

Research Brief

JPMORGAN CHASE & CO.
INSTITUTE

How families used the advanced Child Tax Credit

November 2022

On March 11, 2021, President Biden signed the American Rescue Plan Act of 2021 (ARPA) into law. The stimulus bill aimed to deliver direct relief to families and workers continuing to struggle financially during the ongoing COVID-19 pandemic. The ARPA's expansion of the existing Child Tax Credit (CTC) program automatically disbursed cash payments to the overwhelming majority of families with children under 17. It was both novel in its structure and unprecedented in its scale. This latest JPMorgan Chase Institute research uses transaction-level data to estimate the impact of these payments on household spending.

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Implications

- **Families with children may spend substantial shares of payments from programs like the Advanced Child Tax Credit.** Notably, many of these families were already holding unusually high cash balances due to Economic Impact Payments. Given the sensitivity of the consumption response to cash liquidity, it is possible that families would spend an even higher share of future payments in the context of household liquidity closer to historical levels.
- **To reach families that are most likely to utilize the payments, policymakers might consider programs that target families that are low-liquidity in addition to being low-income.** Cash liquidity was a very strong predictor of spending response: low-liquidity families were significantly more likely to spend out of advanced CTC payments than were high-liquidity families, who were notably unresponsive to advanced CTC payments. Income further differentiated consumption responses among low-liquidity families, where low-income recipients had the strongest response of any group.
- **The spending response to a similar future program is likely to be larger than what we find here because cash balances were historically high in 2021 due to the pandemic.** As recent Institute work has [shown](#), cash balances were elevated in the second half of 2021 when advanced CTC payments landed. This was especially true for lower-income families and younger families.
- **Underlying differences in liquidity are also largely responsible for observed aggregate differences in consumption response by race.** The consumption response to advanced CTC payments differed by race and ethnicity, with Black families spending a larger proportion of their July payments within the first week than Hispanic and White families. However, after accounting for differences in household liquidity, racial differences in spending responses to July CTC payments for high-liquidity households were substantially smaller.

Finding One: Households spent 40 percent of their July advanced Child Tax Credit payments within one week, transferred 18 percent to other accounts, and held 41 percent as cash in their checking accounts.

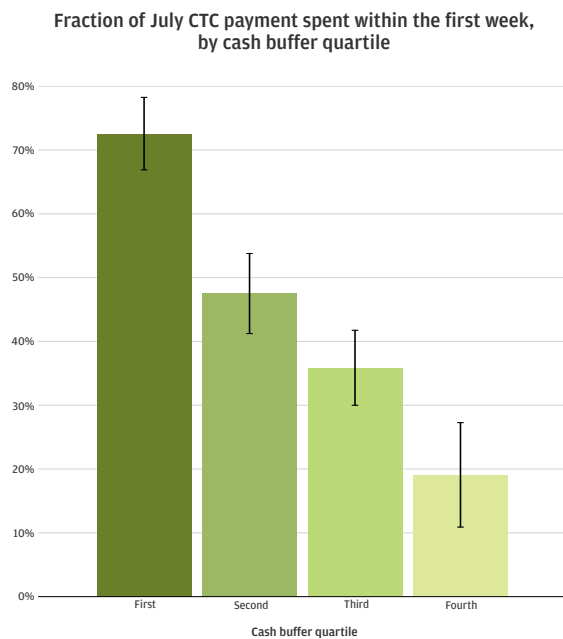
Within the first week of receipt, households spent 40 percent of their CTC payment. Spending on non-durable goods accounted for more than three quarters of this response, and roughly 12 percent of non-durable spending was on groceries and fuel. An additional 18 percent of the CTC payment went toward transfers to other accounts, with most of the remainder held as cash savings in households' checking accounts.

Finding Two: Liquidity was a stronger predictor of spending response than income; for all income quartiles, spending response roughly doubled for low-liquidity households compared to high-liquidity households.

We measure the liquidity of a household by computing its cash buffer—the amount of cash it has on hand divided by its typical spending. By this metric, families with smaller cash buffers are more liquidity constrained. We observe clear differences in spending response across all cash buffer quartiles, with more muted responses for higher buffer groups. Households' cash-on-hand remains a strong predictor of spending response even when we account for household income. Among households with below-median cash buffers, the spending response was strongest for the lowest earners, but still notable for high-earning households, indicating that cash liquidity was a stronger predictor of spending response than income.

Households with low cash buffers used a larger portion of their CTC payments on spending and debt payments and maintained very little “unused” CTC money. High-liquidity households appear especially unresponsive to advanced CTC payments. They not only spend less of their CTC relative to low-buffer households (19 percent vs. 73 percent) but also make proportionally smaller debt payments and transfers to other accounts.

Figure 7: Recipients with the lowest liquidity spent 73 percent of their July CTC payments in the first week, compared to only 19 percent spent by the highest liquidity recipients.



Note: Weekly spending includes the total of all purchases made from each household's Chase accounts via credit card, debit card, paper checks, cash withdrawals, and electronic payments. Cash buffer represents the amount of cash a household had on hand in April 2021 divided by its typical spending. Households in quartile 1 had cash to cover less than 2 weeks of spending; quartile 4 households had more than 19 weeks of spending available. The height of the bars represents marginal propensity to consume (MPC). We measure the MPC for each payment by comparing the CTC recipients' excess spending in the week the payment was received to their excess spending in the prior week.

Source: JPMorgan Chase Institute

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Figure 9: Low-liquidity recipients consumed a larger portion of their July CTC payments via spending and debt payments, and maintained very little as cash savings (2 percent vs. 70 percent for high-liquidity recipients).

