Economic SYNOPSES
short essays and reports on the economic issues of the day

2013 ■ Number 25

Forward Guidance 101A: A Roadmap of the U.S. Experience

Silvio Contessi, *Economist*
Li Li, *Research Associate*

The policy response to the 2007-09 financial crisis significantly expanded the toolkit available to monetary policy authorities of the world's major central banks. In the fall of 2008, the Federal Open Market Committee (FOMC) lowered the federal funds rate, its main policy rate, to near zero. The Committee also began a series of unconventional monetary policy programs explicitly aimed at providing further policy accommodation with interest rates near zero (i.e., at the zero lower bound) and stimulating aggregate expenditures.

This essay provides an introduction to the Federal Reserve's *forward guidance*, one of its accommodative policy tools. Forward guidance consists of communicating to the public the stance of monetary policy that is expected to prevail in the future.[1] While the full-blown adoption of forward guidance in the United States was concurrent with the financial crisis and the zero lower bound, when further stimulus in the form of lower long-term yields was sought, the Federal Reserve and other central banks experimented with forward guidance or practiced it when the policy rate was above its zero lower bound.

In both environments, a central bank is orienting expectations about future monetary policy but with different objectives. It is widely understood that expectations play an important role in the economy, affecting a variety of decisions such as consumption, saving, and investment. Managing expectations is an important channel a central bank can use to achieve its policy objectives. In normal times, when the policy rate is not near zero, monetary policy authorities set policy instruments in response to economic fluctuations. Several models support the notion that a clear, easily understood policy rule can help successfully guide the private sector's expectations and ultimately may influence the economy consistent with the central bank's objectives.

However, Woodford (2013) and others have suggested that, when policy rates are close to zero, signaling that the policy rate will remain low longer than the central bank's policy rule would suggest provides additional accommodation. These two environments—positive and near-zero policy rates—tend to correspond with two approaches to managing expectations. In the first case, the central bank simply forecasts and communicates to the public the economic outlook and the expected monetary policy action consistent with this outlook, without committing to a specific policy action. The monetary policy stance could change in response to events that deviate from the forecast, but consistently with the policy rule.

Forward guidance consists of communicating to the public the stance of monetary policy that is expected to prevail in the future.

In the second case, the central bank may want to guide private sector expectations with a commitment to monetary policy action in case of future deviations from the underlying policy rule, essentially tying the authority's hands. A credible promise to continue accommodative monetary policy until a certain date or after the recovery strengthens (and the policy rule calls for higher policy rates) amounts to influencing expectations and long-term yields and providing additional monetary stimulus today. Because of this different focus on commitment, Campbell et al. (2012) aptly refer to these two approaches as *Delphic* forward guidance and *Odyssean* forward guidance.[2]

Elements of forward guidance in the United States can be found in a few FOMC statements during the Greenspan era (see the "Pre-crisis experience" section of the table). The FOMC's choice of language first suggested policy accommodation could be maintained for a considerable period (December 2003) during the recovery from the 2001 recession and later indicated a measured pace for removing it. Kool and Thornton (2012) define this language as *implicit* forward guidance (in the sense that it does not explicitly mention a specific endpoint) and point out this practice was discontinued in 2005.[3]

The Bernanke Fed resurrected forward guidance at the peak of the financial crisis when the FOMC statement pointed to "exceptionally low levels of the federal funds rate for some time" at the launch of the first round of quantitative easing (in December 2008)[4] and later for an extended period (see the "Crisis and post-crisis experience" section of the table).

In 2011, the FOMC statement language changed significantly to include a precise and explicit minimal period of extraordinary policy accommodation: "at least through mid-2013" (in August 2011) and later "late 2014" (in January 2012), an approach also referred to as "date-based" forward guidance. In September 2012, the language became even stronger with a reference to a "considerable time after the economic recovery strengthens," specified as "at least through mid-2015." Several commentators pointed out that the date-based guidance may have been interpreted as signaling either a weaker economic outlook or a change in the FOMC's policy rule, a particularly important distinction when an empirical analysis of the direct effect of date-based forward guidance is attempted.

A second important change in the FOMC language was the clarification that the extraordinary policy accommodation would be maintained at least as long as unemployment remained above 6.5 percent, consistent with the Fed's explicit inflation objective (December 2012). Finally, in

