Interpreting Fed Policy Action and Implications for Treasury Yields

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Hawkish? Dovish? Even more dovish? Hawkish?

The interpretation of Federal Reserve policy intent by financial market participants has pirouetted across the stage of the past nine months, partly in response to the discordant score played by officialdom. The cacophony is such that the rate calls of many prominent investment firms have violated a fundamental tenet of forecasts: Projections are supposed to be less, not more, volatile than that projected.

The Standish view is that, while Fed communication may be convoluted, Fed intent is plain. Monetary policy makers want to renormalize their interest-rate stance. They thought they set off a gradual tightening regime at the end of last year only to learn that four quarter-point rate hikes in 2016 seemed dangerously outsized to market participants. At its March meeting, the Federal Open Market Committee (FOMC) stretched out its plan to encompass only two moves this year. Subsequent central bank talk was meant to reassure investors, themselves, and tomorrow’s historians of the Fed that following a glacial path that was without US precedent was warranted and that, in any circumstances, the plan depended on the outlook. Many market participants double counted, taking the attempt to justify a dovish decision as predicting even more dovishness in future decisions.

Fed talk since has made it plain that two tightenings are penciled in for 2016. The rest of the real estate of this note explains what this implies for Treasury yields. Notwithstanding Chair Yellen’s admonishment that “one should not look to the dot plot...” the surprising finding is that a lot can be learned from taking the Fed at its word, or its dots. We price out the Fed’s rate guidance since it has been providing guidance in the Summary of Economic Projects (SEP), from January 2012 to March 2016. The Fed’s intended path of policy tightening is shallower than last year and has them settling out at a funds rate that is lower than previously indicated, but policy makers are tightening now, rather than just suggesting future action. Walking their rate guidance forward (dropping the promise of policy staying on hold from 2012 to mid-2015 to living the prospects of more immediate action) explains a bit of the movement in the Treasury yield curve, especially a relative flattening at the longer end. The exercise also highlights that a major disconnect between the Fed and market participants opened in 2014. Thinking about the origins of that wedge helps identify the five main alternative scenarios in store for investors over the next several years. The Fed may be right or wrong. Whether it is right or how it is wrong matters materially for portfolio choice.

1 See https://www.federalreserve.gov/mediacenter/files/FOMCPresconf20140319.pdf, page 9

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How Do the Dots Connect?

Much is lacking in the interest rate guidance provided four times a year in the SEP, which is not surprising given its origin as a compromise of disclosure by a group that cannot agree to a common forecast. Among the problems, FOMC participants do not provide forecasts but rather their individual assessments of the appropriate path of policy given what they hold to be the most likely outcome for the US economy. There is no coordination on key conditioning influences for the outlook, such as the paths of oil and other commodity prices, monetary policy abroad, or fiscal policy at home. The FOMC is not a dictatorship, but it is not a democracy, either. Despite this, the dots are not influence-weighted, even to the point of failing to differentiate voting FOMC members versus out-of-rotation observers.

The upper panel of the chart plots the median responses to the first SEP in which the rate outlook was provided (January 2012) and the most recent one (March 2016) using three assumptions to fill out the blank spaces in our knowledge for the period relevant in pricing long-lived assets.

Constructing the Expectations Component of the Treasury Term Structure

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The calculations for the upper panel:

1. Interpolate the median SEP response for the last quarter of each year;
2. Assume that the long-run funds rate is achieved five years after the start of tightening; and
3. Flat-line the path at the terminal nominal funds rate subsequently.

In the lower left panel, each yield represents:

4. the forward-looking average of the funds rate over the relevant maturity.

First, the SEP reports the appropriate fourth-quarter-of-the-year funds rate for the next three or four years (with the extra observation added in the second half of the year). We draw a straight line between those points to interpolate quarterly readings.

Second, participants report their view of the long-run nominal federal funds rate, which we assume is first achieved five years after the year the Fed first starts raising rates.² In January 2012, for instance, the median participant expected the funds rate to be pinned to its zero lower bound (ZLB) for that year and the next. We plug the value of the long-run funds rate into 2019, five full years after the expected onset of rate rises in 2014. With the Fed, in the event, raising rates for the first time in 2015, we put the long-run response from the March 2016 SEP in 2021.

