

The Transition from Extraordinary to "Normal"

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

Joint Central Bank Conference
Bern, Switzerland
November 5, 2015

- Atlanta Fed President and CEO Dennis Lockhart, in a November 5, 2015, speech at the Joint Central Bank Conference in Bern, Switzerland, discusses the foundational framework that informs his thinking about U.S. monetary policy.
- Lockhart describes "normal" monetary policy, employed before the financial crisis, in terms of a "Taylor framework." This approach sees policy in terms of rule-like benchmarks that rely on judgments.
- Lockhart believes we are transitioning from a period of extraordinary policy—employed during and after the crisis—to normal policy. He feels it is now appropriate to be thinking of the stance of U.S. monetary policy in terms of familiar Taylor framework benchmarks.
- Lockhart thinks a case can be made for some adjustment of the federal funds rate target from its current near-zero level. Adjustment thereafter will most appropriately be very gradual, he says.
- Lockhart notes that liftoff remains a close call. A relatively small adjustment in an estimate of the neutral rate of interest, or revisions in his forecast of how quickly remaining output and inflation-target gaps might close, could quite easily point to a longer period for a zero federal funds rate.
- Lockhart expects to see a subsiding of the risks that appropriately led to a policy hold in September and October. He thinks the case for liftoff will continue to firm up.

Thank you for inviting me to speak tonight. I want to congratulate the organizing committee from the Swiss National Bank, the Bank of Canada, the Cleveland Fed, and my own Atlanta Fed Research Department for putting on this excellent conference.

I understand that Thomas Jordan was a founding father of this conference, which started many years ago as a forum to discuss issues of joint interest to our respective banks. I'm sure, Thomas, you are justifiably proud of what you helped establish.

I take special note of the fact that the collaboration and fellowship between our institutions has spread beyond just this event. At the suggestion of Thomas Moser during this conference in Ottawa last year, we hosted Katrin Assenmacher of the Swiss National Bank at the Atlanta Fed. Katrin observed our approach to preparing for meetings of the Federal Open Market Committee, or FOMC. In turn, we will have the opportunity to send a member of my staff to do the same next year in Zurich. These sorts of interactions enrich our appreciation for the challenges we face in an increasingly complex and interconnected world.

We are just about a week past the latest FOMC meeting. Understandably, the public was focused on what signal the Committee might send about near-term decisions regarding the federal funds rate. Going into that meeting, I felt a successful outcome would be expectations aligning with the view that liftoff at our upcoming December meeting is a possibility, but not a certainty. I am satisfied that was accomplished.

In my remarks this evening, I would like to shift the focus somewhat away from the "will they or won't they" question. Instead, I'm going to talk about the foundational framework that informs my thinking about U.S. monetary policy in its next phase. In particular, I'm going to talk about the broader context in which I think about the setting of the federal funds rate target range.

As you know, these comments reflect my own opinion. Nothing I say tonight necessarily reflects the thinking of my FOMC colleagues or others in the Federal Reserve System.

"Normal" Monetary Policy and the Taylor Framework

My commentary will start with making a distinction between the approach that has informed my thinking through much of the period after the Great Recession and what I will refer to as "normal" monetary policy.

By "normal" monetary policy, I mean decisions that can broadly be described in terms of some variant of a Taylor rule as a benchmark for the policy rate target. I will refer to this orientation as the "Taylor framework."

I intend to make what could be a quite abstract discussion more concrete and immediate. Toward that end, I'll conclude my remarks with comments on how the framework I will describe relates to my support for the September and October FOMC decisions. I'll also make some tentative comments about the path forward. In doing so, I will highlight the usefulness of the Taylor framework, but will also make note of its limitations.

Let me make an assertion that I think is relatively uncontroversial. Before the financial crisis, monetary policy could reasonably be described in terms of what I have just called the "Taylor framework."

Obviously, this is a reference to John Taylor and his famous rule. While Professor Taylor proposed a particular rule back in 1993, I am thinking more generally of a framework.

My notion of a Taylor framework does not lead mechanically to a rate setting. Rather, it's an approach that sees policy in terms of rule-like benchmarks. These benchmarks rely on judgments about resource-utilization gaps, deviations of inflation from central-bank objectives, and some notion of a "neutral" rate of interest. Such a framework, to my mind, captures the spirit of the congressional mandate to foster maximum employment and price stability.

