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The dovish FOMC bias increases the probability for QE3

- In a historic US monetary policy shift at its January meeting, the Fed has made a major step towards greater transparency, trying to shape market interest-rate expectations.
- The Fed's conditional commitment to keep fed funds rates at exceptionally low levels was extended from "at least through mid-2013" to "at least through late 2014".
- The FOMC participants' rate projections gave a less dovish picture than the FOMC statement, with the median participant expecting a fed funds rate of about 0.75% at the end of 2014.
- According to our estimates, the Fed would begin tightening its policy at the end of 2013 or at the beginning of 2014 under its forecasts, if it responded to the economic conditions in the same way that it did in the past.
- Given our forecasts for a below-trend growth about 2.0% in 2012, we believe that the Fed will move to a further round of about \$600bn of Treasury and MBS purchases towards the middle of 2012. We expect the first rate hike in mid-2014, with a year-end target of about 0.75%.

Overview

In a historic US monetary policy shift, the FOMC announced for the first time its policy objectives and fed funds rate forecasts at its January 24-25 meeting, including an explicit goal on the inflation rate in the long run. The Fed has made a major step towards greater transparency, in an effort to shape market interest-rate expectations. In particular, the FOMC released committee participants' assessments of the appropriate timing of policy firming, while providing policymakers' specific projections for the appropriate federal funds rate over the next few years and in the longer run. The Fed's conditional commitment to keep fed funds rates at exceptionally low levels was extended from "at least through mid-2013"

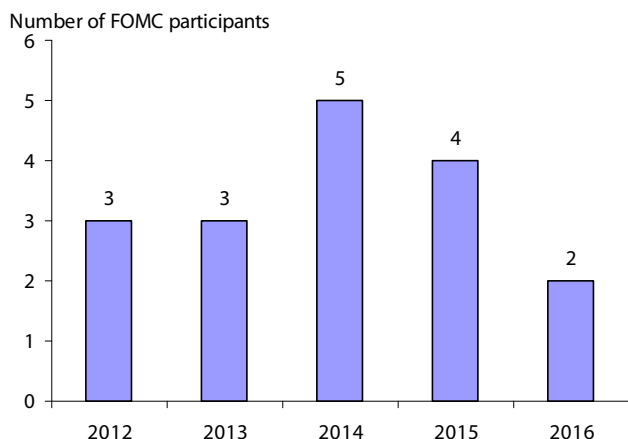
to "at least through late 2014", providing a more dovish tone than market participants had previously thought.

Participants' rate projections: less dovish than the statement

The FOMC participants' projections of the first rate hike were distributed quite evenly between 2012 and 2016, revealing a high degree of dispersion. Three members are expecting a rate increase already in 2012, three in 2013, five in 2014, four in 2015 and two in 2016 (Figure 1). Hence, the individual rate projections gave a less dovish picture than the FOMC statement, with the latter signaling a somewhat later start to the tightening cycle. Should we take into account both the FOMC statement and the FOMC participants' assessments, "exceptionally low rates" does not necessarily mean unchanged

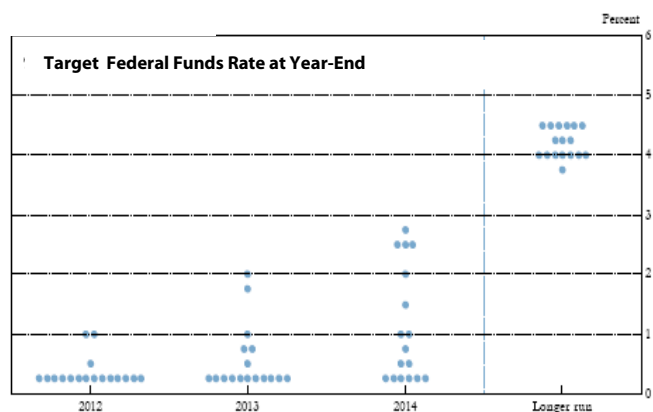
rates, given that 11 out of 17 members expect a higher fed funds rate than the current rate in late 2014 (Figure 2). In addition, should we estimate the “central tendency” FOMC projections of the fed funds rate, excluding the three highest and the three lowest projections, we find that the median FOMC participant expects a fed funds rate of about 0.75% at the end of 2014.

