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Findings from the Social Policy Institute's Child Tax Credit Panel (Wave 2)

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Leah Hamilton, MSW, Ph.D.
Appalachian State University
Co-Principal Investigator

Stephen Roll, Ph.D.
Social Policy Institute at Washington University in St. Louis
Co-Principal Investigator

Mathieu Despard, MSW, Ph.D.
University of North Carolina, Greensboro
Co-Investigator

Elaine Maag, M.S.
Urban Institute
Contributor

Yung Chun, Ph.D.
Social Policy Institute at Washington University in St. Louis
Contributor

Laura Brugger, M.A.
Social Policy Institute at Washington University in St. Louis
Contributor

Michal Grinstein-Weiss, Ph.D.
Social Policy Institute at Washington University in St. Louis
Contributor

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TABLE OF CONTENTS

Executive Summary

The 2021 temporary expansion of the child tax credit (CTC) was unprecedented in its reach, lifting 3.7 million children out of poverty as of December 2021. It provided families with up to $3,600 for every child in the household under the age of six, and up to $3,000 for every child between the ages of 6 and 17. Half the credit was issued monthly between July and December, 2021. Almost all middle- and low-income families with children were eligible for the CTC. Married parents making less than $150,000 and single parents making less than $112,500 per year were eligible to receive the full amount of the credit, which began to phase out slowly after these income cut-offs. The purpose of this study is to understand the impact of the expanded CTC on families and to inform current proposals to make the credit permanent.

To better understand how families responded to the CTC, we utilized the NORC/Amerispeak probability-based online panel to survey a nationally-representative group of 1,782 American parents eligible for the credit and a comparison group of 2,015 ineligible households. Wave 1 of the survey was administered between July 8 and July 13, 2021—immediately before the first CTC payments were delivered. Wave 2 was administered between December 27 and January 14, 2022—soon after the final payments were deposited on December 15, 2021. In this report, we compare the employment, well-being, and financial security outcomes of families before and after receiving six months of CTC payments. Overall, we find that families used the CTC to cover routine expenses without reducing their employment. Eligible families experienced improved nutrition, decreased reliance on credit cards and other high-risk financial services, and also made long term educational investments for both parents and children. We find that these changes were especially promising for Black, Hispanic, and other minority families, along with low- and moderate-income families, suggesting that the expanded CTC may be an important tool for addressing both racial financial inequality and a widening income gap in the United States.

Key Findings

- 79 percent of CTC-eligible households reported receiving the credit.
    - The most common reasons given for not receiving the credit were opting out of the monthly payments to receive a lump sum payment at tax time (29 percent) and not knowing how to receive the credit (25 percent).
- The most common reported uses for the CTC were:
    - routine expenses such as housing and utilities (70 percent)
    - clothing or other essential items for children (58 percent)
    - purchasing more food for the family (56 percent)
    - saving for emergencies (49 percent)
    - paying off debt (42 percent)
- There were no statistically significant changes in employment between CTC-eligible households and households without qualifying children (i.e., CTC-ineligible households) over the six months of payments.

- CTC-eligible households were 1.3 times more likely to start learning new professional skills than ineligible households.
- Around 70 percent of CTC recipients who were negatively affected by inflation said the CTC payments helped them to better manage higher prices.
- Almost two-thirds of CTC recipients said the monthly CTC payments made it easier for them to budget than waiting for a single lump-sum payment at tax filing.
- The expanded CTC significantly improved food security and healthy eating among those eligible. Compared to ineligible households, CTC-eligible households were:
    - 1.3 times more likely to increase fruit consumption.
    - 1.5 times more likely to increase meat and protein consumption.
    - 1.4 times more likely to report increased ability to afford balanced meals.
- The expanded CTC significantly improved the financial security of eligible families.
    - CTC-eligible households had statistically significant declines in credit card debt compared to those not eligible.
    - CTC-eligible households were significantly more likely to reduce reliance on high-cost financial services such as payday loans, pawn shops, and also reduced rates of selling blood plasma.
    - CTC-eligible households were better able to manage emergency expenses and strengthened their rainy day funds.
    - CTC-eligible households experienced significant declines in evictions.
- The monthly CTC allowed families of color to make significant investments in their children's long-term educational outcomes.
    - Black, Hispanic and other non-white households were more likely to use the CTC for childcare and education expenses.
    - Black, Hispanic and other non-white households were more than twice as likely to say the CTC allowed them to pay for more or better tutoring for their children.
    - Black and other non-white households were more than twice as likely to say the CTC enabled them to pay for extracurricular activities for their children.
- In addition, the expanded CTC bolstered the financial security of low- and moderate-income families, while allowing them to also support their children's development.
    - Compared to higher-income CTC recipients, households making less than $50,000 a year were much more likely to report using the CTC to pay for tutors, spend more time with their children, purchase more and better food for their families, and move/improve their homes.
    - Low- and moderate-income CTC recipients were much more likely than higher-income recipients to report that the CTC helped them manage housing costs and utility bills.

- CTC-eligible families making between $25,000 and $50,000 were almost twice as likely to experience improvements in affording balanced meals, relative to CTC-ineligible families.
- Low- and moderate-income families eligible for the CTC were also more likely to report learning professional skills, more likely to report improvements in their ability to manage emergency expenses, and less likely to report using high-cost financial services like payday loans and auto title loans, relative to CTC-ineligible families.

Background

In early 2021, President Joe Biden and Congress passed a COVID-19 relief package that gave most Americans a $1,400 economic impact payment and expanded the existing Child Tax Credit (CTC) on a temporary basis (Taylor, 2021). This expansion increased the credit's maximum value ($3,000 for school-age children and $3,600 for children under the age of six) for single parents filing as head of household with incomes less than $112,500 and for married couples with incomes less than $150,000.[1] For families with higher incomes, the CTC phases down until it reaches its pre-2021 level of up to $2,000 per child. The CTC was made fully refundable, eliminating the earnings requirement to receive the refundable portion of the credit. This meant that, for one year, even very low-income families qualified for the full credit. The CTC was also extended to families with children aged 17. Finally, half of the credit was issued in regular monthly payments to most families from July to December 2021.

These temporary changes give the credit significant advantages over existing family assistance programs such as Temporary Assistance to Needy Families, which has low income and asset limits and strict work requirements and is criticized for creating employment and savings disincentives among low-income families (Hamilton, 2020). In terms of reach, it also has advantages over the Earned Income Tax Credit, which lifted 5.6 million people out of poverty in 2018 (Center on Budget and Policy Priorities, 2018) but is not available to unemployed households or those with additional barriers to employment such as parents with disabilities or those with caregiving responsibilities for children or other adults with disabilities. The EITC also has relatively low upper income thresholds ($53,865 for two parents with two dependents filing jointly; Internal Revenue Service, 2022), meaning that many more middle-income families will benefit from the CTC. Thirty-nine million households were predicted to receive the expanded CTC, reaching 88 percent of American children (Internal Revenue Service, 2021). 59.3 million children were reached with the first monthly disbursement in July, 2021 with the IRS extending its reach over the course of six months to 61.3 million children (Curran, 2021; Department of the Treasury, 2021).

Further, because families of color are overrepresented among families with incomes below the poverty line, an extension of the expanded CTC was forecasted to lift 1 million Black children and 1.7 million Hispanic children out of poverty in an average year (Acs & Werner, 2021). However, these families also faced the greatest barriers to receiving the credit, either due to being unbanked or having less attachment to the workforce and therefore not having filed taxes in recent years (Curran, 2021; Waxman et al., 2021). Families who primarily spoke Spanish in the home were also less likely to report having received the credit, indicating that these households may face additional barriers to receipt (Pilkauskas & Michelmore, 2021).

Several polls administered in early 2021 found that a majority of Americans supported the expanded credit. A survey conducted in April 2021 by Data for Progress found that 59 percent of respondents supported the expansion, including 75 percent of Democrats and 43 percent of

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[1] In some cases, a person claiming the CTC will file as single, rather than head of household. In these cases, the credit begins to phase out once income reaches $75,000.

Republicans (Data for Progress, 2021). However, there was also wide variation in American's awareness of the expanded credit before its implementation. In one survey conducted in April 2021, 53 percent of likely voters were unaware of the credit, but this number decreased to 35 percent by July (Wilson, 2021). Another survey conducted in June 2021 found that 29 percent of low- to moderate-income households had heard little to nothing about the credit. This lack of awareness was much higher (78 percent) among households who did not file taxes in 2020 (most often because their income was too low), meaning that those who could benefit the most from the credit were the least aware of it (SaverLife, 2021). This may also mean that these households were unaware that they needed to sign up for the credit through the IRS non-filer portal.

Despite the barriers faced by some families, indicating a need for improved outreach, the expanded CTC did seem to create an important temporary safety net along with contemporaneous public policy measures such as extended unemployment insurance, an eviction moratorium, student loan forbearance, and stimulus payments. For families in the lowest income quintile, the monthly CTC represented a 35 percent income boost on average (Institute on Taxation and Economic Policy, 2021). The JPMorgan Chase Institute (Greig et al., 2021) found that CTC-eligible families saw higher bank balance gains in the latter half of 2021 than non-eligible households, indicating that the CTC created an important liquidity buffer for families. Researchers estimated that the monthly CTC alone reduced childhood poverty by 30 percent in December 2021, keeping 3.7 million children out of poverty (Parolin & Curran, 2022). However, after the first "missed" payment in January 2022, the national child poverty rate increased by 41 percent (Parolin et al., 2022).

Such significant reductions in childhood poverty represent substantial potential savings as childhood poverty currently costs more than $1 trillion per year in reduced productivity and increased crime, health care, and social services spending (McLaughlin & Rank, 2018). Researchers at the Center on Poverty and Social Policy at Columbia University predict that a permanently expanded credit would cost taxpayers $97 billion per year but generate $982 billion in annual economic stimulus via future earnings and tax contributions, decreased infant mortality and other negative health outcomes, and reductions in child protection and law enforcement involvement (Garfinkel et al., 2022). In the recent "Baby's First Years" study, babies whose parents received an extra $333 per month had higher brain activity at one year of age than those in a comparison group receiving only $20 per month. The authors suggest that cash transfers in the early years of a child's life can have long-term effects on children's development, school performance, adult employment, and economic outcomes (Troller-Renfree et al., 2022). Likewise, expanded child tax benefits in Canada were associated with improved test scores, decreased aggression and hunger among children, and decreased maternal depression (Milligan & Stabile, 2011).

Some have argued that the expanded CTC may negatively impact employment and workforce participation. This assumption is not supported by existing research on similar, unconditional cash transfer programs, which finds that recipients continue working as they did before or reduce work only slightly (Hasdell, 2020). In a recent cash transfer pilot in Stockton, CA, full-time employment among recipients *increased* by 40 percent (Baker et al., 2021). Similar increases in employment have been observed among low-income parents who received a conditional cash transfer in New York City (Riccio & Miller, 2016) and single mothers receiving the Canadian child tax credit (Schirle & Koebel, 2015). Some studies based on economic models suggest moderate employment reductions (Corinth et. al 2021) while other similarly structured studies find lower projected employment decreases (Bastian, 2022; Goldin, Maag, & Michelmore 2021). Often,

mothers with very young children are the most likely to reduce employment when offered unconditional transfers, thereby allowing them to contribute critical unpaid child care labor to both household and national economies (Hammond & Orr, 2021).

There are also questions about the extent to which direct cash may lead to significant changes in behaviors such as crime, drug use and hospitalizations. Though it may be difficult to see large changes in these outcomes over just six months of CTC payments, previous research on cash transfer programs provide insight into how the monthly payments might influence behavior. A meta-analysis of 30 global cash transfer programs found that spending on temptation goods such as alcohol and tobacco decreased after implementation of the program (Evans & Popova, 2016). Expansions of child tax benefits in Canada and the United Kingdom were likewise associated with lower expenditures on tobacco and alcohol while low-income families spent more money on education, food, rent, clothing, and transportation (Gregg et al., 2005; Jones et al., 2015). Less than 1% of merchant transactions tracked among a group of low-income mothers of newborns who received an unconditional monthly cash benefit were made at liquor stores. Mothers reported using the benefit to cover periods of the month when cash income was lower and associated their benefits primarily with their babies' needs (Rojas et al., 2020).

However, it is important to note that the *frequency* of cash transfer programs has a significant potential influence on behavioral outcomes. For example, researchers discovered small increases in drug-related incidents in the days and weeks following the annual, lump-sum disbursement of the Alaska Permanent Dividend Fund (Watson et al., 2020) which is at odds with most other studies of cash transfer programs with smaller, recurring disbursements (Evans & Popova, 2016). One cash transfer project with individuals experiencing homelessness in Canada found that when the payments were split up and made more frequently, drug use declined (Richardson et al., 2019). Similarly, a pilot project which broke up EITC payments over four regular installments found that recipients experienced both improved financial outcomes and decreased psychological stress (Kramer et al., 2019).

