



Real-time Poverty Estimates During the COVID-19 Pandemic through May 2022*

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Poverty Continues to Hold Steady

The past two years have seen unprecedented job loss due to the pandemic, three rounds of government stimulus payments, a sharp rise in prices, expanded unemployment insurance, and many changes in other policies that have affected incomes and spending patterns. The government response to the pandemic has been at times generous but uneven across people and time.

What has been the effect of the pandemic, government stimulus, and other economic changes on poverty? Our most recent estimates, which are reported in Table 1, include data through May 2022 and accounts for the latest changes in prices. These estimates indicate that the poverty rate for May 2022 was 11.3 percent, which is up nearly 0.5 percentage points from the previous month. However, we caution against making too much of month-to-month changes in our annual poverty measure given the variability due to relatively small samples from the monthly CPS. To smooth out some of this variation, we also report a 3-month moving average of our poverty estimates (Table 2). These estimates show that poverty has remained fairly steady in 2022, with the 3-month moving average ranging from 11 to 11.5 percent. Our most recent estimate, is 0.6 percentage points higher than the rate just prior to the start of the pandemic, but 0.7 percentage points lower than the peak rate in September 2021. Focusing on the moving average, the poverty rate for more disadvantaged groups including blacks, Hispanics, and those with a high school degree or less is more than a percentage point higher today than it was prior to the pandemic. However, it is more than a percentage point lower than it was at its height during the pandemic in the latter part of 2021.

Path of Poverty Earlier in the Pandemic

The effect of the pandemic on the economy and the government's response have had a noticeable impact on poverty rates over the past year. In a <u>recent study</u>, published in the *Brookings Papers on Economic Activity*, we developed a new poverty measure that provides near-real-time poverty estimates using U.S. Census Bureau data. These estimates, which can be produced with a lag of only a few weeks, provide immediate information on how the pandemic is affecting individuals and families. As a result, the estimates should guide government policies and programs that help prevent people from slipping into poverty during sharp downturns in the economy. These monthly updates are also available through our Poverty Measurement Dashboard at http://povertymeasurement.org/covid-19-poverty-dashboard/.

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¹ Due to the moderate sized samples available to construct these monthly rates, the estimates are imprecise. Consequently, changes in poverty between consecutive months are not statistically significant.

² The family income question is only asked of a quarter of the Monthly CPS sample.

³ Our poverty rate is estimated using household income over the past twelve months including the interview month. So, the poverty rate for May 2022 is calculated using the reference period for income from June 2021 through May 2022. This window included the months when most households with children received advance Child Tax Credit (CTC) payments, which were paid from July through December. As noted in past reports, we think it is likely that CTC payments are included in our income measure as we found substantial evidence that Economic Impact Payments (which are also tax credits) were registered, though we cannot be sure that any particular income source is included in the reports of total money income.

Our initial study provided estimates through June 2020. In Table 1, we report these estimates as well as updated results through May 2022.⁶ As these results show, poverty declined by 1.3 percentage points in the first few months after the start of the pandemic from 10.8 percent in January 2020 to 9.6 percent in June 2020. Poverty declined across a range of demographic groups and geographies, with some of the most noticeable declines evident for people with low levels of education and for those who fall into the "other race" (neither white nor Black) category. In our initial study, we also showed that the entire decline in poverty through June 2020 can be accounted for by the one-time stimulus checks the federal government issued, predominantly in April and May 2020, and the expansion of unemployment insurance eligibility and benefits. Those stimulus payments provided up to \$1,200 to individuals and \$2,400 to married couples without dependents, and the unemployment insurance benefits were initially supplemented by \$600 per week and eligibility was broadened. Our analyses indicate that in the absence of these programs, poverty would have risen sharply.

In the last 6 months of 2020, however, poverty rose sharply, as some of the benefits that were part of the initial government relief package expired. Poverty rose by 2.1 percentage points from 9.6 percent in June to 11.7 percent in December, adding about 7 million people to the ranks of the poor. Poverty rose each month between June and November even though the unemployment rate fell by 40 percent (from 11.1 percent to 6.7 percent) during this period. This disconnect between poverty and unemployment is not surprising given that many government benefits expired and unemployment insurance benefits are typically only about half of pre-job loss earnings.

