Global Macro Strategy

Can the Fed drop its dots and extend the risk rally?

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Daniel Waldman
Strategist
daniel.waldman@ubs.com
+1-203-719 4281

Jeff Greenberg
Strategist
jeff.greenberg@ubs.com
+1-203-719 1751

Themos Fiotakis
Strategist
themos.fiotakis@ubs.com
+44-20-7567 7215

Yianos Kontopoulos
Strategist
yianos.kontopoulos@ubs.com
+44-20-7568 8924

Will the Fed support the risk rally?

We have previously argued that three major sources of uncertainty – the Fed, oil, and China – have weighed on risk assets. Evidence of easier policy out of China (and Europe) and a rebound in oil, driven in part by a weaker dollar, have provided relief to markets. Marginally more dovish Fed rhetoric and markets pricing out a March hike have likely helped the risk rally as well. From a starting point of depressed growth and inflation expectations in mid-February, equities and risk assets have recovered significantly. For the rally to extend, the Fed will need to chime in. It can take a modest step in this direction at its March meeting, by re-aligning the "dots" closer to market expectations.

Markets are currently significantly more dovish than the FOMC

Markets price one Fed hike this year, while the FOMC's December projections show expectations of four. This gap between market expectations and the Fed's own policy projections in the so-called "dot plot" has persisted since late-2014, and currently stands at very wide levels compared to history.

This gap is likely to narrow, but will persist…

With US labor market data remaining robust, it is unlikely that the FOMC dots will adjust all the way to market expectations. More likely, the median FOMC dot will fall to either two or three hikes for this year, leaving a gap versus market expectations.

…and keep volatility elevated

We show that this persistent gap has likely been a key source of market uncertainty and has helped keep volatility elevated for risky assets, and for markets more broadly, during the past year. Disagreement between the Fed and markets has resulted in tighter financial conditions both before and after the first Fed hike, and weighed on risky assets.

How to position if the Fed doesn't drop its dots enough

A shift in the median dot to two hikes this year would likely be marginally positive for risk assets. If the median dot were to fall to an expectation of three hikes this year, we would expect this to weigh on risk assets in the near term. Our preferred exposure to the risk rally has been via European bank credit ahead of the ECB, and DM equities more generally. We would protect these long risk positions through long US bond (5 or 10-year) positions, short US small caps versus US large caps, and long USD versus EM FX, commodity-producers in particular.

Gap between Fed and markets: a source of uncertainty

Investors may overlook the gap between the Fed and markets…

The gap between Fed and market pricing for monetary policy remains wide, with markets pricing just one hike in 2016 versus the median of FOMC dots showing four (Figure 1). It is often assumed that this has limited market implications, but we disagree. We show that the widening gap between Fed and market expectations for monetary policy has been an ongoing and key source of market uncertainty. It has raised volatility, strengthened the dollar, and negatively impacted risk assets.

…but it has been a key source of uncertainty.

Three major sources of uncertainty – the Fed, oil, and China – have been weighing on risk assets this year (link). Easier policy out of China (and the ECB) coupled with a rebound in oil, driven in part by a weaker dollar, have provided relief to markets. From a starting point of depressed growth and inflation expectations in mid-February, equities and risky assets have recovered significantly. However, for the rally to extend, we believe the FOMC will have to chime in at its March meeting.

What would it take for Fed to extend risk-on momentum?

Whether the Fed supports risk sentiment at the March meeting has little to do with policy *action* – virtually no one expects the FOMC to hike (or cut) – and everything to do with *communication*. The Fed's "dot plot" of rate projections is now the strongest policy signal the Fed sends, even if it's accompanied by a lot of noise.