Recurring installment payments may also have a consumption smoothing effect. Income volatility, defined as significant and unpredictable changes in month-to-month income, increases the likelihood that a household will experience food insecurity, housing instability and a host of other negative outcomes (Smith-Ramani et al., 2017). Experts in the psychology of economic scarcity explain that income volatility can "elicit a range of counterproductive behaviors such as attentional neglect, forgetting, impulsive spending, anxiety and poor planning" (Smith-Ramani et al., 2017, p. 365). Monthly payments can help families cope with income volatility that results from factors like precarious employment (e.g., irregular work hours for wage earners, fluctuating and seasonal earnings among self-employed, and "gig" workers) and caregiving responsibilities (e.g., parents who lack paid sick leave and need to stay home with a sick child). Monthly CTC payments may also give a liquidity boost to households that struggle to save by creating enough financial "slack" to build short-term savings needed to smooth consumption when regular income falls short, is volatile, and/or when confronting expense shocks (Despard et al., 2018). Forty-one percent of Americans report not having enough savings to cover a $2,000 financial emergency, such as a medical bill or major car repair (Pew Charitable Trusts, 2015), which may help explain why researchers estimate that escaping poverty takes "almost 20 years with nearly nothing going wrong" (White, 2017). Further, the accumulation of assets is an important component of intergenerational mobility and plays a critical role in persistent racial inequality (Pfeffer & Killewald, 2019).

Monthly CTC payments may further influence households' use of credit and unsecured debt. When faced with a financial emergency or when income falls short of usual expenses, households typically turn to credit. For households with subprime credit scores, credit options may be limited to high-cost options such as payday loans. Regular CTC payments may lessen demand for credit and/or enable households to pay down and better manage unsecured debt. Lastly, the monthly delivery of the CTC marks an important departure from traditional policy approaches, which may have additional effects on household financial well-being. Currently, individuals must wait until they file their federal income tax returns to claim credits that may generate refunds. Waiting for tax refunds may force households to defer meeting important material needs and/or accumulate unsecured debt to smooth consumption. People also often defer healthcare until after tax refunds arrive, even when they are able to predict what their refund will be (Farrell, Greig, & Hamoudi, 2018).

In sum, both the increased value of the CTC and its partial advance payment mechanism may improve the financial well-being and health of many families—especially those with lower incomes, a lack of savings, and low credit scores. In particular, the additional CTC may help lessen families' risk for material hardship. Indeed, the U.S. Census Bureau's Household Pulse Survey found a significant decline in the number of households with children reporting food and financial insecurity immediately before and after the first monthly payment was deposited on July 15, 2021 (Perez-Lopez, 2021; Shafer et al., 2022). However, these hardships increased again immediately after the payments ended in December, 2022 (U.S. Census Bureau, 2022). This is important because hardship is associated with a host of adverse outcomes related to other policy objectives, such as increased risk for child maltreatment (Yang, 2015), child behavior problems (Zilanawala & Pilkauskas, 2012), and intimate partner violence (O'Connor & Nepomnyaschy, 2020). Understanding how the CTC affected families in ways that relate to various policy goals is important for informing long-term public and political discourse around this and related cash transfer benefits.

Preliminary Impacts

In September 2021, we released the findings of our Wave 1 survey, which primarily focused upon parents' initial perceptions of the expanded credit and how families planned to use CTC payments (Hamilton et al., 2021). We found that most parents (87.7 percent) had heard about the credit, similar to another survey fielded in the same time period (National Women's Law Center, 2021). Parents with only one child and those with household incomes below $25,000 were the least likely to have heard about the credit. More than 83 percent of parents either supported making the expanded credit permanent or were undecided. Nearly three in four (72 percent) parents preferred monthly payments over an annual lump sum.[2]

When asked what parents intended to do with the credit, the most common responses were: (1) save for emergencies (74.8 percent); (2) apply the money towards housing, food and utilities (66.6 percent); (3) purchase clothing or other essentials for their children (58.1 percent); (4) purchase more or better-quality foods for their family (49.0 percent); and (5) contribute to a college fund for their children (41.9 percent). Households with $50,000 or less in income were more likely than higher-income households to plan on using the CTC for essential expenses, spend more time with their children, and spend more on tutors for their children. Many households, regardless of income, planned to use the CTC to help build a college fund for their children. Similarly, a study of the Census Pulse survey found that respondents reported primarily using the credit for food (50.9 percent), essential bills (35.9 percent), clothing (29.8 percent), and housing (27.6 percent) (Roll et al., 2021). However, 27.6 percent of families reported putting most of the CTC towards savings (Roll et al., 2021). Other analyses of the Census Pulse data reported similar findings (Karpman et al., 2021).

When we asked parents in Wave 1 how the CTC might affect their employment choices, 93.6 percent of parents planned to continue working or work more while receiving the credit. Those most likely to predict working less were parents with infants or toddlers (11.2 percent). Less than a fifth of respondents (19.7 percent) said they would use the credit to stay home more with their children. Those most likely to say this lived with a spouse or partner. Census Pulse data between May and December, 2021 similarly found no statistically significant changes in parental employment, although self-employment did increase slightly (Roll et al., 2022). Economic modeling similarly predicts minimal effects to employment (Bastian, 2022; Goldin, Maag, and Michelmore 2021).

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[2] In part, the preference for monthly payments may be expressing a need for the money sooner, rather than later. In a cash demonstration project in Washington, DC, the majority of recipients chose to receive a $5,500 cash gift as a single payment, rather than over five months (Bogle et. al, 2022).

Current Study

The temporary expansion of the CTC gives researchers an unprecedented opportunity to measure the employment, financial, and well-being effects of a sweeping cash transfer policy intervention. In the current study, we seek to answer the following research questions:

1. For what purposes did parents report using their CTC payments?
2. How did parents' economic and social well-being outcomes—including measures of employment, savings, credit usage, well-being, and material hardship (e.g., skipped housing payments, food insecurity)—change after the implementation of the CTC?
3. How did high-risk behaviors such as illicit drug use and criminal arrests change after the implementation of the CTC?
4. How did these economic and social well-being outcomes for CTC-eligible households differ relative to a comparison group of households without CTC-eligible children?
5. To what extent did the effects of the CTC observed in this study differ based on family characteristics such as parents' income and race/ethnicity?
6. Did the CTC help close the racial equity gap in terms of economic, social and educational outcomes for families of color?

Methodology

To conduct this study, we utilized a multi-wave NORC/Amerispeak probability-based online panel (NORC, 2021) to survey 1,782 American parents who qualified for the expanded CTC and a comparison group of 2,015 households who were not eligible for the CTC (e.g., parents of children aged 18 and older, and adults without children or taxable dependents). The panel survey was administered at two periods before and after the expanded CTC provision.

- The Wave 1 survey was administered between July 8 and July 13, 2021. This time frame enabled us to collect data on households immediately before the first CTC payment went out on July 15. After data cleaning, the Wave 1 survey included 3,245 households (CTC-eligible=1,522; Non-eligible=1,723).
- The Wave 2 survey was administered between December 27, 2021 and January 14, 2022, after the final monthly payment was deposited on December 15, 2021 and approximately six months after the Wave 1 survey. After data cleaning, the Wave 2 survey includes 3,112 households (CTC-eligible=1,469; Non-eligible=1,643). The Wave 2 sample includes 2,560 return respondents who completed the Wave 1 survey (CTC-eligible=1,209; Non-eligible=1,351) and 552 new respondents (CTC-eligible=260; Non-eligible=292).

Both survey samples were limited to those with household incomes below $150,000, which is the level at which the credit begins to phase out for married families. The use of a probability-based panel allows us to use weights based on Census Bureau's Current Population Survey (CPS) to ensure that our sample is representative of the U.S. population of CTC-eligible parents. Both surveys capture a wide variety of questions concerning household characteristics, measures of economic and social well-being, and interactions with and investment in children in addition to financial security, employment, material hardship experiences. Also, the surveys include an array of questions designed to measure opinions of the CTC and how households plan to use the credit (Wave 1) and actual CTC-related behaviors (Wave 2). In the Wave 2 survey, we added detailed questions regarding the changes in food consumption now compared to six months prior.

Table 1. Descriptive statistics of CTC-eligible and CTC-ineligible samples (weighted)

	Eligible	Ineligible	Overall	F-stat/t-stat[a]	
Number of dependents					
0	0.1%	57.4%	40.0%		
1	23.0%	11.8%	15.2%		
2	32.9%	15.7%	20.9%		
3 or more	44.0%	15.1%	23.9%	221.18	***
With a young child (< 6 years)					
No	74.8%	97.6%	90.6%		

Yes	25.2%	2.4%	9.4%	155.41	***
Age					
18-29	15.4%	30.1%	25.6%		
30-44	60.6%	20.7%	32.8%		
45-59	22.7%	30.9%	28.4%		
60+	1.3%	18.3%	13.1%	101.75	***
Gender					
Male	43.0%	50.7%	48.4%		
Female	57.0%	49.3%	51.7%	7.89	**
Race/ethnicity					
White, non-Hispanic	52.0%	58.5%	56.6%		
Black, non-Hispanic	13.1%	15.3%	14.6%		
Hispanic	26.1%	17.9%	20.4%		
Other	8.8%	8.2%	8.4%	4.42	**
Marital status					
Single	16.4%	48.4%	38.7%		
Not single, not married	11.5%	13.3%	12.8%		
Not single, married	72.1%	38.3%	48.6%	78.75	***
Income					
$0 to $24.9K	21.1%	32.6%	29.1%		
$25.0K to $49.9K	24.0%	24.9%	24.6%		
$50.0K to $99.9K	40.6%	31.7%	34.4%		
$100.0K to $150.0K	14.3%	10.8%	11.9%	9.35	***
Liquid asset					
mean	$21,553.0	$29,009.6	$27,836.8	2.59	**
Employment status					
Self-employed	13.3%	11.7%	12.2%		

Employed	62.1%	58.4%	59.5%	
Unemployed	7.7%	7.3%	7.5%	
Other	16.9%	22.6%	20.9%	1.95
Educational attainment				
Less than HS	11.6%	10.3%	10.7%	
HS graduate or equivalent	29.3%	32.2%	31.3%	
Vocational/tech school	29.0%	30.5%	30.1%	
Bachelor's degree	19.0%	18.3%	18.5%	
Post grad/professional degree	11.1%	8.8%	9.5%	0.89
Homeownership				
Not own home	40.3%	44.6%	43.3%	
Own home	59.7%	55.4%	56.7%	2.48
Foreign born				
No	90.3%	90.7%	90.6%	
Yes	9.7%	9.3%	9.4%	0.08
Region				
Northeast	14.3%	16.4%	15.7%	
Midwest	21.5%	21.2%	21.3%	
South	39.9%	39.6%	39.7%	
West	24.2%	22.9%	23.3%	0.41
Sample proportion (unweighted)	47.3%	52.7%	100.0%	
Sample proportion (weighted)	30.4%	69.6%	100.0%	
Observations	1,201	1,340	2,541	

Notes: + p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001
Source: Social Policy Institute Child Tax Credit Survey (Wave 2)

Of the sample, 1,201 (47.3%) had dependent children under 18 and were thus eligible to receive the child tax credit and 1,340 (52.7%) did not have minor dependent children and were thus not eligible. Of these CTC-ineligible households, 53.1% had no children and 46.9% had children who

were either aged 18 or older or who were not tax dependents and were thus ineligible for the CTC. After weighting the sample to ensure national representativeness, 30.4 percent were eligible and 69.6 percent were not. Among CTC-eligible respondents, roughly one-third reported having two dependent children and 44.0 percent had three or more dependents living with them. Eligible respondents were more likely to be in the 30-44 age range than ineligible respondents, who were more likely to be in either the younger or older age ranges. Slightly over half of the overall sample were female (51.7 percent) and a larger share of the eligible sample were female (57 percent) than the ineligible sample (49.3 percent). Most respondents were non-Hispanic white (56.6 percent), followed by 20.4 percent Hispanic, 14.6 percent non-Hispanic Black, and 8.4 percent non-white other race/ethnicity. CTC-eligible respondents were more likely to be Hispanic and less likely to be white than ineligible respondents. The majority of the eligible sample (72.1 percent) was married, while almost half of the ineligible sample was single. In general, the eligible sample tended to have higher incomes than the ineligible sample. However, ineligible respondents had higher average liquid assets ($29,009) compared to eligible respondents ($21,553). Employment status, educational attainment, home ownership, being foreign-born, and region of the country were all relatively similar between eligible and ineligible respondents.

Analytical Approach

Our analysis proceeds in two stages. First, we analyze families' uptake of the CTC, their reported usage of the credit, and their perceptions of the CTC's benefits. Second, we examine the impacts of the CTC on families' outcomes. While the first stage is descriptive, the second stage incorporates a variety of econometric models that allow us to make inferences about the CTC's impacts. In both stages, we explore our outcomes of interest for the general population and across racial/ethnic groups and income levels.

CTC usage and perceived CTC benefits

The descriptive section of this report focuses on survey respondents in Wave 2 who reported that they had received the CTC payments. First, we asked respondents if they received the CTC and, if not, why they did not receive the payments. We also asked respondents about the value of the CTC payments they received each month. Then, we asked CTC recipients a variety of questions related specifically to the credit. These questions included details on the specific purposes for which respondents used their CTC payments and how it affected their balance sheets (e.g., savings and debt). In addition, we asked an array of questions capturing respondents' opinions on different ways the CTC may have affected their lives. For example, we asked respondents about the extent to which they agreed with statements around the CTC making it easier for them to afford housing costs and utility bills, and the extent to which the CTC made their finances easier to manage. To identify statistically significant findings in this stage of the analysis, we used basic statistical tests such as chi-squared tests.

