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Low Inflation. Low Unemployment. What Gives?

By Edmund Phelps, a professor of economics at Columbia University and author of "Structural Slumps" (Harvard University Press, 1994).

It is common knowledge that inflation will rise if effective demand "overheats" employment, causing unemployment to drop below its natural rate. This is known as the modern model, or the nonaccelerating inflation rate of unemployment (Nairu). But, presented with both low inflation and low unemployment, many believe the present boom shows the model has failed.

As an inventor of the model and developer of some of its recent advances, I believe that the model, far from flunking the test, provides an answer to how employment soared without any rise in inflation.

Misunderstandings
Several misunderstandings of the model have arisen. Laymen believed the natural unemployment rate to be a constant -- somewhat like the speed of light -- and equal to 6%. When they saw the actual unemployment rate sink to 4% while the inflation rate drifted down, they rejected the model.

The model's inventors, however, never saw the natural rate as a constant. By its nature it is not tied to monetary decisions; it is a variable, one determined by nonmonetary forces. The natural rate is estimated to have stood around 4.5% in the mid-1950s, hit 5% or so in 1970, surged to perhaps 6.5% in the mid-1980s and has fallen strongly since.

Critics also charge the model with a basic theoretical error: It is not the employment rate but monetary policy that affects inflation, they say.

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The model doesn't say otherwise. The natural rate is itself not a model of inflation. It is one component of the modern model, which also has money in it. A purpose of the model was to explain how a central bank's monetary policy not only drives price levels but has transient employment effects too. If monetary policy shifts toward higher inflation, the imperfectly informed market adjusts prices with a delay, which deflects some of the impact to employment and drives it above its natural path. This spike in jobs is an effect of increased inflation, not the cause of it.

Supply-siders complain that the model instills fear of low unemployment, causing the central bank to stifle growth. They contend that the central bank should fix an inflation target; with such
a target clearly in its sights, inflation would not get far if unemployment fell. But even with an inflation target, it makes sense that the central bank pay attention to the gap between the actual unemployment rate and its estimated natural path. That gap gives the bank a better idea of excess liquidity and thus the degree to which policy must be tightened to hit such a target.

Finally, some think the model omits supply shocks. A shock that lowers the natural unemployment rate, they suggest, works to decrease both inflation and the actual unemployment rate. In ignoring supply shocks, they conclude, the model often gets the direction of the inflation rate wrong. But again, all the model says is that the inflation rate will fall if unemployment is held above its natural path; such a gap can occur through a rise in the actual unemployment rate (via a contraction of demand) or a fall of the natural rate (via a good supply shock).

The real test of the model is to shed light on how unemployment has fallen so low without rising inflation. The model ascribes the decline of the unemployment rate to 4% by late 1999 (from a bit under 6% in 1989) to a decline of the natural rate (from about 6.25% in late 1989). The test is to find the nonmonetary forces that reduced the natural rate.

Contrary to Wall Street thinking, the decline is not due to higher effective demand as the result of consumer and investment spending. What's the 'natural' unemployment rate? There's no static answer -- which is why today's booming US economy doesn't discredit the Nairu theory.

While the velocity of money can cause higher prices and a transient rise in jobs, it can't budge the natural rate. The game is to find the structural shifts that raised supply and created jobs.

A useful start is to view the natural rate as a weighted average of the natural rates within labor-force groups. We could then argue that the average changes when the weights change. Joblessness is greatest among high-school dropouts, yet their presence in the labor force fell to 10% in 1999, from 15% in 1989. This change -- and others on up the education ladder -- markedly decreases the weighted average of unemployment rates within each education group. The natural unemployment rate is thus reduced by about half a point -- to 5.75% from the estimated 6.25%.

A study by Lawrence Katz and Alan Krueger also cites three compositional changes. The declining supply of the young in the labor force removed workers who are prone to bouts of unemployment, as did the rise in the prison population. The increased role of temporary help also subtly lowered unemployment. These forces may have reduced the natural rate in the 1990s by about three-quarters of a point, getting it down to 5%.
But there is more to the boom. In 1996, unemployment rates within education groups began a steep descent. The dropouts' unemployment rate slid from 9% early that year to 6.5% in 1999. Real wage rates of low and median earners showed fat year-to-year gains starting in 1997. The growth of real GDP jumped.

This is an investment boom. Business investing in new equipment and structures rose by nearly one-third, to 13.7% of GDP in 1999 from 10.8% in 1995. Other data indicate more investing in training, recruiting, customers and new markets. The pickup in firms' valuations of these business assets led to more jobs. Expansionist firms drove down industry markups, which boosted sales, employment and real wages.

What prompted these asset revaluations? One development is the big productivity speedup. From 1973 to 1995, the growth rate of nonfarm productivity remained slow, between 1.4% and 1.6%. From 1995 onward, the mean annual growth rate was 2.6%; it shot up to 4% in the past two quarters. It appears that a one-point rise in the growth rate might lower the natural rate by half a point, to 4.5%.

The other development is expectations of a one-time upshift in the path of productivity, and hence of profits on business assets down the road -- a lift on top of the already speedier trend path. Though we can't observe managers' profit expectation, stock-market indicators may reflect those valuations. Statistically, since 1960 these measures have been big influences on unemployment two to four years later.

Good Political Economy

These two expectations are pinned on the prospective success of products and methods created by the new economy. Behind this is good political economy: rewards to successful innovators, open markets, the discipline of share-owner value and the rise of venture capital.

The new-economy mystique has no plausible explanation for the fall of the natural rate. The idea that globalization keeps a lid on the price level is an error. So too are the ideas that new information technologies take us to perfect markets that eliminate unemployment, and the idea that the new economy will banish business fluctuations. The new economy has been a test of the modern model. It confirms that the real forces of enterprise and finance -- not money and banking -- are the ultimate drivers of unemployment. It has contracted the natural rate through venerable market mechanisms, not any new rules. As this new economy goes from prospect to realization, these same mechanisms will work in reverse to send the natural rate back to some nonboom level. That is, until the good old economy creates the next
wave of promising innovation.