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## TRACKING THE COVID-19 ECONOMY ANALYSIS AND COMMENTARY

### How Has the Pandemic Affected Published Unemployment Rates?

#### By Paul R. Flora

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The pandemic has created problems for the labor market and for measuring the labor market. Despite these challenges, the Bureau of Labor Statistics (BLS) has continued to publish unemployment rates and provide guidance on interpreting the data, given specific problems and dramatic changes. Using BLS estimates and guidance, the following adjustments can be made to represent an upper bound for the unemployment rate, albeit with uncertainty.

#### Adjustment for Misclassification of Workers

Early in the pandemic, the BLS noted that an unusually high proportion of household survey respondents reported that they were "employed but not at work *for other reasons*" and suggested it may be appropriate to consider many of these people as unemployed. Assuming that *all* of the excess respondents in this category were unemployed, we arrive at the first adjustment for potential misclassification. Most of this problem had dissipated by July 2020.

#### Adjustment for the Pandemic-Induced Drop in Labor Force Participation

The second adjustment corrects for a significant decline in the labor force participation rate since the pandemic began. Absent the pandemic, labor force participation might have trended in either direction; however, the pre-pandemic trend had been that rates were rising slightly over the prior year in the U.S. and in our three states.

The BLS has been reporting on the number of people not looking for work because of the pandemic, which was still over 4 million as of February 2021. This number may include early retirements, people staying home to provide care for others, and laid off, discouraged workers from hard-hit industries. Structural changes in the economy may prevent some of these people from returning to work.

For the second adjustment, the labor force participation rate from February 2020 is held constant across all subsequent months. The resulting additional (or fewer) people are added as unemployed in the numerator and as part of the labor force in the denominator. In the charts below, the highest line combines both adjustments.



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For our three states, the process is the same; however, the adjustment for potential misclassification is based solely on the U.S. estimates above, which have been distributed proportionate to each state's labor force share.



Source: Bureau of Labor Statistics via Haver Analytics with additional calculations by the Philadelphia Fed's Research Department

#### Notes:

These charts follow (in part) the approach used for a speech, "Getting Back to a Strong Labor Market," delivered by Jerome Powell, Chair of the Board of Governors, to the Economic Club of New York on February 10, 2021.

https://www.federalreserve.gov/newsevents/speech/powell20210210a.htm

The **effects of the COVID-19 pandemic on employment data** are described by the BLS with each monthly data release. https://www.bls.gov/covid19/effects-of-covid-19-pandemic-and-response-on-the-employment-situation-news-release.htm

