The Differential Effects of Monthly and Lump-Sum Child Tax Credit Payments on Food and Housing Hardship

Zachary Parolin[a,c], Elizabeth Ananat[b], Sophie Collyer[a], Megan Curran[a], and Christopher Wimer[a]

[a]Center on Poverty and Social Policy, Columbia University
[b]Barnard College, Columbia University
[c]Bocconi University

Abstract: This study investigates the effects of the expanded Child Tax Credit (CTC) on food and housing hardship in the United States, and tests whether the effects vary by payment frequency and size. We produce difference-in-difference estimates to identify how monthly and lump-sum CTC payments affected food and housing hardship among a sample of 943,568 respondents between April 2021–May 2022. The monthly CTC payments reduced food insufficiency among families with children by at least 2.4 percentage points (19%), but the lump-sum payment did not reduce food insufficiency. Instead, the lump-sum payment reduced the likelihood that families with children were behind on housing payments by at least 1.2 percentage points (10%). Distribution type matters in efforts to reduce food hardship: families were more likely to use the monthly benefits to purchase food, but the lump-sum benefits to catch up on rent payments.

In March 2021, the United States (U.S.) Congress passed the American Rescue Plan (ARP), which included a large expansion of the Child Tax Credit (CTC). The CTC expansion marked a notable shift in the American welfare state's treatment of low-income families; however, it was implemented for only one tax year. The payments were also delivered to families in two ways: as monthly payments and lump-sum payments. This study investigates the effects of the monthly and lump-sum expanded CTC payments on two indicators of material hardship that carry direct consequences for public health: food insufficiency and falling behind on rent or mortgage payments. In particular, we explore the possibility that families use monthly and lump-sum payments differently: with the smaller, regular payments going to meet ongoing nutrition demands (Parolin et al, 2021; Shafer et al, 2022; Perez-Lopez, 2021) while larger, one-time payments are used to pay down debt, such as housing arrears (Halpern-Meekin, 2015; Goodman-Bacon and McGranahan, 2008), suggesting that the two types of payments differentially affect food hardship.

Prior to the CTC's expansion, tax filers could receive a CTC of up to $2,000 per child per year, but it was not fully refundable.[1] One in three children did not receive the full benefit value because their families did not earn enough to qualify. Children with single parents, those in rural areas, those in larger families, and Black and Latino children were disproportionally ineligible for the full credit (Curran and Collyer, 2020; Collyer, Harris, and Wimer, 2019). The ARP made the CTC available to almost all children for tax year 2021, including making the full benefit newly available to those in families with the lowest incomes who had been previously excluded. Additionally, it increased the maximum annual credit value to $3,000 per child aged 6-17 and $3,600 per child under 6, and delivered half the credit in monthly installments (up to $250 per older child, $300 per younger child) between July and December 2021.[2] The A lump-sum payment for the remainder (up to $1,800 per child) was then provided in March or April 2022 upon tax filing.

This study uses the Census Household Pulse Survey ('Pulse'), which offers nationally-representative data throughout 2021-2022, to identify the policy's consequences for food and housing hardship. We apply difference-in-difference estimates and exploit the fact the policy effects differ between respondents with children and those without, and that households with children benefit differentially based on the number and ages of resident children and pre-reform income levels. Our investigations build on earlier research studying the consequences of the initial monthly payments for food hardship (Parolin et al., 2021; Perez-Lopez, 2021), but we expand that work in several ways: we offer a stronger research design to isolate plausibly-causal effects; compare reductions in food hardship to housing hardship; assess the differential effects of the monthly payments compared to the lump-sum payments on hardship; and elaborate on direct consequences for reductions in food and housing hardship in the U.S.

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[1] See additional information on the history of the Child Tax Credit, see Crandall-Hollick (2021), Crandall-Hollick (2018), and Garfinkel et al. (2016).

[2] Because the payments began halfway through the year, families will receive half of full amount of their credit via monthly payments in 2021 and the remainder in a single payment when they file taxes in 2022.

METHODS

*Data Source:*Data come from the U.S. Census Bureau Pulse, launched in April 2020 to collect nationally-representative information on the social and economic wellbeing of U.S. households. The data have been used to track trends in material hardship, subjective wellbeing, and other social and economic indicators throughout the COVID-19 pandemic (Bauer et al., 2020; Bitler et al., 2020; Morales et al., 2020; Schanzenbach and Pitts, 2020; Ziliak, 2021; Cai et al., 2020, Twenge and Joiner, 2020).

We use data collected between April 14, 2021 and May 9, 2022 (Waves 28-45). Our timespan includes three months of outcomes before the monthly payment treatment (April 14 to July 5, 2021), six months during the monthly CTC payments (July 21 to December 13, 2021), six weeks after the expiration of the monthly payments and before the lump-sum payment (December 29, 2021, to February 7, 2022), five weeks during the provision of the lump-sum payments (March 2 to April 22, 2022), and two weeks after most lump-sum payments were distributed (April 27 to May 9, 2022). With the staggered nature of the treatments, we can investigate the effects of the introduction and expiration of the monthly CTC payments and compare them to those of the lump-sum payments.