Policy in the Not-So-Great Recovery

During the financial crisis, recession, and aftermath, the FOMC employed unconventional policy tools. And, with the benefit of hindsight, I think they were necessary. It's fair to say that the Great Recession was followed by the Not-So-Great Recovery. A variety of headwinds whipped up by the financial crisis and its aftermath have resulted in a historically slow and halting recovery in the United States, and indeed in the global economy.

One of the basic policy realities of this period, of course, has been a federal funds rate set at what is, in the United States, the effective lower bound. This was unconventional by the standards of history.

Additional unconventional tools included the three rounds of large-scale asset purchases, popularly known as quantitative easing. QE3, which began in September 2012, was soon supported by explicit forward guidance indicating the FOMC's intention to maintain an exceptionally stimulative policy stance until explicit inflation and unemployment thresholds were reached.

Eventually, explicit thresholds were replaced with more general statements about labor market conditions and progress toward the Federal Reserve's inflation objective. But forward guidance remained a central tool of monetary policy. It became the sole policy tool when QE3 ended in October 2014.

In my view, the essential purpose of forward guidance was to stay the course on maintaining an extraordinarily low setting of the Fed's policy rate for longer than what would be prescribed by "normal" monetary policy.¹

Only when the recovery was firmly entrenched would it be appropriate to transition from an extraordinary, and in some sense emergency, stance of monetary policy to a more conventional use of standard benchmarks for setting policy rates.

At the end of last year, the statements accompanying the FOMC's rate decisions shifted from an approach that used forward guidance to an approach that has come to be described as "data dependence." I supported that shift, and view it as an element of a transition away from the extraordinary policies necessitated by a weak recovery.

At this juncture, it's my assessment that the U.S. economy is likely in an above-potential growth phase, with labor markets continuing to improve, and with an underlying inflationary trend that, if not rapidly moving toward the FOMC's objective, is at least not moving away from that objective.

I believe we are transitioning from a period of extraordinary policy to normal policy. That is to say, I believe it is now appropriate to be thinking of the stance of U.S. monetary policy in terms of familiar Taylor framework benchmarks. Let me comment on the state of the three ingredients of a Taylor framework: resource gaps, the inflation-target gap, and the "neutral" real rate of interest.

Resource Gaps

The first key ingredient of Taylor-rule benchmarks is an assessment of resource gaps. Given the Fed's dual mandate, it is appropriate to focus on resource gaps in terms of the labor market.

There are a variety of ways to measure labor utilization. Indeed, I prefer a dashboard method of judging the employment gap. The dashboard includes the official unemployment rate, the employment-to-population ratio, and a measure recently devised by my staff in Atlanta. We call this the ZPOP ratio.² The ZPOP ratio is akin to a worker satisfaction ratio. It estimates the share of the population that is working the hours they wish.

ZPOP counts people as satisfied with their hours of work if they are employed full-time, they are employed part-time by choice, or, according to their report to the Census Bureau, they do not want a job.

Those who say they don't currently want a job are treated as satisfied. In that sense, they are fully utilized, because the chances they will change their status in the near future tend to be quite low. The largest driver of the overall increase of people in the "do not want a job" group has, in recent years, been retirement.

As of September, the ZPOP ratio stood at 92 percent on a seasonally adjusted basis. So, by this measure, 8 percent of the working-age population is underutilized. That figure is well below the cyclical peak of 15 percent in early 2010, but is still just above the cyclical trough of 7 percent in late 2006.

It is possible that structural changes in labor markets have changed the ZPOP ratio that should be associated with full utilization of labor resources. For instance, there probably have been shifts in employment opportunities for less educated and younger workers toward industries that have larger concentrations of part-time employment. This could indicate that the share of the group working part-time but wanting more hours is going to be a bit higher permanently.

Still, it's my opinion that most, though not all, labor market slack has been absorbed. The conclusion our ZPOP-based analysis leads to is similar to our estimate of the output gap—that it's substantially, but not completely, closed.

The Inflation-Target Gap

The second ingredient of a Taylor framework is the inflation-target gap.

A little over a month ago, FOMC Chair Janet Yellen gave an important speech on inflation dynamics and monetary policy. Chair Yellen put forward the view that, despite the significant shortfall of inflation from our 2 percent target, it's likely that inflation will gradually return to that target as transitory influences fade, resource slack continues to diminish, and inflation expectations remain anchored. I share her view.