CTC impacts on family outcomes

The impact analysis section of this report explores how families' outcomes changed from immediately before the monthly CTC payments started going out, to immediately after the payments ended. Our analysis focuses on five categories of outcomes: 1) food consumption and food security, 2) employment, 3) asset and debts, 4) hardship experiences, and 5) parental stress and mental health. To estimate the impacts of the CTC, we employ a Difference-in-Difference

(DID) approach to compare changes in family outcomes in Wave 1 and Wave 2 between CTC-eligible and non-eligible families. As our outcome variables take different forms (continuous, binary, and categorical), we utilize three different econometric approaches:

- Ordinary Least Squares (OLS) regression for continuous outcomes including assets and debts;
- Logistic (Logit) regression for binary outcomes including food consumption, food security, and employment;
- Multinomial logistic (MNL) regression for categorical outcomes including alternative finance service use, hardship, changes in parental stress, and mental health.

Each econometric model controls for demographic and socioeconomic characteristics at the individual level, including respondent's age, gender (parent), race/ethnicity (parent), educational attainment (parent), employment status (parent), and foreign born (parent) as well as at the family level, including marital status, income, liquid asset amount, homeownership, and the region in which respondents live (e.g., South, Midwest, Northeast, West). All control variables were measured at Wave 1 of the survey, immediately before the CTC payments went out, meaning that CTC receipt should not affect the values of these variables. Though our analysis primarily focuses on changes in outcomes between CTC-eligible and non-eligible groups, we also report outcome changes across racial/ethnic groups (non-Hispanic white, Black, Hispanic, and other) and household income levels ($0 to $24,999, $25,000 to $49,999, $50,000 to $99,999, and $100,000 to $150,000). This allows us to assess the extent to which the CTC has stronger impacts on economically vulnerable or marginalized groups, such as low-income or racial/ethnic minority families. All outcome models report predicted margins (e.g., dollar amount change, predicted probability, etc.). We report results at the 10 percent significance threshold.

Study Results

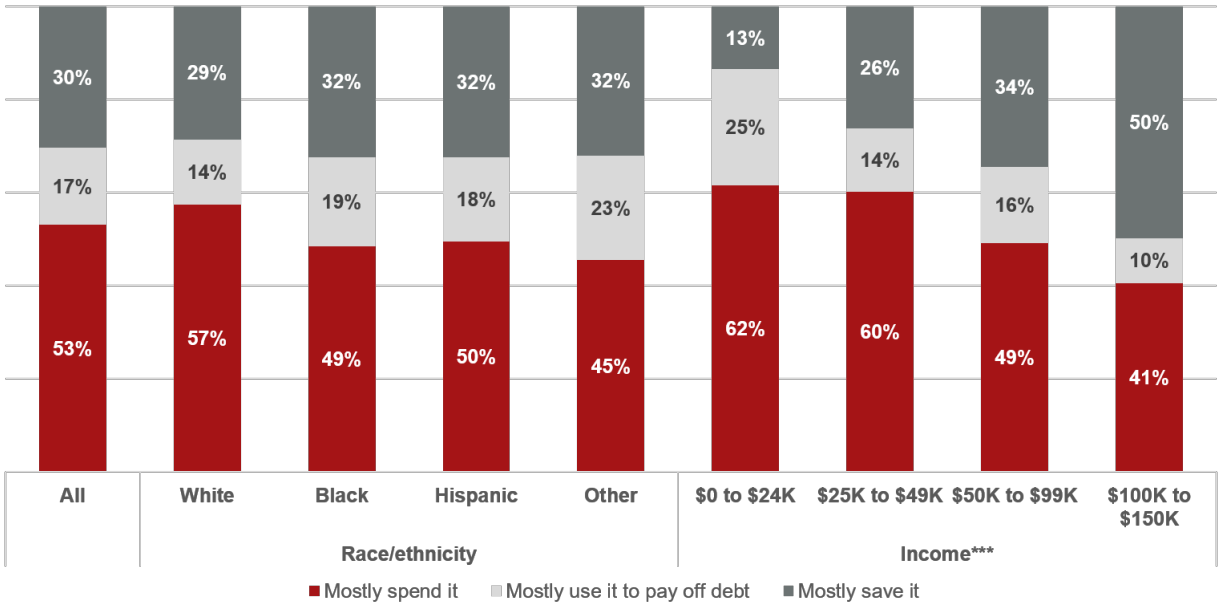
CTC access, usage, and perceived benefits

Among those who were eligible to receive the CTC, about 21 percent reported that they did not receive the credit. The most common reason respondents gave for not yet receiving a CTC payment was because they opted out of monthly payments and planned to receive the credit as a lump sum during tax time (29 percent). However, 25 percent of eligible respondents who did not receive a payment reported that they did not know how to get the credit. The remaining respondents reported that they did not receive the credit for some other reason (23 percent), because their child did not qualify for the credit (15 percent), or they tried but had not yet received their payment (8 percent).

How families used the CTC

To capture CTC usage patterns, we first asked respondents whether they primarily used the credit for spending, saving, or paying down debt. **Figure 1** shows that, in general, 53 percent of CTC recipients reported primarily spending their CTC benefits, while 30 percent mostly saved it, and 17 percent mostly used the CTC to pay off debt. There did not appear to be significant differences in overall CTC usage based on respondents' race/ethnicity. However, there was an association between income and saving, spending, or paying down debt with CTC benefits. In particular, 50 percent of the highest income cohort reported that they mostly saved the credit while 13 percent of the lowest income group mostly saved it, and 25 percent of the lowest income group mostly used it to pay off debts while only 10 percent of those in the highest income cohort did so.

Figure 1. The child tax credit and family balance sheets, by race/ethnicity and income

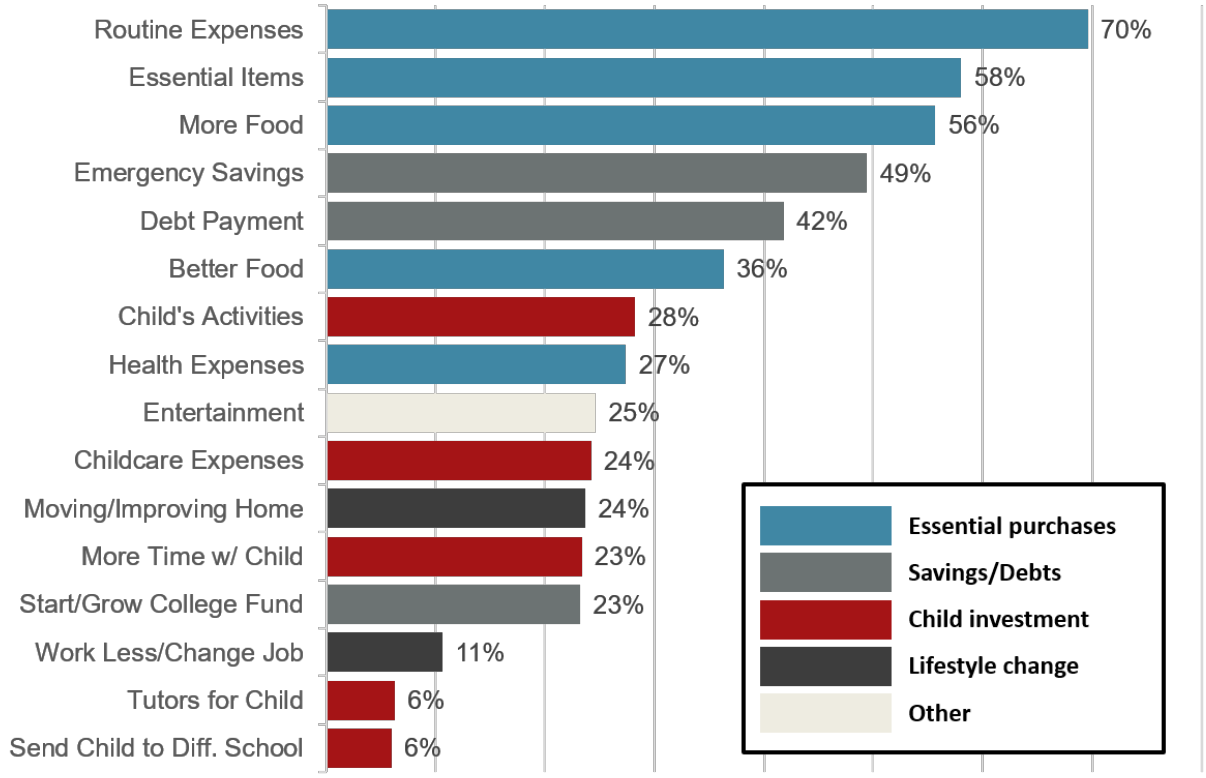


Notes: *** p<0.001; all other results are not statistically significant
n=1,056
Source: Social Policy Institute Child Tax Credit Survey (Wave 2)

We also asked respondents about the specific purposes for which they reported using their CTC payments and gave them 16 different options capturing different types of savings, spending, debts and investments in their families and children. **Figure 2** shows that most respondents said that they used the CTC for routine expenses such as housing, food, and utilities (70 percent), clothing or other essential items for their children (58 percent), purchasing more food for the family (56 percent), saving for emergencies (49 percent), and paying off debt (42 percent). Relatively few respondents said that the benefit affected their work situation. For example, 23 percent said they used the payment to stay home with their child more while 11 percent reported that they used the CTC to work less or change jobs. Importantly, when we examine changes in employment in the impact analysis section below, we find no statistically significant changes in employment between CTC-eligible households and households without CTC-eligible children.

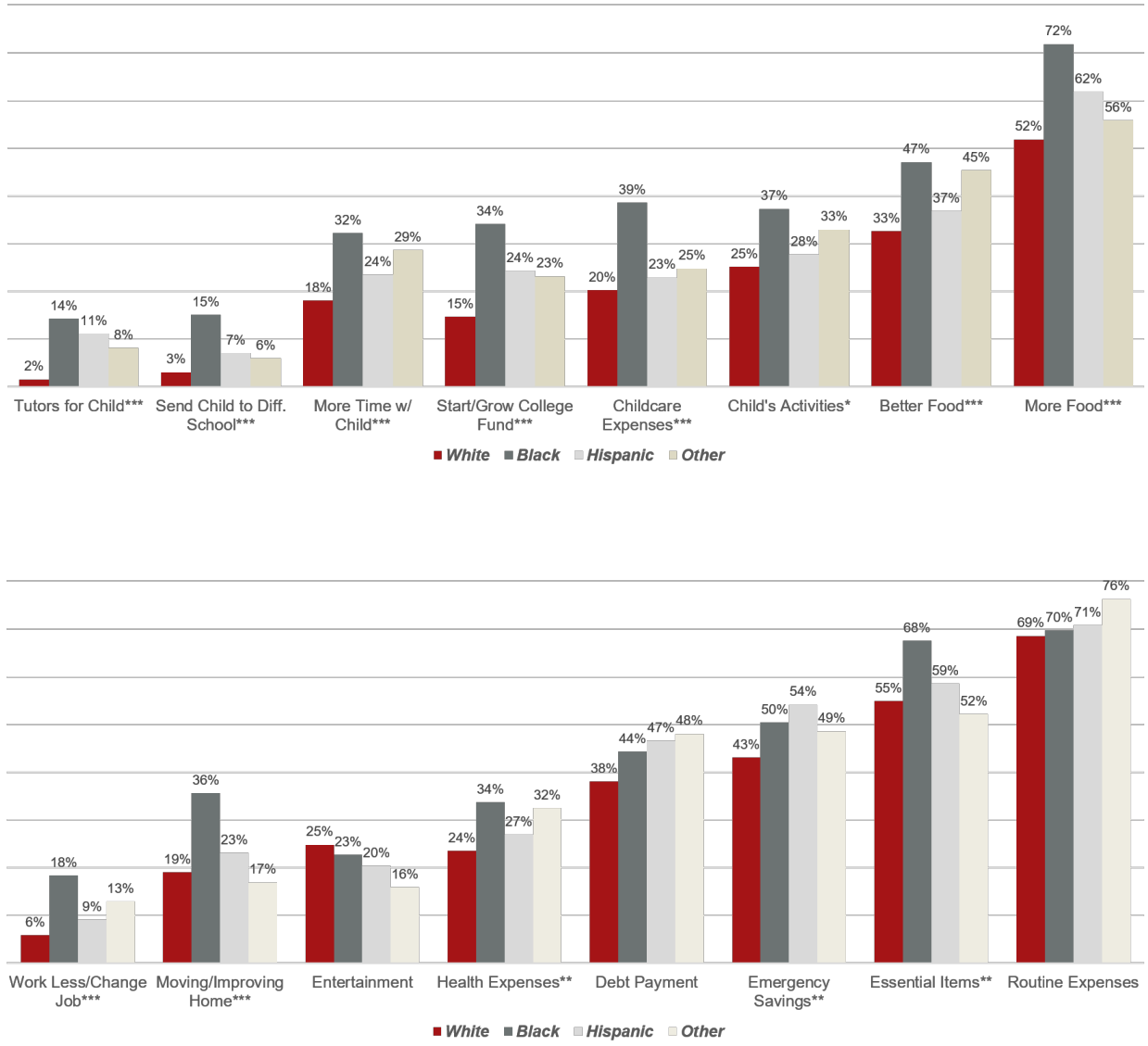
Notably, as seen in Figure 2b, non-Hispanic Black (hereafter, Black) families were more likely to use the CTC benefit to purchase more food for their family (72 percent), better food for their family (47 percent), and essential items (68 percent) as compared to other race/ethnicity groups. Further, Black, Hispanic, and respondents who identified with other non-Hispanic non-white race/ethnicity groups (hereafter, other non-white) were more likely to use the CTC for childcare and education expenses compared to non-Hispanic white (hereafter, white) respondents.

