



**Real-time Poverty Estimates During the COVID-19 Pandemic
Results through September 2020**

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

[October 18, 2020]

Real-time Estimates of Poverty Show Poverty Rose after Government Benefits Expired

The coronavirus pandemic has taken a significant toll on the U.S. labor market. Since the start of the pandemic, more than 75 million claims for unemployment insurance have been filed. Improvements in the labor market have slowed with more than 12 million officially unemployed and millions of other former workers still without jobs. Early on in the pandemic the federal government offered a relief package that included large, one-time stimulus payments to households and greatly expanded unemployment insurance benefits. But some of these benefits have expired while unemployment persists, raising important questions about the long-term impact of the pandemic on poverty.

Fortunately, [James Sullivan](#), the Gilbert F. Schaefer College Professor of Economics and co-founder of the Wilson Sheehan Lab for Economic Opportunities ([LEO](#)) at the University of Notre Dame; [Bruce Meyer](#), the McCormick Foundation Professor at the University of Chicago Harris School of Public Policy; and [Jeehoon Han](#), an economist at Zhejiang University, have constructed a new poverty measure that provides near-real-time poverty estimates using U.S. Census Bureau data. They are updating this measure on a monthly basis as new data become available.

Their analysis shows that poverty declined in the first few months after the start of the pandemic. They find that the poverty rate fell by 1.5 percentage points from 10.9 percent in the months leading up to the COVID-19 pandemic (January and February) to 9.4 percent in the three months at the start of the pandemic (April, May, and June). The team also found evidence that 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.

Poverty has risen, however, in recent months as some of the benefits that were part of the government relief package have expired. Poverty rose 1.4 percentage points from 9.4 percent in the period from April to June to 10.8 percent for August and September, erasing the decline in poverty that occurred early on in the pandemic. The increase in poverty in recent months was more noticeable for blacks, children, and those with a high school education or less. The estimates also suggest that poverty rose more in states with less effective unemployment insurance systems. The recent overall rise raises concerns about possible future increases in poverty given that Pandemic Unemployment Compensation, the additional \$600 paid weekly to unemployment insurance recipients, was discontinued at the end of July and Congress has not passed another relief package.

The initial research will be published in the *Brookings Papers on Economic Activity* and is [available via the National Bureau of Economic Research \(NBER\)](#), while the economists’ monthly updates are currently available via the team’s [Poverty Measurement dashboard](#).

The researchers’ estimates, which can be produced with a lag of only a few weeks, help clarify how the pandemic affects individuals and families throughout 2020 as it happens. As a result,

the estimates could be the basis for government policies and programs that help prevent people from slipping into poverty during sharp downturns in the economy.

“In this time of crisis, it is important for policymakers to respond as quickly as possible to address the needs of those hit hardest by the pandemic,” the authors said. “Our results show that for low-income individuals and families, the government response to the pandemic more than offset the sharp decline in earnings early on in the pandemic. However, these gains appear to have faded as some of the benefits expire. It is important that we continue to track poverty in real time to determine what additional support is called for as this pandemic persists.”

Interestingly, the data indicate that the vast majority of the unemployed received unemployment insurance, though this was less true early on in the pandemic. Receipt of the benefits was uneven across the states, however, with some not reaching a large share of their out-of-work residents. The rise in poverty was particularly evident in these states in September.

The authors' initial study (using the data through June) goes on to show that [the entire decline in poverty can be accounted for by the one-time stimulus checks the federal government issued](#), predominantly in April and May, and the expansion of unemployment insurance eligibility and benefits. In fact, in absence of these programs, poverty would have risen sharply. The one-time payments provided up to \$1,200 to individuals and \$2,400 to married couples without dependents, with the maximum amount going to individuals with income under \$75,000, and married couples with income under \$150,000. In addition, unemployment insurance benefits were increased by \$600 per week and eligibility for unemployment insurance was broadened to include the self-employed, those seeking part-time employment, and others who otherwise would not be eligible.

To calculate their near-real-time estimates of poverty, the authors 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. In their study, the authors show that, historically, their real-time poverty estimate from the monthly CPS has been a good predictor of changes in the official poverty rate.

