

The New Normal?

Economists ponder whether the “natural” rate of unemployment has risen

BY RENEE COURTOIS



Many economists believe that the recent recession is technically over. But it may not feel that way on Main Street. This recession brought the largest post-war upswing in the unemployment rate, rising from a pre-recession low of 4.4 percent to about 10 percent in recent months. Many economists predict a “jobless recovery,” in which gross domestic product — the foremost measure of the economy’s overall output — rises, but employment continues to fall or remains stagnant.

Is some of this unemployment here to stay?

Economists often speak of a “natural” rate of unemployment that the economy will gravitate to after working through business cycle fluctuations. There will always be some positive level of unemployment. Firms continually create and destroy jobs in response to supply and demand conditions. Moreover, at any given time some industries are declining while others are expanding. The supply of labor, too, changes with people graduating, retiring, moving between jobs, and choosing to work more or less throughout their lives, and it can take time for job seekers to locate opportunities.

The natural rate of unemployment — or, conversely, the level of “full employment” — is the rate that exists due to this constant churning even when the economy is running smoothly. Before the recession, the Congressional Budget Office, which produces the most widely used estimate of the natural rate, judged it to be about 5 percent. A current unemployment rate of almost double that implies the economy

has a long way to go before reaching full employment. But if the natural rate has risen, as some economists suspect, then we may not expect unemployment to fall anytime soon to the low levels seen before the recession.

A Moving Target for Policy

Promoting employment is half of the Federal Reserve’s mandated policy objective. But when unemployment is especially low, labor markets are tight and that puts upward pressure on wages and, therefore, inflation. This poses a problem for price stability, the other half of the Fed’s mandate. In general, the Fed’s monetary policy tools push inflation and unemployment in opposite directions. This inverse trade-off reflects the famed Phillips curve.

To know what level of unemployment the Fed can reasonably expect to achieve without igniting inflation, Fed policymakers must have in mind some estimate of the natural rate. This is a challenge because the natural rate is not an observable statistic — it must be inferred from other data — and it changes over time. The natural rate is determined by features of the economy that are more or less permanent, like the flexibility of labor markets and the policies and laws that affect it.

Though these are usually deeply embedded features of an economy that change slowly over time, this doesn’t mean we should too easily assume the current natural rate will remain the status quo. “The medium term natural unemployment rate can dart around just like any other economic variable,”

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says Edmund Phelps of Columbia University who won the 2006 Nobel Prize in economics in part for his work on the natural rate. For example, he says the natural rate is partly a function of the values that entrepreneurs and investors put on business assets. “If that takes a jump, your best guess about the medium term natural unemployment rate takes a jump too,” and the actual unemployment rate will eventually follow. Perhaps the best example of this was in the late 1990s tech boom that endowed the economy with lasting productivity gains and, as a result, arguably lowered the natural rate of unemployment. But it is hard to definitively know in real time whether the natural rate is changing. Some economists, such as Stanford University’s Robert Hall, have gone as far as suggesting that the natural rate is too variable to be useful in policymaking.

The Phillips Curve relationship, too, is far from stable. When it was first documented by New Zealand economist A.W. Phillips in 1958, economists initially believed the relationship presented a relatively simple trade-off for policymakers: If low unemployment was the priority, they could “buy” it in each period by printing money (or, similarly, through fiscal expansion), fooling employers into thinking demand for their products had increased, leading them to hire more workers. This meshed well with the Keynesian view of the day that endorsed the government’s ability to manage demand to produce high employment.