Regarding inflation expectations, stable expectations are a critical underpinning of the case for confidence that the FOMC can meet its inflation objective over a reasonable horizon. On this point, Chair Yellen made note of some puzzles—some contradictory aspects of various measures of private-sector inflation expectations. I'd like to examine these apparent contradictions, applying work we've done at the Atlanta Fed.

One of these puzzles relates to divergent signals obtained from different survey measures of inflation expectations. At first glance, different players in the private economy hold very different views about future inflation. Two commonly referenced surveys are the Philadelphia Fed's Survey of Professional Forecasters and the University of Michigan's Survey of Consumers. With the former, professional forecasters tend to have expectations that are tightly grouped around the observed inflation trend. Meanwhile, household surveys reveal a remarkably wide range of opinions about future inflation, and on average run persistently higher than trend inflation.

There is a large body of work that attempts to explain why groups in the economy apparently view inflation so differently.

In contrast, work by my staff at the Atlanta Fed indicates that views on inflation may not be as different as the survey data suggest—provided you ask the right question.³

Since 2011, we have been surveying business executives about costs and prices. Our research shows that most of the differences we observe in survey measures of inflation expectations are a result of the questions being asked. For example, we find that when we ask business executives the same question usually put to households—a prediction of "prices in general"—they respond much the same way that households do. They give a prediction that appears unusually high on average and varies quite a bit from executive to executive.

But when we ask executives to predict a specific inflation measure like core CPI, or Consumer Price Index, inflation—the same question that is asked of forecasters—the responses of the panel of firms are nearly identical to those of professional forecasters.

To me, these results highlight the importance of getting the question right. For business executives, who are, after all, the price setters, we ask questions about the costs they expect to face and the prices they expect to charge. We think these are the questions that are meaningful to their businesses. And from these data, we conclude that inflation expectations of business firms look, on average, quite similar to what's reported for professional economists and not much at all like what's reported for households. In other words, expectations appear anchored and reasonably consistent from firm to firm, and near target-appropriate levels.

A second concern noted in the Yellen speech was the recent softening of expectation measures derived from market-based inflation compensation. These are potentially important signals because they could represent the inflationary sentiments of parties who actually have money at risk.

Since June, the five-year breakeven rate, measuring inflation compensation over the next five years, has fallen roughly 55 basis points (as of October 28). This raises the question of how much of this 55 basis-point decline is due to falling inflation expectations versus other factors.

My staff has made an effort to unpack the various components in these market-based break-even rates. Others have done similar work. Our results indicate that factors other than expected inflation, notably market liquidity, can account for almost all the drop in the breakeven rate. Our estimate of investors' underlying CPI inflation expectations over the next five years is about 2.1 percent, right in line with the FOMC's objective.⁴

Overall, it appears to me that inflation expectations are fairly well anchored.

The "Neutral" Real Rate of Interest

The final piece of the Taylor framework is some measure of a "neutral" real rate of interest. In John Taylor's original formulation, this would be the 2 percent real policy rate. More generally, the neutral rate idea is meant to capture the level of the inflation-adjusted policy rate target that is neither stimulative nor restrictive.

As you in this audience are aware, there is a large literature on defining and measuring the neutral rate, variously known as "r-star," the "equilibrium" rate, or the "natural" rate. I won't review that literature in any detail, but I will make three observations.

First, by most accounts, the estimated neutral rate has been on a downward trajectory for some time, and is at historically low levels.⁵ This phenomenon has been estimated in other advanced economies as well.

Second, I tend to view the historically low levels of the neutral rate as resulting from fundamentals that are beyond the reach of monetary policy. These include population aging, productivity growth, and the global appetite for saving and investment.

Finally, it goes without saying that the level of the neutral rate—like all estimates of variables not directly observed—is subject to error and uncertainty. However, based on a range of evidence, I think a neutral rate in the neighborhood of zero is a reasonable estimate.

A Qualification: Benchmarks, Forecasts, and Risks

Adding up all of the elements of the Taylor framework as I currently see them, I think a case can be made for some adjustment of the federal funds rate target from its current near-zero level. That said, adjustment thereafter will most appropriately be very gradual, in my opinion.