We provide descriptive statistics on the respondents in Appendix A, which show that the Pulse sample closely mirrors population estimates from the U.S. Current Population Survey Annual Social and Economic Supplement (CPS ASEC). As the U.S. Department of Agriculture (2021) describes, the Pulse's sampling process and different recall periods in reporting material hardship likely inhibits reliable cross-sample comparisons; as such, we do not attempt to compare material hardship outcomes in the Pulse to other surveys (see also Winship and Rachidi, 2021). Week-to-week estimates of food hardship and other outcomes within the Pulse (from Wave 28 onward), however, are produced with consistent sampling and survey methods.

Sample Criteria: We exclude households in the Pulse (1.3% of respondents) who have imputed values of number of children in the household. Our total sample size is 943,568 respondents (we use the word "respondents" and "households" interchangeably, given that respondents are often asked to report on household conditions). In our primary analysis, we include all respondents, regardless of income.

Measuring Material Hardship: Appendix Table A1 presents our primary measures of food and housing hardship. Our food insufficiency measure captures whether respondents "sometimes or often did not have enough food to eat" in the prior week. Our housing hardship indicator measures whether the household is currently caught up on rent or mortgage payments. We operationalize each of these indicators as a binary variable using the criteria described in Table A1.

Methods: We estimate difference-in-difference models to assess the effect of the expanded CTC on our outcomes of interest, as defined in Equation (1).

$$y_i = \beta_1 CTCWeek_i + \beta_2 Treatment_i + \beta_3 (CTCWeek * Treatment)_i + \beta_4 X_i + \varepsilon_i \quad (1)$$

The outcome variable is one of our hardship indicators (separate models for each). *CTCWeek* is a binary indicator of whether the time of survey occurred during one of the periods in which either the monthly or lump-sum CTC payment was distributed. We specify our treatment variable, *Treatment,* in two separate ways. First, we operationalize a binary treatment indicator measured as whether the household has children (value set to 1) or not (value set to 0).[3] Childless households do not directly benefit from the reform and form our control group.

For our second treatment indicator, we estimate models using a continuous indicator of treatment intensity to capture the fact that the likely impact of the CTC varies by age of the children (as children under 6 receive larger monthly benefits), the number of children in the home, and the relative value of the new CTC benefits compared to what the family likely received from the CTC prior to the reform. We cannot consistently observe the age of each child in a given household in the Pulse, nor do we have information on pre-reform CTC receipt.[4] Thus, we use data from the 2019 U.S. CPS ASEC to estimate the mean pre- and post-reform benefit values for bins defined by the number of adults in the household (ranging from 1 to 10), the number of children in the household (ranging from 0 to 10), and eight pre-tax income category bins (from under $25,000 annually scaling up to more than $200,000 per year). We compute the mean pre-reform refundable CTC benefits as observed for each family unit in the CPS ASEC. We then simulate the *additional* post-reform benefits that each family is eligible for using detailed policy rules from the CTC reform specified in the ARP. We subtract the pre-reform benefit value from the post-reform benefit value to create a "net benefit" measure for each family unit. Finally, we calculate the weighted mean of the size-adjusted net benefit value for each of the bins defined above and import this value into the Pulse, matching on the number of adults, number of children, and pre-tax income category of the Pulse respondents. We provide more details and descriptive statistics on the indicator in Appendix B.

In the Appendix, we supplement the intent-to-treat effects (ITT, or the effect of the treatment on the full treatment group, regardless of whether they report actually receiving the CTC) described in Equation (1) with estimates of the treatment effect on the treated (TOT) using two-stage least

