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Spending Responses to the Child Tax Credit Expansions

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Abstract

This article summarizes the literature that studied how people used the 2021 advance Child Tax Credit. Four primary findings emerged. Families more frequently reporting paying down debt during the first few months the payments were being distributed. In the final months of payments, families more frequently reported spending it. Families primarily used the monthly CTC on household necessities and child-related spending. There was heterogeneity in the spending response across income and race. Lastly, the CTC helped families deal with rising inflation.

Key words: spending; saving; consumption; Child Tax Credit

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“People have written me to tell me they’ll use the money to buy their kids new shoes, to send them to summer camp, to cover afterschool care when school starts up again.” President Joseph R. Biden, July 15th, 2021¹

INTRODUCTION

The purpose of the expanded and advance Child Tax Credit (CTC) in 2021 was to improve the well-being of children by increasing their family’s resources through a monthly flow of income. It is through the improved ability of families to pay for the costs of raising children and weather financial shocks that the expanded CTC could improve child well-being. A first-order question of cash transfers is whether people spent it or saved it. And if they spent it, what did they buy? In this article, we summarize the literature that studied how people used the 2021 advance Child Tax Credit.

By the time of the first advance CTC payment, the nationwide COVID-19 emergency was on-going for sixteen months, with unemployment still elevated. The research summarized below finds that the monthly payments enabled families to pay regular bills and stabilize their spending. A tenant of economic theory is that a family’s economic well-being is determined by their consumption of goods and services, and that smoothing consumption in response to income shocks improves well-being. This tenant is even more important when examining the economic well-being of children, who rely on their parents to provide them with the necessities of life. The pandemic led to extreme shocks to both income and consumption, and families with children were particularly impacted.

The 2021 CTC was unique among benefits administered through the tax code in that it provided monthly payments; about two-thirds of those eligible with low-income received the advance payments (Micheltmore and Pilkauskas 2023). How families spend and save the annual lump sum EITC and annual lump sum CTC after filing taxes is well understood (Barrow and McGranahan 2000; Smeeding et al 2000; Goodman-Bacon and McGranahan 2008; Johnson, Parker, and Souleles 2009; Jones and Micheltmore 2018; Fisher and Rehkopf 2022). In contrast, little evidence existed before the advance CTC on how families spend or save unconditional monthly cash transfers. The closest may be the Making Work Pay tax credit in 2009, which was a small tax credit, up to \$400 or \$800 spread out over one year for single or married tax filers, designed to increase take-home pay each pay period. Sahn, Shapiro, Slemrod (2012) find that only 13 percent of households reported mostly spending the Making Work Pay tax credit.

Throughout this article, as in the economics literature, the word ‘consumption’ is used interchangeably with ‘consumption expenditure.’ However, the two concepts are distinct. Consumption expenditure refers to the cost for goods and services purchased in the reference period. Consumption includes goods and services that had zero cost to the household in the reference period, such as gifts received, in-kind government transfers, the home production of goods and services, and the value of services from durables such as automobiles and housing.² These consumption items are often not recorded in surveys that measure consumption expenditure. When

¹ <https://www.whitehouse.gov/briefing-room/speeches-remarks/2021/07/15/remarks-by-president-biden-to-mark-the-day-that-tens-of-millions-of-families-will-get-their-first-monthly-child-tax-credit-relief-payments-thanks-to-the-american-rescue-plan/>

² See the OECD Framework for Statistics on the Distribution of Household Income, Consumption and Wealth (2013) for a more detailed discussion of the distinction between ‘consumption’ and ‘consumption expenditure.’

citing specific results, we default to the term used by the authors. Additionally, we use the terms expenditures or spending to refer to consumption expenditure.

The article proceeds as follows. The next section describes the data sources and empirical methodology employed by the research that estimated the spending response to the CTC. The third section describes the primary findings. We then put these findings in context of consumer responses to other income transfers administered through the tax code. The last section concludes.

DATA SOURCES AND METHODOLOGY

The speed and severity of the COVID-19 pandemic increased the demand by policy makers and researchers for real- or near-real time data, leading to the creation of new surveys, the addition of questions to existing surveys, and the utilization of transactions data from consumer financial accounts and retail businesses. To help set the context for the research findings summarized, this section describes the data sources and empirical methodology used in the research summarized here.

Data Sources

Studies relied on two general types of data sources for their work: surveys and administrative. Table 1 lists the data sources and sample for each data source used to study the impact of the CTC on spending behavior.