There is a caveat—an important one, I think. The Taylor framework is a benchmark, and a benchmark only. Appropriate policy is forward-looking. The data inputs that drive policy conclusions have meaning for policy not in the moment, but in how they influence projections of future economic conditions and progress toward policymakers' goals. A benchmark based on estimates of today's output and inflation-target gaps is informative, but it's only part of the picture.

Any actual policy decision must take into account a broader array of considerations that cannot be captured by the simple framework I have described. An assessment of risks is a crucial element in sound decision making.

Earlier this year, I thought economic conditions would evolve in such a way that liftoff could be justified by the time the Committee met in September. The economy did more or less evolve in line with the path I expected.

Applying the Taylor framework alone, liftoff in September was arguably appropriate. But emerging risks—that is, open questions about spillover effects from the slowdown in Chinese growth and the sudden spike in volatility in global financial markets—called for some delay. For me, it was a close call, but I thought holding off was prudent.

Then following the September meeting, I came to the view that the period leading to the October FOMC meeting was not long enough to answer all the questions that the Committee faced at the September meeting. Here again, risk management principles in my mind justified some discounting of a liftoff signal that might derive from application of the simple Taylor framework.

I expect to see a subsiding of the risks that appropriately led, in my opinion, to a policy hold in September and October. I think the case for liftoff will continue to firm up.

Looking Ahead

Though my assessment of the Taylor framework elements leads me to the view that liftoff will soon be appropriate, I am not concerned that the FOMC is behind the curve.

Liftoff remains a close call. A relatively small adjustment in an estimate of the neutral rate, or revisions in my forecast of how quickly remaining output and inflation-target gaps might close, could quite easily point to a longer period for a zero funds rate.

New risks or uncertainties may well color future decisions in a way that will justify continued deviations from the simple prescriptions of a Taylor framework. But it is apparent to me that we are in the midst of transition from an extraordinary period that called for unconventional tools, to a period where we again utilize rule-like benchmarks.

¹ Michael Woodford's presentation at the Kansas City Fed's 2012 Jackson Hole conference provided a timely and important articulation of this idea. See "Methods of Policy Accommodation at the Interest-Rate Lower Bound" (presentation, Economic Policy Symposium on the Changing Policy Landscape, Federal Reserve Bank of Kansas City, Jackson Hole, WY, August 31, 2012).

² The idea is found at macroblog.typepad.com/macroblog/2015/09/the-zpop-ratio-a-simple-take-on-a-complicated-labor-market.html.

³ See Michael F. Bryan, Brent H. Meyer, and Nicholas B. Parker, "The Inflation Expectations of Firms: What Do They Look Like, Are They Accurate, and Do They Matter?" (Federal Reserve Bank of Atlanta, Working Paper 2014-27a, December 2014).

⁴ See Nikolay Gospodinov and Bin Wei, "A Note on Extracting Inflation Expectations from Market Prices of TIPS and Inflation Derivatives" (Federal Reserve Bank of Atlanta, 2015) and the forthcoming working paper by Nikolay Gospodinov and Bin Wei "Forecasts of Inflation and Interest Rates in No-Arbitrage Affine Models" (working paper, Federal Reserve Bank of Atlanta, forthcoming). For analysis about the stability of inflation expectations and the large liquidity premium, see Stefania D'Amico, Don H. Kim, and Min Wei "Tips from TIPS: The Informational Content of Treasury Inflation-Protected Security Prices" (Federal Reserve Board Finance and Economic Discussion Series 2014-24, 2014); and Michael Abrahams, Tobias Adrian, Richard K. Crump, and Emanuel Moench, "Decomposing Nominal and Real Yield Curves" (Staff Report No. 570, Federal Reserve Bank of New York, 2015).

⁵ See, for example, James D. Hamilton, Ethan S. Harris, Jan Hatzius, and Kenneth D. West, "The Equilibrium Real Funds Rate: Past, Present, and Future" (U.S. Monetary Forum, Booth School of Business, University of Chicago, February 2015); and Thomas Laubach and John C. Williams, "Measuring the Natural Rate of Interest Redux" (Federal Reserve Bank of San Francisco Working Paper 2015-16, October 2015).

Contact: [Jean Tate](mailto:Jean.Tate@frb.org) 404-498-8035

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