

## The Challenge of Estimating Full Employment

**Dennis Lockhart**  
President and Chief Executive Officer  
Federal Reserve Bank of Atlanta

Tanous Lecture, Georgetown University  
Washington, DC  
March 6, 2014

### Key points

- Atlanta Fed President and CEO Dennis Lockhart, in a March 6 lecture at Georgetown University, talks about the challenge of estimating full employment.
- In Lockhart's view, the current stance of monetary policy appropriately aligns with the outlook, and the Federal Reserve's asset purchase program will continue winding down.
- Lockhart believes the real question is when the Fed's policy interest rate, now near zero, will begin to rise.
- Lockhart reiterates that inflation and employment are both well short of goal.
- The current official unemployment rate of 6.6 percent may overstate the overall health of employment conditions, Lockhart says.
- Lockhart says that to get close to full employment would involve substantial absorption of the shadow labor force—those who are not working but also not counted in the standard unemployment rate.
- Lockhart stresses that a careful evaluation of the employment situation suggests that full employment is still a ways off, and continued monetary accommodation is necessary.



Today I will explore the challenge of estimating full employment and the implications for monetary policy. To give you a roadmap of my remarks, I will start with an assessment of current economic conditions here in the first quarter of 2014. I will follow that by laying out my outlook for full year 2014 and the early months of 2015.

It is axiomatic in monetary policy that the stance of policy should fit (be appropriate for) the outlook. I will explain the current position of policy and give you my opinion of its appropriateness. I'll then discuss the questions about the direction of policy that are on the public mind and the mind of financial market participants.

I will argue that the most important question is the timing of the first increase in the Fed's policy interest rate. And I will share my framework for thinking about that decision.

In my thinking, there are two dominant and equal considerations in the decision to raise interest rates. They are, in shorthand, inflation and employment. I plan, in these remarks, to give most attention to employment (or, more to the point, full employment). And I will argue that there remains considerable slack in the country's employment situation.

Some might add a third consideration—financial stability. I will touch on that subject but treat it as an ever-present, ever-pertinent contextual requirement.

As you follow my line of thinking this evening, please remember that you're hearing my personal views. I am not speaking for the Federal Reserve or the Federal Open Market Committee. My colleagues may not see things the way I do.

### Current economic conditions

The recession ended and the recovery began in the summer of 2009. For the first four years of recovery, gross domestic product (GDP) growth averaged just over 2.0 percent. In the second half of 2013, however, the economy appeared to pick up momentum. Growth in the third and fourth quarters of last year averaged 3.25 percent (annualized).

We entered 2014 with high hopes that the economy would continue to experience a phase of accelerated growth that might be sustained for some time. Many forecasters, including those at a number of the Federal Reserve Banks, foresaw growth in 2014 around 3.0 percent.

Since then, the economic indicators have been mixed, but generally softer than expected. Overall consumer spending rose strongly in January, but was heavily concentrated in home utility expenditures—power consumption—as colder-than-usual weather hit many regions of the country.

Auto sales, which were strong in 2013, slowed sharply at year-end and early in 2014. Likewise, home sales and housing starts have fallen off since last fall.

Finally, industrial activity has slowed quite a bit since last October, following a mid-2013 surge. There was a pronounced decline in manufacturing production in January. Survey data on factory orders in February show a modest increase.

For each of these data points, bad weather is thought to have had a significant, adverse influence on the reported number. Indeed, my research staff estimates that real GDP growth in the first quarter may have been reduced by about three-fourths percentage point (annualized) due to bad weather. I've seen roughly similar estimates from other sources, though I think all of these estimates are necessarily more impressionistic than precise.

I think we could see an uptick in activity in the second quarter as business activity rebounds and some catch-up in sales and production occurs. If this is the case, forecasts of stronger growth in line with the second half of last year may still play out.

The alternative view, however, is that this quarter signals incipient renewed weakness—another false dawn. There is some ambiguity around the current state of the economy.

### **Outlook**

In my personal outlook for 2014 and the beginning months of 2015, I am holding to an optimistic outlook. By "optimistic," I mean I expect a resumption of growth after the soft first quarter closer to a 3.0 percent annual pace. That rate of growth should bring continuing solid employment gains and a healthier economy in general, including a healthier rate of inflation.

As I said, current conditions are ambiguous. Why am I not succumbing to doubts, you might ask? Because, in my view, the economy's fundamentals are stronger, and the headwinds that have buffeted the economy and restrained growth are weaker.

Let me expand on my claim that the economy's fundamentals are stronger. I think basic conditions in several key sectors of the economy are much improved compared with earlier in the recovery period. I would cite banking, housing, energy, and manufacturing as examples.

Household balance sheets are much healthier now thanks to reduced debt, higher saving, and stronger asset prices, including higher home values.

Business and financial-system leverage has been significantly reduced from levels precrisis that were demonstrated to be unsustainable. Business profitability is good, and firm balance sheets are generally liquid.

Likewise, fiscal imbalances, while not solved for the long term, are somewhat less a near-term concern.

Finally, employment markets are unquestionably in a better state compared to even a year ago.

