Richard W Fisher: Forward guidance (With reference to Monty Python, Odysseus, Apollo, Paul Fisher, Deng Xiaoping and Mario Draghi's Old Man)

Remarks by Mr Richard W Fisher, President and Chief Executive Officer of the Federal Reserve Bank of Dallas, before the Asia Society Hong Kong Center, Hong Kong, 4 April 2014.

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The views expressed by the author do not necessarily reflect official positions of the Federal Reserve System.

Thank you, Alice (Mong). It is always an honor to speak before the Asia Society anywhere in the world but especially here in Hong Kong, one of my favorite cities. I was in Hong Kong during the transition ceremonies in 1997 when the White House called to ask if I would become deputy U.S. trade representative. It was a position in which I served for four years under President Clinton, and it put me on the path to high-level public service. That and my love for the spectacular food here have cemented Hong Kong in my heart. Thank you for inviting me to stop here on my way to Beijing.

I want to talk today about "forward guidance" in monetary policy. It is the subject du jour of central bankers. We've seen it popularized by the Bank of Canada and Bank of England, and it figured prominently in the statement recently released by the Federal Open Market Committee (FOMC) of the Federal Reserve after our meeting of March 18–19 and again during the post-meeting press conference of the Fed Chair, Janet Yellen. It is front and center on the agenda of the FOMC.

To understand forward guidance and its prominence in current discussions within monetary policy circles, it helps to retrace recent history.

Adieu quantitative easing

To encourage economic recovery from the debacle of the financial crisis of 2007–09, the FOMC cut interest rates to near zero. The Fed introduced an array of special lending facilities during the most panicked stage of the crisis. These credit and liquidity programs were largely self-liquidating as market functioning improved. But still being "zero bound," we embarked upon a program of massively expanding the Fed's balance sheet, referred to internally as "large-scale asset purchases" and popularly known as quantitative easing (QE). By buying copious quantities of longer-term U.S. Treasury bonds and mortgage-backed securities (MBS), our balance sheet has grown from slightly under \$900 billion prior to the crisis to \$4.3 trillion at present.

When the Fed buys a Treasury note or bond or an MBS, we pay for it, putting money out into the economy with the expectation that the money will be used by banks and other creditors and investors to finance job-creating investment, the purchase of homes and other expansive economic activity.

Thus far, much of the money we have pushed out into the economy has been stored away rather than expended to the desired degree. For example, we have seen a huge buildup in the reserves of the depository institutions of the United States. Less than a fifth of commercial credit in the highly developed U.S. capital markets is extended through depository institutions. Yet depository institutions alone have accumulated a total of \$2.57 trillion in excess reserves — money that is sitting on the sidelines rather than being loaned out into the economy. That's up from a norm of around \$2 billion before the crisis.

The Fed's large-scale asset purchases dramatically and more broadly impacted credit markets. The U.S. credit markets are awash in liquidity.

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As of March 14, our par holdings of fixed-rate MBS exceeded 30 percent of the outstanding stock of those securities. Through these purchases, we have driven down mortgage rates and helped rekindle the U.S. housing market.

We now own just shy of 24 percent of the stock of Treasury coupon securities. Having concentrated our purchases of Treasuries further out on the yield curve, and done so in size, we have driven nominal interest rates across the credit spectrum to lows not seen in over a half century.

This has allowed U.S. businesses to restructure their balance sheets, manage their earnings per share through share buybacks financed with bargain-basement debt issuance, bolster stock prices through enhanced dividend payouts and position themselves for financing growth once they see the whites of the eyes of greater certainty about their economic future. By driving nominal interest rates to half-century lows, we have also reduced the hurdle rate by which future cash flows of publicly traded businesses are discounted. Thus, through financial engineering, we have helped bolster a roaring bull market for equities: The indexes for stocks have nearly tripled from the lows reached in March 2009.