Figure 2a. Usage of the child tax credit



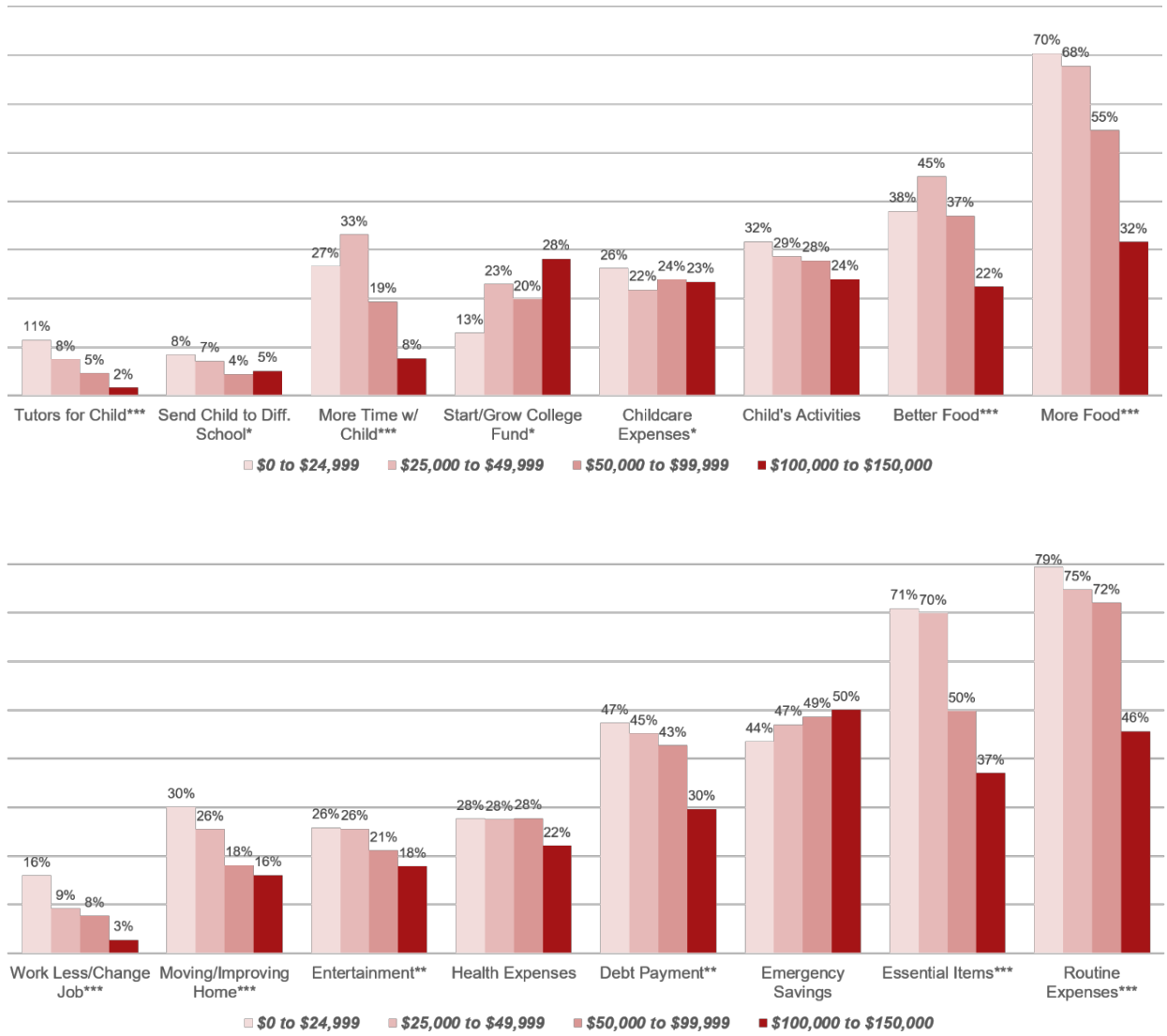
Notes: n=1,056-1,107. Responses differ slightly across categories as some respondents skipped answering yes/no for certain categories. Routine expenses include usual items such as housing, food, and utilities. Essential items included clothing and anything a respondent designated essential.
Source: Social Policy Institute Child Tax Credit Survey (Wave 2)

Figure 2b. Usage of the Child Tax Credit, by race/ethnicity



Notes: *p<0.05, **p<0.01, **p<0.001; all other results are not statistically significant
n=1,056-1,107. Responses differ slightly across categories as some respondents skipped answering yes/no for certain categories.
Source: Social Policy Institute Child Tax Credit Survey (Wave 2)

Figure 2c. Usage of the Child Tax Credit, by income



Notes: * p < 0.05, **p<0.01, ***p<0.001; all other results are not statistically significant
n=1,056-1,107. Responses differ slightly across categories as some respondents skipped answering yes/no for certain categories.
Source: Social Policy Institute Child Tax Credit Survey (Wave 2)

Perceived benefits of the CTC

In addition to asking how families spent the CTC, we asked CTC recipients several questions about how they thought the CTC payments benefited their families. This might be an important distinction because hypothetically, a family could use most of the CTC on essential bills, but put the most *value* on long term child investments, for example. In **Table 2**, we report the perceived impact of the CTC among recipients. Specifically, we examine whether respondents agreed or disagreed with the following statements:

- "The Child Tax Credit payments…
    - **[Tutoring for child]** "allowed me to afford more or better tutoring for my child(ren)"
    - **[Childcare]** "allowed me to afford more or better childcare for my child(ren)"
    - **[More Time w/ child]** "allowed me to spend more time with my child(ren)"
    - **[Extracurriculars]** "allowed me to afford more or better extracurricular activities for my child(ren)"
    - **[Future education]** "allowed me to save more for my child(ren)'s future education"
    - **[Housing costs]** "made it easier for me to afford housing costs"
    - **[Utility bills]** "made it easier for me to afford utility bills"
    - **[Eased financial burden]** "made things easier financially for me and my family"

Most respondents reported that the CTC made it easier for them to support their family (76 percent), afford utility bills (60 percent), and cover housing costs (55 percent). Over one-third of respondents also stated that the CTC allowed them to pay for extracurricular activities for their children (34 percent) and save for their child's future education (36 percent). Additionally, 34 percent of recipients reported that the CTC allowed them to spend more time with their children.

Black, Hispanic, and other non-white race/ethnicity households were especially likely to report using the credit to make greater investments in their children. For example, between 37 percent and 47 percent of Black, Hispanic, and other non-white race/ethnicity households said the CTC enabled them to spend more time with their children compared to 28 percent of white households. Similarly, Black, Hispanic, and other non-white race/ethnicity households were more than twice as likely to say the CTC allowed them to pay for more or better tutoring for their children, and Black and other non-white race/ethnicity households were more than twice as likely to say the CTC enabled them to pay for more or better extracurricular activities for their children.

Respondents in the lowest income groups were much more likely to report that the CTC was beneficial for them than those in higher income groups. For example, over 80 percent of those in both the $0-$24,999 and $25,000-$49,999 income groups either somewhat or strongly agreed that the CTC made it easier to support their family (81 percent and 80 percent respectively). Indeed, the lowest-income families were much more likely than higher income families to report using the CTC for managing utility bills and housing costs, affording more child care and spending more time with their children, and paying for tutoring and extracurricular activities for their children. Higher income families, by contrast, were more likely to report using the CTC to pay for their children's future education. Notably, even among those in the highest income category, only a very small share disagreed with the statement that the CTC made it easier to support their family (12 percent).

Table 2. Perceived CTC benefits, by race/ethnicity and income

			Race/ethnicity		
	All	**White**	**Black**	**Hispanic**	**Other**
*Tutoring for Child****	18.4%	10.0%	26.1%	28.8%	25.4%
*Childcare****	23.6%	16.1%	32.3%	29.9%	33.9%
*More Time w/ Child****	34.0%	28.1%	36.9%	39.5%	46.5%
*Extracurriculars***	34.3%	32.0%	42.9%	29.7%	45.8%
*Future Education****	36.2%	30.7%	40.6%	37.6%	54.8%
*Housing Costs***	55.0%	49.8%	61.0%	61.7%	56.7%
*Utility Bills****	60.4%	54.7%	61.9%	72.8%	57.0%
Eased financial burden	75.6%	73.6%	75.9%	78.0%	80.2%
			Income		
	All	**$0 to $24K**	**$25K to $49K**	**$50K to $99K**	**$100K to $150K**
*Tutoring for Child****	18.4%	30.0%	22.5%	13.0%	11.3%
*Childcare****	23.6%	32.3%	23.9%	21.8%	16.2%
*More Time w/ Child****	34.0%	44.2%	43.1%	29.6%	18.4%
*Extracurriculars**	34.3%	40.7%	36.8%	32.1%	28.6%

Future Education+	36.2%	35.3%	31.5%	36.2%	45.3%
*Housing Costs****	55.0%	70.4%	59.9%	52.1%	34.5%
*Utility Bills****	60.4%	69.8%	68.5%	58.8%	39.0%
*Eased financial burden****	75.6%	81.4%	79.9%	76.1%	59.5%

Notes: + p < 0.10, *p<0.05, **p<0.01, ***p<0.001; all other results are not statistically significant
n=1,046-1,053. Responses differ slightly across categories as some respondents skipped answering yes/no for certain categories.
Source: Social Policy Institute Child Tax Credit Survey (Wave 2)

Lastly, we explored how the CTC payments helped households budget their finances. We did this in two ways. First, we were interested in the role CTC payments played in helping households offset inflation, which spiked during the period the payments were active. To measure this, we asked respondents how much they agreed or disagreed with the statement:

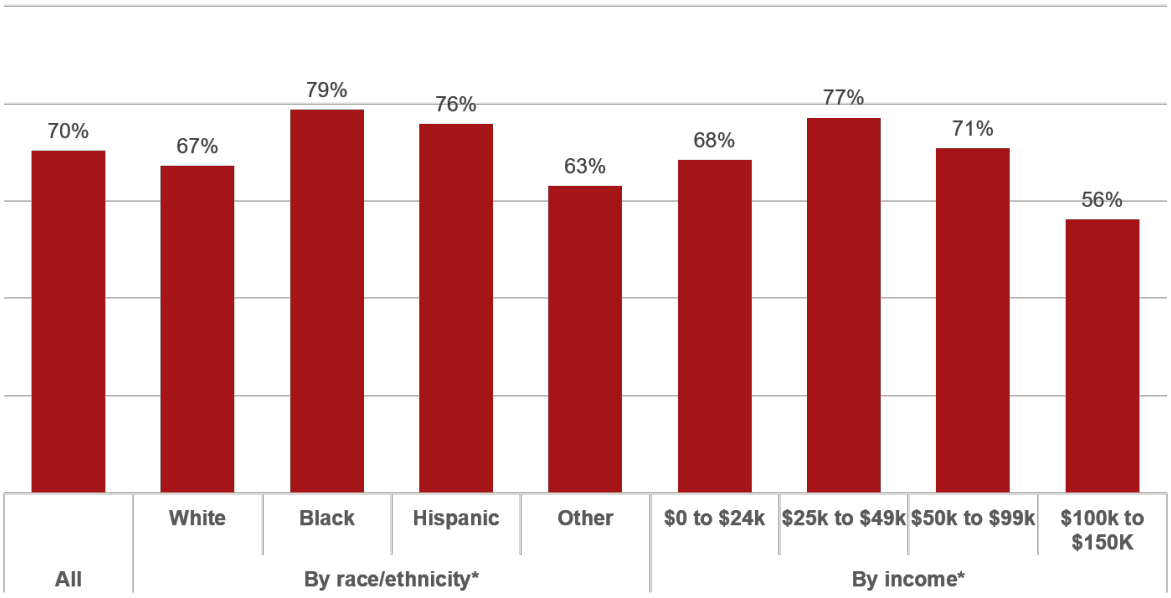
> *"Rising prices over the last six months have made it harder for me to afford essential expenses such as food, gas, electricity, or other household items."*

For the 70.5 percent that either agreed or strongly agreed with the statement, we asked their agreement with the statement:

> *"The Child Tax Credit payments made it easier for me to afford the higher prices for essential expenses such as food, gas, electricity or other household items."*

Figure 3 shows that, of those who suffered from inflation during the pandemic, 70 percent answered that the CTC payment helped them better afford higher prices. In particular, 79 percent of Black and 76 percent of Hispanic families and families making between $25K to $49.9K (77 percent) were more likely to report that the CTC helped them manage inflation.