At the same time, certain headwinds that have persistently buffeted the economy and restrained growth appear to have lessened. The fiscal drag associated with federal government budget austerity measures has eased. The risk of another financial meltdown emanating from Europe seems to have receded. Concerns about European sovereign debt and the exposure of the European banking system were an important source of uncertainty that weighed heavily on business confidence in the years 2011 and 2012, for instance.

That said, we live in a world where change can come quickly. At the moment, the Ukraine situation is front of mind. The situation presents some risk, particularly to Europe. Disruption of the European economy could spill over to our own in some measure. The situation calls for close monitoring of developments.

More broadly, slowing growth in certain emerging market economies—a potential headwind—bears watching.

Stepping back, though, my overall assessment is that conditions have significantly improved.

### **Policy stance**

In my view, the current stance of the Committee's policy appropriately aligns with this outlook. In December, the Committee made the decision to begin tapering its program of asset purchases. The level of monthly purchases now stands at \$65 billion, down from \$85 billion.

The foundational policy instrument—the target for the federal funds rate—remains near zero. The policy rate has been as low as it can go for more than five years. Importantly, the Committee has communicated through what is called "forward guidance" that interest-rate policy is likely to stay put for a while longer. So, in spite of the phasing out of asset purchases, the intended overall position of policy is "highly accommodative." I think this is appropriate and needed.

This is where we are today as regards policy. The public—including, importantly, participants in financial markets—is focused at the moment on two questions about the course of policy. The public wants to know under what conditions might the Committee reverse course on tapering—either pause the wind-down of purchases or actually increase the monetary stimulus that asset purchases aim to deliver. There is a high bar to reversing course, in my opinion. That is certainly my position. Unless the economy takes a major turn for the worse or a spell of intense disinflation develops, I expect the program to be completely wound down by the end of the year.

The second question—in my mind the more salient of the two—is the timing of "liftoff." Liftoff is the date when the policy rate, and presumably all interest rates, will begin to rise.

In my bank's official forecast, we are putting liftoff in the back half of 2015.

### **Key considerations in a liftoff decision**

Now I want to frame for you how I, as one policymaker, am thinking about the liftoff decision.

I think there are two key considerations that should affect the timing of liftoff. They are inflation and employment. Inflation (sometimes called price stability) and employment (expressed as maximum employment) have been assigned to the Fed by Congress as the primary objectives of monetary policy. They are captured in the so-called dual mandate.

I want to spend most of my remaining time talking about the employment side of our mandate, but let me comment briefly on inflation.

In January 2012, the Fed established a formal inflation target of 2 percent. The official time horizon for achieving this target was stated as "over the longer run." It says "over the longer run"—which I take to mean most of the time—not "in the long run," which I would translate as "eventually." Two percent over the longer run is the Fed's notion of a healthy rate of inflation and our definition of price stability.

Today, inflation is running well below the 2 percent target. The January headline Personal Consumption Expenditures (PCE) index showed inflation at 1.2 percent for the last 12 months. The 12-month rate for the core PCE index (which excludes volatile food and energy prices) was 1.1 percent. There has not been much movement in the rate of inflation for several months. At the moment, it does not seem to be moving higher. Business contacts tell me they have very little, if any, pricing power.

The Committee would like to see the inflation rate rise to 2 percent over the coming many months. In my official forecast, I am projecting just this as a by-product of a sustained quicker pace of growth. In my view, the unhealthy low run rate of inflation justifies continuing monetary stimulus.

There are times when accelerating inflation might require putting the brakes on monetary stimulus. That is not the case now. Our inflation objective and full employment objective are not in conflict. They are complementary objectives. So, I will now turn to the second consideration in a liftoff decision, the outlook for achieving full or maximum employment.

#### **Achieving sustainable full employment**

The current official level of unemployment is 6.6 percent. More than a year ago, the Committee set out a threshold of 6.5 percent as a criterion for beginning to consider a rate hike. Later, the Committee updated its rate guidance with a statement that it expects the policy rate to remain at its current level "well past" achievement of 6.5 percent.

Given that measured unemployment is so close to 6.5 percent, the time is approaching for a refreshed explanation of how unemployment or broader employment conditions are to be factored into a liftoff decision. In my mind, this requires a revisiting of what constitutes full employment.

Defining full employment is a harder question than answering whether we are close to achieving such a state.

If all we had to go on was the official unemployment rate, we might think we are rapidly approaching full utilization of the nation's labor resources. There has been a significant decline in the unemployment rate. It was 10 percent at its peak and nearly 8 percent at the beginning of last year. As I said, it's 6.6 percent today. We get an updated number tomorrow.

I think the current official unemployment rate may overstate the overall health of and progress achieved in employment conditions. As you may be aware, the interpretation of falling unemployment has been complicated by a decline in participation in the workforce.

Let me explain what it means to be a participant in the workforce. The data used to construct the unemployment rate come from a survey of households conducted by the Census Bureau for the Bureau of Labor Statistics. To be counted as a participant in the labor force, a respondent must give rather specific qualifying answers to questions in the survey. To be counted as a member of the labor force—and, therefore, to be counted in the calculation of the official unemployment rate—respondents have to indicate that they were either working or available to work in the previous month. Evidence of availability for work is the claim to have actively sought employment in that month. Otherwise, they are not in the labor force.