Alongside these signs of rebound have been some developments that give rise to caution. I have spoken of these in recent speeches, echoing concerns I have raised in FOMC discussions:

- The price-to-earnings (PE) ratio of stocks is among the highest decile of reported values since 1881. Bob Shiller's inflation-adjusted PE ratio reached 26 this week as the Standard & Poor's 500 hit yet another record high. For context, the measure hit 30 before Black Tuesday in 1929 and reached an all-time high of 44 before the dot-com implosion at the end of 1999.¹
- Since bottoming out five years ago, the market capitalization of the U.S. stock market as a percentage of the country's economic output has more than doubled to 145 percent the highest reading since the record was set in March 2000.
- Margin debt has been setting historic highs for several months running and, according to data released by the New York Stock Exchange on Monday, now stands at \$466 billion.²
- Junk-bond yields have declined below 5.5 percent, nearing record lows.³
- Covenant-lite lending is becoming more widespread. In my Federal Reserve District,
 96 percent of which is the booming economy of Texas, bankers are reporting that money center banks are lending on terms that are increasingly imprudent.

The former funds manager in me sees these as yellow lights. The central banker in me is reminded of the mandate to safeguard financial stability. As I said recently in a speech in Mexico, we must watch these developments carefully lest we become responsible for raising the ghost of irrational exuberance.

It is clear to me that we have a liquidity pool that is more than sufficiently deep and wide enough nationwide to finance job-creating capital expansion and reduce labor market "slack." But that will happen only if and when our fiscal authorities – the Congress and the president

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Robert Shiller's price-to-earnings ratio for the S&P 500 is based on average inflation-adjusted earnings from the previous 10 years, known as the cyclically adjusted PE ratio.

² Data on market activity and margin debt can be found at www.nyxdata.com/nysedata/asp/factbook/viewer interactive.asp.

As measured by the Bank of America/Merrill Lynch high-yield corporate debt index covering credits rated BB+ and below.

- are able to muster the courage to craft tax, spending and regulatory incentives for job-creating enterprises to mobilize liquidity for expansion and payroll growth.

Thus far, inflation has yet to raise its ugly head, and inflation expectations as measured by consumer surveys and market-traded instruments have remained stolid. However, with each passing day, constantly adding massive amounts to the monetary base will inevitably present a significant challenge to the FOMC, which must ultimately manage this high-power money so that it does not become fuel for sustained inflation above the committee's 2 percent target once it is activated and flows into the economy.

Thus, I was more than supportive of the collective decision of the FOMC to begin cutting back on our rate of accumulation of assets beginning in December. Over the course of our recent meetings, we have cut back from accumulating \$85 billion per month in Treasuries and MBS to a present rate of \$55 billion per month. This is still somewhat promiscuous. Even with the taper, the recent decline of mortgage supply has driven our absorption of the MBS market to 85 percent of fixed-rate MBS issuance. The fall in net MBS supply is outpacing the taper.

At the current reduction in the run rate of accumulation, the exercise known as QE3 will terminate in October (when I project we will hold more than 40 percent of the MBS market and almost a fourth of outstanding Treasuries). We will then be back to managing monetary policy through the more traditional tool of the overnight lending rate that anchors the yield curve.

Enter forward guidance

This is no small matter. Quantitative easing has made life easy not only for corporate treasurers and homeowners and consumers burdened by debt, but also for money market operators. It has run up the price of stocks and bonds mostly in straight-line fashion, and it has taken volatility out of the marketplace, allowing market operators and their clients to profit with little effort. The question of when and under what conditions the FOMC will begin to raise the base rate off the floor is understandably of intense interest.

For example, every quarter, FOMC participants each provide forecasts of the year in which they presently think the target overnight rate will be raised, based on what they individually consider to be the proper conduct of monetary policy. This has given rise to what I consider a rabid focus on the economic projections, or "dots," that accompany our FOMC statements on a quarterly basis. Monty Python could almost have written a sketch on the pundits' preoccupation with the dots.⁴

Truth be told, although many of us have econometric models and all of us have a phenomenal team of economists who help us develop our projections, these estimates are, in the end, largely guesswork. Especially the further out in time they go. Yet the press and the markets focus on them as though they were the writ of all-knowing, all-seeing monetary sages. On Monday night, for example, there was much ado made about Janet Yellen noting in Chicago that the central tendency of our best guesses was that full employment would be somewhere between a 5.2 and 5.6 percent unemployment rate.

It is nonetheless helpful to contemplate what may be useful guideposts for deciding when to raise the base rate and how we may convey this to the markets. And so the FOMC is grappling with just what, in fact, we can provide the marketplace in the form of forward guidance about our future modus operandi.

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Monty Python is the British comedy troupe known for its satirical skits. A parody about the FOMC's "dots" could rank up there with the spoof about the argument clinic "intended to create grievous mental confusion among the general public." A link is provided here for your enjoyment: www.youtube.com/watch?v=kQFKtl6gn9Y.