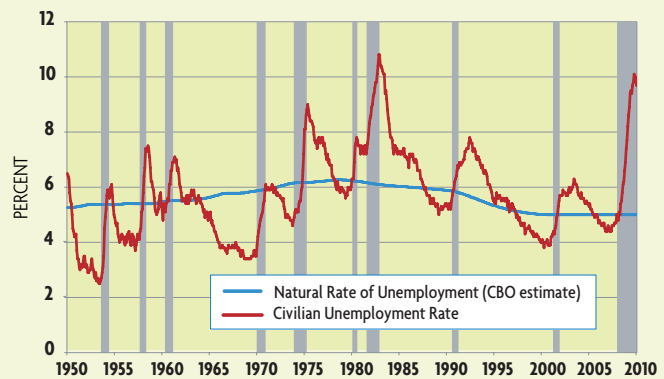
But such a policy trade-off was too simple to be true since it would rely on tricking people indefinitely, as Phelps and Milton Friedman, also a Nobel laureate, pointed out in their respective research during the 1960s. Eventually, people would figure out that the boost in demand was only an illusion created by the increased money supply. Workers would be unwilling to work at their old wages since inflation had eroded their purchasing power, and nominal wages would have to rise at a magnitude equal to the increase in inflation, bringing unemployment back up to the natural rate. In the medium run — a period long enough for the economy to go through this learning process — the result of this attempt at expansion would be a higher price level with no change in any “real” economic variable like unemployment or production. “The natural unemployment rate idea is all about how demand doesn’t matter in the long run,” says Phelps.

Moreover, the inflation trick would only boost employment once or twice before the public grew to expect it. Then, Friedman explained in 1968, only perpetually higher and higher inflation surprises would produce the short-run boost in employment. It wasn’t that the natural rate corresponded to a particular rate of inflation — say, 3.5 percent. Instead it corresponded to no change in inflation. When unemployment was equal to its natural rate, inflation could be expected to be relatively stable. That’s how the natural rate of unemployment got a rather awkward nickname: the non-accelerating inflation rate of unemployment, or NAIRU.

Then in the 1970s policymakers learned painfully that high inflation from easy monetary policies doesn’t translate

Constant Churning

Actual Unemployment and the Natural Rate



NOTES: Shaded areas correspond to recessions. Data through March 2010.
SOURCE: Bureau of Labor Statistics/Congressional Budget Office

to low unemployment. Additionally, oil price spikes made inflation a more consistent phenomenon. Rising inflation was simply the norm, so it no longer had the beneficial effect on unemployment. Stagflation, or simultaneously rising inflation and unemployment, was the result.

The Great Moderation of the 1980s, 1990s, and 2000s also challenged conventional thinking about the Phillips curve. The economy performed well during this period, and both inflation and unemployment were low and stable relative to their historical averages. When macroeconomic variables don’t vary much, it is harder to identify a statistical relationship between them. Here the Phillips curve appeared to be a less concrete description of the short-run trade-off between inflation and unemployment. A 2001 study by University of California, Los Angeles economists Andrew Atkeson and Lee Ohanian documented that since the mid-1980s, the short-run Phillips curve relationship had not been very stable, and therefore had limited use for policymakers.

But the Phillips curve may redeem itself when the variables move to extremes. It is in steep recessions that the inflation-unemployment relationship seems strongest, argue San Francisco Fed economists Zheng Liu and Glenn Rudebusch in a January 2010 analysis. That implies the Phillips curve relationship, though inconclusive, could be a useful tool for monetary policy as the economy recovers from the recent severe recession. If the natural rate has not risen from its pre-recession level of about 5 percent, then unemployment is currently much too high, and this could potentially be addressed by sustained accommodative monetary policy. But if the natural rate has risen, then the point at which accommodative monetary policy becomes inflationary should occur sooner.

Prospects for a Jobless Recovery

That means economists have to turn to the difficult task of gauging whether the natural rate of unemployment has changed, and if so, by how much. This depends on the labor

market conditions currently contributing to unemployment, their magnitude, and how permanent they are likely to be.

No two recessions are alike in this regard. In recessions immediately following World War II, up through that of the early 1980s, the economy experienced a sharp boost in employment soon after each recession's trough. But the more recent recessions of 1990-91 and 2001 were characterized as jobless recoveries with sluggish or nonexistent job growth even as GDP recovered.

At first blush the recession that began in 2007 shares labor market characteristics of both modern and older recessions, according to New York Fed economist Aysegül Sahin. Two important factors contribute to an increase in the unemployment rate: how many workers lose their jobs and flow into unemployment, and how many find new ones and flow out of unemployment. The recent recession began with a large number of layoffs, causing an increase in inflows into unemployment like the also-steep recessions of the 1970s and 1980s. In addition, even after layoffs subsided, unemployed workers continued to have difficulty finding new jobs, causing a drop in outflows, similar to the recessions of the early 1990s and 2001. As a result, the unemployment rate more than doubled from 5 percent at the start of the recession in December 2007 to a high of 10.1 percent in October 2009, and still remains at elevated levels.