The increase in poverty in the latter half of 2020 was more noticeable for Blacks, children, and those with a high school education or less. For Blacks, poverty rose by 3.2 percentage points between June and December. Poverty also rose noticeably for those with a high school education or less, from 16.9 percent in June to 22.4 percent in December.

A new round of stimulus payments of up to \$600 per person started going out in January 2021 and Pandemic Unemployment Compensation, which provides supplemental benefits to those collecting unemployment insurance, was revived at a lower amount (\$300 per week as compared to the \$600 per week supplement that expired in July 2020). The American Rescue Plan provided additional stimulus payments of up to \$1,400 per person as well as an extension of the \$300 Pandemic Unemployment Compensation payments to September 2021, although some states stopped providing these supplemental benefits a few months earlier.

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⁶ The estimates reported in Table 1 differ from those reported in Han et al. (2020)—and in previous reports—because we have slightly changed our methods. First, we have revised the thresholds. In Han et al. (2020) we used the official poverty thresholds, which are only updated annually for inflation using the CPI. We now update the thresholds each month using the monthly CPI. Thus, for example, the thresholds we use for December of 2020 are the same as the official poverty thresholds for reference year 2020, but we then adjust these thresholds using the CPI to calculate poverty in the subsequent months, January-November 2021. Second, we revised the data we draw from to impute income using bracket values. We now draw within bracket values from the 2021 ASEC to impute income in 2022, while we use the 2020 (2019) ASEC to impute income in 2021 (2020). Previously, we used the 2019 (2020) ASEC to impute income in January 2020 - January 2021 (February 2021 - January 2022). These revisions have only a small effect on the level of our poverty estimates and virtually no effect on the changes over time.

Methods

To calculate near-real-time estimates of poverty, we use data from the monthly Current Population Survey (CPS), a nationally representative survey of about 60,000 households each month — the same survey that is used to calculate official monthly unemployment statistics. This survey includes a global question about family income that is asked of a quarter of the sample and provides the data necessary to estimate poverty. To determine the poverty status of a family, we compare their income to their official poverty threshold, adjusted for inflation on a monthly basis. Specifically, we multiply the 2021 poverty thresholds by an adjustment factor, which is calculated as the average monthly CPI during the 12-month reference period for income in a given monthly CPS. We show that, historically, the real-time poverty estimate from the monthly CPS has been a good predictor of changes in the official poverty rate.

We should caution against overinterpreting the month to month variation in poverty rates, particularly for smaller subgroups of the population. Given the smaller sample available to construct real-time poverty estimates, one may want to average a few months to reduce this volatility.

We should also note some important limitations with this approach. First, as with the official measure of poverty, this income source does not include in-kind benefits such as food stamps and housing subsidies. It also may miss some taxes, although as discussed above there are reasons to believe tax payments such as the advance CTC would be included. Another potential limitation with our approach for tracking poverty over time is that the price index used to adjust thresholds overstates inflation. In previous work, we have shown that this price index bias significantly affects estimates of changes in poverty over several decades. Such bias, however, is likely to be very small when calculating changes in poverty within a year. It is also important to note that income in surveys has been shown to be significantly underreported, especially for those with few resources, and the extent of under-reporting has increased over time. This underreporting, however, is less likely to be a concern for the very short run changes that we examine, unless the pandemic significantly affected reporting. Despite these limitations, our approach arguably provides the most comprehensive information available on household resources and poverty in real time for a nationally representative sample.

⁷ Meyer, Bruce and Jim Sullivan (2012), "Winning the War: Poverty from the Great Society to the Great Recession," Brookings Papers on Economic Activity, Fall, p. 133-183. https://www.brookings.edu/bpea-articles/winning-the-war-poverty-from-the-great-society-to-the-great-recession/.

⁸ See Meyer, B.D., Mok, W.K.C. and Sullivan, J.X. 2015. Household Surveys in Crisis. Journal of Economic Perspectives, 29 (4), 199–226; Meyer, Bruce D. and James X. Sullivan, 2011. "Viewpoint: Further Results on Measuring the Well-Being of the Poor Using Income and Consumption." Canadian Journal of Economics 44(1): 52-87; and Meyer, Bruce D. and James X. Sullivan, 2003, "Measuring the Well-Being of the Poor Using Income and Consumption," Journal of Human Resources 38(S): 1180-1220.