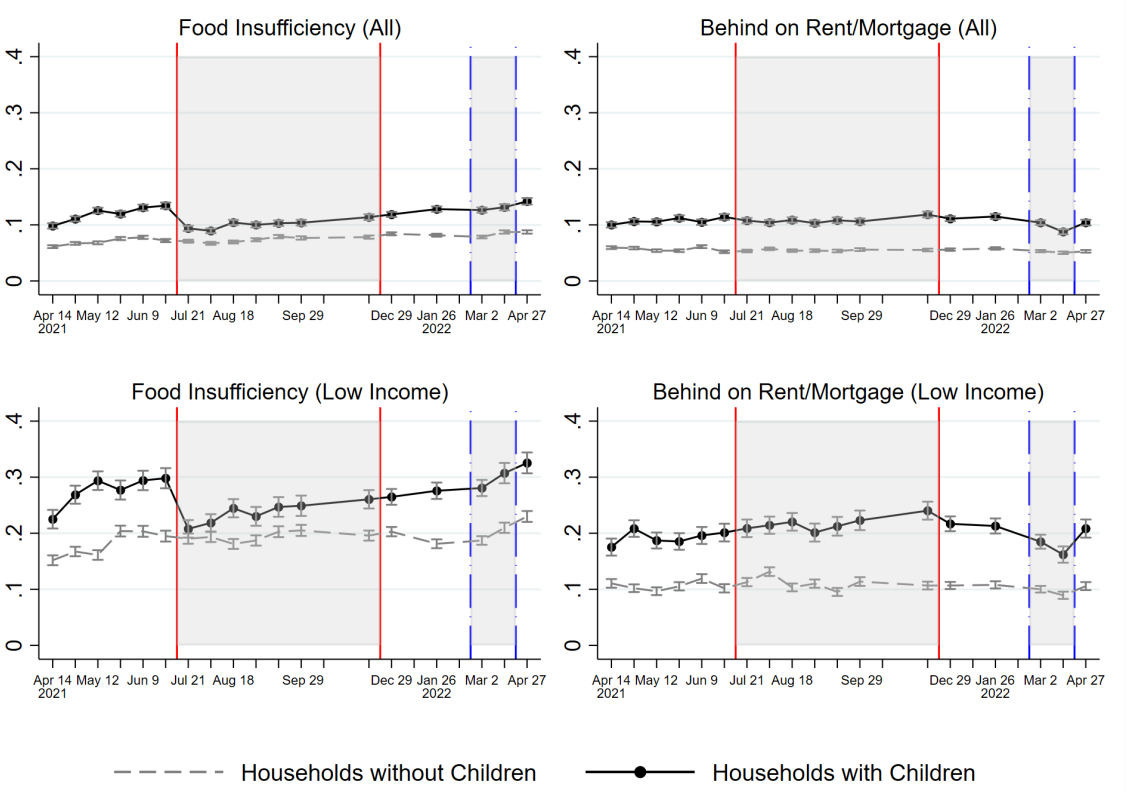
[3] We cannot directly measure CTC eligibility within the Pulse, though nearly 90 percent of families with children are eligible to receive benefits (Tax Policy Center, 2021); exceptions are very high-income families and undocumented families. As such, our primary analyses classifies all respondents with children into the treatment group.
[4] Wave 34 of the Pulse does have binary variables indicating whether children are under 5 or between 5 and 11. Given that the data are not consistently available throughout the waves included in this analysis, however, we cannot use it in our estimations or creation of the treatment indicators.

squares models. Given that underreporting of CTC receipt in the Pulse could upwardly bias the TOT results, we focus on the ITT results in our primary results, while providing a range of outcomes based on the upward bounds from the TOT.

RESULTS

Figure 1 presents descriptive trends in our food and housing hardship indicators from April 2021 through May 2022 for childless households (dashed gray line) and households with children (solid black line). The first shaded area represents the period of the monthly CTC payments, and the second represents the lump-sum payments. The upper panel presents results for all respondents; the lower panel shows results for low-income respondents (below $35,000 in pre-tax income).

Figure 1: Trends in food insufficiency and being behind on rent/mortgage payments for households with and without children



Note: The shaded gray area represents the two treatment periods: monthly payments were distributed in the first period between the solid red lines, and the lump-sum payment was distributed in the second period between the dashed blue lines.

Food insufficiency among all households with children increased from 9.8 percent in April 2021 to 13.4 percent at the end of June 2021, before the first CTC payment. Childless families also saw an increase, with food insufficiency rising from 6.1 percent to 7.2 percent during this time period. After the first CTC payment, however, food insufficiency remained relatively stable for childless households (7.2 percent to 7.1 percent), but declined for families with children (13.4 percent to 9.4 percent). Among low-income families with children (bottom panel), the decline was even larger: food insufficiency fell from 29.8 percent in June to 20.8 percent in July 2021, while the rate for low-income childless households changed little, from 19.5 percent to 19 percent. Throughout the rest of 2021, levels of food insufficiency ticked up slightly for both family types, perhaps reflecting the withdrawal of expanded unemployment benefits (and, in some states, emergency SNAP allotments) and rising food prices. After the monthly CTC payments expired, food hardship continued to rise for families with children, but declined slightly for childless families. Despite the lump-sum CTC payments in spring 2022, food hardship continued to rise for both family types during this time.

Trends in falling behind on rent or mortgage payments, meanwhile, showed very little change in response to the introduction or removal of monthly CTC payments, across income levels and household types. Roughly 20 percent of low-income households with children were behind throughout 2021. Upon receipt of the lump-sum CTC payments in March 2022, however, housing hardship declined for families with children while remaining stable for childless households. This descriptive evidence points to differential consumption responses to the monthly versus lump-sum CTC payments: the smaller, monthly payments were primarily used to increase food intake, while the larger, lump-sum payment was primarily used to catch up on housing payments. This is consistent with prior literature on differential consumption responses to refundable tax credits (Halpern-Meekin et al 2015; Goodman-Bacon and McGranahan 2008).

Table 1 presents results from our difference-in-difference estimates using our binary treatment among all respondents.[5] The first column presents results from the full range of data, covering the introduction and lapse of the monthly and lump-sum payments. The subsequent columns examine each treatment period individually.

