of hardships experienced by families by nearly 17%. Similarly, we find robust evidence that the CTC cut reports of food insecurity by almost one-third.

The evidence for reductions in medical hardships, being unable to pay a full utility bill, and relying on friends and family for food is somewhat less certain. Although the CTC appears to have reduced the incidence of these hardships, these point estimates were statistically significant in some models, but not all. Thus, we interpret these findings as suggestive.

Figure 2: Percent Reduction in Hardship as a Result of a \$500 Child Tax Credit



*Note: * indicates findings are statistically significant and robust across models. + indicates findings do not reach conventional levels of statistical significance in our most stringent test; however, they are negatively signed and similar in size to the estimates with household size fixed-effects, which do reach conventional levels of statistical significance. Thus we consider these results as suggestive evidence. See the full paper for details on modeling approaches.*

Table 1: How did you use the CTC? By percentage of respondents

| | 2021 Month | July | August | September | October | November | December |
|--|------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <i>Bills and living expenses</i> | | | | | | | |
| Paid bills | | 72 | 75 | 75 | 75 | 79 | 74 |
| Paid rent/mortgage/for housing | | 9 | 9 | 9 | 12 | 9 | 9 |
| Bought food | | 5 | 7 | 8 | 8 | 8 | 8 |
| Paid of loans/debts | | 5 | 4 | 4 | 4 | 4 | 3 |
| Bought household necessities (toiletries, cleaning supplies etc) | | 4 | 5 | 5 | 6 | 7 | 5 |
| Paid for gas or car expenses | | 2 | 5 | 5 | 5 | 5 | 4 |
| <i>Child related expenses</i> | | | | | | | |
| Bought school supplies | | 11 | 14 | 6 | 2 | 2 | 1 |
| Bought school clothes/uniforms/clothes | | 14 | 12 | 14 | 17 | 17 | 13 |
| Bought child necessities (diapers, wipes, other) | | 8 | 8 | 12 | 9 | 13 | 10 |
| Paid for child-care | | 4 | 6 | 5 | 5 | 7 | 7 |
| <i>Other</i> | | | | | | | |
| Put money in savings | | 2 | 2 | 2 | 1 | 1 | 1 |
| Other | | 4 | 4 | 3 | 2 | 2 | 0 |
| Clothes (not specified kid/adult) | | | 2 | 3 | 2 | 2 | 1 |
| Holiday/birthday gifts | | | | 1 | 1 | 3 | 12 |
| N | | 1,151 | 2,208 | 1,354 | 1,982 | 1,778 | 1,228 |

Note: Categories are not mutually exclusive (people could select multiple responses). Sample is restricted to parents who received the CTC and who provided a response. Percents may sum to more than 100%.

In addition to the material hardships shown in Figure 2, we also examined the effects of the CTC on a number of additional hardship and economic well-being measures and found no effects of the CTC on these outcomes. We found no effect of the CTC on:

- Severe housing hardship (like eviction and homelessness)
- Whether families decided not to pay a bill
- Families' ability to get to appointments, work, or somewhere else
- Whether families reported having "everything they typically need"
- The total money families had on hand
- The time that the money they had on hand would last
- Whether they borrowed money from friends and family
- Whether they visited a food pantry in the last month

It is perhaps surprising that we find no effects on these indicators of material well-being. For some outcomes, like severe housing hardship, it may be the case that the monthly benefit was not sufficient to address this hardship. Many families in our study are also in debt; thus, because the credit was relatively short-lived, families may not have been able to get fully out of debt and back on their feet with the six-month credit. It might also be surprising that we find no impact of the monthly 2021 CTC on the total money that families had on hand, but this could be explained by the fact that our survey was conducted between two and four weeks after each of the monthly payments was disbursed. Given the very low incomes of our respondents and the fact that very few report saving their credit, it is possible that most families had already spent down their credits by the time of the survey.

DID THE 2021 MONTHLY CTC AFFECT EMPLOYMENT?