The Census Bureau gets a variety of answers to its questions. Some people say they do not want a job. Others say they are available for work but have not looked for employment in the last month. Some who are counted as employed say they are working part time but would like a full-time job.

Those who are available, have looked for work in the past year, but have not recently looked for work are labeled "marginally attached." They are not in the official labor force, so they are not officially unemployed. You might say they are a "shadow labor force."

The makeup of the class of marginally attached workers is quite fluid. About 40 percent of the marginally attached in any given month join the official labor force in the subsequent month. But only about 10 percent of those who move into the labor force find a job right away. In effect, they went from unofficially unemployed to officially unemployed. I think there is a strong case for assuming that at least a fraction of the marginally attached should be treated as unemployed even though they don't show up in the standard measure of unemployment.

Let me insert here a short tutorial on the hierarchy of unemployment measures published by the Bureau of Labor Statistics. There are six levels—U-1 through U-6, each with its own technical definition that includes or excludes categories of workers. The official headline unemployment rate (which stands today at 6.6 percent) is U-3. One measure that counts the marginally attached in the pool of the unemployed is U-6.

U-6 also includes working people who identify themselves as working "part time for economic reasons." These are people who want to work full time (defined as 35 hours or more) but are able only to get fewer than 35 hours of work. In official employment statistics, these part-time workers count equally with full-time workers. In my view, people who work part time for economic reasons might be thought of as partially unemployed. And among those "economic reasons" might be that the economy, in spite of recent growth, is not yet strong enough to close the actual, even if not fully measured, employment gap.

Here's my point: what U-6 captures matters. Measures such as marginally attached and part time for economic reasons became elevated in the recession and have not come down materially. Said differently, broader measures of unemployment like U-6 suggest that a significant level of slack remains in our employment markets.

So what's going on with the marginally attached, and even some of the completely detached?

The health of the labor market clearly affects decisions of individuals to enroll in school, apply for disability insurance benefits, or stay home to take care of house or family. Discouragement over job prospects rose during the Great Recession, causing many unemployed people to drop out of the labor force and others not to enter it. People make a participation choice based on their sense—from what they hear—of employment prospects, the costs associated with going to work (for example, commuting costs, childcare, elder care, housekeeping), and the feasibility of alternatives to work (perhaps school or part-time tasks compensated in cash). People are well-attuned to incentives and disincentives and their opportunity costs. Individuals make personal calculations in answer to the question, am I (or are we as a household) net better off if I go to work? I'd argue that the responses of people in the surveys that determine the data are not independent of prevailing economic conditions. If the economy were hitting on all cylinders, many people would give different answers.

As a policymaker, I am concerned about the unemployed in the official labor force, but I am also concerned about the unemployed in the shadow labor force. To get close to full employment, as I think of it, would involve substantial absorption of this shadow labor force. I do not think we're near that point yet. This is one of the reasons I support continuing with a highly accommodative policy and deferring liftoff for a while longer.

### **Financial stability**

Earlier, I drew your attention to the two objectives of the Fed's dual mandate as key considerations in a liftoff decision. Before closing, let me draw your attention to a related consideration that could influence a liftoff decision. That is financial stability, or the risk of financial instability.

Financial stability can be viewed as a factor that is closely allied with our statutorily mandated objectives. A spell of financial instability, if severe enough, could be a spoiler in the Fed's pursuit of stable prices and full employment through its accommodative policy stance.

The first line of defense would most likely be use of the tools of macroprudential supervision of banks and the financial system. But, speaking for myself of course, I don't completely rule out a situation in which emerging threats would influence the stance of policy.

Since I'm here at Georgetown, I'll mention my colleague Governor Dan Tarullo (who also has a Georgetown connection, having been a law professor downtown), who recently addressed the pertinent role of financial stability concerns in our policymaking. He said, "[I]ncorporating financial stability considerations into monetary policy decisions need not imply the creation of an additional mandate for monetary policy. The potentially huge effect on price stability and employment associated with bouts of serious financial instability gives ample justification."

### **Conclusion**

Let me sum up. Current economic conditions are ambiguous, but I believe that after a weak first quarter, the economy will resume growing at the accelerated pace seen in the second half of 2013. I believe the fundamentals are stronger, and headwinds that previously restrained growth have diminished. The current stance of monetary policy—the ultra-low policy interest rate accompanied by the wind-down of the asset purchase program—is right for the outlook and the remaining work to be done.

The pivotal question in terms of policy is when it will be appropriate for the Fed to raise the policy interest rate. To answer that question, I look to the state of inflation and employment. I would argue that both are well short of goal. The employment goal is expressed as full employment. Even with the progress made to date, a careful evaluation of the employment situation suggests to me that full employment is still a ways off, and continued monetary accommodation is necessary.

**Contact:** [Jean Tate](#) 404-498-8035

**RELATED LINKS:** [Dennis Lockhart's biography](#) • [PDF version](#) • [Speaker's Bureau](#) • [Atlanta Fed speeches](#)