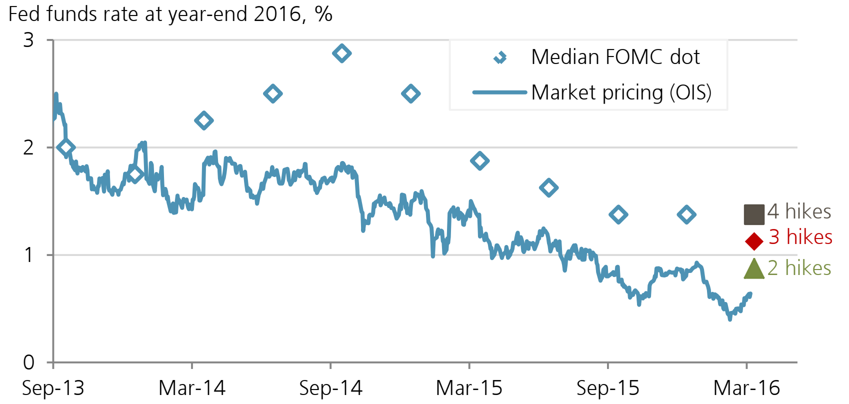
The FOMC may narrow the rates gap at its March meeting…

If the median FOMC rate projection remains at four hikes for 2016, this is a hawkish signal and would be negative for risk assets and positive for the USD vs. EM FX. If the Fed median dot falls by one, showing three rate hikes for 2016, this small adjustment would maintain a wide gap between FOMC projections and current market pricing, keeping market uncertainty high, likely leading to weakness in risk assets. The impact on EUR/USD would be important, as the recent widening in rate differentials in favour of the US has not been accompanied by a fall in EUR/USD. If the dollar were to show less responsiveness to higher US rates, the feedback effect to tighter US financial conditions and weaker US equities may not be as large as seen previously.

…but we doubt the gap can be closed all the way.

A reduction in the median to two hikes in 2016 would represent a dovish signal, and would likely be marginally positive for risk assets (Figure 1). In Box 1, we construct a measure of the Fed-market gap and show how the Fed effectively tightened financial conditions well before it first hiked rates – and continues to tighten *without* hikes.

Figure 1: Even if the Fed removes two 2016 hikes, a gap to markets will remain



Source: Haver Analytics, Bloomberg, Federal Reserve, UBS calculations

Box 1: Constructing a measure of Fed-market disagreement

We seek a way to quantify the Fed-markets gap…

Quantifying the gap between Fed and market pricing is non-trivial. At any given time, each FOMC participant has several dots, representing projections for the appropriate Fed Funds rate at the end of the current year, two to three following years, and the longer run. To quantify the gaps between these measures that can be tracked over time, we start with these two types of time series: the median of FOMC participants' dots, and market pricing of policy rates in OIS curves (for all years since the "dot plot" began in 2012). In Figure 2, we show the evolution of dots and market pricing for end-2014, 2015, and 2016 Fed Funds rate.

…and do this by constructing a unique time series…

We then create our own series, where each point incorporates three discrete, end-of-year projections (weighted by the inverse of the time until the projected date, thereby assigning greater weight to nearer term forecasts). Each September when the FOMC lengthens its forecast horizon (e.g., including 2018 as of Sept 2015), we omit the current-year projection and include the later year. We then represent both the Fed and OIS series as pace of hikes per quarter.

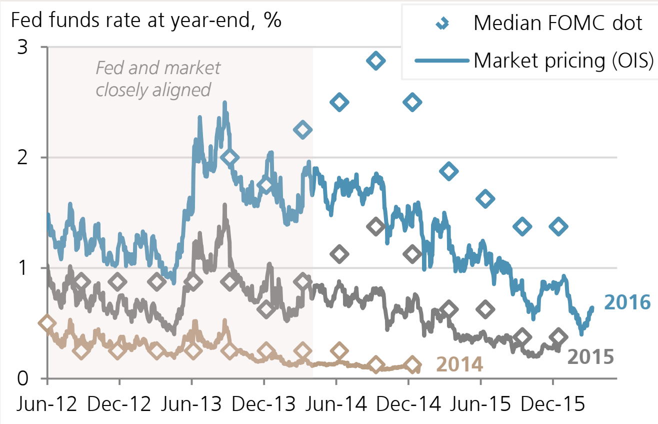
Our series overcomes the limitations of the Fed's forecast being done quarterly and for fixed date (e.g., "end-2015") and enables us to show the Fed-market disagreement as a daily time series (Figure 3) and measure the extent to which the Fed projects a faster (+) or slower (-) pace of tightening than the market. To our knowledge, these data have not previously been represented this way.