Surveys can be further divided into two subgroups: on-going surveys that added CTC-related questions and new surveys. Long-running nationally representative surveys, the Consumer Expenditure (CE) Survey, the NORC/AmeriSpeak panel, and the Survey of Household Economics and Decisionmaking (SHED), added CTC-related questions. Three additional surveys launched at the beginning of the COVID pandemic added CTC-related questions in 2021. The U.S. Census Bureau launched the Household Pulse Survey (HPS) in April 2020. The American Enterprise Institute began conducting a longitudinal survey of working-age adults in the U.S. in July 2020, the Employment and Safety Net Survey (ESNS), and RAPID began surveying households with children age birth to five in April 2020.

Others created surveys specifically to address CTC-related questions. The Center for the Study of Social Policy conducted a survey in partnership with community organizations in four states to understand the impact of the CTC on families of color (Blount and Minoff 2022). The Center for Law and Social Policy fielded a nationally representative survey of CTC-eligible parents to understand the reach and impact of the CTC (Burnside, Fuller, and Zhang 2022). Finally, researchers fielded a survey of Supplemental Nutrition Assistance Program (SNAP) recipients using the Propel app to understand how the CTC impacted families receiving SNAP (Pilkauskas, Michelmore, Kovski, and Shaefer 2022).

Most of these surveys capture spending using categorical questions. The Household Pulse typifies these categorical questions by asking two questions:

*Thinking about your use of the payments from the Child Tax Credit did you: 1) mostly spend it; 2) mostly save it; 3) mostly use it to pay off debt?*³

What did you and your household mostly spend the most recent Child Tax Credit payment on?

Respondents to the HPS were provided seventeen categories to choose from in the second question, including items such as food, clothing, and childcare.

The other data source is administrative records. The most common source is from consumer financial transactions. SaverLife used linked account data among its low-income household users who want to improve their savings behavior. The JPMorgan Chase Institute used its linked transaction data for those with accounts through JPMorgan Chase. Finally, Lourie, Shanthikumar, Shevlin, and Zhu (2022) used linked transaction data from a data aggregator, Envestnet | Yodlee.

Others used administrative data from businesses to capture aggregate consumer spending. Mastercard SpendingPulse reported on retail sales (Mastercard SpendingPulse 2022). Similarly, Safegraph collected transaction data from over 316,000 retail establishments in the U.S. (Parolin, Guipponi, Lee, and Collyer 2022). Separately, Safegraph collected mobile phone location data, which Parolin et al. (2022) use to count visits to retail stores as a proxy for spending.

Methodology

Most of the research on usage of the advanced CTC payments was descriptive. Six studies implemented quasi-experimental approaches to estimate a causal impact of the CTC on spending. This section describes the quasi-experimental methods used.

The most common approach was a standard difference-in-difference methodology. The pre-period consisted of the months before the advance CTC payments were distributed. The post-period included some or all the months the CTC payments were distributed.

When defining the treatment group, one approach used those who received the advance CTC (Lourie et al. 2022; Wheat et al. 2022), estimating a treatment-on-the-treated effect. Others used those deemed eligible to receive the advance CTC (Pilkauskas et al. 2021; Hamilton et al. 2022; Schild et al. 2023), estimating an intent-to-treat effect.

The definition of the control group varied more between the studies. Lourie et al. (2022) and Wheat et al. (2022) define their control group as those not receiving the CTC benefits. Those not receiving benefits included those who were eligible but did not receive the advance CTC. Those eligible for the CTC but not receiving the advance CTC would be expected to receive the full CTC benefit if they filed a 2021 tax return in early 2022. Those not receiving benefits also included those not eligible for the CTC either because they had no qualifying children or their income was too high. Hamilton et al. (2022) used only those not eligible for the CTC as the control group.

Pilkauskas et al. (2021) and Schild et al. (2023) use a parameterized difference-in-difference approach, simulating the dollar benefits received. Both identify the impact of the CTC using two

³ Paying off debt is functionally equivalent to a form of savings. Both increase wealth. Shapiro and Slemrod (2003) developed the first question above. They included “mostly save it” and “mostly use it to pay off debt” because some survey respondents may not view paying off debt as a form of saving.

sources of variation. First, all respondents prior to the expanded CTC were coded as receiving \$0 in CTC benefits that month. Thus, they have pre/post variation. Second, they have variation in the amount received across families, based on the number and age of the children in the household. Schild et al. (2023) also use respondents to the 2019 CE Survey who would be eligible for the CTC under the 2021 law to control for the seasonality of expenditures.

