**Real-time Poverty Estimates During the COVID-19 Pandemic
through October 2021***

Jeehoon Han, Zhejiang University
Bruce D. Meyer, University of Chicago, NBER, and AEI
James X. Sullivan, University of Notre Dame and LEO

November 18, 2021

Poverty Continues to Hold Steady

The coronavirus pandemic has taken a significant toll on the U.S. labor market. Since the start of the pandemic, more than 120 million claims for unemployment insurance have been filed, and although they have fallen, these new weekly claims remained well above the pre-pandemic rate until very recently. Currently, there are 4.6 million fewer employed workers than just prior to the pandemic.

The government response to this large shock to the U.S. labor market has been at times generous but uneven across people and time. Early in the pandemic, the federal government offered a large relief package that included one-time stimulus payments to households and greatly expanded unemployment insurance benefits. After many of these benefits expired, the federal government passed another relief package in December 2020 that provided additional, but smaller, stimulus payments and partially extended some of the other benefits. The most recent relief package, the American Rescue Plan, which was passed in March 2021, included more generous one-time stimulus payments and additional expansions to unemployment insurance benefits, as well as a significant increase in the child tax credit.

What is the effect of the pandemic on poverty? Our most recent estimates, which include data through October 2021, indicate that the poverty rate for October 2021 was 11.5 percent, which is unchanged from the prior month. This rate is higher than it was prior to the pandemic—in January 2020 the poverty rate was 10.7 percent,[1] and it is 2.4 percentage points higher than at its low point in May 2020.

While month-to-month changes are noisy, our estimates indicate that child poverty rose by a percentage point to 17.2%, which remains above the pre-pandemic rate of about 15%. This persistently high poverty rate contrasts with forecasts of sharply decreasing poverty for children this year.[2] Many offsetting factors have contributed to the recent change including increases in income due to the slow reversal of earlier employment losses and the start of advance payments of the Child Tax Credit, and decreases in income due to the expiration of unemployment insurance benefits in the summer and early fall.

Our poverty rate is estimated using household income over the past twelve months including the interview month. So, the poverty rate for October 2021 is calculated using the reference period for income from November 2020 through October 2021. This window now includes the first few months of the advance Child Tax Credit payments as well as the period when millions of workers lost unemployment insurance benefits.

---

[1] Due to the moderate sized samples available to construct these monthly rates, the estimates are imprecise. Consequently, changes in poverty between consecutive months and the difference in poverty between January 2020 and October 2021 are not statistically significant. Larger changes, such as the rise from May 2020 to October 2021 are statistically significant.

[2] Center on Poverty and Social Policy (2021), "A Poverty Reduction Analysis of the American Family Act," Poverty & Social Policy Fact Sheet, Columbia University. https://static1.squarespace.com/static/5743308460b5e922a25a6dc7/t/600f2123fdfa730101a4426a/1611604260458/Poverty-Reduction-Analysis-American-Family-Act-CPSP-2020.pdf

Path of Poverty During 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 [recent study](#), 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/.

Our initial study provided estimates through June 2020. In Table 1, we report these estimates as well as updated results through October 2021. As these results show, poverty declined by 1.3 percentage points in the first few months after the start of the pandemic from 10.7 percent in January 2020 to 9.4 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 percentage points from 9.4 percent in June to 11.4 percent in December, adding 6.7 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 2.9 percentage points between June and December. Poverty also rose noticeably for those with a high school education or less, from 16.7 percent in June to 21.7 percent in December.

A new round of stimulus payments of up to $600 per person started going out in January 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.

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 question about family income that is asked of a quarter of the sample and provides the data necessary to estimate poverty. 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 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.