Figure 3. Agreement that CTC helped with inflation, by race/ethnicity and income



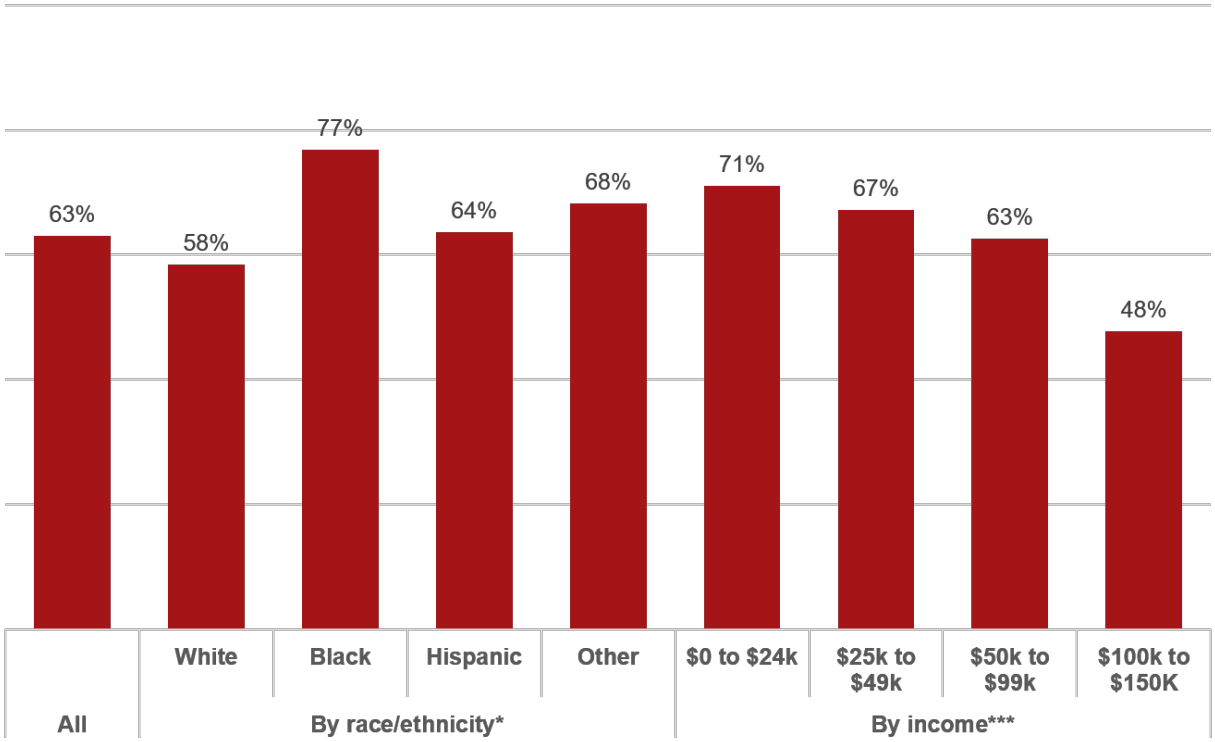
Notes: * p < 0.05
n=756
Source: Social Policy Institute Child Tax Credit Survey (Wave 2)

In addition, we wanted to understand the extent to which the monthly nature of the CTC payments helped respondents budget their finances relative to the more traditional, lump-sum delivery of tax credits like the EITC (and the CTC prior to 2021). To do so, we asked respondents about their agreement with the statement:

"Receiving monthly payments of the Child tax credit made it much easier for me to manage my budget than waiting to receive it as a single payment at tax filing."

Figure 4 shows that approximately two thirds (63 percent) of CTC-eligible families reported that the monthly CTC payments made it easier to budget compared to waiting for the lump-sum payment. Further, non-white families of other races/ethnicities (68 percent) as well as families earning between $0 to $24,999 (71 percent) and $25,000 to $49,999 (67 percent) were more likely to agree that the monthly payments made budgeting easier.

Figure 4. Agreement that monthly CTC payments make budgeting easier than single annual payment, by race/ethnicity and income



Notes: * p < 0.05,***p<0.001
n=1,053
Source: Social Policy Institute Child Tax Credit Survey (Wave 2)

Impacts of CTC on American families

In the prior sections of this report, we focused on how CTC recipients reported using the credit, and the extent to which they felt the credit affected their lives. In this section, we assess the impacts of the CTC by comparing changes in outcomes for CTC-eligible households and households without CTC-eligible children between Waves 1 and 2 of our survey. Specifically, we examine the impacts of the credit on food consumption and food insecurity, employment, assets and debts, hardships, parental stress, and mental health.

Food consumption and food insecurity

As noted above, one of the primary uses of the CTC was on food expenditures. To assess the extent to which the CTC impacted families' food security—i.e., the ability for families to get adequate food and nutrition—we asked an array of food security questions in both waves of the survey. In particular, we asked respondents how often the following statements were true for them in both waves of the survey:

- **[Food concern]** "I worried whether food would run out before I got money to buy more."
- **[Food sufficiency] "**The food I bought just didn't last and I didn't have money to get more."
- **[Free meals]** "I received free food or meals because there wasn't enough money."
- **[Balanced meals]** "I couldn't afford to eat balanced meals."

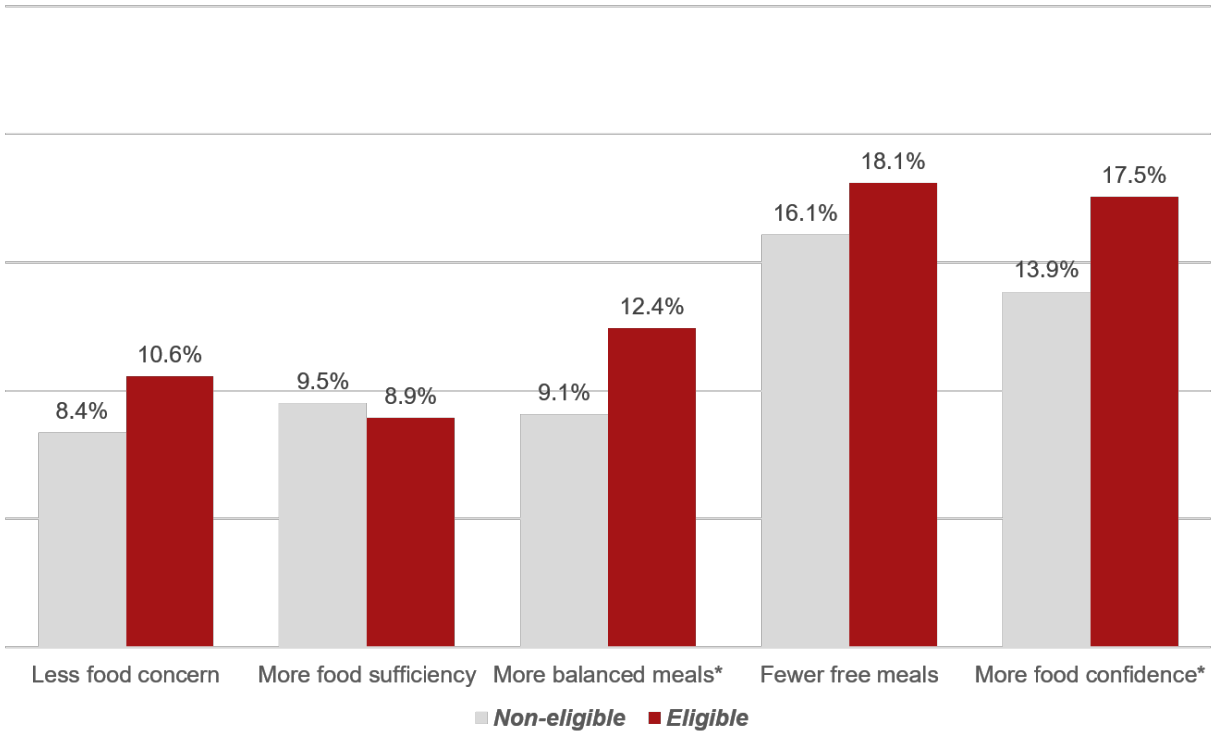
We also asked respondents "How **confident** are you that your household will be able to afford the kind of food you need for the next four weeks?" In **Figure 5**, we report the extent to which respondents reported changes in each of the food security measures before and after the CTC payments went out. These results provide evidence that the CTC indeed improved families' food security. In particular, we found that CTC-eligible families were:

- 1.4 times more likely than ineligible families to report increased affordability of balanced meals (12.4 percent vs. 9.1 percent; $p<0.05$); and
- 1.4 times more likely than ineligible families to gain confidence about affording the kinds of food they need (17.5 percent vs. 13.9 percent; $p<0.05$).

Notably, these improvements were more pronounced among some minority groups (Black and Hispanic families) and the low-moderate income group ($25K to $49.9K). For instance, CTC-eligible Black families were almost twice as likely as ineligible Black families to become more confident to afford the kinds of food they need (22.8 percent vs. 13.9 percent), while CTC-eligible familes with low-moderate incomes were 1.7 times more likely than low-moderate income

ineligible families to report increased affordability of balanced meals than their counterparts who were ineligible for the CTC (13.9 percent vs. 8.0 percent).

Figure 5. Improvement in family food security over the study period, by CTC eligibility



Notes: * p < 0.05; all other results are not statistically significant
n=2,381-2,444. Responses differ slightly across categories as some respondents skipped answering yes/no for certain categories. Demographic and socioeconomic attributes are controlled.
Source: Social Policy Institute Child Tax Credit Survey (Waves 1 and 2)

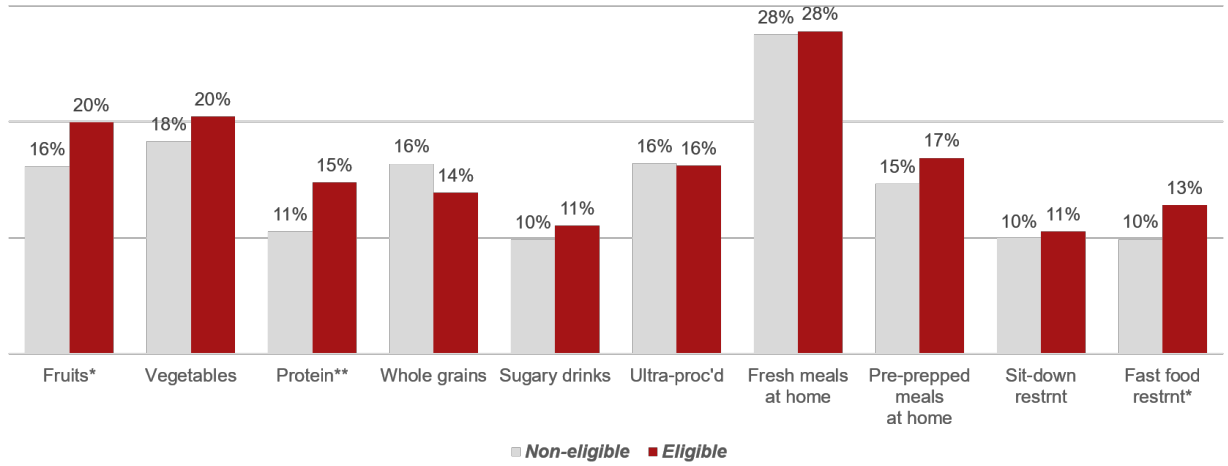
We were also interested in how the types of food consumed by families changed over the period the CTC payments were active. To assess this, we asked Wave 2 survey respondents how their consumption of an array of different food types changed over the six months that the CTC payments were active. Responses to this question provide evidence that the CTC expansion increased the amount of "health foods" consumed by CTC-eligible families as compared to non-eligible families (see **Figure 6**). After controlling for demographic and socioeconomic characteristics of CTC-eligible and non-eligible families, CTC-eligible families were:

- 1.3 times more likely than ineligible families to increase fruit consumption (20.0 percent vs. 16.2 percent; $p<0.05$); and
- 1.5 times more likely than ineligible families to increase meat or protein consumption (14.7 percent vs. 10.6 percent; $p<0.01$).

Notably, compared to non-CTC-eligible families, receipt of the expanded CTC was also associated with a greater increase in eating at fast-food restaurants (OR=1.36; $p<0.05$). This, in conjunction with the above finding that the CTC increased families' ability to afford balanced meals, may point to the increased flexibility in food choices among CTC recipients and that the benefit allowed increased spending across a variety of food options.

We also observed pronounced food consumption changes among Black families and lower-income families. For instance, 32 percent of Black CTC-eligible families reported increases in meats and protein consumption during the study period as compared to 18 percent of ineligible Black families. CTC-eligible families with low and moderate-income ($25K to $49.9K) were almost twice as likely to report increases in fruit consumption than their CTC-ineligible counterparts (25 percent vs. 14 percent).