Table 1: Poverty Rates, Monthly CPS, 2020-2022

												Head	Head	UI	UI
Sample	All individuals	Individuals Age 0-17	Individuals Age 18-64		Race: White	Race: Black	Race: Other	Ethnicity: Hispanic	Ethnicity: Non- Hispanic	Gender: Male	Gender: Female	Education:	Education:	Recipiency:	Recipiency:
												H.S.	Some	High Q1	Low Q1
		Age 0-17										Degree or	College or	Recipiency	Recipiency
												below	above	(>=35%)	(<35%)
Jan-20	10.8%	15.2%	9.9%	7.7%	9.5%	18.0%	12.3%	20.2%	8.8%	10.3%	11.3%	21.2%	5.9%	9.4%	12.1%
Feb-20	10.9%	15.0%	9.7%	8.9%	9.0%	20.9%	12.2%	17.4%	9.4%	9.9%	11.8%	20.1%	6.3%	9.9%	11.8%
Mar-20	10.4%	16.5%	8.7%	7.4%	8.8%	21.8%	9.3%	16.7%	9.0%	9.0%	11.8%	20.7%	5.5%	8.6%	12.1%
Apr-20	9.4%	14.3%	7.9%	7.2%	7.8%	18.0%	9.4%	18.4%	7.2%	8.7%	10.0%	19.3%	4.7%	8.4%	10.3%
May-20	9.2%	12.9%	8.4%	6.7%	8.0%	16.1%	9.6%	18.4%	7.0%	8.5%	9.9%	17.9%	5.3%	8.5%	10.0%
Jun-20	9.6%	13.5%	8.6%	7.1%	8.0%	19.3%	8.4%	18.0%	7.5%	9.0%	10.1%	16.9%	6.3%	8.8%	10.3%
Jul-20	10.3%	15.6%	9.2%	6.0%	8.9%	18.6%	10.3%	19.4%	8.0%	9.0%	11.5%	19.5%	5.7%	10.1%	10.4%
Aug-20	10.6%	15.8%	9.4%	7.0%	8.1%	23.5%	12.0%	14.2%	9.7%	9.7%	11.4%	20.3%	5.8%	10.1%	11.0%
Sep-20	10.8%	16.2%	9.3%	8.2%	8.9%	22.7%	10.4%	17.8%	9.3%	10.1%	11.5%	20.8%	5.9%	8.7%	12.8%
Oct-20	11.5%	16.8%	10.1%	8.4%	9.7%	22.9%	10.6%	18.0%	9.9%	10.7%	12.2%	22.6%	6.1%	10.2%	12.6%
Nov-20	11.8%	16.0%	11.0%	8.7%	10.2%	21.2%	12.4%	21.7%	9.5%	11.0%	12.6%	22.7%	6.4%	10.5%	13.1%
Dec-20	11.7%	16.2%	10.7%	8.4%	10.3%	22.5%	9.7%	22.7%	9.1%	11.4%	12.0%	22.4%	6.5%	10.4%	13.0%
Jan-21	11.3%	16.5%	10.2%	7.2%	9.6%	20.8%	12.1%	18.4%	9.6%	10.7%	11.9%	21.7%	6.4%	10.4%	12.1%
Feb-21	11.3%	16.4%	10.3%	7.4%	9.3%	20.8%	13.7%	20.0%	9.3%	10.6%	12.1%	22.5%	5.7%	10.6%	12.0%