Table 1. Poverty Rates, Monthly CPS, 2020-2021

Month	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Jun-20 - Jan-20	Oct-21 - Jun-20	Oct-21 - Jan-20
Full Sample	10.7%	10.7%	10.3%	9.2%	9.1%	9.4%	10.2%	10.4%	10.6%	11.3%	11.6%	11.4%	11.1%	11.2%	11.7%	11.3%	11.0%	11.0%	11.3%	11.6%	11.5%	11.5%	-1.3%	2.1%	0.7%
	(0.5)	(0.5)	(0.5)	(0.7)	(0.6)	(0.6)	(0.6)	(0.6)	(0.5)	(0.5)	(0.5)	(0.6)	(0.5)	(0.5)	(0.6)	(0.5)	(0.5)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.8)	(0.8)	(0.7)
Number of individuals	20,020	20,822	16,733	14,383	14,236	14,391	15,156	16,341	18,358	18,748	18,151	17,356	18,328	18,846	18,787	19,230	18,535	17,600	18,047	17,649	17,231	17,565			
Age																									
Age 0-17	15.1%	14.9%	16.5%	14.0%	12.7%	13.4%	15.5%	15.6%	16.0%	16.6%	15.8%	15.9%	16.0%	16.1%	17.4%	16.7%	16.3%	15.3%	16.4%	17.0%	16.2%	17.2%	-1.7%	3.8%	2.1%
	(1.0)	(1.0)	(1.2)	(1.4)	(1.4)	(1.3)	(1.3)	(1.3)	(1.2)	(1.1)	(1.0)	(1.2)	(1.1)	(1.1)	(1.2)	(1.2)	(1.2)	(1.2)	(1.2)	(1.2)	(1.1)	(1.2)	(1.7)	(1.8)	(1.6)
Age 18-64	9.8%	9.6%	8.6%	7.8%	8.3%	8.4%	9.2%	9.3%	9.1%	10.0%	10.8%	10.4%	10.1%	10.2%	10.4%	10.1%	9.7%	10.1%	10.1%	10.5%	10.6%	9.8%	-1.4%	1.4%	0.0%
	(0.5)	(0.5)	(0.5)	(0.6)	(0.6)	(0.6)	(0.6)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.6)	(0.6)	(0.5)	(0.5)	(0.5)	(0.8)	(0.8)	(0.7)
Age 65+	7.6%	8.8%	7.3%	7.1%	6.6%	7.0%	5.9%	6.8%	8.0%	8.1%	8.5%	8.3%	7.1%	7.1%	7.8%	7.4%	7.5%	7.8%	7.9%	7.8%	8.1%	8.8%	-0.6%	1.9%	1.2%
	(0.6)	(0.6)	(0.6)	(0.7)	(0.6)	(0.7)	(0.6)	(0.6)	(0.6)	(0.6)	(0.7)	(0.7)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.7)	(0.7)	(0.9)	(1.0)	(0.9)
Race																									
White	9.3%	8.9%	8.7%	7.7%	7.9%	7.9%	8.8%	8.0%	8.7%	9.5%	10.0%	10.0%	9.4%	9.1%	10.5%	9.6%	9.2%	8.9%	9.4%	9.4%	9.5%	10.3%	-1.4%	2.4%	1.0%
	(0.5)	(0.5)	(0.6)	(0.7)	(0.7)	(0.6)	(0.7)	(0.6)	(0.5)	(0.5)	(0.6)	(0.6)	(0.6)	(0.5)	(0.6)	(0.6)	(0.5)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.8)	(0.9)	(0.8)
Black	18.5%	20.7%	21.8%	17.8%	16.1%	19.1%	18.5%	23.3%	22.5%	22.7%	20.9%	22.1%	20.9%	21.0%	21.2%	21.1%	22.4%	22.6%	21.4%	23.7%	23.0%	20.9%	0.6%	1.7%	2.3%
	(1.7)	(1.7)	(2.1)	(2.5)	(2.2)	(2.3)	(2.3)	(2.5)	(2.1)	(2.1)	(2.1)	(2.2)	(2.0)	(2.2)	(2.0)	(2.0)	(2.2)	(2.2)	(2.3)	(2.2)	(2.2)	(2.0)	(2.9)	(3.1)	(2.6)
Other	12.2%	11.9%	9.1%	9.3%	9.6%	8.3%	10.3%	11.5%	10.1%	10.3%	12.2%	9.6%	12.1%	13.2%	9.3%	10.9%	10.8%	11.6%	12.7%	14.3%	12.9%	9.2%	-3.9%	0.9%	-3.0%
	(1.5)	(1.6)	(1.4)	(2.0)	(2.2)	(1.7)	(2.0)	(2.1)	(1.7)	(1.5)	(1.7)	(1.5)	(1.7)	(1.8)	(1.3)	(1.6)	(1.6)	(1.6)	(1.8)	(1.8)	(1.8)	(1.4)	(2.3)	(2.3)	(2.1)
Ethnicity																									
Hispanic	20.0%	17.2%	16.4%	18.0%	18.1%	17.6%	19.4%	14.0%	17.4%	17.6%	21.0%	21.7%	17.6%	19.7%	20.6%	19.5%	20.5%	17.1%	21.0%	19.4%	20.1%	19.2%	-2.4%	1.7%	-0.7%
	(1.7)	(1.5)	(1.8)	(2.2)	(2.2)	(2.2)	(2.2)	(1.7)	(1.6)	(1.6)	(1.7)	(1.9)	(1.6)	(1.7)	(1.7)	(1.8)	(1.7)	(1.7)	(1.9)	(1.7)	(1.9)	(1.8)	(2.7)	(2.8)	(2.4)
