Is the economy overheating? Here's why it's so hard to say

By Justin Wolfers November 6, 2015 – *The New York Times*

Let me tell you a story of the battle between the "inflation targeters" and the "accelerationists." You'll want to hear this bit of economic history because you want to know whether the Fed might raise interest rates after the latest rosy employment report.

The Fed is struggling with what conclusions to draw from the recent uptick in wage growth, because despite that uptick, wage growth remains anemic. Economists interpret data through the lens of theoretical models, and the central theory used within the Federal Reserve is a concept called the Phillips curve. At its heart, this theory simply says that when unemployment falls below its long-run sustainable rate, good workers become hard to find, leading firms to offer higher wages. Eventually, this rise in wage growth will feed through into higher inflation. And this matters to the Fed, because it is targeting an inflation rate of around 2 percent.

The problem is that no one knows whether unemployment is above or below its long-run sustainable rate, which is often called the natural rate. The latest data suggest that unemployment is currently 5 percent, while a recent survey found that some economists believe that the natural rate might be as low as 4.25 percent, while others think it's as high as 5.8 percent.

Historically, an unemployment rate of 5 percent would be thought to be close to the natural rate. But with hundreds of thousands of parttimers still unable to find full-time work, it is hard to believe the labor market is close to overheating. Add in the millions of jobless people who aren't officially counted as unemployed because they aren't looking hard enough for work, and it looks as if the economy could employ more workers without fueling inflation. Special factors like this muddy the precision of the Phillips curve framework, and this is why sophisticated statistical analyses suggest that the margin of error around estimates of the natural rate might be plus or minus 1.5 percent. That's an extraordinary degree of uncertainty.

The point is, no one really knows if unemployment is above or below its natural rate. Given this, the best that policy makers can do is to look for symptoms that the economy is overheating.

The Phillips curve tells policy makers what symptoms to look for: If the unemployment rate is below its natural rate, then wage growth will be higher.

Sounds simple, right? Not so fast.

In the original formulation of the Phillips curve — which was popular through the 1950s and 1960s — lower unemployment would yield higher wage growth and hence higher inflation.

But by the 1970s, even as most economists accepted the premise that an overheated economy would lead to higher inflation, Milton Friedman, the Nobel laureate economist, asked the question: Higher inflation, relative to what? His answer was that an overheated economy would lead to higher inflation *relative to expectations*.

If future inflation was expected to be like past inflation, then an overheated economy would lead inflation to be higher, relative to its recent history. This interpretation is commonly called the "accelerationist" view, because it suggests that persistently low unemployment will cause inflation to take off. As such, to accelerationists, the first hint of an overheating economy is that wage growth will be higher than it has been recently. The key variable then is whether wage growth is increasing or decreasing.

Indeed, wage growth does look to be increasing, and over the past year, hourly earnings of private employees have risen by 2.5 percent, up a notch from the 2 percent rate over the previous four years. As such, accelerationists fear that the recent uptick in wage growth is the labor market telling us that it already at full capacity.

The next revolution came when another University of Chicago Nobel Laureate, Robert Lucas, suggested that inflation expectations were unlikely to simply reflect an extrapolation of past trends. By his view, expectations were rational, reflecting a richer understanding of the economy than simply past trends. This led a generation of central bankers — and most notably, Ben Bernanke during his tenure as Fed chairman — to focus on shaping inflation expectations. The idea is that if the Fed truly committed to keeping inflation at 2 percent, then people would rationally come to expect 2 percent inflation. And because inflation expectations help determine inflation, this yields a virtuous cycle in which actual inflation would be close to 2 percent, because people expect inflation to be close to 2 percent. Out of this intellectual foment, the Fed's inflation target was born.

Let's return to what this means for the Phillips curve. If the Fed has truly succeeded in anchoring inflation expectations at 2 percent, then a tight labor market will cause inflation to be high, *relative to that 2 percent target*. This view suggests that the symptom of an overheating labor market is not the change in wage growth or inflation, but rather an inflation rate above 2 percent. That is you should focus on the level of inflation, not its change.

The latest reading of the Fed's preferred gauge — the price index for personal consumption expenditures — suggests an inflation rate of only 0.2 percent over the past year, or 1.3 percent when excluding volatile food and energy prices. By this view, the economy is nowhere near overheating.

And the early warning signals — developments in wage growth — tell a similar story. A 2 percent inflation target roughly translates into a 3 to 3.5 percent target for wage growth in an economy experiencing 1 to 1.5 percent productivity growth. This suggests that annual wage growth of 2.5 percent should be interpreted as workers telling us that unemployment remains above its natural rate.

So, should policy makers be pleased by current low levels of inflation — as the inflation targeters would suggest — or are the accelerationists right to be worried by the fact that wage growth may be rising?

My reading of the evidence is that the accelerationist model fit the data pretty well through until the late 1980s or early 1990s. But over the past 20 years the Phillips curve appears to have changed in exactly the way the inflation targeters predicted would happen as the Fed gained a reputation for ensuring that inflation remained low and stable. The key variable to accelerationists — changes in inflation (or wage growth) — no longer appears to bear much relationship to the excess capacity in the economy. Inflation barely changed in response to the economy's cratering in 2008; nor has it risen much in response to the recovery.

However, while a couple of decades is a long time in human years, it's not much in statistician years, and so it bears emphasizing that the data aren't entirely conclusive.

What does this mean for the Fed? It's too simple to characterize the current debate as one between hawks who dislike inflation and doves who are more concerned about unemployment. Rather, the main divide may be between accelerationists worried that rising wage growth signals an economy at full capacity, versus inflation targeters, who argue that weak wage growth signals that unemployment remains too high. And in the next few weeks, we'll find out who's winning that argument.

Justin Wolfers is a professor of economics and public policy at the University of Michigan.