Lastly, Parolin et al. (2022) use county-level poverty rates to define the intensity of the treatment. They compare the consumption response in counties with the highest poverty rate to those living in medium or low poverty-rate counties. Low, medium, and high poverty is defined using terciles of the 2010 county-level poverty rate.

PRIMARY FINDINGS

Four primary findings emerge from the literature: the use of the CTC varied across the months, with families more frequently reporting paying down debt during the first months, and by the end of the monthly payments more frequently reporting spending; among families that spent the CTC, they primarily used it on household necessities and child-related spending; the spending response was heterogeneous across income and race; and the CTC helped families mitigate the negative impacts of rising prices. This section provides a detailed discussion of these findings.

Overall Spending Response

Figure 1a and Figure 1b compare the reported use of the CTC between the CE Survey and the HPS across the months. The CE and HPS agree on the trends but differ in the reported levels. The CE Survey reports a higher percentage of households primarily spending the CTC, 52 to 61 percent over the period, whereas the HPS estimates primarily spending to be between 26 and 40 percent.

Despite the difference in levels, the CE Survey and HPS agree on the trends. During the early months of distribution, a higher proportion of respondents reported utilizing their payments for savings (Karpman et al., 2021; Perez-Lopez and Mayol-Garcia, 2021; Roll et al., 2021). During the last few months of distribution, the percentage of savers declined, and the percentage of respondents using their payment for spending increased (Schild et al., 2023; Hamilton et al., 2022). Wheat et al. (2022) find that families spent the highest fraction of the CTC benefit in the first week of receiving their July payment, with families spending about 40% of the CTC in mid-July. The fraction spent in the first week declined to around 20-25% from August to November, then it increased to around 33% in December. The difference between the transactions data and the survey data could result from differences in the timeframe considered with the transactions data focusing on the first week and the survey data focusing on four weeks or three months.

While there is no explanation within the literature for why the fraction of households primarily spending the CTC increased over time, some conjectures can be made. Prior to the distribution of the advanced CTC payments, households received additional income from other relief policies enacted by the Federal Government. For example, the third and largest Economic Impact Payment was received around April 2021, just a few months before the first CTC payment. Parker et al. (2022) found the spending response to the third Economic Impact Payment was relatively small, which suggests increased levels of savings during the early months of the CTC payments. This additional income may have influenced households to use the CTC payments for debt repayment or savings (Wheat, Deadman, and Sullivan 2022). However, as time progressed, households may have experienced increased spending needs due to events like the start of the school year in August and

September (Perez-Lopez and Mayol-Garcia, 2021; Pilkauskas and Cooney, 2021), rising prices (Figure 2), and increased spending during the holiday season.

The differences in the levels between Figure 1a and Figure 1b may be attributed to several factors. Firstly, the HPS has a relatively low response rate – less than 7 percent (Peterson, Toribio, Farber, and Hornick, 2021). Second, the framing of the question differed between the two surveys. The HPS asked respondents about their use of the payment over the previous four weeks, while the CE Survey asked about the previous three months. In addition, the CE asked the CTC use question at the end of the survey, after respondents had been asked numerous questions about their spending behaviors during the same three-month reference period. In contrast, the HPS questions are asked without any previous questions related to their spending patterns. These differences in framing could have influenced respondents' recall and reporting of their payment utilization.

We can look to other surveys that also include questions about the overall use of the CTC payments for validation. The ESN Survey found that 45 percent of respondents reported mostly spending their CTC payment (Rachidi 2021). Similarly, the SHED reported 54 percent of respondents mostly spent their CTC payment (Board of Governors 2022). These findings align more closely with the CE.

Further evidence comes from the several studies that use spending data to estimate the total amount spent. Schild et al. (2023) estimated that families spent 41% of the CTC benefits within three months.⁴ Wheat, Deadman, and Sullivan (2022) found that recipients spent about 40% of the July 2021 CTC benefits within the first week of receipt. Of the remaining benefits, 41% were saved, 18% were transferred to other accounts, and 1% was used to pay down debt. In the other five months, they report that families spent 21-33% of the CTC benefits in the first week. Overall, the bulk of the evidence suggests that around half of households mostly spent the advance CTC benefits and that about half of the advance CTC payments were spent within three months.⁵

What were the payments spent on?