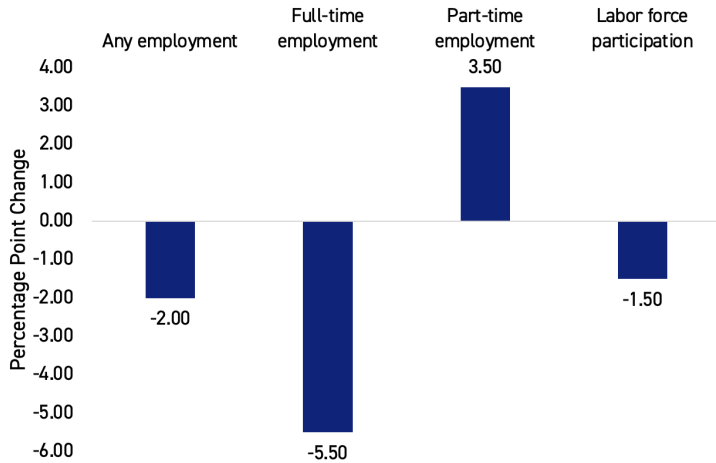
Policymakers and politicians have been concerned the 2021 monthly CTC might reduce employment. Several studies have found no effects of the CTC on employment^{22, 23, 24, 25} and the results from our study affirm those findings.

In Figure 3, we show the percentage point change in employment because of a \$500 monthly CTC. Here, unlike Figure 2, we show percentage point change for consistency with other studies²⁶ and none of the estimates shown here are statistically significant. The point estimates suggest a possible shift from full-time employment to part-time employment, but these findings are not robust across model specifications. Thus, we conclude the 2021 CTC had little to no effect on the employment of families with very low incomes.

DID THE EFFECTS OF 2021 MONTHLY CTC DIFFER BY INCOME AND RACE/ETHNICITY?

We examined differences in the effects of the 2021 CTC by income, comparing those with extremely low incomes (below \$500 in monthly earnings) to those with low incomes (\$500 or greater in monthly earnings). We did this because those at the very bottom are very unlikely to have received the CTC in the past and because there is evidence from other studies that cash transfers that represent a larger proportion of household income have bigger effects^{27, 28, 29}. However, we find little to no evidence of differences in the effects by household income.

Figure 3: Percentage Point Change in Employment as a Result of a \$500 Child Tax Credit, No Significant Effects



Note: We find no statistically significant effects of the monthly CTC on any labor supply or employment outcomes.

We also studied differences in the effects of the CTC by race/ethnicity as research suggests there are important intersections between tax policy and racial inequality³⁰. As a result of making the credit fully refundable and removing the earnings minimum, Hispanic and Black families were more likely to become newly eligible or fully eligible for the CTC with the 2021 expansion³¹.³² Thus, the 2021 CTC provided these families with new support relative to White families, who have historically had higher eligibility rates. We find some evidence that the 2021 CTC helped reduce hardships among Black families more than White or Hispanic families, but the differences were not large.

CONCLUSION

Our study focuses on a sample of families with very low incomes, who were most likely to gain access to the CTC in 2021. We find that families spent their monthly CTC on bills and expenses that should improve their material well-being. We also find that the monthly CTC reduced families' overall number of material hardships and, in particular, their food insecurity. These findings are in keeping with other studies of the effects of the CTC on broader populations³³.³⁴ Similarly, we find no evidence of an effect of the CTC on the employment of families with low incomes, consistent with evidence from other studies³⁵. We also find suggestive evidence that the CTC improved other measures of material well-being (reduced medical hardships, inability to pay utility bills, and reliance on friends and family for food).

The 2021 monthly CTC was short-lived. Thus, it is hard to know what the effects of a longer-term, more stable credit would be. Nonetheless, our research suggests the credit reduced material hardship for families with very low incomes, which prior research suggests should improve child and family well-being^{36, 37}.

ABOUT THE AUTHORS

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The authors would like to acknowledge Propel for its partnership in fielding the survey and sharing results for analysis. We would also like to thank [U-M Poverty Solutions](#) associate Samiul Jubaed for his assistance with the data cleaning as well as Nicole Kovski, who co-authored the paper summarized in this brief. We also thank the Washington Center for Equitable Growth and the Lynn and Charles Schusterman Family Foundation for their generous support of our research.

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