Figure 6. Changes in types of foods consumed over the study period, by CTC eligibility



Notes: *p<0.05, **p<0.01; all other results are not statistically significant
n=2,479-2,506. Responses differ slightly across categories as some respondents skipped answering yes/no for certain categories.
Demographic and socioeconomic attributes are controlled.
Source: Social Policy Institute Child Tax Credit Survey (Wave 2)

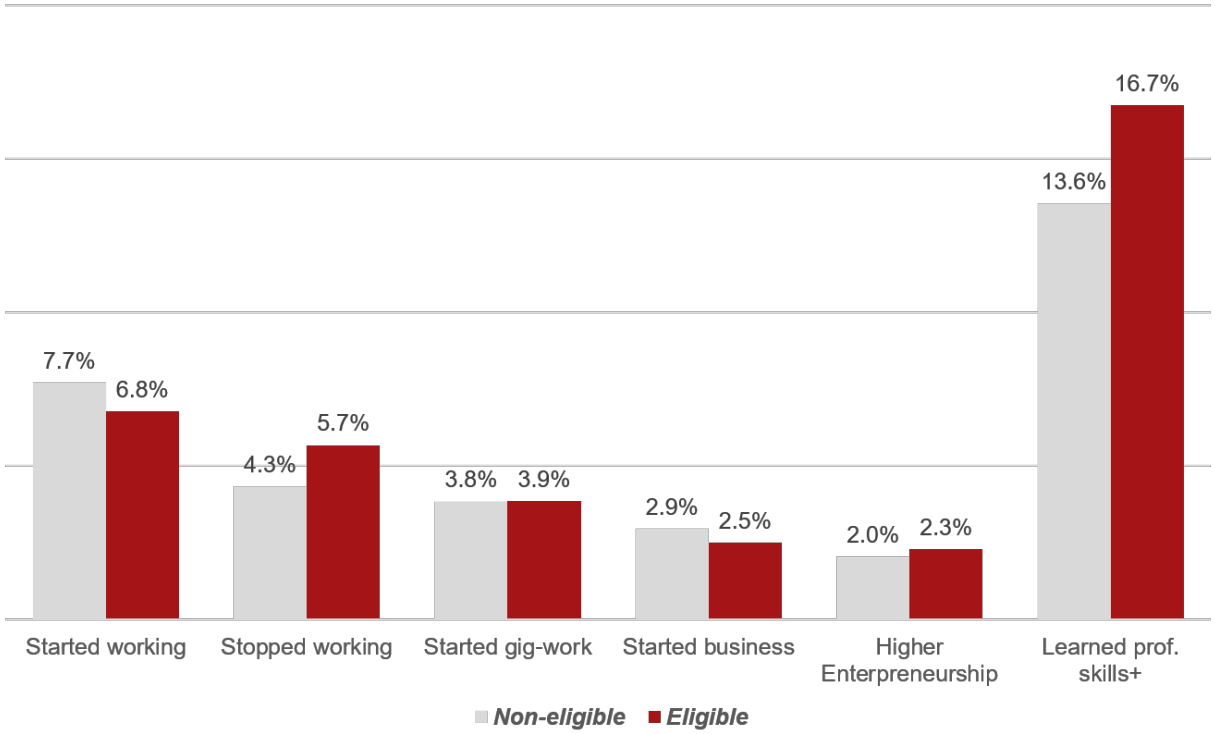
Employment

We examine changes in several employment-related metrics to assess the impact of the CTC on household employment. These metrics include:

- **[Started working]** Respondents who reported unemployment at Wave 1 and were employed at Wave 2;
- **[Stopped working]** Respondents who reported employment at Wave 1 and were unemployed at Wave 2;
- **[Started gig work]** Respondents who started gig work (e.g., driving for Uber, selling things on Etsy, etc.) between Waves 1 and 2;
- **[Started business]** Respondents who reported a business at Wave 2 they did not have at Wave 1;
- **[Higher entrepreneurship]** Respondents who reported *intentions* to start a business at Wave 2 who did not have those intentions at Wave 1;
- **[Learned professional skills]** Respondents who reported that they had learned professional skills between Waves 1 and 2.

In line with other studies using Census data (e.g., Roll et al., 2022), we see very little evidence that the CTC payments led to changes in household employment (**Figure 7**). In terms of changes in general employment, gig work, business startup, and entrepreneurship, we do not see significant differences between CTC-eligible and ineligible households. However, we do find a modest difference in the rate of learning new professional skills between the two groups. During the six-month study period, the CTC-eligible were 1.3 times more likely to start learning new professional skills than the ineligible comparison group (16.7 percent vs. 13.6 percent; $p<0.10$). This trend was especially prominent in the low-to-moderate income group ($25K to $49.9K): the CTC-eligible in this income cohort (20.4 percent) were more than twice as likely to start learning new job-related skills as the non-eligible comparison group (9.2 percent), and this difference is statistically significant at the 0.10 confidence level.

Figure 7. Employment changes over the study period, by CTC eligibility



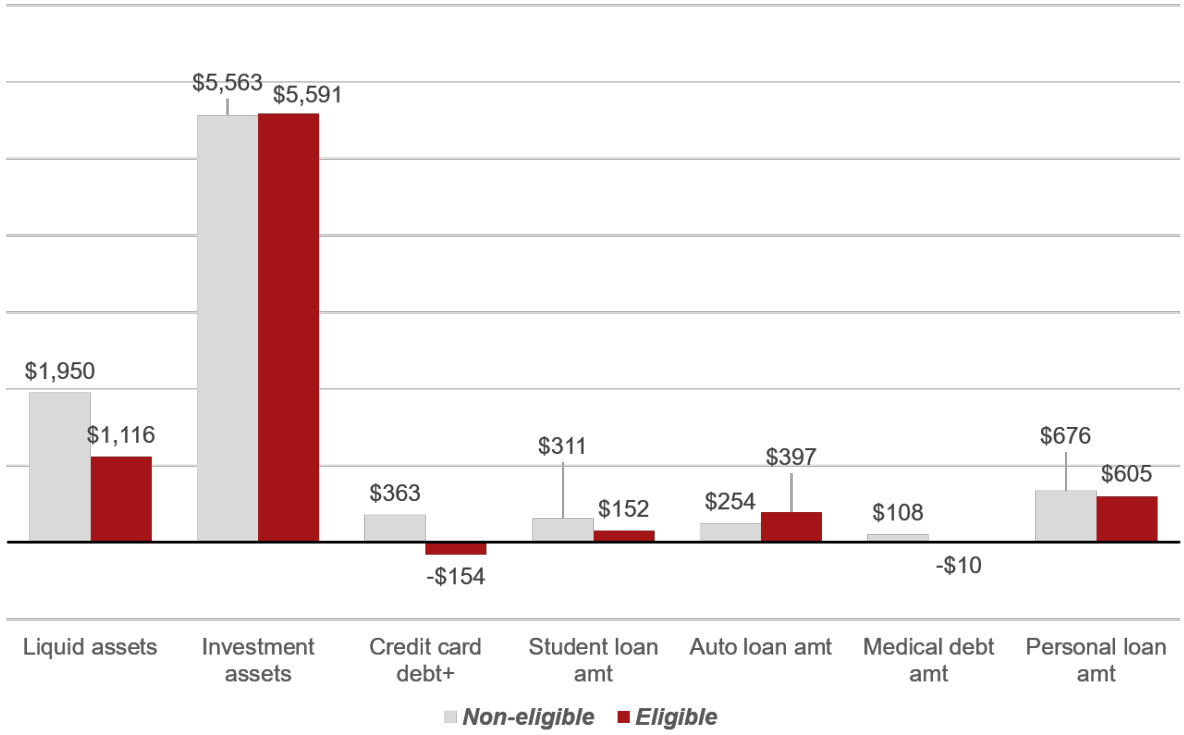
Notes: + $p < 0.10$; all other results are not statistically significant
n=1,681-2,495. Responses differ slightly across categories as some respondents skipped answering yes/no for certain categories.
Demographic and socioeconomic attributes are controlled
Source: Social Policy Institute Child Tax Credit Survey (Waves 1 and 2)

Asset and debts

Given that some of the most prominent reported uses of the CTC were on paying down debts and emergency savings, we wanted to investigate changes in household balance sheets from before and after the CTC payments. **Figure 8** reveals no major differences between CTC-eligible and ineligible households across a variety of asset and debt measures, including liquid assets (e.g., money held in cash or in bank accounts), investment assets, student loan amounts, auto loan

amounts, medical debt, or the amount held in bank overdrafts. However, we do observe some evidence that CTC-eligible households reduced their credit card liabilities more than ineligible households. On average, the unpaid credit card balance of the CTC-eligible decreased by $154 during the six months the CTC payments were active, while the outstanding balance of the non-eligible increased by $363 ($p < 0.1$). Notably, while **Figure 8** suggests a substantial gap in liquid asset amount changes between the two groups, this difference is not statistically significant.

Figure 8. Changes in assets and debts over the study period, by CTC eligibility



Notes: + $p < 0.10$; all other results are not statistically significant
n=1,267-2,514. Responses differ slightly across categories as some respondents skipped answering yes/no for certain categories.
Demographic and socioeconomic attributes are controlled.
Asset and debt amounts are winsorized at 1 percentile.
Source: Social Policy Institute Child Tax Credit Survey (Waves 1 and 2)

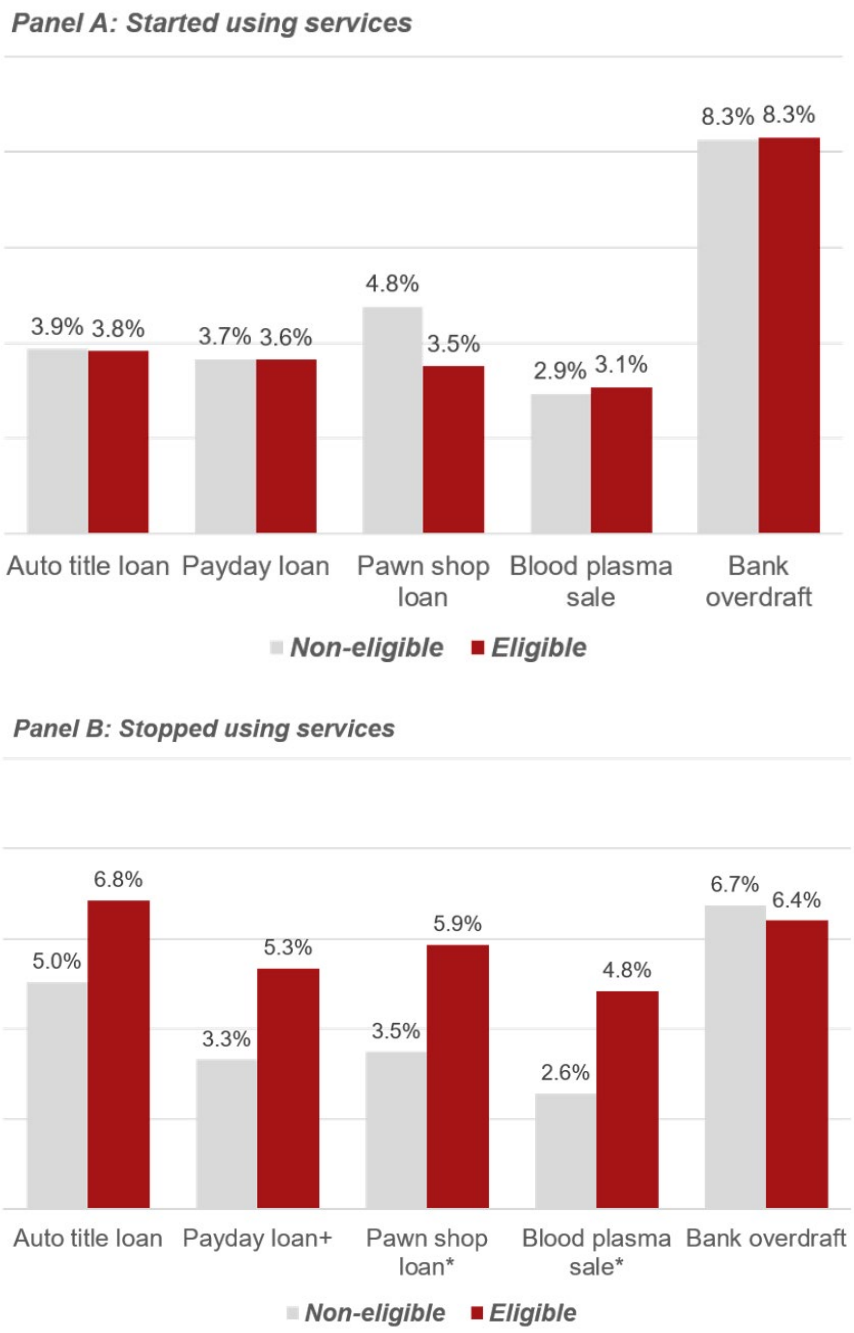
However, while we did not see large changes in household balance sheets, we did observe substantial shifts in respondents' usage of alternative financial services (AFS)—which include products like payday loans, auto title loans, and pawnshop loans and serve as high-cost alternatives to mainstream sources of credit like credit cards or bank loans—and rates of selling blood plasma over the period the CTC payments were active. In **Figure 9**, we explore changes in the usage of these services in two ways. The **top panel of Figure 9** examines rates of households "opting in" to using these services; that is, those who did not report using these services in the six months prior to Wave 1 of the survey, but then reported using them between Wave 1 and Wave 2. The **bottom panel of Figure 9** examines rates of households "opting out" of these services; that is, those who reported using these services in the six months prior to Wave 1, but then stopped using them between Wave 1 and Wave 2.