Mar-21	11.8%	17.5%	10.5%	8.0%	10.6%	21.5%	9.3%	20.7%	9.7%	10.6%	12.9%	22.3%	6.7%	9.4%	14.0%
Apr-21	11.3%	16.8%	10.2%	7.5%	9.7%	21.1%	11.0%	19.6%	9.4%	10.3%	12.3%	21.1%	6.6%	10.2%	12.4%
May-21	11.3%	16.8%	9.9%	7.8%	9.5%	22.9%	11.1%	20.9%	9.0%	10.4%	12.0%	21.7%	6.0%	10.3%	12.1%
Jun-21	11.3%	15.7%	10.3%	8.2%	9.3%	23.0%	11.8%	17.9%	9.7%	10.6%	12.0%	21.3%	6.5%	10.1%	12.5%
Jul-21	11.6%	16.8%	10.4%	8.2%	9.7%	21.6%	13.0%	21.4%	9.3%	10.8%	12.3%	21.8%	6.4%	10.7%	12.5%
Aug-21	12.1%	17.7%	10.9%	8.3%	9.8%	24.5%	14.5%	20.6%	10.0%	11.1%	13.0%	23.3%	6.5%	10.7%	13.4%
Sep-21	11.9%	16.6%	10.9%	8.6%	9.9%	23.7%	13.1%	20.8%	9.9%	10.8%	13.0%	22.6%	6.7%	10.7%	13.1%
Oct-21	11.9%	17.7%	10.2%	9.5%	10.7%	21.7%	9.6%	19.9%	10.0%	11.1%	12.7%	23.4%	6.1%	9.8%	14.0%
Nov-21	11.6%	16.3%	10.5%	8.6%	9.9%	20.9%	13.1%	19.9%	9.6%	11.0%	12.2%	21.9%	6.5%	9.2%	14.0%
Dec-21	12.2%	16.1%	11.3%	9.5%	10.5%	21.3%	13.3%	23.9%	9.3%	11.3%	13.0%	23.4%	6.6%	11.4%	12.9%
Jan-22	11.7%	16.9%	10.4%	9.0%	9.8%	22.4%	13.1%	19.4%	9.9%	10.8%	12.6%	21.3%	6.8%	10.4%	13.0%
Feb-22	10.6%	15.2%	9.6%	7.7%	8.7%	18.9%	14.6%	18.0%	8.8%	9.6%	11.6%	20.5%	5.5%	9.3%	11.8%
Mar-22	11.7%	16.7%	10.6%	7.9%	9.9%	22.6%	10.8%	19.6%	9.8%	10.3%	13.0%	23.3%	6.0%	10.6%	12.7%
Apr-22	10.8%	15.1%	9.9%	8.0%	9.3%	19.4%	11.3%	20.1%	8.6%	10.4%	11.3%	20.4%	6.1%	9.7%	11.9%
May-22	11.3%	16.4%	9.8%	9.2%	9.2%	22.0%	13.4%	18.2%	9.6%	10.2%	12.4%	21.6%	6.1%	10.7%	11.9%
Jun-20 - Jan-20	-1.3%	-1.6%	-1.4%	-0.6%	-1.4%	1.2%	-3.9%	-2.2%	-1.2%	-1.3%	-1.3%	-4.3%	0.3%	-0.7%	-1.9%
May-22 - Jun-20	1.7%	2.8%	1.2%	2.1%	1.1%	2.8%	5.0%	0.2%	2.1%	1.2%	2.3%	4.7%	-0.2%	1.9%	1.6%
May-22 - Jan-20	0.5%	1.2%	-0.1%	1.5%	-0.3%	4.0%	1.0%	-2.0%	0.9%	-0.1%	1.0%	0.4%	0.1%	1.2%	-0.2%