Roadmap of the U.S. Forward Guidance Experience

Date	Federal funds rate (percent)	FOMC forward guidance language
Pre-crisis experience		
8/12/2003	1	"Policy accommodation can be maintained for a considerable period"
1/28/2004	1	"The Committee believes that it can be patient in removing its policy accommodation"
5/4/2004	1	"Policy accommodation can be removed at a pace that is likely to be measured"
6/30/2004	1.25	"Policy accommodation can be removed at a pace that is likely to be measured"
Crisis and post-crisis experience		
12/16/2008	0-0.25	"Weak economic conditions are likely to warrant exceptionally low levels of the federal funds rate for some time"
3/18/2009	0-0.25	"Economic conditions are likely to warrant exceptionally low levels of the federal funds rate for an extended period"
8/9/2011	0-0.25	"Economic conditions…are likely to warrant exceptionally low levels for the federal funds rate at least through mid-2013"
1/25/2012	0-0.25	"Economic conditions…are likely to warrant exceptionally low levels for the federal funds rate at least through late 2014"
9/13/2012	0-0.25	"A highly accommodative stance of monetary policy will remain appropriate for a considerable time after the economic recovery strengthens…exceptionally low levels for the federal funds rate are likely to be warranted at least through mid-2015"
12/12/2012	0-0.25	"At least as long as the unemployment rate remains above 6½ percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored"
6/19/2013	0-0.25	"It would be appropriate to moderate the monthly pace of purchases later this year...we would continue to reduce the pace of purchases in measured steps through the first half of next year, ending purchases around midyear...when asset purchases ultimately come to an end, the unemployment rate would likely be in the vicinity of 7 percent, with solid economic growth supporting further job gains"

June 2013, the Chairman indicated the Committee expected that when asset purchases ultimately come to an end, "unemployment would be in the vicinity of 7 percent, and inflation would be moving toward our 2 percent objective" (Bernanke, 2013).

How should we measure the effectiveness of such a communication policy? The most direct way is to determine whether the announcements actually changed expectations—for example, of interest rates. Kool and Thornton's (2012) analysis of the 2003-05 period provides evidence that forward guidance did not increase the ability of market participants to forecast future short-term and long-term yields. Campbell et al. (2012) estimate the effects of unexpected FOMC policy announcements (interpreted as shocks to the stance of monetary policy) on Treasury security and corporate bond yields that contain a component of expectation. They find a significant effect during the 1990-2007 period but imprecise estimates during the 2007-11 period. Finally, Raskin (2013) focuses on the extent to which the date-based guidance altered perceptions of the change in policy for a given change in economic conditions between August 2011 and December 2012. He finds that the FOMC's date-based forward guidance did more than signal a weaker outlook—it altered perceptions of the Committee's likely reaction to evolving conditions.

While empirical literature on the topic is still in its infancy, studies of other countries also contribute to understanding the relevance of this new policy for the United States as well. These experiences are discussed in an upcoming *Economic Synopses* essay (Contessi and Li, forthcoming). ■

Notes

[1] See "How Does Forward Guidance about the Federal Reserve's Target for the Federal Funds Rate Support the Economic Recovery?" (http://www.federalreserve.gov/faqs/money_19277.htm).

[2] Odysseus, or Ulysses, was a legendary Greek king of Ithaca and the hero of Homer's epic poem, *The Odyssey*, in which Odysseus faces the dangerous Sirens while tied to a mast from which he cannot escape. Delphic refers to the oracle of Delphi, the most important oracle in the classical Greek world.

[3] Campbell et al. (2012) define explicit forward guidance as that provided through formal FOMC statements and implicit forward guidance as that provided through speeches and testimony by the Committee members.

[4] FOMC meeting calendars, statements, and minutes for 2008-2014 are available at http://www.federalreserve.gov/monetarypolicy/fomccalendars.htm.

References

Bernanke, Ben S. Semiannual Monetary Policy Report to the Congress Before the Committee on Financial Services, U.S. House of Representatives. Washington, DC, July 17, 2013; http://www.federalreserve.gov/newsevents/testimony/bernanke20130717a.htm.

Campbell, Jeffrey R.; Evans, Charles L.; Fisher, Jonas D.M. and Justiniano, Alejandro. "Macroeconomic Effects of Federal Reserve Forward Guidance." *Brookings Papers on Economic Activity*, Spring 2012, pp. 1-54.

Contessi, Silvio and Li, Li. "Forward Guidance 101B: A Roadmap of Other Countries' Experiences." Forthcoming in Federal Reserve Bank of St. Louis *Economic Synopses*, 2013.

Kool, Clemens J.M. and Thornton, Daniel L. "How Effective Is Central Bank Forward Guidance?" Federal Reserve Bank of St. Louis Working Paper No. 2012-063A, December 2012; http://research.stlouisfed.org/wp/2012/2012-063.pdf.

Raskin, Matthew D. "The Effects of the Federal Reserve's Date-Based Forward Guidance." Finance and Economics Discussion Series No. 2013-37, May 9, 2013; http://www.federalreserve.gov/pubs/feds/2013/201337/201337pap.pdf.

Woodford, Michael. "Forward Guidance by Inflation-Targeting Central Banks." Working paper, Columbia University, May 27, 2013; http://www.columbia.edu/~mw2230/RiksbankIT.pdf.

Posted on September 10, 2013