…to assess the impact of this uncertainty on financial conditions.

The Fed and markets were very well-aligned from 2011 until mid-2014. In late-2014, significant gaps started to emerge. At that time, FOMC participants revised up projections for the pace of rate hikes expected in 2015 and 2016, but the market did not follow (Figure 2). Then, shortly after concluding QE purchases, the FOMC eliminated the reference that it would be a "considerable time" before rate hikes commenced, effectively ending the era of forward guidance.

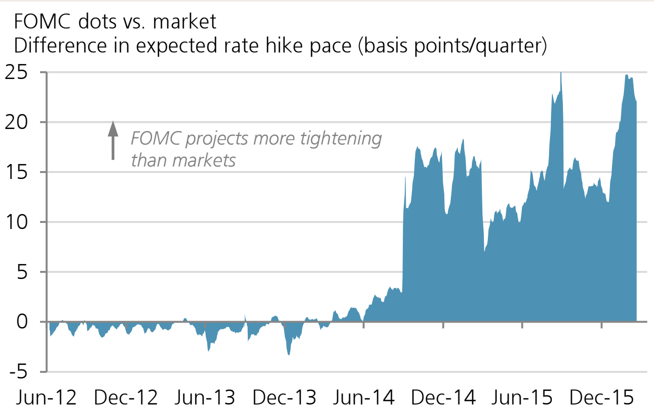
In the absence of guidance, investors have been left to rely on incoming data, Fed speaker comments, and the dot plot. Our measure of disagreement between the Fed dots and market pricing helps illustrate the market consequences of less guidance, as well as the challenges of easing financial conditions with the Fed's current communication strategy.

Figure 2: Wide gap between market and Fed projections



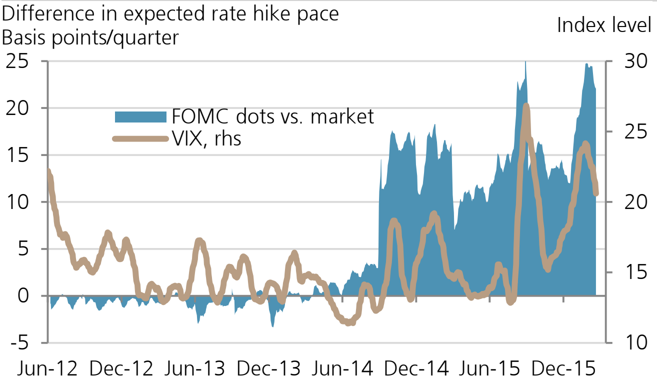
Source: Haver Analytics, Bloomberg, Federal Reserve, UBS calculations

Figure 3: Our constructed series of the Fed-markets gap



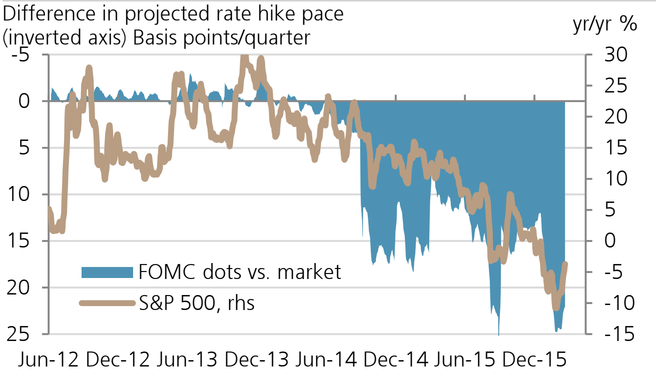
Source: Haver Analytics, Bloomberg, Federal Reserve, UBS calculations

Figure 4: End of forward guidance = higher volatility…



Source: Haver Analytics, Bloomberg, Federal Reserve, UBS calculations

Figure 5: and weaker risk market performance



Source: Haver Analytics, Bloomberg, Federal Reserve, UBS calculations

Disagreement = higher volatility and weaker risk asset performance

Is greater Fed uncertainty and higher volatility a coincidence?