Odysseus or Apollo?

Research papers have addressed this subject. For example, some academic economists draw on Greek mythology to distinguish different techniques for crafting forward guidance, making a distinction between Odyssean and Delphic forms of guidance.

The Odyssean model involves committing to a policy rule or to a criterion for choosing between different policy alternatives. Policymakers tie themselves to the mast of this rule or criterion, sacrificing some of their short-run freedom of action in order to achieve what they hope will be superior outcomes over the long term. In monetary policy, commitment can in theory reduce the risk of future recession and more tightly control medium-horizon inflation expectations at the cost of a somewhat poorer near-term inflation or unemployment performance.

Commitments come in lots of different flavors and styles, and forward guidance isn't necessarily helpful or wise just because it's Odyssean. Tying yourself to the mast isn't an especially good idea if your ship is sinking, or if enemy forces are directing fire toward your deck. Committing to a particular path for the funds rate, or to a time schedule for funds-rate liftoff, is not something in which I or many of my colleagues have any interest. Commitments that are contingent on future economic conditions, in contrast, enjoy at least some support on the FOMC. President (Narayana) Kocherlakota of the Minneapolis Fed, for example, has notably proposed that the committee promise to delay liftoff at least until either the unemployment rate reaches 5 1/2 percent or forecasted inflation hits 2 1/4 percent (provided longer-term inflation expectations remain well-anchored, and possible risks to financial stability remain well-contained).

My own view is that commitments aren't always credible, especially if they purport to extend far into the future. It's hard to bind future policymakers, and it's difficult to anticipate all the various economic circumstances that might arise down the road. As a general rule, then, the further into the future a commitment extends, the vaguer it tends to be. Along these lines, the FOMC periodically reiterates its commitment to do what it is legally mandated to do: pursue full employment, price stability and a stable financial system. But getting from there to an actual prescription for the funds rate isn't straightforward. If it were, FOMC meetings wouldn't take eight-plus hours of discussion and hundreds of pages of briefing materials.

Delphic forward guidance is less binding than Odyssean guidance. Like the responses of the oracle of Apollo at Delphi, it is more obscure, more enigmatic. It amounts to saying, "Here's what we think we are going to want to do if the economy evolves as we currently expect." Delphic guidance clarifies your current thinking about future policy without making any promises – even contingent promises.

Our current FOMC statement is chock-full of Delphic guidance. On asset purchases: "If incoming information broadly supports the committee's expectation of ongoing improvement in labor market conditions and inflation moving back toward its longer-run objective, the committee will likely reduce the pace of asset purchases in further measured steps ..." On the timing of liftoff: "The committee continues to anticipate ... that it likely will be appropriate to maintain the current target range for the federal funds rate for a considerable time after the asset purchase program ends ..." On the post-liftoff path of the funds rate: "The committee currently anticipates that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the committee views as normal in the longer run."

As a former practitioner, I can tell you that market operators prefer Odyssean guidance to Delphic guidance, and within the Odyssean model, tend to prefer inflexible, calendar-based guidance to guidance that's either conditional or qualitative. Life in my former incarnation would naturally be much more pleasant if I could dial in the specific dates and levels of interest rate movements. But as a central banker, I am haunted by a comment made by Winston Churchill in 1926, shortly before things began to unravel in the global financial

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markets. Speaking at the Waldorf Hotel in London, he said: "In finance, everything that is agreeable is unsound and everything that is sound is disagreeable." ⁵

I worry that the predictability of calendar-based commitments can quite possibly be unsound in two key dimensions. First, the quantitative moorings may be misplaced – especially given shifts in economic relationships following the worst downturn since the Great Depression. Second, I question if it is sound policy to remove all uncertainty or volatility from the market. I wonder whether being *totally* predictable may, at best, lead to a false complacency that can too easily be upset should we need to change course. At its worst, I fear calendar-based commitments can lead, perversely, to market instability by encouraging markets to overshoot, as they appear to be doing in some quarters at present. I say "calendar-based commitments," even though the FOMC has tried to couch its calendar-based guidance in Delphic language. The problem is that guidance intended to be Delphic is, in practice, often given an Odyssean interpretation. Whether because of wishful thinking by market operators or because of policymaker inertia (it's easier to stick with the previously announced plan than to explain a departure from that plan), the Delphic undergoes metamorphosis and becomes Odyssean.

