ONLINE APPENDIX

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

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APPENDIX A: Descriptive Statistics and Comparison to CPS ASEC

| | Census Household Pulse Survey | | | Current Population Survey 2019 |
|----------------------------------|------------------------------------|-------------------------|------------------------|--------------------------------------|
| | All (April 2021 to May 2022) | Before July 15, 2021 | After July 15, 2021 | Annual, 2019 |
| Female | 51.8% | 52.3% | 51.6% | 51.7% |
| No High School Degree | 6.6% | 6.6% | 6.6% | 12.0% |
| College Degree | 34.5% | 34.8% | 34.4% | 30.3% |
| Age | 49.7 | 50.0 | 49.6 | 47.0 |
| Married | 57.3% | 58.0% | 57.0% | 51.7% |
| Children in HH (Binary) | 35.9% | 36.5% | 35.6% | 35.4% |
| Hispanic | 15.3% | 15.1% | 15.4% | 15.5% |
| Black | 10.2% | 10.3% | 10.2% | 12.4% |
| Asian | 5.2% | 5.1% | 5.2% | 6.1% |
| Pre-Tax Income: \$0-25,000 | 14.8% | 14.1% | 15.2% | 16.9% |
| Pre-Tax Income: \$25,000-100,000 | 54.4% | 54.7% | 54.3% | 52.2% |
| Pre-Tax Income: \$100,000+ | 30.7% | 31.2% | 30.5% | 30.9% |

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

 Population Survey

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.

| Table A2: Overview of primary hardship | indicators |
|--|------------|
|--|------------|

| Туре | Prompt | Qualifying Responses |
|--|--|--|
| Household food insufficiency | In the last 7 days, which of these statements best describes the food eaten in your household? | <i>Sometimes</i> or <i>often</i> not enough to eat |
| Not caught up on rent [or mortgage] | Is this household currently caught up on rent [or mortgage] payments? | No. |

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 calculate the weighted mean of the net benefit value for each of the bins defined above. 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. Below, we visualize the mean size-adjusted net gain in CTC benefits by income bin and family size.



Figure B1: Mean size-adjusted net CTC benefits per month by number of children in household, family structure, 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: Spending patterns among self-reported Child Tax Credit recipients

Note: Authors' calculations from Waves 34-45 of Census Household Pulse Survey (July to December 2021). "Low-income" refers to pre-tax annual incomes below \$35,000. Respondents can report spending their CTC benefits on more than one category.

APPENDIX D: Seasonality Tests

| | 1. Food Insufficiency, All Incomes | 2. Behind on Rent or Mortgage, | 3. Food Insufficiency, Low Income | 4. Behind on Rent or Mortgage, |
|--|--|--------------------------------------|---|--------------------------------------|
| Treatment as Post-Ju | uly 15, 2020 | An incomes | | Low medine |
| Household with Children | 0.015 ^{***} (0.003) | 0.043 ^{***} (0.003) | 0.021 ^{**} (0.006) | 0.078 ^{***} (0.006) |
| Household with Children X Post-July 15 | 0.014 ^{***} (0.004) | 0.005 [*] (0.002) | 0.027 ^{**} (0.009) | 0.003 (0.007) |
| Pre-Treatment Mean among Treated Group | 0.135 | 0.134 | 0.279 | 0.237 |

Table D1: Seasonality test in 2020 sample (April 23, 2020 - December 21, 2020): Difference-indifferences estimates of intent to treat effects with binary treatment set as post-July 15, 2020

Note: The sample sizes are 1,515,120 (all incomes) and 816,767 (low income). "Low income" refers to prior-year household income <\$35,000. All models include state and week fixed effects, controls for age, education, and sex of respondent. Robust standard errors clustered at the state level in parentheses.

| | 1. Food | 2. Behind on | 3. Food | 4. Behind on |
|---------------------------------|----------------|--------------|----------------|--------------|
| | Insufficiency, | Rent or | Insufficiency, | Rent or |
| | All Incomes | Mortgage, | Low Income | Mortgage, |
| | | All Incomes | | Low Income |
| Treatment as Post-July 15, 2020 | | | | |
| Household with | 0.151*** | 0.193*** | 0.055* | 0.152*** |
| Children | (0.013) | (0.012) | (0.021) | (0.016) |
| | . , | . , | . , | |
| Household with | 0.075^{***} | 0.017^* | 0.085^{***} | 0.021 |
| Children X | (0.016) | (0.008) | (0.021) | (0.016) |
| Post-July 15 | | | | |
| Pre-Treatment | 0.135 | 0.134 | 0.279 | 0.237 |
| Mean among | | | | |
| Treated Group | | | | |
| _ | | | | |

Table D2: Seasonality test in 2020 sample (April 23, 2020 - December 21, 2020): Difference-indifferences estimates of intent to treat effects with continuous treatment set as post-July 15, 2020

Note: The sample sizes are 1,515,120 (all incomes) and 816,767 (low income). "Low income" refers to prior-year household income <\$35,000. All models include state and week fixed effects, controls for age, education, and sex of respondent. Robust standard errors clustered at the state level in parentheses.