[5] In Appendix D, we present event study specifications for all respondents and low-income respondents. The results support our parallel trends assumption and document that the monthly CTC payments were particularly effective at reducing food insufficiency among lower-income respondents.

Table 1: Effect of the CTC on hardship outcomes (difference-in-difference estimates of intent to treat effects with binary treatment)

	All Treatments (Apr 2021 – May 2022)	On Treatment (Apr 2021 – Dec 2021)	Off Treatment (Jul 2021 – Feb 2022)	Lump-Sum Payment (Jan 2022 – May 2022)
1) **Food Insufficiency** (Pre-Treatment Mean: .120)				
Household with Children	0.029***	0.032***	0.019*	0.024***
	(0.003)	(0.003)	(0.008)	(0.005)
Household with Children X CTC Months	-0.016***	-0.024***	-0.010+	-0.001
	(0.004)	(0.006)	(0.005)	(0.006)
2) **Behind on Rent or Mortgage Payment** (Pre-Treatment Mean: .107)				
Household with Children	0.039***	0.038***	0.033***	0.044***
	(0.003)	(0.003)	(0.007)	(0.004)
Household with Children X CTC Months	-0.003	-0.004	0.000	-0.012*
	(0.003)	(0.005)	(0.005)	(0.005)

Note: All models include state fixed effects, week fixed effects, controls for age, age squared, education, sex of household head, net gain from expanded EITC benefits, an interaction of household with children and whether expanded unemployment benefits were provided in the given state-month, and an interaction of households with children and whether SNAP emergency allotments were provided in the given state-month. Robust standard errors in parentheses. $^{+}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$.

Results in Column 1 suggest a significant decline in food insufficiency for households with children relative to childless households during periods in which the CTC was distributed. Among all households, the intent-to-treat effect amounts to a 1.6 percentage point decline in food insufficiency for households with children versus those without, an effect size around 13 percent of the pre-treatment mean (12 percent) of food insufficiency among households with children. Column 2 shows a particularly strong reduction after the introduction of the monthly payments: food insufficiency fell by 2.4 percentage points for households with children (19 percent decline relative to the pre-treatment mean). Column 3 suggests that the expiration of the monthly CTC payments after December 15, 2021, led to about a 1-percentage-point, marginally significant, increase in food hardship for families with children. Consistent with our descriptive findings, Column 4 suggests that the lump-sum CTC payment did not meaningfully affect food insufficiency for families with children relative to childless families.

In Appendix C, we present our treatment effect on the treated results. Those findings suggest that the effect of the monthly payments could be as high as a 3.8-percentage-point (32%) decline in food hardship for families with children, and that the expiration of the same payments could be associated with up to a 1.5-percentage-point (12.5%) increase in food hardship.

The bottom half of Table 1 presents results for being behind on rent/mortgage payments. Consistent with the descriptive results, monthly payments had little effect on housing hardship. However, lump-sum CTC payments (Column 4) were associated with a 1.2-percentage-point reduction in being behind on rent for families with children, roughly a 10-percent decline relative to the pre-treatment mean.

Table 2 applies our continuous indicator of CTC treatment intensity. This measure captures variation based on pre-tax income and household size (see Appendix B). Given the difference in treatment intensity for the monthly versus lump-sum payment, we do not display "All Treatments" results as in the prior table. Column 1 shows that a $1,000 increase in CTC treatment intensity during the first treatment period was associated with a 7.1-percentage-point decline in food insufficiency among respondents with children relative to childless respondents after introduction of the CTC. With an average net payment of $232 during the monthly distribution, this result implies a reduction from the mean benefit of 1.6 percentage points (14% of the pre-treatment mean).

Table 2: Effect of the CTC on hardship outcomes (difference-in-difference estimates of intent to treat effects with continuous treatment)