Several studies examined the spending behavior of households that received the advanced CTC payments with respect to general spending categories. The findings indicated that a significant portion of households used the CTC to meet basic needs. For example, Hamilton et al. (2022) found 70 percent of respondents used the CTC for routine essential expenses such as housing, food, and utilities.⁶ Similarly, RAPID-EC (2021) reported that 55 percent of respondents used the CTC to meet their basic needs, which included categories such as housing, food, and telecommunications, and Pilkauskas and Cooney (2021) found 75 percent of respondents use the CTC to pay bills.

⁴ The best quasi-experimental estimate from Schild et al. (2023) suggested that households spent 41% of the CTC. This estimated response controls for household size. Schild et al. estimate that 75% of the CTC benefits were spent when only controlling for the number of adults in the household.

⁵ We estimated the marginal propensity to consume the CTC based on the methodology of Shapiro and Slemrod (2003). The marginal propensity to consume (MPC) represents an estimate what percentage of CTC benefits households spent. We used the CE Survey estimates from Figure 1a and assumed that 52 percent of households mostly spent the CTC within three months. Under various assumptions about the distribution of the MPC, we estimated an overall MPC of 0.48-0.57, in line with the research summarized here.

⁶ Brugger et al. (2023) used the same data to explore the impact of the CTC on households raising children with disabilities compared to households of children without disabilities. They found households of children with a disability have a higher rate of spending on routine expenses (83 versus 70 percent) and purchasing more food (71 versus 57 percent), but a lower rate of spending on childcare expenses (15 versus 25 percent).

When examining more specific spending categories, surveys revealed consistent results. Approximately 48 to 58 percent of respondents reported using the CTC for food (Hamilton et al., 2022; Karpman et al., 2021; Blount and Minoff, 2022), while around 30 percent used it for rent or mortgage payments (Karpman et al., 2021; SHED, 2022; Blount and Minoff, 2022). The percentages were similar for clothing and utilities (Karpman et al., 2021). Analysis of expenditure and transaction-level data reinforced these findings. Using spending data, Schild et al. (2023) estimated that for every \$100 of CTC benefit received, \$23 was allocated to housing and \$13 to food. Lourie et al. (2022) utilized bank account and credit card data and found increased spending on groceries and education.

Child-related spending emerged as another common category for the use of the CTC. Several studies found that approximately a quarter of respondents reported spending their CTC funds in this manner (Karpman et al., 2021; Perez-Lopez and Mayol-Garcia, 2021; Pilkauskas et al., 2022; Pilkauskas and Cooney, 2021). However, other studies found around 50 percent of respondents reported child-related spending (Board of Governors 2022; Hamilton et al., 2022). This spending was directed towards childcare expenses, children's activities, school supplies, and children's clothing (Hamilton et al., 2022; Karpman et al., 2021; Perez-Lopez and Mayol-Garcia, 2021; Pilkauskas et al., 2022; Pilkauskas and Cooney, 2021). Schild et al. (2023) found that children's clothing had the highest spending response (\$6 out of \$100) among the analyzed child-related spending categories.

Furthermore, there seemed to be a seasonal effect on child-related spending. Pilkauskas et al. (2022) and Perez-Lopez and Mayol-Garcia (2021) noted that spending on children was at its highest around August when children were returning to school. Spending on children decreased as the school year progressed. Additionally, Perez-Lopez and Mayol-Garcia (2021) found that households with at least one child between 5 and 17 years old were more likely to report using the CTC for school-related expenses, while families with only children under the age of 5 were more likely to spend the CTC on childcare.

Spending Response by Income and Race

Several studies have shown heterogeneous spending responses by income and by race. This section first discusses the literature's findings across income groups and then across race.

Household income level was strongly correlated with CTC usage. A higher percentage of lower-income households reported having spent the CTC or paid down debt, while higher-income households were more inclined to save (Karpman et al., 2021; Rachidi, 2021; Blount and Minoff, 2022; Board of Governors, 2022; Hamilton et al., 2022; Schild et al., 2023). Around 50-60% of households with income below \$25,000 utilized the advanced payment for spending, whereas only 30-40% of those with income above \$75,000 mostly spent. Notably, the presence of lower liquid savings had a stronger influence on reported use than income alone. For checking and savings accounts with the lowest cash balances, the average weekly spending response was nearly four times higher compared to those with the highest cash balances, 73% versus 19%, illustrating the impact of financial constraints on spending behavior (Wheat, Deadman, and Sullivan 2022).

