Olivier Blanchard provides a brief reaction to "Real-Time Estimates of Potential GDP," by Coibion, Gorodnichenko, and Ulate

Note from Jared Bernstein, Director of CBPP's Full Employment Project: Along with the release of the important new Coibion et al paper,[1] economist Olivier Blanchard, who pioneered some of the key work extended by Coibion et al, agreed to provide brief comments on their paper and its implications for current economic policy. Thanks, Olivier!

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The basic point of the note by Coibion et al is an extremely important one. Current methods of estimation of potential output do not distinguish between different sources of shocks behind output fluctuations. This is clearest with HP filters, which basically adjust estimated potential output slowly down if output has been weak for a while, or the natural rate of unemployment slowly up if the unemployment rate has been high for a while.

It could well be, however, that weak output is temporary, say, due to a bout of depressed animal spirits, and does not reflect a decrease in potential output. Or it could be the reverse: Weak output may reflect a financial crisis with long-lasting and perhaps even permanent effects on potential output. In the first case, the statistical approach will overestimate the decline in potential, and in the second, underestimate it.

We can thus think of two types of shocks. Those with a permanent effect on output, and those with only a temporary effect. As Danny Quah and I showed in a 1989 paper, under this assumption, one can recover the two shocks, and reconstruct the time series for output due only to the shocks with a permanent effect. If one is willing (and this is a separate step, mapping "permanent" to supply and "temporary" to demand) to call the first a "supply shock" and the second a "demand shock," then the reconstructed time series based on the shocks with a permanent effect can be thought of as "potential output." This is what the authors do. The results are attractive, and suggest the presence of some remaining output slack.

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[1] Olivier Coibion, Yuriy Gorodnichenko, and Mauricio Ulate, "Real-Time Estimates of Potential GDP: Should the Fed Really Be Hitting the Brakes?" Center on Budget and Policy Priorities, January 31, 2018, https://www.cbpp.org/research/full-employment/real-time-estimates-of-potential-gdp-should-the-fed-really-be-hitting-the.

The exercise comes with many warnings. Among them: There may be supply shocks that do not have a permanent effect. The computer will conclude incorrectly that they are demand shocks. While in fact they affect potential output for a while, their effect will not show up in the reconstructed series for potential output. Similarly, some demand shocks may affect potential output for a while: Their effect will also not show up in the reconstructed series. Rather than two shocks, there may be (and surely are) many supply shocks, many demand shocks, each of them with a different dynamic effect on output. Then, only under restrictive conditions will the "two shocks" approach capture the dynamic effects of both types of shocks.

All this to say: The exercise is clearly an improvement upon existing methods. But there are limits to it. Some of these limits can be addressed, by looking at more variables, and so on. Some not so easily. In short, it is a better tool, but it is not a magic one. It must be added to, not replace, the existing panoply.

To me, the best tool remains the inflation signal, at least as far as the labor market, and unemployment, goes. Inflation is the canary in the mine, and a very reliable canary. If the labor market is too tight, if unemployment is below the natural rate, workers will ask for higher wages, firms will be willing to offer higher wages either to keep them or recruit new ones, firms will start increasing prices in order to cover higher marginal cost, etc.

Interpreting the song of the canary, i.e. knowing exactly what inflation rate to look at and in what way, is indeed difficult. What do higher wages mean? Higher relative to what? If relative to price expectations, how are they formed? Similarly, what do higher prices mean? Higher relative to marginal cost? How do we measure it? The signal may not emerge cleanly from a simple price-inflation Phillips curve. One needs to look more closely. But if one does not see wage or price pressure, it is a strong indication that the unemployment rate is still above or equal to the natural rate. To be concrete and topical, the fact that wage inflation remains so subdued makes me conclude that the U.S. natural rate of unemployment is closer to 3.5-4% than to the current CBO estimate of 4.6%. Where exactly is hard to know, but as unemployment gets lower, I shall be listening carefully to the canary.