So which employment recovery will the current recession resemble? As with all recessions, inflow rates have receded as the economy has begun to pull out of the recession, so the mystery is how outflow rates will behave going forward.

Outflows depend on two factors: job creation and the labor market's ability to match job seekers with openings. Job creation should be relatively swift if much of unemployment is cyclical — that is, a result of the business cycle — writes Chicago Fed economist Ellen Rissman in a 2009 study. Laid-off workers can simply be called back to work when demand for goods and services picks back up. But unemployment resulting from structural realignment — in which some industries decrease in size for good — tends to hang on longer. Affected employees must find new industries, which in some cases will mean moving to new locations or acquiring new job skills.

It's not clear how much of the current unemployment rate comes from structural realignment. Some industries have been hit harder than others in the recent recession, most notably those that expanded as a result of the housing and lending boom. The so-called FIRE sector — finance, insurance, and real estate — as well as construction, have all declined more than employment as a whole. Total nonfarm employment has contracted by more than 5 percent since the recession's start, while the FIRE sector has lost more than 6 percent of its jobs. In construction, over 25 percent of jobs have been eliminated.

Much of the unemployment within construction and the FIRE sector is indeed being caused by large structural reallocations, according to Rissman. But so far structural realignment was not adding much to the economy's overall

unemployment rate, she found in her 2009 study. Economist Rob Valletta and analyst Aisling Cleary of the San Francisco Fed also examined the role of sectoral imbalances in late 2008. Based on updated analyses using data through the end of 2009, Valletta reports that labor demand imbalances across industries — which require a reallocation of workers — did not appear to be adding much to overall unemployment. In fact, they found the imbalances had begun to dissipate in the second half of 2009. Their findings imply that the increase in unemployment during 2008-2009 was primarily cyclical rather than structural.

One possible explanation for this is that the sectors economists think might be permanently shrinking represent a relatively small component of total employment. Manufacturing, for example, was about 10 percent of total nonfarm employment before the recession and also was hit hard during the downturn. Though the hit to construction has been severe, the sector constituted just 5.4 percent of total employment going into the recession.

But the nature of layoffs may provide some evidence of structural realignment. "Starting from the 1990s, firms' use of temporary layoffs declined a lot. As a result only a tiny fraction of unemployed people today are on temporary layoff," Sahin says. A job's permanent eradication may be a harbinger of a permanent shift away from that industry.

Even if permanent layoffs don't reflect a structural realignment, they can still hint at a slower employment recovery. "Temporary layoffs are very easy to reverse because you basically have the desk, the computer, and now you just call the worker back," Sahin says. "It's much cheaper than actually setting up a new position and investing in the capital and posting a vacancy."

To the extent that a worker's old job has permanently gone away, re-employment will have to come from new job creation. Once demand starts to pick up, firms still may be hesitant to hire until they are sure to be out of the woods economically — especially if they can tap into other means of producing more with the same number of workers in the meantime. Some firms may increase the number of hours their current employees work without hiring new workers, or they call on temp workers when possible. "They can just push the existing workers even more because the quit rate is very low," Sahin says. "Less people produce more as a result. In those recessions productivity increases a lot."

This seems to be the case now, since productivity has stayed strong in this recession. In the 2001 recession productivity growth never dropped below 2 percent, note Cleveland Fed economists Paul Bauer and Michael Shenk. So far in this recession productivity growth dropped to a low of 1.4 percent before surging well above 5 percent at the end of 2009. Historically, productivity growth would fall or even turn negative in recessions. Most economists point to "labor hoarding," in which firms hang on to workers through the recession so as to not lose good workers familiar with their production. In the recent recession, productivity coming from more intense use of capital has increased even though