In Figure 4, we show the relationship between our constructed time series of market-Fed disagreement and equity market volatility. Volatility has increased significantly since late 2014, very much in line with rise in disagreement between markets and the Fed. After averaging 14 in both 2013 and 2014, the VIX averaged 16.5 in 2015, and more than 20 so far in 2016. The MOVE index, which measures volatility in the US bond market, averaged 71 in 2013 and 61 in 2014, rising sharply to an average of 80 in 2015.

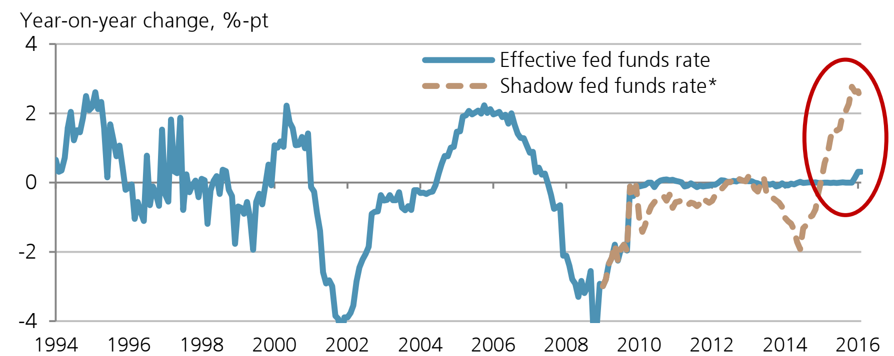
Equity market returns show a similar relationship, with strong performance when Fed guidance suppressed volatility, followed by weakness as Fed uncertainty and volatility increased (Figure 5).

Of course, one needs to be cautious in these assessments. The Fed's forward guidance policy was not the only factor boosting equity performance in 2013 and 2014, and the rise in Fed uncertainty has not been the only driver of higher volatility and risk assets weakness more recently. There is always the possibility of a third factor, i.e. the fact that there are late cycle dynamics at play, which elevates volatility and disagreement between markets and Fed policy.

Fed guidance tightened financial conditions long before the first rate hike.

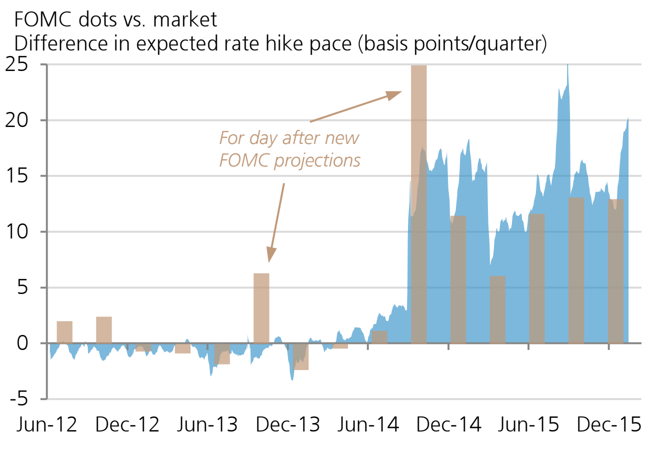
Nonetheless, the conspicuous pickup in volatility did coincide with the divergence of Fed guidance and market pricing. This supports the case that the Fed has at least contributed to volatile market outcomes and tighter financial conditions. Other metrics support the intuition, too. For instance, the Wu-Xia shadow Fed Funds rate shows a tighter Fed policy stance from mid-2014 onward (Figure 6).