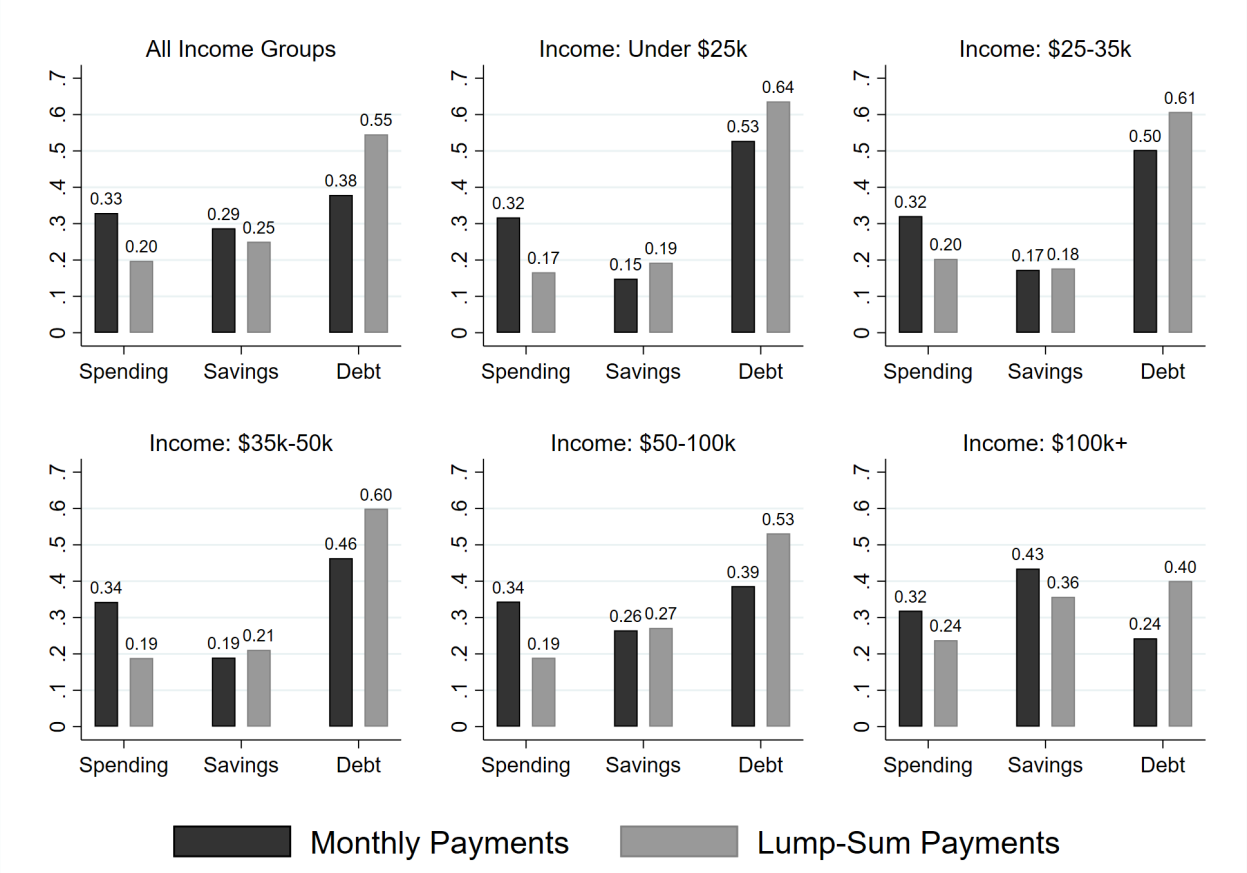
	On Treatment (Apr 2021 – Dec 2021)	Off Treatment (Jul 2021 – Feb 2022)	Lump-Sum Payment (Jan 2022 – May 2022)
1) **Food Insufficiency** (Pre-Treatment Mean: .120)			
Net Gain from CTC	0.205***	0.141***	0.024***
	(0.014)	(0.035)	(0.003)
Net Gain from CTC X CTC Months	-0.071*	-0.005	0.005
	(0.028)	(0.023)	(0.004)
2) **Behind on Rent or Mortgage Payment** (Pre-Treatment Mean: .107)			
Net Gain from CTC	0.165***	0.199***	0.029***
	(0.012)	(0.032)	(0.002)
Net Gain from CTC X CTC Months	0.019	-0.016	-0.010**
	(0.024)	(0.022)	(0.003)

Note: All models include state fixed effects, week fixed effects, controls for age, age squared, education, sex of household head, net gain from expanded EITC benefits, an interaction of household with children and whether expanded unemployment benefits were provided in the given state-month, and an interaction of households with children and whether SNAP emergency allotments were provided in the given state-month. Robust standard errors in parentheses. $^{+}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$.

The expiration of the monthly CTC payments was again associated with a decline in food insufficiency, though the effect in this model is not statistically significant. Consistent with our primary findings, the effect of the lump-sum payment was not statistically significant.

With respect to housing hardship, the treatment intensity indicator suggests that a $1,000 increase in the CTC lump-sum payment was associated with a 0.1-percentage-point reduction in being behind on rent or mortgage payments. With an average lump-sum net CTC payment at tax time of $1,658, this result implies a mean benefit led to a 1.7-percentage-point decline in housing hardship (14% of the pre-treatment mean).

Figure 2: Primary use of Child Tax Credit benefits among self-reported recipients



Note: Authors' calculations from Census Household Pulse Survey. Respondents are asked: "Thinking about your use of the payments from the "Child Tax Credit" did you:" and can answer "Mostly spend it" ("spend"), "Mostly save it" ("save"), or "Mostly use it to pay off debt" ("debt").

To supplement our estimation results, Figure 2 presents descriptive evidence of reported spending uses of the monthly versus lump-sum CTC payments among self-reported recipients of either. The results show that the lowest-income recipients of the lump-sum CTC payments were less likely to spend the payment on goods and services or to save their CTC payments; instead, they were more likely to use the CTC to pay back debt, which includes rent arrears. This stands in contrast to the monthly payments, which fewer recipients used to pay off debt. These findings are consistent with our estimation results: the lump-sum payments were more likely than the monthly payments to be spent on debt, including rent arrears, rather than new goods or services. This was particularly true for the lowest-income CTC recipients. Put differently: the monthly cash payments were more often used to increase food consumption and reduce food hardship.