Figure 1: Appropriate Timing of Policy Firming



Source: Federal Reserve

Figure 2: Appropriate Pace of Policy Firming



Source: Federal Reserve

In his press conference, Chairman Bernanke commented on the difference between the FOMC statement and the participants' forecasts, arguing that the forward guidance, i.e. the FOMC policy statement, should be given priority over the reported projections. It seems that the FOMC voters as a group have a more dovish bias than the participants, given that the hawks usually come from the Federal Reserve Bank Presidents, only some of whom actually vote in any given year. Regarding the voting rights from the Federal Reserve Bank Presidents in 2012, the three hawkish dissents who had previously voted against easing (Narayana Kocherlakota, Charles Plosser and Richard Fisher) are no longer voters and were replaced by only one hawk, Jeffrey Lacker, who

dissented¹, and three more centrist/dovish voters (Sandra Pianalto, John Williams and Dennis Lockhart). As a result, the Fed members' estimates for the fed funds rate reveal a more hawkish bias among non-voters.

Table 1: Economic Projections of Federal Reserve Board Members and Federal Reserve Bank Presidents, January 2012

	Central Tendency*			
	2012	2013	2014	Longer
Change in real GDP	2.2 - 2.7	2.8 - 3.2	3.3 - 4.0	2.3 - 2.6
November forecast	(2.5-2.9)	(3.0-3.5)	(3.0-3.9)	(2.4-2.7)
Unemployment rate	8.2 - 8.5	7.4 - 8.1	6.7 - 7.6	5.2 - 6.0
November forecast	(8.5-8.7)	(7.8-8.2)	(6.8-7.7)	(5.2-6.0)
PCE inflation	1.4 - 1.8	1.4 - 2.0	1.6 - 2.0	2.0
November forecast	(1.4-2.0)	(1.5-2.0)	(1.5-2.0)	(1.7-2.0)
Core PCE inflation	1.5 - 1.8	1.5 - 2.0	1.6 - 2.0	
November forecast	(1.5-2.0)	(1.4-2.0)	(1.5-2.0)	
Fed Funds Rate	0.00 - 0.25	0.00 - 0.75	0.00 - 2.50	4.00 - 4.50

*The central tendency excludes the three highest and three lower projections for each variable in each year.

Source: Federal Reserve, Eurobank EFG Research

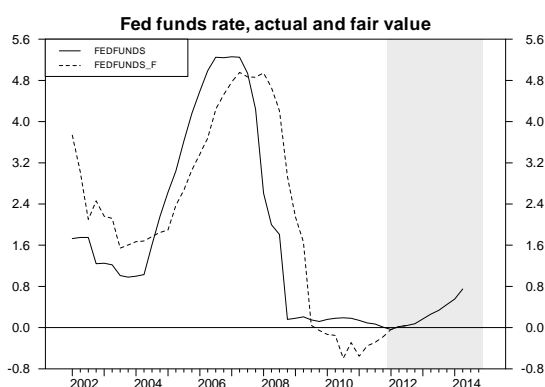
Fed's economic outlook: optimistic relative to its dovish signal to stay on hold through late 2014