Thus, I wonder if anything beyond the Delphic is practicable, as much as I might like to set our compass on autopilot. But even expressing meaningful forward guidance along more amorphous lines is challenging.

"We'll see": 摸石頭過河

The point is: Forward guidance can be a complicated monetary policy tool. I had an interesting discussion about this two weeks ago with a couple of the members of the Bank of England's Monetary Policy Committee (MPC). They noted that Chris Giles of the *Financial Times* has devoted a substantial amount of thoughtful attention to the discussion of forward guidance.

In Giles' *Money Supply* blog post of Oct. 2, 2013, he wrote: "Forget triggers, thresholds, knockouts and long lists of conditions. Paul Fisher, the Bank of England's head of markets, says everyone is wrong to think forward guidance is complicated. The policy was summarized in a single simple sentence of the [Bank of England's] explanatory document, he said in a speech today. This is the sentence," and I'm quoting Giles quoting Paul Fisher: "In essence, the MPC judges that, until the margin of slack within the economy has narrowed significantly, it will be appropriate to maintain the current exceptionally stimulative stance of monetary policy, provided that such an approach remains consistent with its primary objective of price stability and does not endanger financial stability."

To a central banker, that may have seemed about as concise a Delphic statement as possible. But Giles suggested, "I'm sure we can all do better than that." He took a stab at translating the sentence himself, suggesting that it meant "the MPC will let the recovery run for as long as it can," but he invited others who might have "better, more elegant and more accurate translations" to submit them via social media. Later that day, he announced the best summation received. Forward guidance expressed in a two-word sentence: "We'll see." 6

That about sums it up. The FOMC is seeking to make sure that we have a sustained recovery without giving rise to inflation or market instability. We will conduct monetary policy accordingly. Regardless of the way we may finally agree at the FOMC to write it out or have Chair Yellen explain it at a press conference, we really cannot say more than that.

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From *Churchill by Himself: The Definitive Collection of Quotations*, edited by Richard Langworth, Philadelphia: Perseus Books Group, 2008, p. 17. Langworth cites Churchill from March 15, 1926.

⁶ "Forward guidance in a sentence," by Chris Giles, *Financial Times, Money Supply* (blog), Oct. 2, 2013. Giles announced the "forward guidance in a sentence ... winner" on Twitter later that same day.

Draghi's Old Man

At a recent meeting I attended in Frankfurt, Mario Draghi of the European Central Bank told of a man who needed a heart transplant. The doctor leveled with him that he had several choices, including the heart of a 75-year-old central banker. "I'll take that one," the man answered immediately. "Why?" the doctor asked. "Well," said the man, "because it's never been used."

As was made clear in Chair Yellen's speech in Chicago earlier this week, central bankers have hearts, and the Fed is working to harness monetary policy to relieve the plight of the cyclically unemployed. But we also need to be vigilant in making clear that we are obligated to maintain price stability and that allowing inflation to take grip is a cardinal sin for a central bank, for it is the cruelest of afflictions for all of society.

Joachim Fels of Morgan Stanley noted that Draghi's little joke serves as a reminder not that my colleagues and I at the Federal Reserve belong to a heartless tribe but that "central banking is about making rational, cool-headed and unemotional decisions often under difficult circumstances". We must conduct monetary policy in a cool-headed and unemotional manner in order to achieve both of the mandates Congress has given us – preserving price stability *and* achieving full employment – while avoiding financial market turbulence.

This is the very best we can offer you, whether you are from ancient Ithaca or Delphi or modern Hong Kong. Those who think we can be more specific in stating our intentions and broadcasting our every next move with complete certainty are, in my opinion, clinging to the myth that economics is a hard science and monetary policy a precise scientific procedure rather than the applied best judgment of cool-headed, unemotional decision-makers. We will cross the river that separates us from a normalized economy and a normalized monetary policy by feeling the stones. We may slip on occasion, but you should not underestimate our intention to apply whatever talents we possess as policymakers to do what is right to advance economic prosperity while strictly adhering to our commitment of containing inflation and maintaining market stability.

Thank you (謝 謝).

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Richard Fisher joined Mario Draghi, Mark Carney, Joachim Fels and others at a symposium on "Financial Stability and the Role of Central Banks," organized by Jens Weidmann and Deutsche Bundesbank in Frankfurt am Main on Feb. 27–28, 2014.