Note: This table is an update of Table 1 of Han et al. (2020), althought the methods differ slightly. We now multiply impute income within brackets for all months using five draws, while Han et al. used a single draw. In Han et al., we used the official poverty thresholds, which are only updated annually for inflation using the CPI. We now update the thresholds each month using the monthly CPI. Thus, for example, the thresholds we use for December of 2020 are the same as the official poverty thresholds for reference year 2020, but we then adjust these thresholds using the CPI to calculate poverty in the subsequent months, January-November 2021. Second, we revised the data we draw from to impute income using bracket values. We now draw within bracket values from the 2021 ASEC to impute income in 2022, while we use the 2020 (2019) ASEC to impute income in 2021 (2020). Previously, we used the 2019 (2020) ASEC to impute income in January 2020 - January 2021 - January 2021 - January 2022). See the paper for additional methods. The sample includes individuals who are included in the householders' families and who are in their 1st or 5th month in the survey. Individuals with imputed income are excluded from the sample. The statistics are weighted using fixed demographic weights since March 2020.

Table 2: 3-Month Moving Average of Poverty Rates, Monthly CPS, 2020-2022

Sample	All individuals	Individuals Age 0-17	Individuals Age 18-64		Race: White	Race: Black	Race: Other	Ethnicity: Hispanic	Ethnicity: Non- Hispanic	Gender:	Gender: Female	Head	Head	UI	UI
												Education:	Education:	Recipiency	Recipiency
												H.S.	Some	: High Q1	: Low Q1
												Degree or	College or	Recipiency	Recipiency
												below	above	(>=35%)	(<35%)
Jan-20															
Feb-20	10.7%	15.6%	9.5%	8.0%	9.1%	20.3%	11.3%	18.1%	9.1%	9.7%	11.7%	20.7%	5.9%	9.3%	12.0%
Mar-20	10.2%	15.3%	8.8%	7.8%	8.5%	20.3%	10.3%	17.5%	8.6%	9.2%	11.2%	20.0%	5.5%	9.0%	11.4%
Apr-20	9.7%	14.6%	8.3%	7.1%	8.2%	18.7%	9.4%	17.8%	7.7%	8.7%	10.6%	19.3%	5.2%	8.5%	10.8%
May-20	9.4%	13.6%	8.3%	7.0%	8.0%	17.8%	9.2%	18.3%	7.3%	8.7%	10.0%	18.0%	5.4%	8.6%	10.2%
Jun-20	9.7%	14.0%	8.7%	6.6%	8.3%	18.0%	9.5%	18.6%	7.5%	8.8%	10.5%	18.1%	5.7%	9.1%	10.2%
Jul-20	10.1%	15.0%	9.1%	6.7%	8.3%	20.5%	10.2%	17.2%	8.4%	9.2%	11.0%	18.9%	5.9%	9.7%	10.6%
Aug-20	10.5%	15.9%	9.3%	7.0%	8.6%	21.6%	10.9%	17.1%	9.0%	9.6%	11.5%	20.2%	5.8%	9.6%	11.4%
Sep-20	10.9%	16.3%	9.6%	7.8%	8.9%	23.1%	11.0%	16.7%	9.7%	10.2%	11.7%	21.2%	5.9%	9.7%	12.1%
Sep-21	12.0%	17.3%	10.7%	8.8%	10.1%	23.3%	12.4%	20.5%	9.9%	11.0%	12.9%	23.1%	6.4%	10.4%	13.5%
Oct-21	11.8%	16.9%	10.6%	8.9%	10.2%	22.1%	11.9%	20.2%	9.8%	11.0%	12.6%	22.7%	6.4%	9.9%	13.7%
Nov-21	11.9%	16.7%	10.7%	9.2%	10.4%	21.3%	12.0%	21.2%	9.6%	11.1%	12.6%	22.9%	6.4%	10.2%	13.6%
Dec-21	11.8%	16.4%	10.7%	9.1%	10.1%	21.5%	13.2%	21.1%	9.6%	11.1%	12.6%	22.2%	6.6%	10.3%	13.3%
Jan-22	11.5%	16.1%	10.4%	8.7%	9.7%	20.9%	13.7%	20.4%	9.3%	10.6%	12.4%	21.7%	6.3%	10.4%	12.6%
Feb-22	11.3%	16.3%	10.2%	8.2%	9.5%	21.3%	12.8%	19.0%	9.5%	10.3%	12.4%	21.7%	6.1%	10.1%	12.5%
Mar-22	11.0%	15.7%	10.0%	7.9%	9.3%	20.3%	12.2%	19.2%	9.1%	10.1%	12.0%	21.4%	5.9%	9.9%	12.1%
Apr-22	11.3%	16.0%	10.1%	8.4%	9.5%	21.4%	11.8%	19.3%	9.4%	10.3%	12.2%	21.8%	6.1%	10.3%	12.1%
May-22															
Jun-20 - Feb-20	-1.0%	-1.6%	-0.7%	-1.4%	-0.8%	-2.3%	-1.8%	0.5%	-1.6%	-0.9%	-1.2%	-2.6%	-0.2%	-0.2%	-1.8%
April-22 - Jun-20	1.6%	2.0%	1.4%	1.8%	1.2%	3.4%	2.4%	0.7%	1.8%	1.5%	1.7%	3.7%	0.3%	1.2%	1.9%
April-22 - Feb-20	0.6%	0.5%	0.6%	0.4%	0.4%	1.1%	0.6%	1.2%	0.3%	0.6%	0.6%	1.1%	0.1%	1.0%	0.1%

Note: This table reports the 3-month moving average of the poverty rates reported in Table 1. For each month in this table we take the average poverty rate of that month, the preceding month, and the following month from Table 1.