DISCUSSION

The transformation of the CTC into a more generous and inclusive monthly payment marked a large shift in the treatment of low-income families with children within the American welfare state. However, the program was temporary, providing monthly payments to respondents for only a six-month period from July through December 2021, plus a lump-sum payment at tax time. To identify the impacts of the monthly and lump-sum payments on material hardship, this study applied a series of difference-in-differences estimates using microdata from the Pulse.

We found, first, that the introduction of the monthly CTC payments strongly reduced food insufficiency, while their withdrawal slightly increased food insufficiency among families with children. The payment of the monthly CTC benefits was associated with a 2.4-percentage-point (19%) decline in food insufficiency among all households with children.

Second, families used the monthly and lump-sum payments to address different needs. While the monthly payments contributed to a 19% relative reduction in food hardship for families with children, the lump-sum payment did not contribute to declines in food hardship. Instead, it contributed to a 10% relative decline in housing hardship. Additionally, we found that nearly two-thirds of the lowest-income recipients of the lump-sum CTC payments used the money to pay off debt, compared to 17% of such respondents who used the money primarily for new spending. In contrast, roughly double the share (32%) of low-income CTC recipients used the monthly payments for new spending rather than paying off debt. These differences suggest differential consumption responses to monthly versus lump-sum payments and have important policy and public health implications. Specifically, the lump-sum payments fulfill a different need for families relative to the monthly payments, allowing them to catch up on debt and rent arrears.

The contribution of the monthly payments to declines in food hardship is consequential, as experiencing food hardship can have severe adverse consequences for health outcomes. Prior studies show that children who experience food hardship are much more likely to develop asthma

and twice as likely to report being in either fair or poor health (Mangini et al, 2015). Our findings suggest that distribution type matters in efforts to reduce food hardship in the U.S.: families are more likely to use monthly payments to purchase food, but the lump-sum, tax-time payments to catch up on housing payments. In other words, our results suggest that re-introducing the monthly cash payments that existed from July to December 2021 would likely contribute to lower levels of food hardship in the U.S. moving forward.

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APPENDICES

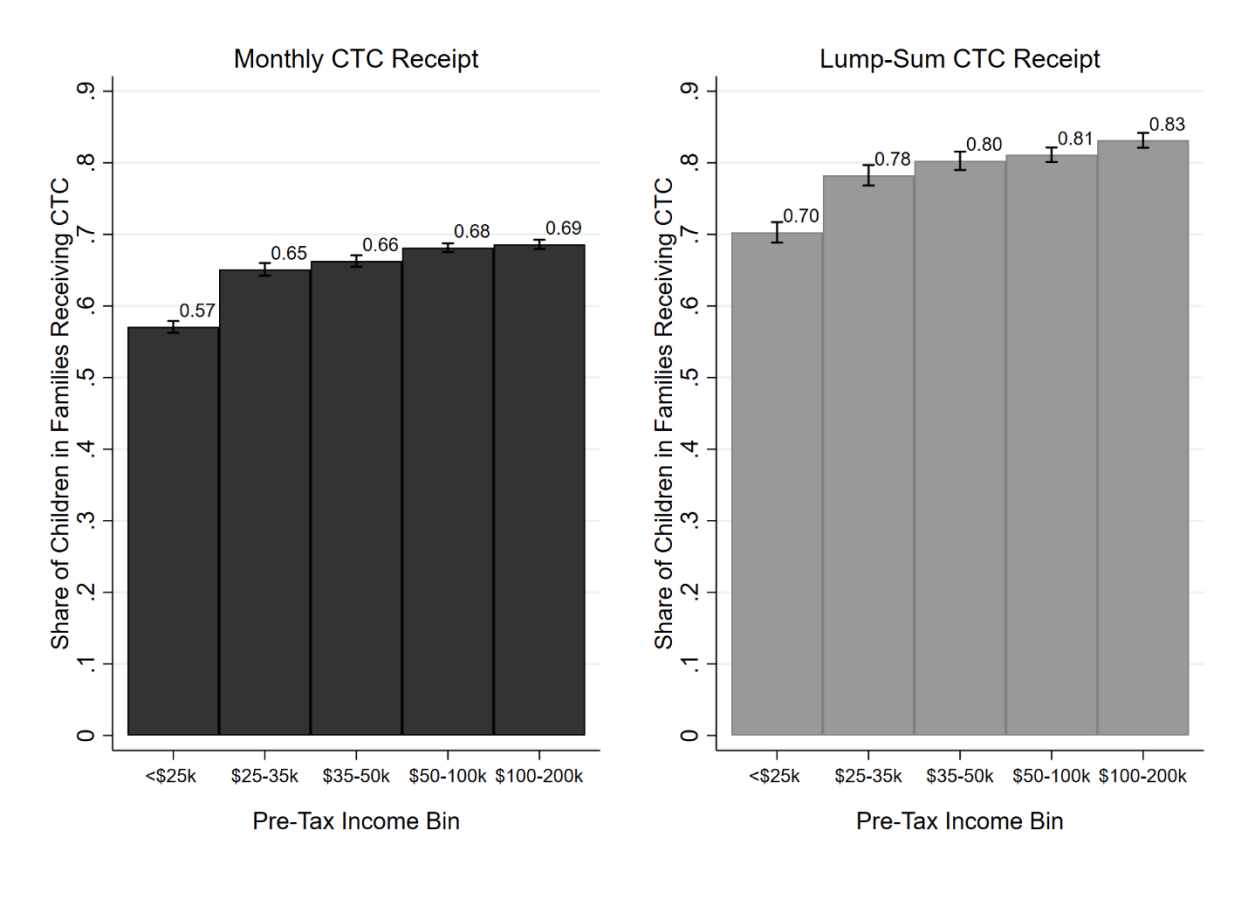
APPENDIX A: Descriptive Statistics and Comparison to CPS ASEC