Table 1. Poverty Rates, Monthly CPS, 2020

Month	January	February	March	April	May	June	July	August	September	(Apr to June)- (Jan/Feb)	(Aug/Sep)- (Apr to June)	(Aug/Sep)- (Jan/Feb)
Full Sample	10.8%	11.0%	10.2%	9.4%	9.3%	9.3%	10.3%	10.5%	11.1%	-1.5%	1.4%	-0.1%
	(0.5)	(0.5)	(0.5)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.5)	(0.5)	(0.5)	(0.5)
Number of individuals	20,020	20,822	16,733	14,383	14,236	14,391	15,156	16,341	18,358			
Age												
Age 0-17	15.3%	15.3%	16.3%	14.4%	13.2%	13.1%	15.5%	15.8%	16.5%	-1.7%	2.6%	0.9%
	(1.0)	(1.0)	(1.2)	(1.4)	(1.4)	(1.3)	(1.3)	(1.2)	(1.1)	(1.0)	(1.1)	(1.1)
Age 18-64	9.8%	9.9%	8.5%	8.0%	8.4%	8.4%	9.3%	9.3%	9.6%	-1.6%	1.2%	-0.4%
	(0.4)	(0.4)	(0.5)	(0.6)	(0.6)	(0.5)	(0.6)	(0.5)	(0.5)	(0.4)	(0.5)	(0.5)
Age 65+	7.7%	8.7%	7.6%	7.1%	6.6%	7.1%	5.9%	6.5%	8.4%	-1.3%	0.6%	-0.8%
	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.7)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)
Race												
White	9.4%	9.2%	8.7%	7.8%	8.3%	7.9%	8.6%	8.2%	9.2%	-1.3%	0.7%	-0.6%
	(0.5)	(0.5)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.5)	(0.5)	(0.5)	(0.5)
Black	18.2%	20.8%	21.3%	18.7%	16.1%	18.2%	19.7%	22.8%	22.8%	-1.9%	5.1%	3.2%
	(1.6)	(1.7)	(2.1)	(2.5)	(2.2)	(2.2)	(2.3)	(2.3)	(2.0)	(1.8)	(2.0)	(1.9)
Other	12.4%	12.1%	9.0%	9.5%	9.1%	8.6%	10.9%	11.3%	10.4%	-3.2%	1.7%	-1.4%
	(1.5)	(1.6)	(1.4)	(1.9)	(2.2)	(1.7)	(1.9)	(2.0)	(1.6)	(1.6)	(1.7)	(1.7)
Gender												
Male	10.3%	10.1%	8.7%	8.7%	8.5%	8.8%	8.8%	9.7%	10.4%	-1.5%	1.4%	-0.1%
	(0.5)	(0.5)	(0.5)	(0.7)	(0.6)	(0.7)	(0.6)	(0.6)	(0.6)	(0.5)	(0.6)	(0.6)
Female	11.3%	11.9%	11.7%	10.1%	10.1%	9.9%	11.6%	11.2%	11.8%	-1.6%	1.4%	-0.2%
	(0.5)	(0.5)	(0.6)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)	(0.6)	(0.6)	(0.6)	(0.6)
Head Education												
H.S. Degree or below	20.9%	20.3%	20.5%	19.5%	18.1%	17.0%	19.4%	20.2%	21.5%	-2.4%	2.6%	0.3%
	(1.1)	(1.1)	(1.3)	(1.6)	(1.4)	(1.3)	(1.5)	(1.4)	(1.2)	(1.1)	(1.2)	(1.2)
Some College or above	6.0%	6.4%	5.3%	4.7%	5.3%	5.9%	5.8%	5.7%	6.0%	-0.9%	0.6%	-0.4%
	(0.4)	(0.4)	(0.4)	(0.5)	(0.6)	(0.6)	(0.5)	(0.5)	(0.5)	(0.4)	(0.5)	(0.5)
UI Reciprocity Rate												
High Q1 Reciprocity (>=35%)	9.5%	10.1%	8.5%	8.3%	8.7%	8.9%	10.1%	10.1%	8.7%	-1.2%	0.8%	-0.4%
	(0.6)	(0.7)	(0.7)	(0.8)	(0.9)	(0.9)	(0.9)	(0.8)	(0.7)	(0.7)	(0.7)	(0.7)
Low Q1 Reciprocity (<35%)	12.0%	11.9%	11.9%	10.5%	10.0%	9.8%	10.4%	10.8%	13.3%	-1.9%	2.0%	0.1%
	(0.7)	(0.7)	(0.8)	(0.9)	(0.9)	(0.8)	(0.9)	(0.9)	(0.8)	(0.7)	(0.8)	(0.8)

Note: This table is an update of Table 1 of Han et al. 2020; see that paper for 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.