Regarding debt repayment, the proportion of households utilizing the advanced payment for this purpose was lower for higher-income households, although there were variations in the reported levels across studies related to their different definitions of low and high income. Rachidi (2021), Hamilton et al. (2022), and Schild et al. (2023) found that approximately 25 percent of low-income

households and 13 percent of high-income households report using their CTC payment to pay off debt. On the other hand, the Board of Governors (2022) reports that 14 percent of low-income households and 10 percent of high-income households use the payments for this purpose. Karpman et al. (2021), which uses the HPS, find 50 percent of low-income households reporting the use of the payment to pay off debt. As noted in the previous section, the HPS levels are significantly different than the other surveys, which may explain the differences found in Karpman et al. (2021).

In terms of general spending categories, low-income households tended to allocate a higher percentage of their payment towards household necessities, such as food, clothing, and utilities, relative to high-income households (Karpman et al., 2021; RAPID, 2021; Board of Governors 2022; Hamilton et al., 2022; Parolin et al., 2022; Brugger et al., 2023; Schild et al., 2023).

The percentage reporting spending on housing (i.e., mortgage or rent) was lower for higher-income households, but the result did not hold if the results were separated by renters and owners. Karpman et al. (2021) showed that 37 percent of households with income below \$25,000 report using the advanced payment for rent, whereas only 5 percent of households with income of \$75,000 or more report using the payment for rent. In contrast, 7 percent of low-income households and 12-percent of high-income households report using a portion of their payment to pay their mortgage. The divergence between renters and owners is likely due to a difference in population. Low-income households are more likely to be renters.

When it comes to spending related to children, low- and high-income households both spent the CTC on children but on different categories of goods and services. Low-income households tended to prioritize spending on schoolbooks and supplies (Karpman et al., 2021) or spending quality time with their children (Hamilton et al., 2022). Higher-income households allocated a larger proportion of their payment to childcare expenses (Karpman et al., 2021; Hamilton et al., 2022; Schild et al., 2023).

Most studies provided analysis of race across four or five groups: Asian, Black, Hispanic, Other, and White, but limited their discussion to the three most common racial groups in the United States: Black, Hispanic, and White. The discussion in this section follows this convention.

Income and race are highly correlated in the United States, and the pattern of use by race mostly followed the income results. Discussing differences by race without controlling for income may lead one to attribute a finding to race that is a function of income. Even controlling for income, race is not intended to show behavioral differences inherent to a race.

Black and Hispanic households tended to use the CTC to pay off debt more frequently than White households (Karpman et al., 2021; Roll et al., 2021; Hamilton et al., 2022; L'Esperance et al., 2022; Schild et al., 2023). In terms of spending, the results were less consistent. Some studies showed that Black (Karpman et al., 2021; L'Esperance et al., 2022; Schild et al., 2023) and Hispanic (Roll et al., 2021; Schild et al., 2023) households were more likely to spend their CTC, while others showed higher spending rates among White households (Hamilton et al., 2022).

Spending by categories also followed income patterns. Black and Hispanic household reported buying clothing, food, essential items, and paying bills more frequently than White households (Blount and Minoff, 2022; Burnside et al., 2022; Hamilton et al., 2022; L'Esperance et al., 2022; Brugger et al., 2023; Schild et al., 2023). They were also more likely to report spending their CTC on

child-related expenses such as school-related expenses, tutors, and children’s clothing (Perez-Lopez and Mayol-Garcia, 2021; Brugger et al., 2023; Schild et al., 2023).

Wheat, Deadman, and Sullivan (2022) and Karpman et al. (2021) considered race and liquidity/income concurrently. As anticipated, the difference in spending response by race diminished after controlling for income. However, it is worth noting that the association between race and income did not fully account for the variation in spending behavior. For example, Hamilton et al. (2022) showed higher-income households were more likely to utilize their advanced payment to establish or grow a college fund, with 28 percent of such households doing so compared to 13 percent of lower-income households. When looking at this result by race, 34 percent of Black households and 24 percent of Hispanic households reported allocating a portion of their payment to a college fund, in contrast to 15 percent of White households. Brugger et al. (2023) arrived at a similar finding. These remaining differences may be attributed to the longstanding and substantial racial wealth gap in the United States (Derenoncourt et al., 2022).

The Role of Inflation in the Spending Response

The advanced CTC payments were distributed during a time of high inflation. Figure 2 displays inflation over the previous twelve months, measured by the Consumer Price Index for All Urban Consumers (CPI-U). The gray area in the figure represents the months during which the advanced monthly CTC payments were disbursed in 2021. The inclusion of inflation rates for 2019 and 2020 serves to highlight that inflation was considerably higher in 2021 than in the previous two years.