Figure 6: The Fed hiked in December 2015, but tightening began in mid-2014



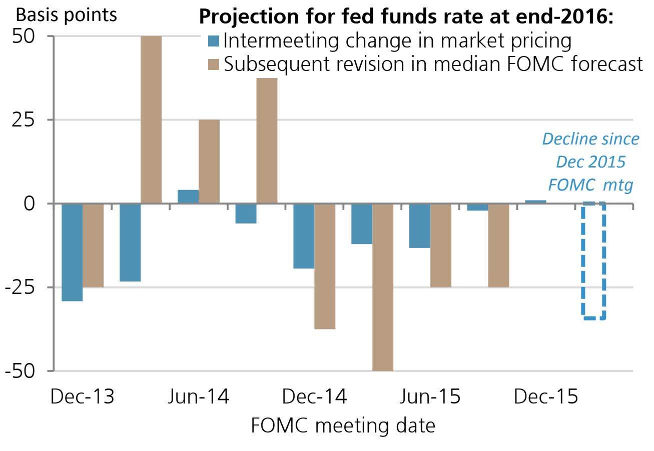
Source: Federal Reserve, Wu and Xia (2015), UBS *Policy stance at lower bound, shown as annual change.

Figure 7: Even measured quarterly, uncertainty has risen



Source: Haver Analytics, Bloomberg, Federal Reserve, UBS calculations

Figure 8: How markets moved vs. how the Fed moved



Source: Haver Analytics, Bloomberg, Federal Reserve, UBS calculations

Where markets go, Fed dots tend to follow

A reasonable question prompted by our metric is that it is being driven by mismatched frequencies. Market expectations are measured daily, yet the Fed dots only change in the Fed's *Summary of Economic Projections*, which are released quarterly. We would make two points in response.

First, Figure 7 shows our measure of Fed/market disagreement on a quarterly basis, measured the day after FOMC meetings in which the dots were published. This eliminates the issue of frequency mismatches, as Fed forecasts are just as fresh as market pricing in this series. Second, the current situation is a good illustration that although the mismatched frequency matters, it isn't fully determinative.

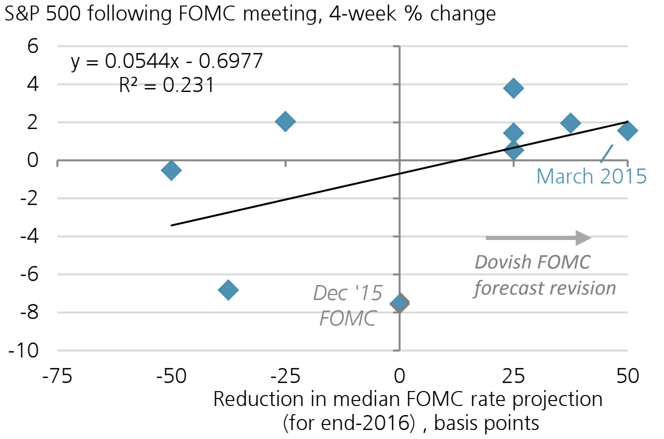
The current gap between markets and the Fed is quite wide, with markets pricing one hike this year versus four hikes in the FOMC dots. This is partly a result of the FOMC dots having not been updated since its December meeting, and the dots are very likely to come down at the March meeting. However, although it is widely expected that the dots will decline at the March meeting, it is not always certain by how much they will do so, and this keeps uncertainty elevated.

Figure 8 illustrates this, comparing historical changes in market pricing for the FOMC between meetings that contain the Fed dots versus what actually happened in the next revision of the dots. Although the dots have tended to converge in the direction of markets, the magnitude of this change has often been different.

How much do the March dots matter for markets?

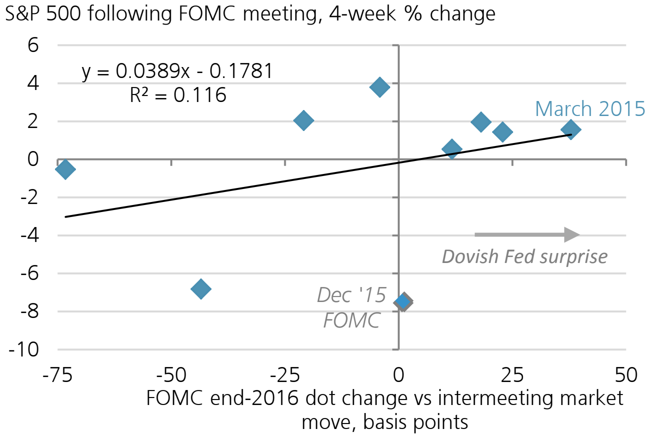
Although the median of the dots is likely to come down at the March FOMC meeting, it is highly unlikely to converge all the way to market pricing of just one hike. However, that does not necessarily mean that risk markets will suffer. Figures 9 and 10 show historically there has been a positive relationship between the dots falling and equity market performance in the following weeks. This is consistent with our recent work showing that monetary easing (QE, specifically) has a positive and lasting impact on risk assets (link).