On the one hand, there were no substantial or statistically significant differences in CTC-eligible and ineligible households "opting in" to AFS usage (**Figure 9, Panel A**), meaning that people were not more or less likely to start using these high-cost services as a result of the CTC. On the other hand, however, the CTC-eligible were more likely to "opt out" of several of these high-cost services than the non-eligible (**Figure 9, Panel B**), meaning that the CTC may have helped eligible families stop relying on these services to make ends meet. In particular, we find that:

- The CTC-eligible were 1.7 times more likely to stop taking out short-term payday loans than the non-eligible (5.3 percent vs. 3.3 percent; $p<0.10$).
- The CTC-eligible were 1.8 times more likely to stop using pawnshop loans than the non-eligible (5.9 percent vs. 3.5 percent; $p<0.05$).
- The CTC-eligible were twice as likely to stop selling blood plasma than the non-eligible (4.8 percent vs. 2.6 percent; $p<0.05$).

The changes in AFS usage between the CTC-eligible and ineligible are more evident when we examine them by race/ethnicity and income. For instance, within Black families, the CTC-eligible were almost three times more likely to stop taking out auto title loans than the non-eligible (4.3 percent vs. 12.6 percent; $p<0.10$, see **Table 3, Panel A in the Appendix**). Within the lowest income group ($0 to $24.9K), the CTC-eligible were 3.2 times more likely to stop taking out short-term payday loans than the non-eligible (2.7 percent vs. 8.6 percent; $p<0.05$, see **Table 3, Panel B in the Appendix**).

Figure 9. Changes in alternative financial service usage over the study period, by CTC eligibility



Notes: + p < 0.10; * p<0.05; all other results are not statistically significant
n=2,438-2,468. Responses differ slightly across categories as some respondents skipped answering yes/no for certain categories.
Multnomial logistic regression model. Demographic and socioeconomic attributes are controlled.
Source: Social Policy Institute Child Tax Credit Survey (Waves 1 and 2)

Emergency expenses and emergency savings

The ability to handle an emergency expense with emergency savings or other forms of liquidity is one of the single best predictors of household financial well-being (Consumer Financial Protection Bureau, 2017; Roll et al., 2022). Given this, we evaluated the impact of the CTC expansion on a household's ability to manage a financial emergency in two ways. First, we asked households the following question on how they would manage a small, unexpected expense:

> *"Suppose that you have an emergency expense that costs $400. Based on your current financial situation, how would you pay for this expense?"*

Respondents select multiple options for how they would cover this expense, including:

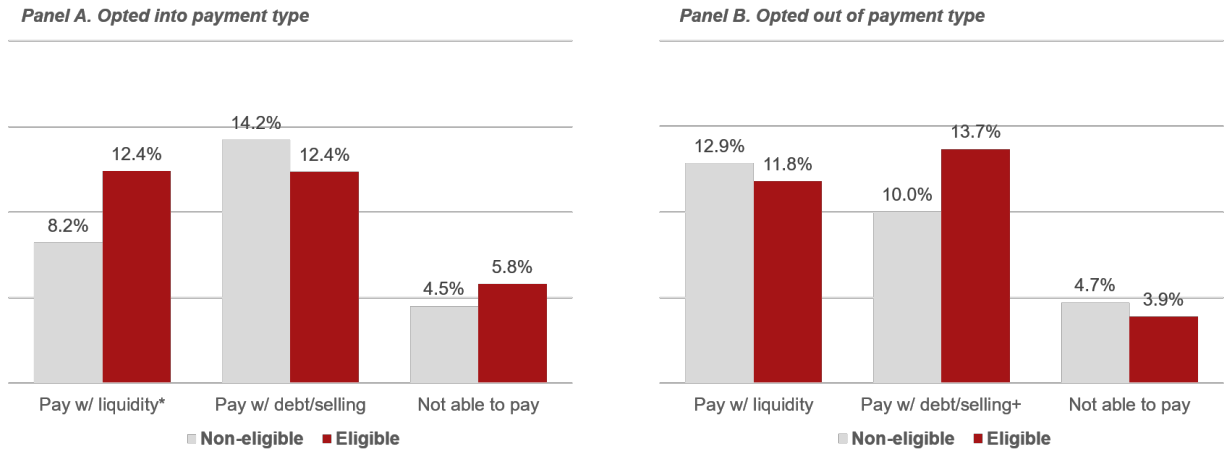
- **[Pay with cash or cash equivalent]** These options include using the money currently in their checking/savings account or cash, or putting it on their credit card and paying it off in full at the next statement
- **[Taking on debt or selling something]** These options include using a credit card they pay off over time, using a bank loan or line of credit, borrowing from friends or family, using a payday loan, overdraft, or deposit advance, or selling something
- **[Couldn't manage the expense]** This option includes those who said they could not handle the $400 expense.

Similar to our approach in examining changes in AFS usage, we defined a change in how households would handle an emergency $400 expense based on shifts in reported payment methods between Waves 1 and 2. For example, a respondent who would *not* have paid for an emergency expense with cash/cash equivalents in Wave 1 but who would use cash/cash equivalents in Wave 2 would be defined as having "opted-in" to that payment method. Similarly, if someone reported they would pay for an expense by taking on debt but would not use that method in Wave 2, they would be defined has having "opted-out" of that payment method. We examine the results of this analysis in **Figure 10.** We find that:

- CTC-eligible families were 1.5 times more likely than ineligible families to opt in to paying for an emergency expense with cash or cash equivalents between Waves 1 and 2 (12.4 percent vs. 8.2 percent; $p<0.05$).
- CTC-eligible families were 1.4 times more likely than ineligible families to opt out of taking on debt or selling something to pay for an emergency expense (13.7% vs 10.0 percent; $p<0.1$).

In addition, we found that these improvements were concentrated among those making less than $25,000 a year, as CTC-eligible households in this income bracket were more than twice as likely to report opting in to paying their emergency expense with cash or cash equivalents than ineligible households in this income bracket (17.4% vs. 8.1%; $p<0.05$). Taken together, these findings suggest that the CTC helped strengthen families' resilience to financial emergencies by allowing them to manage unexpected expenses through cash or savings rather than by taking on debt.

Figure 10. Changes in how families would pay for a $400 emergency expense, by CTC eligibility



Notes: + p < 0.10; *p<0.05; all other results are not statistically significant
n=2,541
Multnomial logistic regression model. Demographic and socioeconomic attributes are controlled
Source: Social Policy Institute Child Tax Credit Survey (Waves 1 and 2)

Next, we examined families' levels of emergency savings more generally. To do this, we first asked families:

> *"Have you set aside any emergency or rainy day funds that would cover your expenses in case of sickness, job loss, economic downturn, or other emergencies?"*

For those that said they did have emergency or rainy day funds, we then asked:

> *"Thinking about the savings that you have set aside in emergency or rainy day funds, which best describes how long your savings will last if your spending levels remained the same?"*

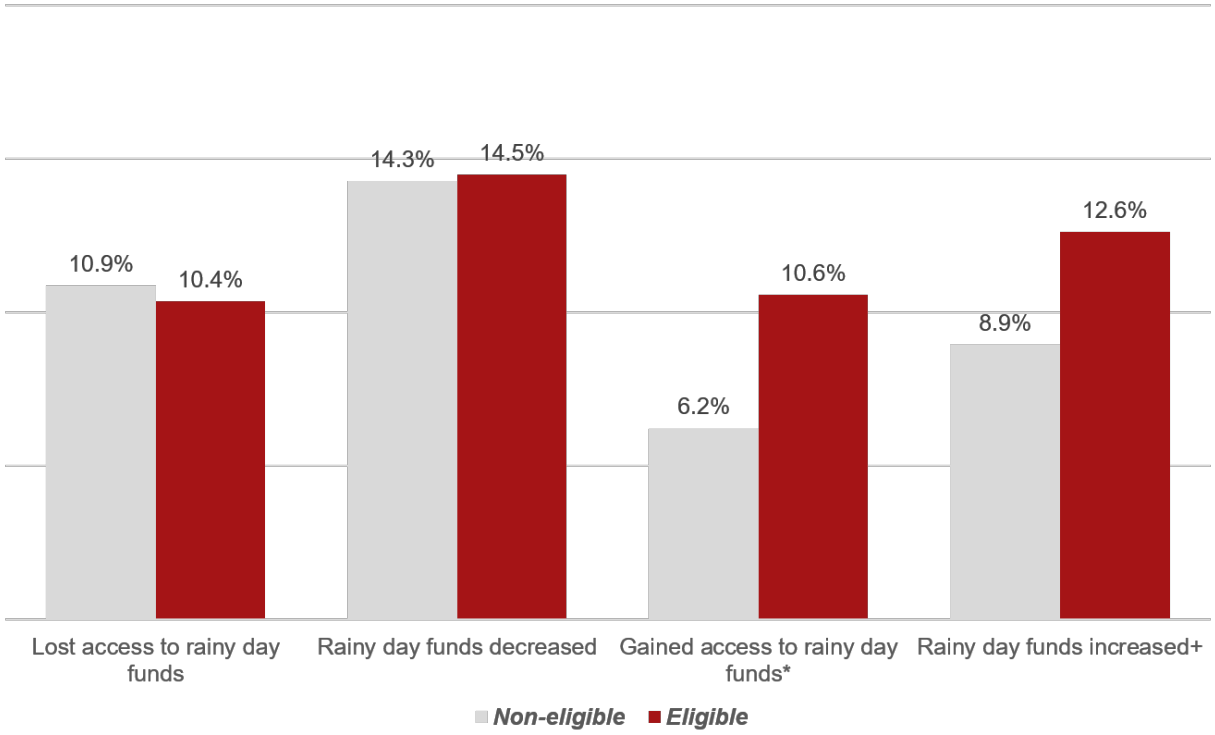
Respondents could answer "less than 1 week," "less than 1 month", "less than 3 months", "less than 6 months", and "6 months or more" to this question. To analyze the CTC's impact on these outcomes, we examined the extent to which CTC-eligible and ineligible families' rainy day savings situation improved or worsened between Waves 1 and 2. For example, a respondent who had no rainy day fund in Wave 1 but reported a rainy day fund in Wave 2 would be considered to have improved their rainy day savings situation (and vice versa). Similarly, a respondent who reported less than 1 week of expenses in their rainy day fund at Wave 1 but less than 3 months of expenses in their rainy day fund at Wave 2 would be considered to have improved their situation. **Figure 11** shows that CTC-eligible families improved their rainy day savings situation relative to ineligible families along both metrics. Specifically, we find that:

- CTC-eligible families were 1.7 times more likely than ineligible families to gain access to rainy day funds between Waves 1 and 2 (10.6 percent vs. 6.2 percent; p<0.05).

- CTC-eligible families were more 1.4 times more likely than ineligible families to report their rainy-day savings amount had improved between Waves 1 and 2 (12.6 percent vs. 8.9 percent; p<0.1).

We also found that these improvements in rainy day fund access were observed across different races/ethnicities and income groups, indicating that the benefits of the CTC in helping families build rainy day funds were broad-based.

Figure 11. Changes in rainy day fund access and amounts, by CTC eligibility



Notes: + p < 0.10; *p<0.05; all other results are not statistically significant
n=2,281-2,360. Responses differ slightly across categories as some respondents skipped answering yes/no for certain categories
Multnomial logistic regression model. Demographic and socioeconomic attributes are controlled
Source: Social Policy Institute Child Tax Credit Survey (Waves 1 and 2)

Hardship experience

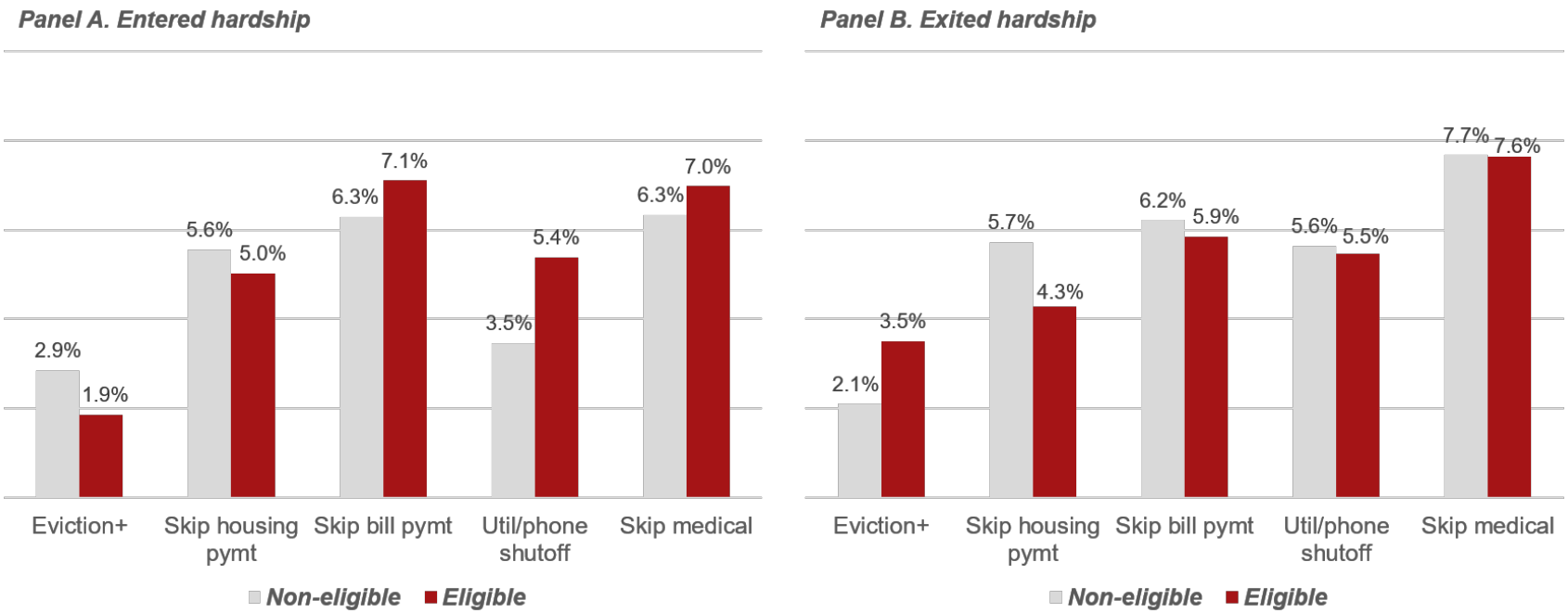
Next, we examine changes in the experience of material and medical hardships during the period the CTC payments were active. These hardships included eviction, skipped housing and utility payments due to cost, phone and utility shutoffs, and skipped medical care due to cost. Similar to our approach for AFS usage above, we examine how people reported "entering" and "exiting" hardship during the study period. We define entering hardship as not experiencing a given hardship in the six months prior to Wave 1 of the survey, but experiencing it between Waves 1 and 2 of the survey. For example, a respondent who did not report skipping a housing payment prior to Wave 1 of the survey, but did skip a housing payment between Waves 1 and 2 would be considered to have "entered" housing hardship. Similarly, we define an exit from hardship as

experiencing a given hardship in the six months prior to Wave 1, but not experiencing that hardship between Waves 1 and 2. Overall, **Figure 12** shows that there were some mild differences in hardship experiences between the CTC-eligible and non-eligible with respect to evictions, specifically:

