

The New York Times | <http://nyti.ms/1o274V7>

Edited by David Leonhardt

Follow Us:

Get the Upshot in your Inbox

The Upshot
TECHNICAL DIFFICULTIES

On State Unemployment Rates, It's Analyst Beware

JULY 26, 2014

Justin Wolfers

In an Upshot article for this week's Sunday Review section, I analyzed the data on employment growth in North Carolina versus South Carolina and argued that there was no evidence that making the long-term unemployed ineligible for unemployment benefits, as North Carolina did, spurred more jobs there.

Let's start with the most obvious issue: There's no point in analyzing data on the number of people receiving jobless benefits in North Carolina. Kicking the long-term unemployed off benefits will mechanically reduce the number of people receiving benefits. This tells us nothing about the central question, which is whether those people ultimately landed jobs or not.

The very fact that the number of people on benefit rolls can fluctuate because of changes in the unemployment insurance system, rather than

changes in the economy, largely explains why economists don't typically measure unemployment by counting the number of beneficiaries. Instead, we tally unemployment through a large-scale survey called the Current Population Survey, which asks people whether they're working, or looking for work.

In order to reliably estimate the national unemployment rate, the Current Population Survey asks 60,000 households nationwide about their employment situation. Even then, the estimated unemployment rate is measured with error. But when you zero in on North Carolina, it's surveying closer to 1,200 households, which probably includes only around 100 unemployed people, and as few as several dozen long-term unemployed directly affected by the benefit cut.

Although the Current Population Survey is sufficiently large that it can somewhat reliably estimate the unemployment rate for the country as a whole, even statisticians at the Bureau of Labor Statistics think it's wildly insufficient for measuring unemployment or long-term unemployment in any particular state.

Consequently, when the government statisticians publish estimates of the unemployment rate in North Carolina, they don't just report the results of the latest survey. Instead, the numbers published in the Local Area Unemployment Statistics are the result of a rather complicated statistical model. This statistical model takes as its inputs current and past values from the Current Population Survey, the number of people claiming unemployment benefits, and an estimate of the number of nonfarm payroll jobs.

Therefore, the officially published unemployment rate is not in fact a measure of the unemployment rate. Instead, it's an amalgam of the household unemployment survey (but conducted on such a small scale at the state level as to yield unreliable estimates), a count of the number of people receiving unemployment benefits (which will be distorted by changes in which subset of the unemployed are eligible), and a survey asking people to report on the number of people on their payrolls (which tells us about employment, rather than unemployment). Moreover, the estimate that this model gives for, say,

unemployment in June, reflects not only the results of labor market data from June, but also past and (when available) future data.

It's virtually impossible to say much about what is happening to unemployment from month to month at the state level, particularly following changes to who is eligible for unemployment benefits. Similar problems plague the official measures of labor force participation by state.

We do have reliable measures of employment, though, which is why I analyze the nonfarm payroll numbers directly, and support that analysis by crunching data from an even more reliable measure of employment drawn from the Quarterly Census of Employment and Wages. (Indeed, that data is sufficiently reliable that in due course, the government statisticians will revise their estimate of nonfarm payrolls to reflect them.)

Unfortunately, these statistical limitations of the officially published state unemployment and labor force participation rates are not widely understood. A result is that every analysis I've seen of recent developments in North Carolina has focused almost exclusively on this data, despite their deficiencies.

The lesson here is that measuring the evolution of state labor markets is a lot harder than you might think.

Justin Wolfers is a senior fellow at the Brookings Institution and professor of economics and public policy at the University of Michigan. Follow him on Twitter at @justinwolfers.

The Upshot provides news, analysis and graphics about politics, policy and everyday life. Follow us on **Facebook** and **Twitter**.