Schild et al. (2023) estimate how inflation impacted household spending. Without adjusting for inflation, they find that total outlays increased by \$41 for every \$100 of advanced CTC payment received.⁷ After adjusting outlays for inflation, the spending response fell to \$27. The CTC payment prompted households to increase their overall spending, but the presence of inflation dampened the purchasing power of the CTC. This finding implies that a portion of the advanced payment was utilized by families to offset the effects of higher prices. The study by Hamilton et al. (2022) supports this inference by finding that approximately 70 percent of recipients who experienced negative consequences due to inflation reported that the CTC payments aided them in managing the impact of rising prices.

COMPARING CTC RESULTS TO PREVIOUS RESEARCH

Prior to the monthly advance CTC, little evidence existed on how families spend or save unconditional monthly cash transfers in the United States. The closest may be changes to tax withholdings. The 2009 Making Work Pay tax credit provided a small decrease in tax withholdings from paychecks. The change in withholding added up to a \$400 or \$800 increase in take-home pay spread out over one year. Sahm, Shapiro, Slemrod (2012) found 13% of households mostly spent the extra cash from the lower withholding. They contrasted this result with the 2008 stimulus payment, where 25% of the same households mostly spent the stimulus payment. A change in paycheck withholding remains an imperfect comparison to the monthly CTC. A change in withholding makes a small change to the household’s regular paycheck, which may or may not be noticed, while the monthly CTC was received separately from any paycheck.

⁷ Schild et al. (2023) define total outlays as the sum of outlays on housing, utilities, food, alcohol, tobacco, clothing, transportation, health, leisure, personal care, education, reading, and miscellaneous. The reference period for those outlays is three months.

Two studies examined how families spent the annual lump sum CTC. Both studies estimated a positive spending response with imprecise estimates. Johnson, Parker, and Souleles (2009) focused on the 2003 CTC expansion and found that households spent about one-quarter of the CTC benefits on non-durable expenditures within three months of receipt. Fisher and Rehkopf (2022) used variation over time in the annual lump sum CTC benefits using all policy-induced variation since the CTC's introduction in 1997. They found that some of the CTC was spent on food, non-durable transportation (e.g., gasoline), and new or used automobiles.

Substantial work has also been done to understand how people spend the Earned Income Tax Credit (EITC). The EITC is paid at tax filing as an annual lump sum, and the EITC benefits are larger, on average, than the CTC payments. The EITC also targets a different population – low-earners, and in particular low-earners with children. The EITC is primarily spent on durables (Barrow and McGranahan 2000; Smeeding et al 2000; Goodman-Bacon and McGranahan 2008; Fisher and Rehkopf 2022). Some of the EITC is spent on food, especially for households receiving a smaller EITC benefit (McGranahan and Schanzenbach 2013; Fisher and Rehkopf 2022). Finally, some of the EITC is saved, with less evidence that it is used to pay down debt (Jones and Micheltmore 2018). The greater propensity to spend the EITC on durable goods likely relates to the size of the EITC relative to the advance CTC and to the lump sum CTC. The annual lump sum EITC acts as forced savings (Fisher and Rehkopf 2022). The large annual lump sum transfer from the EITC provides the liquidity to purchase more expensive durables or as a down payment for a vehicle.

Lastly, the CTC expansion was part of the American Rescue Plan Act in 2021, which was part of the COVID-recession response. The CTC spending response may be conflated with the economic impact payments (EIP) made in 2020 and 2021. Comparing the 2020 and 2021 EIPs to the tax rebates in 2001 and 2008, Parker et al. (2022) found smaller impacts on non-durable spending than the previous tax rebates, and even smaller impacts for the third EIP that was made in Spring 2021, just a few months before the CTC monthly payments. Absent the three EIPs, the spending response to the CTC may have been higher.

CONCLUSIONS

Several key findings emerged from the literature surveyed here. First, the use of the CTC monthly payments varied across the months, with families more frequently reporting using the payment to pay down debt during the first few months the payments were being distributed. At the end of the monthly payments in November and December 2021, spending was the most frequently reported use. Second, among families that spent the CTC, they primarily used it on household necessities and child-related spending. Third, the spending response was heterogeneous across income and race, with lower-income households more likely to spend on necessities and bills, and higher-income households more likely to save. A higher percentage of Black households and Hispanic households report allocating a portion of their CTC payment to a college fund, compared to White households. Lastly, the CTC helped families during a time of increasing prices.