- The CTC-eligible were 1.7 times more likely to *avoid* eviction between Waves 1 and 2 than the ineligible (3.5 percent vs. 2.1 percent; $p<0.10$).
- The CTC-eligible were almost one-third less likely to *get* evicted between Waves 1 and 2 than the ineligible (1.9 percent vs. 2.9 percent; $p<0.10$).

Notably, improvements in hardship outcomes were most noticeable in minority groups, including Black and Hispanic respondents. At Wave 2, the CTC-eligible Hispanic respondents were, for example, 2.5 times more likely to escape from the eviction risk that they experienced in Wave 1 than ineligible Hispanic respondents (4.5 percent vs. 1.8 percent).

Figure 12. Changes in hardship experience over the study period, by CTC eligibility



Notes: + p < 0.10; all other results are not statistically significant
n=2,362-2,473. Responses differ slightly across categories as some respondents skipped answering yes/no for certain categories.
Multinomial logistic regression. Demographic and socioeconomic attributes are controlled.
Source: Social Policy Institute Child Tax Credit Survey (Waves 1 and 2)

Arrests and Drug Use

In addition to hardship risks, we also examined the changes in the rates of reported drug usage and arrests of anyone in the household during the study period (**Figure 13**). We found that the CTC-eligible were around 50% less likely to start using illegal drugs between Waves 1 and 2 than ineligible households (1.3 percent vs. 2.6 percent; p<0.10).

Figure 13. Changes in drug use and arrests over the study period, by CTC eligibility

		Non-Eligible	Eligible
Entered into	*Drug use+*	2.6%	1.3%
	Arrested	1.1%	1.0%
Exited from	*Drug use*	1.9%	2.2%
	Arrested	0.7%	1.1%

Notes: + p < 0.10; all other results are not statistically significant

n (drug use)=2,423; n (arrested)=2,486

Multinomial logistic regression. Demographic and socioeconomic attributes are controlled

Source: Social Policy Institute Child Tax Credit Survey (Waves 1 and 2)

Mental health and parental stress

Lastly, we examine how the CTC-eligible group's mental health and parental stress changed from before and after the CTC payment period. Overall, we did not see a significant improvement (or deterioration) in either reported rates of depression/anxiety (as measured through the PHQ-4 scale) or a standard parental stress index (Berry & Jones, 1995). While 31 percent of the CTC-eligible parents reported a higher depression/anxiety level than six months prior, 33 percent reported a lower level. Also, 47 percent of CTC-eligible parents reported a higher parental stress level than six months prior, whereas 46 percent reported a lower level.

Importantly, the changes in mental health and parental stress vary by parents' demographic and socioeconomic characteristics. Single and older parents tended to exhibit greater (and negative) changes in a depression/anxiety than others during the study period (p<0.10 for both). For parental stress, parents with young children (under 6) reported a greater increase in stress level than those without a young child (p<0.10). While Black parents exhibited a decrease in their parental stress level, white parents exhibited an increase in their parental stress level, and the change was statistically significant (p<0.05).

Conclusions

Overall, our findings suggest that the expanded CTC supported eligible families in several critical ways. First, **the credit allowed families to cover routine expenses, such as housing, food, utilities, clothing, and other essential items for their children while also helping families to save for emergencies and pay off debt**. Because one of the primary uses of the benefit was on food, it is not surprising that **the CTC significantly lowered eligible families' food insecurity and helped them afford healthier, balanced meals for their children**. Additionally, t**he CTC reduced overall economic insecurity for eligible households**, as evidenced by their **declining credit card debt, lower eviction risks, stronger rainy-day funds, and reduced reliance on payday loans, pawn shops, and selling blood plasma to make ends meet**. It was, however, surprising to find that we discovered such mixed results regarding depression and parental stress. These discrepancies require further examination, but we hypothesize that the extra strain on CTC-eligible households compared to those ineligible (mostly non-parents) amidst a peaking Omicron variant (Morris & Calfas, 2022), winter break, the holidays, and other seasonal components may help to explain these findings and makes it all the more striking that family households experienced so many other positive outcomes.

While we found no differences in employment patterns between CTC-eligible and ineligible households, such statistically non-significant findings provide important implications for the overall impact of the credit. Some research has aroused concern that the expanded CTC's generous benefits discourage employment among recipients (Corinth et al., 2021). However, our findings support other models suggesting that the CTC payment would have no negative effects (Bastian, 2022; Goldin, Maag, & Michelmore 2021). Contrary to the previous concerns regarding the will to work, our finding that **CTC-eligible households, especially those of low- to moderate-incomes, were more likely to gain new professional skills** implies that additional income from the expanded CTC seems to encourage people to develop themselves to seek a better job quality.

One of the most profound findings of this study is how the expanded CTC supported racial and ethnic minority families in ways that will support long-term economic mobility. **Black, Hispanic, and other non-white minority groups were statistically more likely to use the credit to make investments in their children's futures such as through improved childcare and education, tutoring, and extracurricular activities. Black families also saw significant improvements in their consumption of healthy foods and a reduced reliance on auto title loans. Hispanic families experienced more substantial declines in evictions between Waves 1 and 2 than other groups as well.** Because minority households are statistically more likely to live in poverty due to long-term institutional racism, some have argued that unconditional cash transfers like the CTC are an important component to addressing racial financial inequality (Zewde et al., 2021).

In addition, we also see that many of the CTC's impacts were most pronounced for lower-income households, particularly for those making less than $50,000 a year. **Lower-income households were more likely to using the CTC to pay for tutors, spend more time with their children, purchase more and better food for their families, and move/improve their homes, while also being much more likely to report that the CTC helped them manage their housing and utility costs.** In addition, **CTC-eligible lower-income households experienced stronger improvements in food security, their ability to manage financial emergencies, and learning professional skills than their CTC-ineligible counterparts, and were also more likely to stop using high-cost**

financial resources like payday loans and auto title loans. These findings indicate that the CTC is helping the most economically vulnerable families manage their current economic needs while also helping them invest more in their children's development, potentially reducing major economic and educational gaps between lower-income and higher-income Americans.

Of course, these results come with important limitations. The primary limitation concerns the structure of our impact analysis. Since the CTC was implemented simultaneously and affected almost every U.S. household with children under the age of 18, there is no true "control" group as there would be in a natural experiment or randomized, controlled trial. Instead, we designed our panel survey to include a comparison group of households ineligible for the CTC, including households without children, those with children aged 18 or older, and those with non-tax dependent children under the age of 18. Though we collect data for both groups immediately before and after the CTC payments went out, there may be unobserved factors that lead to differences in outcomes not attributable to the CTC. Another major limitation of this study concerns the timing of the panel survey data collection. Wave 1 of the survey was administered as the Delta variant of the coronavirus was beginning to spread widely, and Wave 2 was administered as the Omicron variant was spreading. The final major limitation of this study concerns the fact that many of our outcome measures were based on retrospective survey questions that asked respondents about their experiences or usage of the CTC over the prior six months. It is possible that respondents' answers to these questions may suffer from some degree of recall bias, and while we would not expect this recall bias to differ between CTC-eligible and ineligible households, it remains a limitation of the study.

Still, these findings provide important contributions to the ongoing national discussion on the CTC. Much of the existing work on the impacts of the CTC has been limited by the lack of panel data, as well as by the relatively coarse outcome measures used in datasets like the Census Household Pulse, which is currently the primary dataset available to analyze CTC dynamics. The primary strength of the current study is its use of a novel, proprietary panel survey explicitly designed to assess the impact of the CTC on eligible households. By collecting longitudinal data on both CTC-eligible and ineligible households before and after the CTC payments, this survey allowed us to assess the impact of the CTC in more rigorous ways than other cross-sectional surveys.

Currently, the fate of the CTC expansion is still uncertain. The payments from the credit stopped at the end of 2021, and Congress is debating whether, and in what form, the CTC expansion should continue in 2022 and beyond. Our findings, in conjunction with a recent study showing that the monthly child poverty rate increased by 41% between December 2021 and January 2022 after the payments stopped (Center on Poverty and Social Policy, 2022), highlight the risks of not continuing the expanded CTC. Just as the credit's expansion improved families' nutrition, housing stability, and credit/debt outcomes, while also allowing them to invest in their children's education and future, choosing to not extend these payments beyond 2021 puts all these short-term gains at risk while also preventing families from experiencing the long-term benefits provided by increased economic security.

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Appendix

Table 3. Changes in alternative financial service usage over the study period, by CTC eligibility *(top panel: started using service; bottom panel: stopped using service)*

	Race/ethnicity								Income							
	White		Black		Hispanic		Other		$0 to $24K		$25K to $49K		$50K to $99K		$100K to $150K	
	Not elig	Elig	Not elig	Elig	Not elig	Elig	Not elig	Elig	Not elig	Elig	Not elig	Elig	Not elig	Elig	Not elig	Elig
Panel A.																
Started using																
Auto title loan	3.3%	3.8%	8.1%	4.1%	3.3%	4.0%	4.0%	3.6%	3.2%	2.4%	3.8%	2.9%	3.4%	4.5%	6.8%	5.4%
Payday loan	1.9%	2.9%	7.4%	3.0%	8.0%	4.4%	**0.9%**	**8.3%***	5.1%	5.0%	3.4%	4.2%	3.6%	2.6%	1.0%	2.5%
Pawnshop	2.8%	4.8%	**4.0%**	**11.7%+**	2.8%	4.3%	8.2%	6.7%	4.3%	8.0%	3.3%	6.4%	2.7%	3.2%	4.7%	6.0%
Blood plasma	2.6%	2.7%	4.2%	2.2%	2.5%	4.4%	4.4%	4.7%	3.3%	2.2%	2.2%	2.8%	3.3%	4.6%	2.5%	2.3%
Bank overdraft	7.1%	8.9%	12.5%	9.3%	9.8%	5.9%	7.3%	7.4%	8.5%	8.4%	11.3%	7.4%	6.3%	9.1%	7.4%	7.1%
Panel B.																
Stopped using																
Auto title loan	4.8%	6.3%	**4.3%**	**12.6%+**	5.9%	5.7%	6.7%	6.1%	6.0%	10.2%	**3.2%**	**9.0%***	5.9%	4.9%	5.6%	5.8%
Payday loan	2.9%	3.7%	4.5%	11.0%	2.5%	6.4%	6.0%	4.7%	**2.7%**	**8.6%***	3.7%	4.2%	4.1%	3.6%	4.0%	4.0%
Pawnshop	4.4%	3.0%	**7.8%**	**1.9%+**	4.1%	5.0%	4.1%	6.3%	7.8%	5.6%	3.9%	2.2%	3.1%	3.5%	5.4%	2.3%
Blood plasma	2.2%	3.6%	**2.2%**	**7.9%+**	1.8%	5.3%	7.9%	7.8%	2.7%	6.9%	3.1%	5.7%	1.8%	3.1%	3.8%	4.2%
Bank overdraft	6.3%	5.5%	4.8%	6.7%	10.2%	8.6%	6.8%	8.2%	7.1%	10.7%	6.6%	6.9%	7.6%	4.9%	5.9%	4.9%

Notes: + p < 0.10, * p < 0.05; all other categories are not significant
n=2,438-2,468. Responses differ slightly across categories as some respondents skipped answering yes/no for certain categories
Multnomial logistic regression model. Demographic and socioeconomic attributes are controlled
Source: Social Policy Institute Child Tax Credit Survey (Waves 1 and 2)

1775 MASSACHUSETTS AVE NW
WASHINGTON, D.C. 20036

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