Non-Hispanic	8.7%	9.3%	9.0%	7.2%	6.9%	7.4%	8.0%	9.6%	9.1%	9.8%	9.4%	9.0%	9.5%	9.1%	9.6%	9.3%	8.7%	9.5%	9.0%	9.7%	9.6%	9.5%	-1.3%	2.1%	0.8%
	(0.4)	(0.5)	(0.5)	(0.6)	(0.5)	(0.5)	(0.6)	(0.6)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.6)	(0.5)	(0.5)	(0.5)	(0.7)	(0.7)	(0.7)	(0.7)
Gender																									
Male	10.2%	9.8%	8.9%	8.5%	8.4%	8.9%	8.9%	9.5%	9.9%	10.5%	10.8%	11.1%	10.5%	10.4%	10.6%	10.3%	10.1%	10.3%	10.6%	10.8%	10.4%	10.6%	-1.4%	1.8%	0.4%
	(0.5)	(0.5)	(0.6)	(0.7)	(0.7)	(0.7)	(0.7)	(0.6)	(0.6)	(0.5)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.9)	(0.9)	(0.8)
Female	11.3%	11.7%	11.7%	9.9%	9.8%	9.9%	11.4%	11.3%	11.3%	12.0%	12.4%	11.7%	11.6%	11.9%	12.8%	12.2%	11.7%	11.6%	11.9%	12.4%	12.6%	12.2%	-1.3%	2.3%	1.0%
	(0.5)	(0.6)	(0.6)	(0.7)	(0.8)	(0.7)	(0.7)	(0.7)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.7)	(0.6)	(0.6)	(0.9)	(0.9)	(0.8)
Head Education																									
H.S. Degree or below	20.8%	19.6%	20.6%	19.0%	17.7%	16.7%	19.3%	20.0%	20.5%	22.2%	22.2%	21.7%	21.3%	21.8%	22.2%	21.0%	21.1%	20.9%	21.2%	22.4%	21.9%	22.5%	-4.1%	5.9%	1.7%
	(1.2)	(1.1)	(1.4)	(1.6)	(1.5)	(1.4)	(1.4)	(1.4)	(1.2)	(1.2)	(1.2)	(1.3)	(1.3)	(1.3)	(1.3)	(1.3)	(1.2)	(1.3)	(1.4)	(1.3)	(1.3)	(1.3)	(1.8)	(1.9)	(1.7)
Some College or above	6.0%	6.3%	5.5%	4.6%	5.2%	6.1%	5.7%	5.8%	5.8%	6.0%	6.3%	6.5%	6.3%	5.7%	6.6%	6.5%	5.8%	6.2%	6.2%	6.2%	6.5%	5.9%	0.1%	-0.2%	-0.1%
	(0.4)	(0.5)	(0.5)	(0.5)	(0.6)	(0.6)	(0.6)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.6)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.8)	(0.8)	(0.6)
UI Recipiency Rate																									
High Q1 Recipiency (>=35%)	9.3%	9.8%	8.5%	8.2%	8.4%	8.7%	10.0%	10.0%	8.5%	10.0%	10.4%	10.2%	10.3%	10.5%	9.3%	10.1%	10.0%	9.8%	10.3%	10.4%	10.4%	9.5%	-0.6%	0.8%	0.2%
	(0.6)	(0.7)	(0.7)	(0.9)	(0.9)	(0.9)	(0.9)	(0.8)	(0.7)	(0.7)	(0.8)	(0.8)	(0.8)	(0.8)	(0.7)	(0.7)	(0.8)	(0.7)	(0.9)	(0.8)	(0.8)	(0.7)	(1.1)	(1.2)	(1.0)
Low Q1 Recipiency (<35%)	12.1%	11.6%	12.1%	10.1%	9.9%	10.0%	10.3%	10.8%	12.6%	12.5%	12.8%	12.7%	11.8%	11.7%	14.0%	12.4%	11.9%	12.1%	12.2%	12.8%	12.7%	13.3%	-2.0%	3.3%	1.2%
	(0.7)	(0.7)	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)	(0.8)	(0.7)	(0.8)	(0.8)	(0.7)	(0.8)	(0.9)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(1.1)	(1.2)	(1.1)

Note: This table is an update of Table 1 of Han et al. 2020. We now multiply impute income within brackets for all months using five draws, while Han et al. used a single draw. Starting in February 2021 we also draw within bracket values from the 2020 ASEC instead of the 2019 ASEC and use 2020 Census poverty thresholds. 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. Standard errors, reported in parentheses, are clustered at the household level.