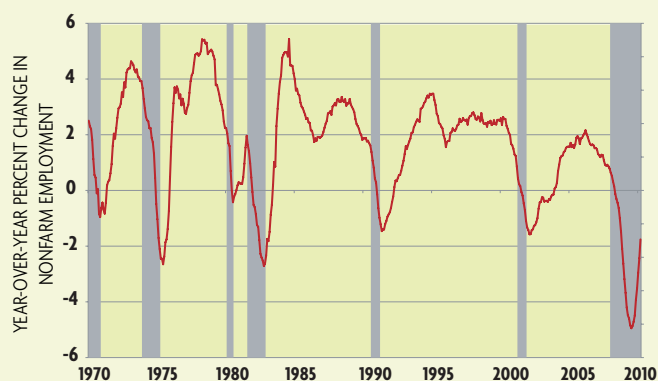
investment has not, implying that employers are indeed finding ways to produce more with the same number of workers.

Regardless of how many jobs are created, the labor market's efficiency at matching available workers to jobs has gone down in this recession, Sahin says, which puts a crimp in employment recovery. There are several explanations behind this lower match efficiency. Workers' skills may not sync well to the jobs opening up, especially if the jobs are in new industries. "It could be that lots of people lost manufacturing jobs and there are many jobs in the health sector, but they are not good matches so they need retraining," Sahin says. Rissman suggests that workers in the FIRE sector, for instance, may have skills that are more easily transferable to other industries whereas workers in construction have skills that are not as easily adaptable. Also, those who have been unemployed for long durations can experience skill depreciation. And even if a worker's marketable skills are still largely intact, long spells of unemployment may appear as a negative signal to would-be employers.

The weak housing market may also limit the ability or willingness of some unemployed to relocate to new jobs. It's not clear how quantitatively important this effect could be, but it could be geographically concentrated in areas that are economically struggling and have weak housing markets. Economists Fernando Ferreira and Joseph Gyourko of the University of Pennsylvania and Joseph Tracy of the New York Fed found in a 2009 study that negative equity in one's home reduced mobility of affected households between 1985 and 2007, making them one-third less mobile on average. Their results do not cover the current housing downturn, but their evidence would be consistent with the most recent U.S. Census estimates that the "mover rate" — a measure

History of the Jobless Recovery

Employment Recoveries Have Been Slower Since the 1990s



NOTE: Shaded areas correspond to recessions.
SOURCE: Bureau of Labor Statistics

that captures the mobility of households — fell in 2008 to the lowest level since the data were first collected in 1948. The proportion of movers who have stayed within the same county has spiked, while the proportion who have moved out of state has fallen to the lowest level since the mid-1990s.

The federal government's expansion of unemployment benefits also could temporarily reduce the labor market's match efficiency. More generous unemployment insurance (UI) regimes have been known to contribute to unemployment for two reasons: Workers receiving UI can be more selective about the job they choose to take, and some unemployed workers who otherwise may have stopped looking for jobs (and therefore would no longer be included in unem-

The Role of Demographics in the Natural Rate of Unemployment

"[M]any of the market characteristics that determine [the level of the natural rate of unemployment] are man-made and policy-made," Milton Friedman said in 1968. But one of the most important determinants of the natural rate of unemployment is entirely out of the control of policy-makers: the composition of the labor force. Changes in demographics, particularly concerning the average age of workers, account for the bulk of the shifts in the natural rate over time. Younger workers are more likely to change jobs than middle-aged people who have a mortgage and other responsibilities, and they are more prone to unemployment.

Thus, the biggest contribution that demographics makes to the natural rate is the proportion of the work force aged 25 or less. It is easy to understand why when you look at unemployment rates by age group. Before the recession, the 16-19 age group had an average unemployment rate in excess of 15 percent, compared with about 8 percent for 20- to 24-year-olds, and well under 4 percent for workers aged 25 and above.