Although the dovish tone of the FOMC statement and extension of the forward guidance was accompanied by a more downbeat assessment of the US economic outlook over the next couple of years (compared to the committee's November projections), Fed's growth forecast was revised down by only 0.25% for 2012 and 2013 (2012: 2.2-2.7% from 2.5-2.9%, 2013: 2.8-3.2% from 3.0-3.5%), and was actually revised higher by about 0.2% for 2014 (Table 1). It is worth noting that the consensus real GDP forecast currently stands at 2.4% for 2013, 0.6% higher than the midpoint of the FOMC's "central tendency" forecast, suggesting a relatively optimistic outlook for its dovish signal to stay on hold for longer than most expected. In addition, the Fed announced a new explicit longer-run target for personal consumption expenditures price index (PCE) at 2%, slightly higher than the previous longer-run projection of 1.75-2% that was part of the November economic projections, but not stated as explicit goal. The dovish tone was expanded in the inflation outlook by removing the ever-present sentence that "the Committee will continue to pay close

¹ Jeffrey M. Lacker was the only FOMC voter who preferred to omit the description of the time period over which economic conditions are likely to warrant exceptionally low levels of the federal funds rate.

attention to the evolution of inflation and inflation expectations". We believe that the removal of this sentence is a signal that the Fed will not be largely concerned about fluctuations in current inflation readings above its target, as low rates of capital and labor utilization will exert downward pressure on wages, costs, and prices, preventing a sustained rise in personal consumption expenditures price inflation.

Figure 3: Fed Funds rate implied by EFG Taylor Rule, using the midpoint of the Fed's central tendency forecasts



Source: Eurobank EFG model estimates

A much earlier tightening of monetary policy, if the Fed responded to the economic conditions in the same way that it did in the past

Trying to assess the appropriate timing of policy firming if the Fed responded to the economic conditions in the same way that it did historically, we find that the conditional commitment to keep rates exceptionally low through late 2014 implies a more dovish stance by the Fed, compared to its reaction function in the past. In particular, in order to estimate the path of the fed funds rate, we use a Taylor rule estimated with labor market tightness² (standardized) and core PCE inflation over the period 1987:Q1-2011:Q4. Given that the Fed is relatively slow in responding to changes in inflation and labor market conditions, i.e. the Fed smooths interest rates, our Taylor rule includes the federal funds rates three periods earlier (interest rate smoothing). Using the midpoint of the Fed's "central tendency" forecasts³, Figure 3 shows that the Fed would likely begin tightening its policy at the end of 2013 or at the beginning of 2014 under its forecasts, with the federal funds rate increasing to 0.75-1.00% at the end of 2014. This is actually the median rate that the FOMC participants currently project for the end of 2014. However, the dovish FOMC

statement is committing to keep rates near the record low of 0-0.25% through the end of 2014. As the market participants took into account the Fed's dovish stance, expectations of the fed funds rate for the end of 2014 were revised down from about 0.80% before the January meeting to about 0.65%.

QE3 is a likely outcome towards the middle of 2012

In the FOMC statement, the committee highlighted that it continues Operation Twist by the middle of 2012 and renewed its promise to review its balance sheet policy as appropriate. Based on Chairman Bernanke's explicit remarks, there is a great chance for the Fed to announce a third round of quantitative easing (QE3) so as to expand further its balance sheet, should the US economy evolve with a modest recovery and a slow improvement on employment. In such a case, renewed asset purchases is the major tool FOMC members have repeatedly highlighted, as it could help inflate away some public and private sector debt and, therefore, aid the deleveraging process. Bernanke's expressed concern about the housing market likely means that a considerable part of any additional asset purchases would be in agency mortgage-backed securities (MBS). To sum up, the FOMC dovish rhetoric suggests the committee wants to keep monetary policy very stimulative for the following three years unless the economy performs substantially better than the Fed projects, i.e. there is a surprising improvement in labor market conditions or a sudden surge in consumer inflation. Given our forecasts for a below-trend growth in the US of about 2.0% in 2012, we believe that the Fed will move to a further round of \$500-750bn of long-term Treasury and MBS purchases towards the middle of 2012 that the Operation Twist will be completed. We expect the first rate hike in mid-2014, with a year-end target of about 0.75%.

² Labor market tightness is the product of the unemployment rate and the median duration of unemployment.

³ See Table 1.

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