Figure 9: Equities tend to rally after the dots drop…



Source: Haver Analytics, Bloomberg, Federal Reserve, UBS calculations

Figure 10: …but expectations of the drop matter, too



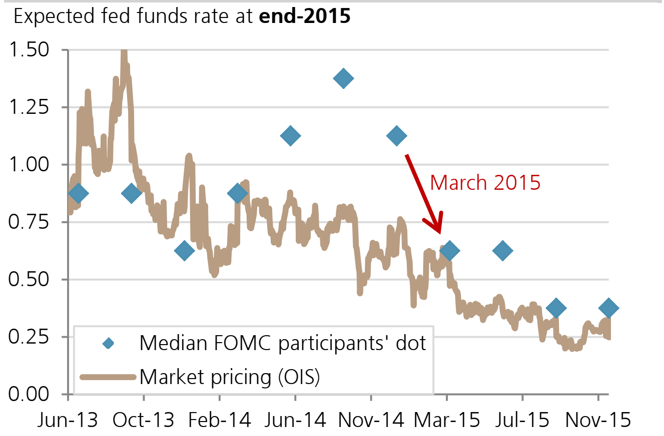
Source: Haver Analytics, Bloomberg, Federal Reserve, UBS calculations

March 2015 case study: In many ways the circumstances of the March 2015 FOMC meeting are similar to March 2016: in December 2014, the FOMC expected four rate hikes in the following year, just as they did in December 2015. In early 2015, financial markets were volatile and the dollar strengthened rapidly. Then, in March 2015, the FOMC dropped two rate cuts from its forecast and realigned the FOMC projections with the market expectations of two hikes (Figure 11). This prompted equities to rally (Figures 9 and 10), since the FOMC revisions put the brakes on the rapid USD rally that began in mid-2014 (Figure 12).

There are a number of key differences between March 2015 and 2016. First, at that time, rate hikes had not yet commenced; now the Fed is in tightening mode. Next, the dollar has been softer recently. Third, FOMC participants could reasonably cut two hikes from their forecasts to re-align with the market back in March 2015, but this time we see it as highly unlikely that the FOMC forecast can drop to the one hike that's priced.

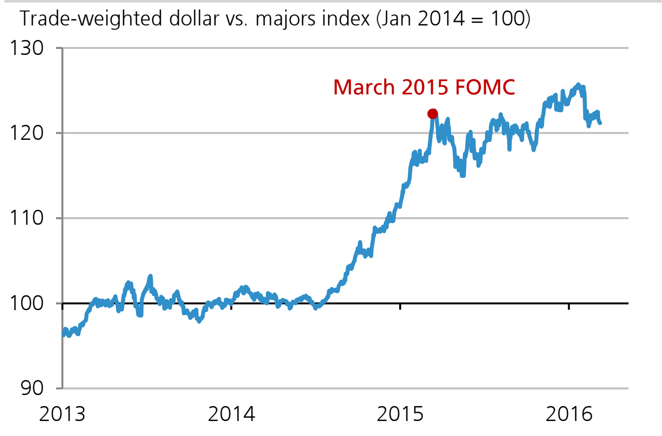
So, how much will the dots need to fall to in March 2016? This is difficult to answer, as there is no clear measure of market pricing for how much the dots are expected to fall, and markets have likely gotten ahead of the decline. Although the equity rally of the past couple weeks has likely been driven mostly by the stabilization in oil prices and China, it probably reflects some easing in monetary policy expectations as well. We consider scenarios on the following page.