Third, the long-run value is assumed to prevail once it is achieved. That rules out interesting business-cycle dynamics, such as policy overshooting or recession-fighting next decade, but finessing a forecast in that fashion for a period so far removed stretches credulity.

As is evident, the policymaking class of 2012 expected that they would be raising rates now more aggressively than the current central banking contingent. But be careful about characterizing one as hawks and the other as doves. Those quicker hikes thought appropriate from the perch of 2012 followed a lengthy pause, and the pause matters for pricing, too.

We can construct the expectations component of Treasury yields if the Fed had complete credibility by taking forward-looking averages of the SEP path (as listed in the chart as assumption four). For example, the expected three-year rate at the beginning of 2012 embedded approximately three years of Fed inaction. One calculated today weighs in gradual policy actions that bring the funds rate close to its (lower) terminal value of 3–1/4 percent.

The two solid lines in the bottom left panel construct the expectations component in Treasury yields for the first and the most recent SEP, putting complete faith in those paths being achieved. Because the Fed moved from expecting action to actually tightening rates, the expectation curve shifted up 50 to 200 basis points. Getting past the "on-hold" period importantly raises short-to-intermediate maturity yields more than longer-term ones. That is, as the Fed enters more deeply into tightening terrain, the expectations curve flattens.

This is especially evident in the dashed line tracking the effects of the passage of time should the SEP reported in September 2016 be identical to the one from this March. Pulling the trigger on one tightening by then and placing greater weight on faster tightening in 2017 and 2018 will push up the expectation of yields 10 to 50 basis points.

What Else Drives Yields?

The six panels of the next chart compare the expectations components to actual Treasury yields across six maturities using the 18 SEP observations that are currently available. The solid lines plot Treasury yields at the end of the week of the FOMC meeting and the dashed lines give the present value of the SEP path consistent with each maturity. Each inset provides a measure of the goodness of fit from regressions of the level of actual yields on the expectations component (the top line) and of changes in those variables (the bottom line).

Three points stand out.

First, the Fed matters. At least some of the shift up in the yield curve in the past two years owes to action and guidance, as the expectations component rose as much as 150 basis points at intermediate maturities. Across the regressions reported, there is a strong positive association between actual yields and their expectations component.

² The logic is that most macro models level out to long-run values after that long a stretch.
Second, the expectations component twists the term structure, as over this period the Fed moved into a tightening regime even as it sequentially scaled back the expected extent of its tightening. The chart below shows the extent to which the Fed shrank the commanding heights of its guidance. The dots trace out FOMC participants’ views on the nominal fed funds rate expected to prevail in the long run from the last SEP available over the five years guidance has been provided. The median of those responses (the dashed line) fell one percentage point over this period, from 4-1/4 to 3-1/4 percent. More strikingly, 18 of 19 FOMC participants at the end of 2012 believed that the long-run anchor to their policy was higher than the view of the current median participant. Fed guidance varies most for intermediate yields because those maturity windows capture more of the expected act of tightening than shorter-term yields and less of the permanent plateau to rates embodied in longer-term yields. This property is reflected in the higher correlations registered in the two-to-five-year segment, which leads to the investment implication that intermediate maturities are the best neighborhood to express a view on Fed action.

The chart provides the responses from the December meeting. The count was 19 out of 19 in the first dot plot of January 2012.
Third, the Fed is not all that matters, as evident in the time-varying wedge between the actual yield and its Fed expectations counterpart. The association between yields and the guidance component veered off track in 2014 in a manner reflective of some combination of investor disbelief in Fed assurances that tightening was imminent and declines in term premiums. As for the possibility of a drop in term premiums, the Fed’s other major policy initiative works in the opposite direction, in that 2014 was the year of the “taper,” or the scaling back and ultimate cessation (in October) of net purchases of fixed-income securities. While it might not have been the Fed, there is scope for effect from other central banks. Both the European Central Bank (ECB) and the Bank of Japan (BoJ) stepped up their accommodation, and, as shown in the chart below, ten-year yields on government securities in the Euro area and Japan were about halved that year. Global investors stretching for yield may well have moved more into US Treasuries. Indeed, a widely followed statistical model of the US yield curve produced by the Federal Reserve Bank of New York estimates that the term premium, plotted as the dashed line, accounts for the wedge opening at the ten-year maturity.