Almost two-thirds of CTC recipients said the monthly CTC payments made it easier for them to budget, and over three-quarters reported the CTC eased their financial burden (Hamilton et al 2022). Similarly, 70 percent of respondents reported that the monthly payments have been "very useful" in helping making ends meet (Pilkaukas and Cooney 2021). This increased sense of financial security may be why 95 percent prefer monthly benefit or bi-weekly CTC payments, while only 5 percent prefer an annual benefit (Blount & Minoff 2022). One reason for preferring monthly payments may

be the higher consumption variability lower-income households experience (Fisher and Hardy 2023). The switch to a recurring monthly payment may have allowed households to plan their spending and experience less consumption variability.

The additional spending and the potential lower variability in spending benefit children directly and indirectly. Child well-being depends on spending on necessities like food, clothing, and shelter, but also on child-specific spending such as education supplies. As Lundberg, Pollak and Wales (1997) show, targeted payments to mothers increase spending on child-related goods and services -- improving child well-being. The CTC had an even broader impact, indirectly improving child well-being, by reducing family poverty and improving adult well-being.

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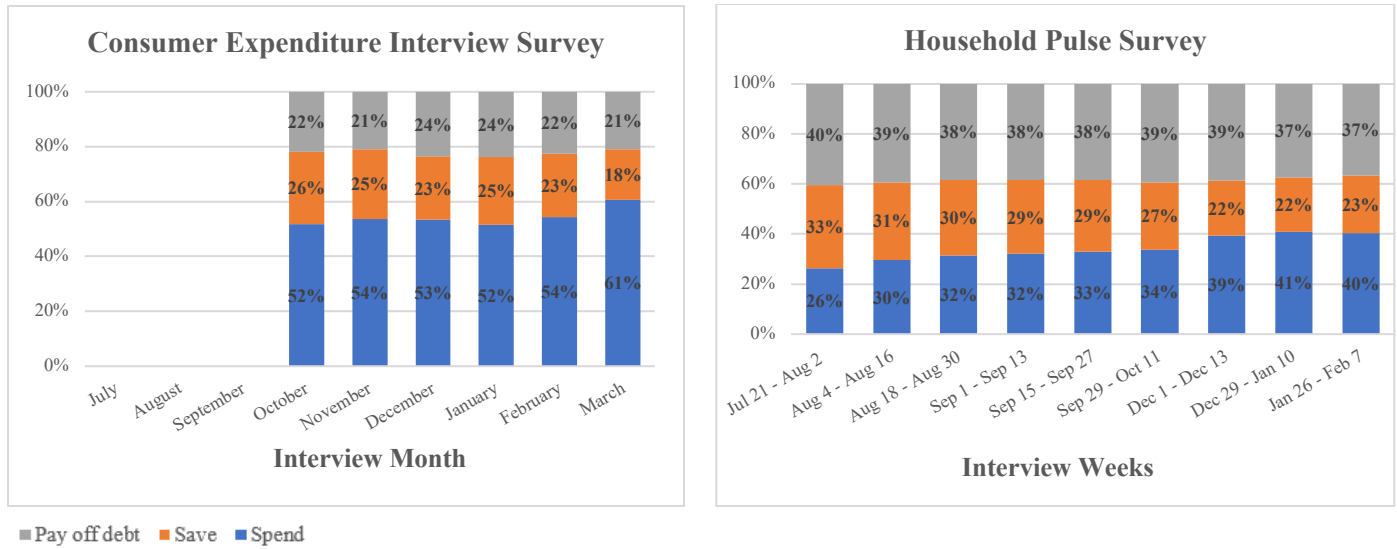
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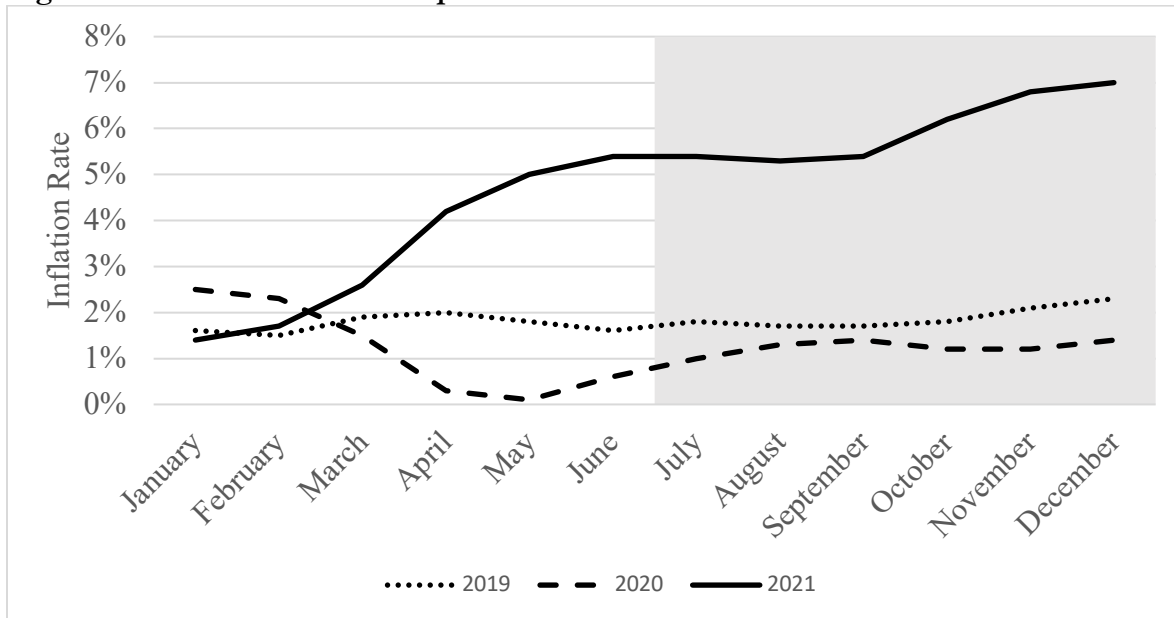
Figure 1: Percent of Respondents who mostly spent, mostly saved, or mostly paid off debt with the monthly CTC benefits, by survey and month