Category	Cash buffer quartile			
	1	2	3	4
Total spending	0.73	0.48	0.36	0.19
	± 0.06	± 0.06	± 0.06	± 0.08
Non-durable	0.60	0.38	0.27	0.12
	± 0.04	± 0.04	± 0.04	± 0.05
Durable	0.06	0.05	0.03	0.02
	± 0.01	± 0.01	± 0.01	± 0.01
Healthcare	0.01	0.01	0.00	0.00
	± 0.003	± 0.003	± 0.003	± 0.003
Other spending	0.06	0.04	0.06	0.04
Debt payments	0.01	0.03	0.02	0.00[†]
	± 0.01	± 0.01	± 0.01	± 0.01
Transfers	0.24	0.18	0.18	0.11
	± 0.04	± 0.04	± 0.05	± 0.06
Other savings	0.02	0.32	0.43	0.70

Note: The fraction of CTC spent represents marginal propensity to consume (MPC). We measure the MPC for each payment by comparing the CTC recipients' excess spending in the week the payment was received to their excess spending in the prior week. Bolded categories—total spend, debt payments, transfers, and other savings—represent a mutually exclusive, collectively exhaustive breakdown of CTC use as measured by MPC. We derive the first three MPCs via the regression specification described in the appendix, and “other savings” represents the remainder, or 1 minus the sum of the derived MPCs. Likewise, the breakdown of total spend sub-categories derives MPCs from three mutually exclusive spending categories, and reports “other spend” as the remainder. For this reason, the two “other” categories do not include confidence intervals. Unless otherwise noted, all estimates are significant at $\alpha = 0.05$.

[†] Not significant at $\alpha = 0.05$.

Source: JPMorgan Chase Institute

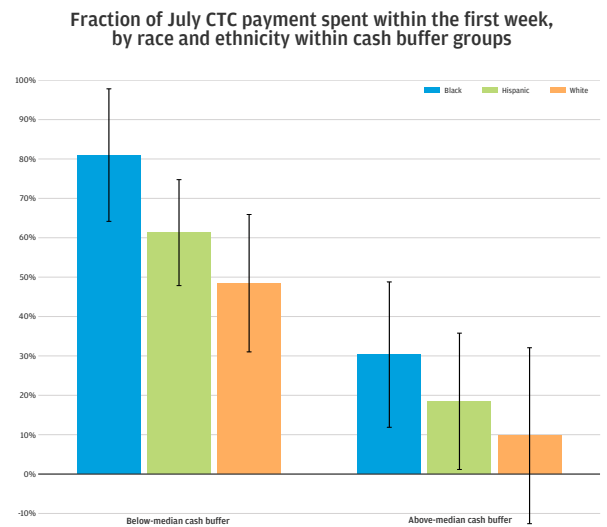
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Finding Three: Differences in CTC consumption response by race are substantially smaller after accounting for differences in liquidity.

Previous JPMorgan Chase Institute [research](#) has documented racial gaps in various financial outcomes. In particular, the Institute observed large racial differences not only in income, but also in liquid assets, which we have just shown to be a key driver of CTC consumption response.

Overall, Black households have the highest spending response, spending about half of CTC payments within the first week; the response was lower for Hispanic and White households. These differences in spending response by race are partially explained by differences in cash buffers (Figure 12). For households with above-median cash buffers, differences in spending response by race are no longer statistically significant. For households with below-median cash buffers, Black households spent the largest share of their July CTC payments within one week (81 percent) followed by Hispanic and White families (61 and 48 percent, respectively).

Figure 12: Racial differences in spending responses to July CTC payments are substantially smaller among households with smaller liquidity.



Note: Weekly spending includes the total of all purchases made from each household's Chase accounts via credit card, debit card, paper checks, cash withdrawals, and electronic payments. Cash buffer represents the amount of cash a household had on hand in April 2021 divided by its typical spending. Households in quartile 1 had cash to cover less than 2 weeks of spending; quartile 4 households had more than 19 weeks of spending available. We group households into race categories (Black, Hispanic, or White) when all individuals in the household have the same self-reported race, based on third-party data. The height of the bars represents marginal propensity to consume (MPC). We measure the MPC for each payment by comparing the CTC recipients' excess spending in the week title payment was received to their excess spending in the prior week.

Source: JPMorgan Chase Institute

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Data Explanation

Figure 7: Recipients with the lowest liquidity spent 73 percent of their July CTC payments in the first week, compared to only 19 percent spent by the highest liquidity recipients.

Bar chart showing the fraction of July CTC spent within the first week. Households in lower cash buffers spent larger fractions of CTC relative to households in higher cash buffer.

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Figure 9: Low-liquidity recipients consumed a larger portion of their July CTC payments via spending and debt payments, and maintained very little as cash savings (2 percent vs. 70 percent for high-liquidity recipients).

Table showing the fraction of July CTC payment spent within the first week, by cash buffer quartile and consumption category. Low-liquidity recipients consumed a larger portion of their July CTC payments via spending and debt payments, and maintained very little as cash savings (2 percent vs. 70 percent for high-liquidity recipients).

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Figure 12: Racial differences in spending responses to July CTC payments are substantially smaller among households with smaller liquidity.

Bar chart showing the fraction of July CTC payment spent within the first week, by race and ethnicity within cash buffer groups. Accounting for differences in household liquidity, spending responses to July CTC payments do not significantly differ by race.

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For more information, visit <https://www.jpmorganchase.com/institute/research/household-income-spending/how-families-used-advanced-CTC>

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