Yields on government securities (%)

What Might Happen?

While there is a surprising amount of content in the dots, we believe it is a stretch to assert that the Fed has complete credibility. One consequence is that an unidentifiable portion of the time-varying gap between actual yields and policy guidance owes to a failure to communicate. Even if this is hard to quantify, thinking about the ways the Fed can go wrong helps to identify five distinct scenarios for the economy, some with starkly different investment implications.
The decision tree below begins with the question fundamental to the process: Is the Fed credible? If so, then Treasury yields are pricing below Fed guidance, turning term premiums negative. This may evidence heightened risk aversion of investors or official presence in the Treasury market. In either case, favoring Treasuries implies that other asset classes—including fixed-income instruments with credit risk, equities, and foreign currencies—are relatively disfavored. Complete credibility also means that the coming tightening is completely cooked into market prices. Delivering on a believed promise, therefore, should not be stressful, and the Treasury yield curve flattens as we walk further into tightening terrain.

Arguing the case that the Fed is not credible begs the questions as to why, the alternative limb of the tree. As one possibility, market participants might believe that the Fed’s guidance is appropriate to return the economy to full employment and stabilize inflation at 2 percent but doubt the willingness of a dovish policy committee to execute the plan. That is, the Eurodollar rate futures curve currently tracks below the dots because the Fed is anticipated to fall behind its own correctly expressed appropriate policy path. Tarrying in tightening allows inflation to overshoot 2 percent, inflation compensation rises, and the Fed ultimately has to tighten sufficiently to create enough slack to get back to goal. Firming more later to compensate for insufficient action now would test the resilience of markets as the yield curve steepens (on the recognition of the pick-up in inflation) and then flattens or even inverts (on remedial action from the Fed). None of this is good for credit or equity valuations.

The decision tree begins with the question fundamental to the process: Is the Fed credible?

**Five Distinct Scenarios for the Federal Reserve and the U.S. Economy**

- **Is The Fed Credible?**
  - **Yes**
    - Term premia are negative because of official intervention
  - **No**
    - Should not do as they say
    - Events stop the Fed
      - Recession
      - Disorderly dollar depreciation, credit tightening, and equity price decline associated with a return to the ZLB
      - The Fed realizes it is wrong
        - Secular stagnation compresses real returns and profits as the world muddles on at a lower rate of potential growth
    - Other financial conditions tighten
      - Orderly dollar appreciation, credit tightening, and equity price decline restrains growth to its potential

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For illustrative purposes only. Source: Standish as of May 31, 2016

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As another possibility, investors might believe the Fed’s mistake is to think it has to tighten as much as its current guidance. In that case, policy will track below the dots either because events stop the Fed or the Fed stops itself. As for the former, the logic runs that the global economy is too anemic to withstand moving the funds rate to 3-1/4 percent, and the attempt to do so triggers recession. The next step in that chain holds that panicked policy makers, seeing an equity market sell-off and wider credit spreads, reverse course, rejoining the ECB and BoJ in the rock-bottom-rate club.

A more nimble Fed might stop somewhere along the tightening track with the economy still north of recession if it sees other financial conditions firming sufficiently to compensate for further rate hikes. That is, as the Fed pulls its policy stance further away from the other major central banks, a combination of dollar appreciation, weak equity prices, and a crimp on credit restrains economic growth to its potential.

As a last possibility, if Chair Yellen and company accept the argument that secular stagnation prevails, we believe they will mark their guidance lower before making a mistake or being forced to by tighter financial conditions. Essentially, the downtrend in the terminal Fed funds rate extends and potential output growth is marked lower as well. The economy muddles through in an environment of compressed real returns, low profits, and low volatility.

The Bottom Line

While Federal Reserve officials have a plan, they also emphasize the data dependence of decisions made meeting by meeting. Assessing the likelihood of their success and the ways they may fail matters for portfolio choice today. As shown in the bottom line of the decision tree, if the Fed turns out to be correct now, it will generate little news relevant for asset prices in the future. A Fed failing in pursuit of either of its goals is a source of volatility and market strains. The Fed may be wrong now but flexible enough to adjust going forward, fostering a relatively orderly transition, though perhaps to a world of constrained possibilities.
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