Source: Authors’ calculations using the Consumer Expenditure Survey and Household Pulse Survey. Results are household population weighted.

Note: The Consumer Expenditure Interview Survey CTC questions were included beginning with the October Interviews.

Figure 2: Inflation rate over the previous 12 months for 2019-2021



Source: Authors’ calculations using the Consumer Price Index for all Urban Consumers (CPI-U).

Table 1: Data sources used to study the consumption or spending impact of the CTC		
Data source	Sample	Survey Period*
<i>A. Surveys</i>		
Census Household Pulse Survey	U.S. households, weighted to the total persons age 18 and older living within housing units or weighted to total households	July 2021 through February 2021
Center for the Study of Social Policy Survey	Low and moderate income and families of color living in Arizona, Michigan, Mississippi, and North Carolina	
Consumer Expenditure Interview Survey	Households with qualifying children and income eligible for the CTC	October 2021 through March 2022
AEI/Employment and Safety Net Survey	Working age adults with an oversample of parents of children under 18	September 2021
CLASP/Ipsos Online Survey	Wave 1: Households with children under 17 and income less than \$150,000 Wave 2: Households with children under 18 and income less than \$75,000	Wave 1: July 2021 Wave 2: October 2021
NORC/AmeriSpeak	Wave 1: Households eligible to receive the CTC	Wave 1: July 2021 Wave 2: December 2021 - January 2022
Propel (mobile app) Survey	SNAP-eligible adult co-residing with at least one child under 18	September 2021
RAPID-EC	Caregivers with children under age six	July 2021 through November 2021
Survey of Household Economics and Decisionmaking	U.S. adults age 18 or older with targeted outreach to young adults (18 – 29), adults with less than a high school degree, adults with household income less than \$50,000 and under 60, and those who are a race or ethnicity other than White, non-Hispanic, weight to be nationally representative	October 2021 through November 2021
<i>B. Transaction data</i>		
Evestnet Yodlee	Excludes those in the phase-down and phase-out regions; must have active accounts from April 2019-Sept 2021;	

JPMorgan Chase (JPMC)	Must have a JPMC deposit account, must conduct a minimum of five transactions per month, and have minimum income in JPMC accounts of \$12,000 per year; only those with income below \$150,000 (married) or below \$75,000 (not married) in 2020 and 2021	
Mastercard SpendingPulse™	In-store and online retail sales, cash or credit, in the United States among MasterCard customers	
Safegraph	location data - >40 million mobile phones; transaction data - 316,276 establishments in 2,940 U.S. counties	
SaverLife app	Individuals using the SaverLife app	
* The survey period reported corresponds to the period when a question about the CTC advanced payments was included. Ongoing surveys like the Census Household Pulse and the Consumer Expenditure Interview have sample periods that extend before and after the period reported in the table.		