Figure 11: The Fed dots dropped enough in 2015…



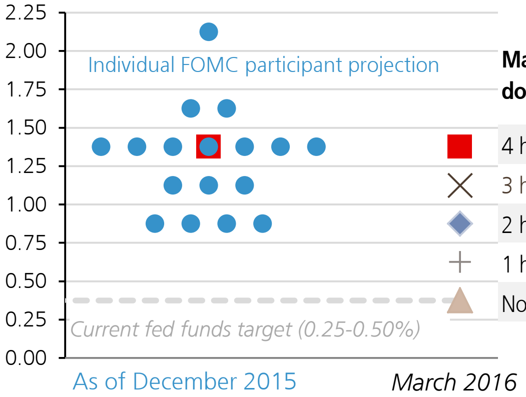
Source: Federal Reserve, Bloomberg, UBS

Figure 12: …and this put a cap on the rapid USD rally



Source: Federal Reserve, Haver Analytics, UBS

Figure 13: How much will the dots fall in March, and will this help risk markets?



March median dot for 2016	vs. Dec 2015 (hikes)	Gap to current market, bp	Next "live" meeting	Signal	Market
4 hikes	=	74	April	Very hawkish	Bearish
3 hikes	-1	49	June	Hawkish	Neutral/Bearish
2 hikes	-2	24	June/Sept	More dovish	Neutral/Bullish
1 hike	-3	-2	Sept/Dec	Very dovish	Bullish
No hikes	-4	-27	Dec or later	"	"

Source: Haver Analytics, Bloomberg, Federal Reserve, UBS calculations

- **Median dot remains at 4 hikes in 2016.** This hawkish outcome is unlikely, but possible. If the FOMC doesn't hike at the March meeting, projections would include an expected hike at a non-press conference meeting.

- **Median dot falls to 3 hikes in 2016.** This is one of the two most likely scenarios, though, to the extent that markets may be expecting something more dovish, this would be negative for risk assets.

- **Median dot falls to 2 hikes in 2016.** This is the most dovish of the plausible outcomes, and could be market-supportive since it represents a mild return to forward guidance. Two rate hikes would be consistent with our US economists baseline forecast for 2016 (see "FOMC – the pause that refreshes").

- **Median dot falls to 1 hike or no hikes in 2016.** This would be bullish and would realign the Fed and markets, but is extremely unlikely, and unlikely to be consistent with the likely revisions in the FOMC's economic projections.

The gap may narrow, but how narrow will be enough?

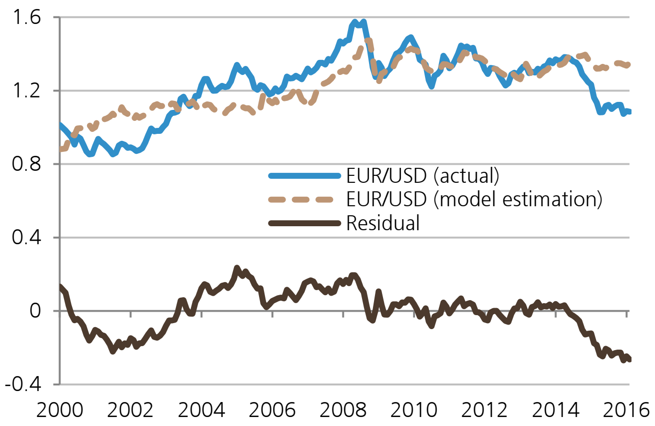
Bottom line: The median of FOMC participants' dots should fall at the March meeting, but as they have done for the past 18 months, projections are likely to retain some optionality for monetary policy. This means the gap versus markets would persist. As we show for scenarios in Figure 6, absent a drop to one hike, a gap will remain to current market pricing. Even if the dots don't converge completely to market expectations, if the decline is enough (median of 2 hikes this year), it may still provide some relief for markets.