Table A1: Descriptive statistics in Census Household Pulse Survey compared to the Current Population Survey

	Census Household Pulse Survey			Current Population Survey 2019
	All	Before July 15, 2021	After July 15, 2021	Annual, 2019
Female	51.9%	52.3%	51.6%	51.7%
No High School Degree	6.5%	6.6%	6.5%	12.0%
College Degree	34.7%	34.8%	34.2%	30.3%
Age	50.0	50.0	49.7	47.0
Married	57.9%	58.0%	57.0%	51.7%
Children in HH (Binary)	36.4%	36.5%	35.4%	35.4%
Hispanic	15.2%	15.1%	15.7%	15.5%
Black	10.9%	11.0%	10.9%	12.4%
Asian	5.6%	5.5%	5.6%	6.1%
Pre-Tax Income: $0-25,000	14.6%	14.1%	14.9%	16.9%
Pre-Tax Income: $25,000-100,000	54.3%	54.6%	54.0%	52.2%
Pre-Tax Income: $100,000+	31.0%	31.2%	31.1%	30.9%

Note: Pulse estimates from all survey respondents in specified month(s). CPS estimates from sample of 18 to 88 year old individuals in ASEC survey (matching the age span of respondents in the Pulse).

Figure A1: Share of children in families reporting receipt of the Child Tax Credit

