

BY JOHN MULLIN

The Non-Employment Index

Something unusual happened during the economic recovery following the Great Recession. By the end of 2014, the official unemployment rate, as measured by the Bureau of Labor Statistics (BLS), had declined by more than 4 percentage points from its October 2009 recessionary peak of 10 percent. Yet the share of the working-age population that was employed had increased by far less — just under 1 percentage point.

The discrepancy between the two figures raised questions about the official unemployment rate as a measure of labor underutilization. Many economists and other observers suspected that the official calculation was understating the true supply of workers available for hire by excluding many formerly active job seekers who had recently become discouraged.

At the time, Richmond Fed economist Andreas Hornstein was among those who saw problems with the official unemployment rate. Seeking to develop an alternative methodology, Hornstein had conversations with Marianna Kudlyak, then of the Richmond Fed, and Fabian Lange of McGill University. Those conversations led to the introduction of what is now known as the Hornstein-Kudlyak-Lange Non-Employment Index (NEI) in a 2014 Richmond Fed *Economic Quarterly* article, “Measuring Resource Utilization in the Labor Market.”

The NEI departs from the various BLS definitions of labor utilization, which are all based on binary classification schemes in which each working-age person who is not employed is, in effect, either categorized as “in” or “out” of the pool of underutilized workers. For the official unemployment rate, people are considered “in” when they answer “yes” to the questions, “Are you available to take a job?” and “Have you actively sought work in the past four weeks?” Otherwise, they are considered “out.” A broader BLS measure, known as U6, uses a more expansive definition of who is “in” the underutilized labor pool, but the definition is still binary: You are either “in” or “out.”

To Hornstein and his colleagues, the problem with these binary definitions is that, as a practical matter, the distinction between those who are counted as “underutilized” and those who are counted as “out of the labor force” is not usually clear cut; it’s a matter of degree. To reflect this reality, the NEI measures the pool of underutilized workers by weighting each nonemployed, working-aged person according to his or her labor market attachment, which the index associates with the person’s relative probability of finding a job. For example, people who are among the BLS’s “short-term unemployed” category are given weights of

100 percent because that group has the highest historical job-finding rate. People who are among the BLS’s “marginally attached, discouraged” category are given weights of roughly 50 percent because that group’s historical job-finding rate is roughly half that of the “short-term unemployed.” And so on.

The NEI accounts for large swathes of the nonworking population who, despite their exclusion from the ranks of the officially unemployed, have historically contributed significant inflows into the ranks of jobholders. Indeed, during 1994-2013, more people transitioned to jobs from being “out of the labor force” than from being “unemployed.” This outcome reflected the large relative size of the “out of the labor force” group. On average during that period, 4 percent of the U.S. working-age population was included in the workforce as officially unemployed, whereas 34 percent of the working-age population was considered out of the workforce — more than eight times as many.

“It may be more likely for a single person in the unemployed category to become employed,” says Hornstein. “But the group that’s out of the labor force is large, and even when you multiply that large group by a lower job-finding rate, you still get a big number of people finding jobs.”

When the NEI was first published in 2014, it conveyed a somewhat startling message. At the time, it was commonly argued that the BLS’s official unemployment rate had understated the available supply of labor after the Great Recession. Yet the NEI suggested the opposite — that the official unemployment rate had overstated supply. The NEI gave a lower estimate of labor supply because it accounted for the fact that many out-of-work people had transitioned from being short-term unemployed with relatively high labor force attachment to being long-term unemployed with relatively low attachment.

But the period of recovery following the Great Recession appears to have been an anomaly. Since then, the linear relationship between the NEI and the official unemployment rate that existed prior to the Great Recession has been largely reestablished, and the indicators have generally provided similar signals about labor market utilization.

Today, the NEI can be accessed on the Richmond Fed’s website and through the St. Louis Fed’s economic data website, FRED. The indicator is likely to be of particular interest during periods when many people are moving in or out of the officially defined labor force, because the NEI looks past this distinction and looks at the overall supply of people potentially available for work. **EF**