Feedback loops, however, may limit market upside. If a more dovish Fed causes a sustained risk rally, that risk rally would likely feedback to a more hawkish Fed in the near term, which would undo some of the rationale for the market rally.

Have the dots been impacting FX?

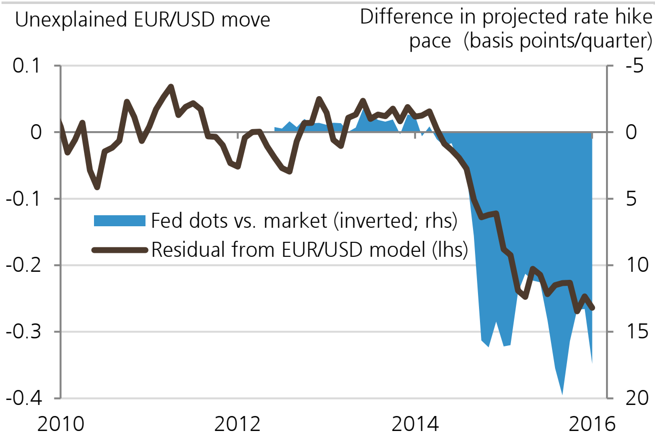
So far, we have focused on the impact of the gap between markets and Fed rhetoric on volatility and risk markets, equities in particular. But the impact may be wider than that, extending to FX as well. To look at this, we first estimate a model for EUR/USD, with the following explanatory variables: 2-year rate differentials, CPI, and unit labor costs. Not surprisingly, this model has a relatively high r-squared of 0.57 (Figure 14, next page).

Figure 14: EUR/USD fell far more than implied…



Source: Bloomberg, Haver Analytics, UBS calculations

Figure 15: …and our measure helps explain the shortfall



Source: Bloomberg, Haver Analytics, UBS calculations

The residuals from such a regression are interesting, and show that EUR/USD has significantly underperformed—based on the explanatory variables, it should currently be closer to 1.20 than 1.10. We then take the residuals from the regression, and regress that that on the dots-disagreement series. Notably, this regression has an r-squared of 0.82.

Figure 15 shows the residuals from our simple OLS model of EUR/USD versus our dots-disagreement series. From 2012-2014, the comparison suggests Fed forward guidance kept the dollar weaker than it would have been otherwise. More recently, it suggests that the dollar has over-performed what rate differentials imply, and this over-performance is related to, and has possibly been driven by the Fed's hawkish rhetoric. Without the Fed's hawkish guidance, our work suggests that EUR/USD would be closer to 1.20.

How to trade ongoing Fed-market disagreement

It's harder for the Fed to deliver dovish surprises.

Our assessment of the Fed communication-market dynamics suggests that it is increasingly challenging for the FOMC to provide dovish surprises.[1] The end of forward guidance allows for wider rifts between Fed policy intentions and market expectations. As long as the Fed intends to deliver more hikes than priced, communication may sound relatively hawkish to get markets positioned for hikes.

If the FOMC fails to deliver dovishness in March, we would expect some selected near-term USD strength. We see limited downside to EUR/USD from "policy divergence" (see Global FX Atlas), and instead prefer long USD positions vs. JPY and EM. Commodity EM in particular seems most at risk of reversing.

We are comfortable being long US duration at these levels, and should the Fed surprise hawkishly, we would expect to see more flattening of the 2s10s curve. From our Top Trades 2016, we also would expect long large-cap vs. short small-cap to perform well, especially if risk aversion adds pressure to credit markets.

[1] The FOMC recognizes the various challenges of its communication strategy, too. The minutes to the January FOMC meeting mentioned that alternative strategies for communicating its rates path were under consideration. In response to the paper presented at the recent US Monetary Policy Forum, Fed Governor Powell provided a list of dot plots challenges: (1) not linked to individual forecasts of other economic variables; (2) no distinction between voter/non-voter; (3) hard to infer reaction functions; (4) three months between revisions; (5) at times, signals conflicting with FOMC press release. Powell still considers dot plot informative and said "on balance, [it] is helpful to market participants and hence to the Committee."

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