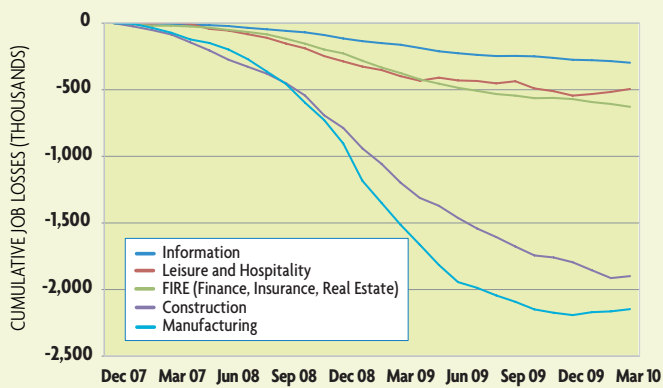
This explains why the natural rate of unemployment rose in the 1980s, when a large crop of baby boomers entered the labor market. Then in the 1990s, after that major component of the labor force had aged some, the natural rate fell. Now many baby boomers are retiring, lowering the average age of labor force participants.

Nobel laureate Edmund Phelps of Columbia University says it is the policy response to retiring baby boomers that could most affect the natural rate. "I've been bracing for a rise in the natural rate for a long time on the thinking that as we get nearer to 2020, when spending for Social Security, retirement pensions, and Medicare and so forth reaches full force, markets will start to factor that in and that will mean expectations of higher tax rates sooner or later to pay for those entitlements." That should depress business asset values, reducing the return to capital investment and innovation, he says. That slower innovation could set a new higher floor for the natural rate of unemployment.

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Some Worse Off than Others

Job Losses in Selected Industries Since Start of Recession



SOURCE: Bureau of Labor Statistics

ployed numbers) may keep searching to continue receiving benefits. But this effect is not likely to be large or persistent. “Even with the temporary increase in generosity, benefits are still pretty stingy by the standards of other advanced economies,” says economist Larry Ball of Johns Hopkins University. “This is not only temporary but, even while it lasts, a pretty small step in the direction of the welfare state.” Sahin adds, “People expect benefits to go down as the economy recovers.”

Is High Unemployment the New Normal?

While it is relatively easy to lay out the risk factors that could point to a jobless recovery, it is highly uncertain how important each of these factors might be. “We believe there are temporary factors that are causing the unemployment rate to be higher than suggested by the stable relationships in the U.S. economy,” Sahin says, summarizing a recent analysis of the behavior of employment in the recent recession with coauthors Bart Hobijn and Michael Elsby, of the San Francisco Fed and the University of Michigan, respectively. These factors could contribute to the risk of a jobless recovery, she says. But there is good news: The U.S. labor market is exceptionally dynamic and flexible, which might help it work through these temporary issues faster.

Would a slow employment recovery mean the natural rate of unemployment has risen too? That is a much trickier issue than simply deriving an outlook for employment. Economists think of the natural rate of unemployment as a function of structural and permanent features of the economy. That said, the difference between a shock that takes a long time to work through and a rise in the natural rate is, to a degree, a matter of semantics. “There’s not a clear distinction between what’s really permanent and what just takes a long time,” Ball says. “One way to think about a change in the natural rate is something that lasts substantially beyond two or three years.”

The outlook for the natural rate and actual unemployment will also depend on prospects for the economy’s future. Though a theoretical premise of the natural rate of unemployment is that demand doesn’t affect the level of employment in the long run, Phelps says, “that’s not to say that the *structure* of demand doesn’t matter.” In particular, he says, investment demand has a large impact on the natural rate. “I think you’re going to have an overhang of people whose careers were tied to investment-like activities who are not going to get picked up again for employment unless, and until, there’s a revival of business investment and more generally of forward-looking projects in companies.”

Though economists can’t with certainty pin a number to the changing natural rate in real time, Phelps ventures what he admits is a rough estimate: “I think the new normal is somewhere between six and a half and eight percent,” he says, an estimate which ranges from “very rosy” to “maybe a little too pessimistic.”

One could also try to pin down the natural rate in terms of the Phillips curve — that is, in terms of what’s simultaneously happening with inflation. “It seems very unlikely that we’re going to be back down to five percent unemployment or very close to that in the next five years,” says Ball, “and inflation seems very stable. And the definition of the NAIRU is the unemployment rate consistent with stable inflation,” he reminds. “So if we see unemployment staying well above five percent without inflation continuously falling, then by definition the NAIRU has risen.” That is, he adds, if our basic model of the Phillips curve is right. **RF**

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