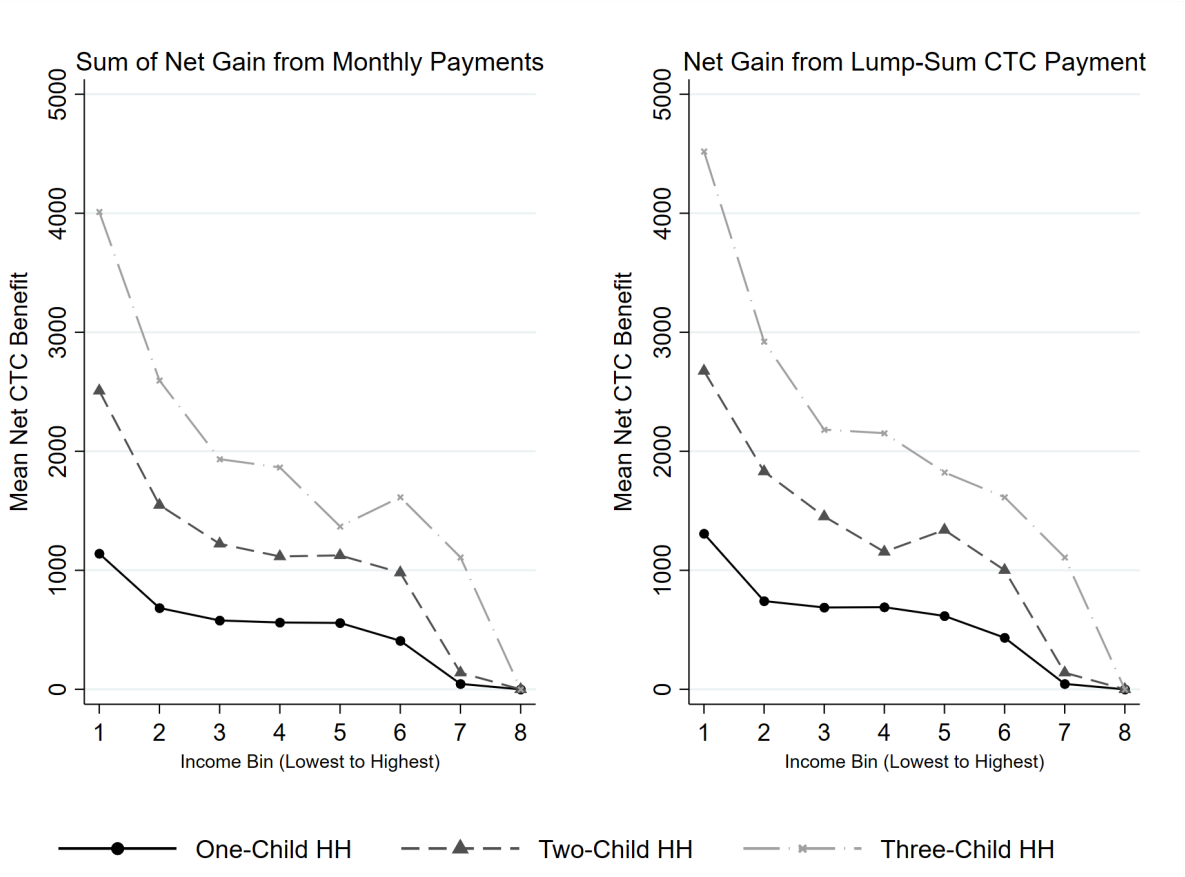


Note: Coverage rates are across the entire sample of households with children and are not limited to eligible households, as eligibility cannot be inferred with precision in the Pulse. Lump-sum CTC receipt refers to reported receipt during tax season of 2022.

APPENDIX B: Continuous Indicator of Treatment Intensity

Our continuous indicator of treatment intensity captures variation in expanded CTC benefits based on age of the children, the number of children in the home, and the relative value of the new CTC benefits compared to what the family likely earned from the existing CTC prior to the reform. We use data from the 2019 U.S. Current Population Survey to estimate the mean pre- and post-reform benefit values for bins defined by the number of adults in the household (ranging from 1 to 10, the number of children in the household (ranging from 0 to 10), and eight pre-tax income category bins (from under $25,000 annually scaling up to more than $200,000 per year). We then import this value into the Pulse, matching on the number of adults, number of children, and pre-tax income category of the Pulse respondents. We estimate the treatment intensity separately for the monthly payments and lump-sum payments. Below, we visualize the mean net gain in CTC benefits by income bin and payment type.

Figure B1: Mean net CTC benefits per month by number of children in household and pre-tax income bin



Note: Income bins are staggered from (1) under $25,000, (2) $25,000 - $34,999, (3) $35,000 - $49,999, (4) $50,000 - $74,999, (5) $75,000 - $99,999, (6) $100,000 - $149,999, (7) $150,000 - $199,999, and (8) $200,000 or more.

APPENDIX C: Treatment effect on the treated results

Table C1: Difference-in-differences estimate of effect of expanded CTC on hardship, binary treatment, treatment effect on the treated

	All Treatments (Apr 2021 – May 2022)	On Treatment (Apr 2021 – Dec 2021)	Off Treatment (Jul 2021 – Feb 2022)	Lump-Sum Payment (Jan 2022 – May 2022)
1) **Food Insufficiency** (Pre-Treatment Mean: .120)				
Household with Children	0.030***	0.031***	0.018*	0.025**
	(0.003)	(0.003)	(0.007)	(0.008)
Household with Children X CTC Months	-0.033***	-0.038***	-0.015+	-0.003
	(0.008)	(0.009)	(0.009)	(0.019)
2) **Behind on Rent or Mortgage Payment** (Pre-Treatment Mean: .107)				
Household with Children	0.039***	0.038***	0.033***	0.053***
	(0.003)	(0.003)	(0.007)	(0.007)
Household with Children X CTC Months	-0.007	-0.006	0.000	-0.038*
	(0.007)	(0.009)	(0.008)	(0.016)

Note: All models include state fixed effects, week fixed effects, controls for age, education, sex of household head, an interaction of household with children and whether expanded unemployment benefits were provided in the given state-month, and an interaction of households with children and whether SNAP emergency allotments were provided in the given state-month. Robust standard errors in parentheses. $^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table C2: Difference-in-differences estimate of effect of expanded CTC on hardship among households; *continuous indicator of treatment intensity*, treatment effect on the treated

	On Treatment (Apr 2021 – Dec 2021)	Off Treatment (Jul 2021 – Feb 2022)	Lump-Sum Payment (Jan 2022 – May 2022)
1) **Food Insufficiency** (Pre-Treatment Mean: .120)			
Net Gain from CTC	0.205***	0.168	0.021***
	(0.014)	(0.144)	(0.004)
Net Gain from CTC X CTC Months	-0.111*	-0.054	0.011
	(0.044)	(0.229)	(0.010)
2) **Behind on Rent or Mortgage Payment** (Pre-Treatment Mean: .107)			
Net Gain from CTC	0.165***	0.286	0.035***
	(0.012)	(0.151)	(0.004)
Net Gain from CTC X CTC Months	0.030	-0.167	-0.025**
	(0.038)	(0.240)	(0.008)

Note: All models include state fixed effects, week fixed effects, controls for age, education, sex of household head, an interaction of household with children and whether expanded unemployment benefits were provided in the given state-month, and an interaction of households with children and whether SNAP emergency allotments were provided in the given state-month. Robust standard errors in parentheses. $^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

APPENDIX D: Event study specification of the effect of the CTC payments on food insufficiency and on being behind on rent/mortgage payments