September 2017

Fed Thoughts:

Known Unknowns

by Vincent Reinhart
Chief Economist

No drama attends the policy action announced at the conclusion of the meeting of the Federal Open Market Committee (FOMC) to be held on September 19th to 20th. Fed officials laid down a long set of rails to the terminus—the announcement of the start of the slowing of their reinvestments of maturing and prepaying securities. A gradual journey thereafter will trim their $4-1/2 trillion balance sheet. Where it ends—both as to the date and the ultimate portfolio adjustment—is unknown now because it depends on the evolution of the economy and financial markets in between.

Fed staff released studies, FOMC participants put markers down in the statement and minutes about acting "relatively soon," and virtually every official near a microphone assured of the appropriateness of the plan. When those agreeing span the range of Governor Brainard and Bank President Mester, with Chair Yellen and President Dudley in the middle, be confident that the congregation clusters in the same pew of the chapel. President Dudley of the New York Fed probably said this the most clearly, holding that "Not only is this shift in policy now widely anticipated, but we have also seen that the impact on the level of the long-term interest rate has been small as expectations have adjusted." Of course, the effect of quantitative easing is hard to quantify both coming and going but we think that the Bank president is right. Markets have healed since the crisis, investors are much less averse to risk, and the size of the Fed's portfolio has shrunk relative to nominal GDP and total debt outstanding.

This almost painful process of step-by-step explanation and reinforcement must have been one of the lessons learnt from the "taper tantrum" of 2013. When officials make public only an intention without specific details, market participants tend to fill in the blanks with their worst-case fears. There is a real risk that the European Central Bank (ECB) relearns this lesson in 2017. ECB President Mario Draghi is putting off public discussion of a looming necessity of reducing net purchases as they run out of assets to buy. Investors' reaction to the unknown may well repeat the recoiling in risk aversion of 2013 on another continent.

The outcome of the FOMC meeting that is more in play is their communication of future interest-rate intent. Revisions to real GDP in the first half and near-term assurance of further momentum, importantly owing to ongoing easy financial conditions, provide no reason to move their forecast of spending growth. Five months of disappointing inflation data, however, likely weigh on their inflation forecast. This probably nudges the path of the appropriate policy rate lower. If the "dots" sink some, will this be enough to take out the median guidance about one more quarter-point hike in 2017?

Investors apparently think so, as the probability of a hike by December implied by interest-rate futures rests at about 30 percent. This trimming of tightening expectations probably owes to three themes running through market conversation. First, wicked weather dislocations are in store that will make it difficult to discern underlying trends. Second, the economic data have been strong enough to suggest momentum in real GDP over the rest of the year but soft of market expectations about nominal activity. And third, a flattening yield curve sends a warning signal of slowing real GDP growth, a signal that some Fed officials may heed. A look back to the closest recent precedent, 2005, cautions that these doubts about the Fed's firming resolve may be overdone.

Four category 5 hurricanes hit the territorial US in 2005, most infamously including Katrina. Three of the four make the top ten list of death and dislocations associated with US storms this century.[1] The year also marked a turn in national policy, as post Katrina's landfall, more of the economic costs associated with hurricanes have been borne by the federal government.

The Cost of Hurricanes in the 2000's

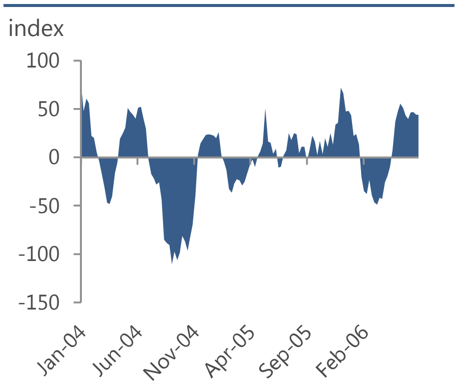
2015 dollars

Year	Storm	Federal Spending	Economic Damage
2005	Katrina	110.2	147.4
2012	Sandy	53.9	69.9
2008	Ike	12.3	33.7
2005	Rita	8.7	22.4
2005	Wilma	6.2	22.4
2011	Irene	4.3	15.5
2008	Gustav	4	6.7
2004	Ivan	3.9	25.8
2004	Jeanne	3.3	9.8
2004	Frances	2.8	12.3

Source: Congressional Budget Office 9/3/17.

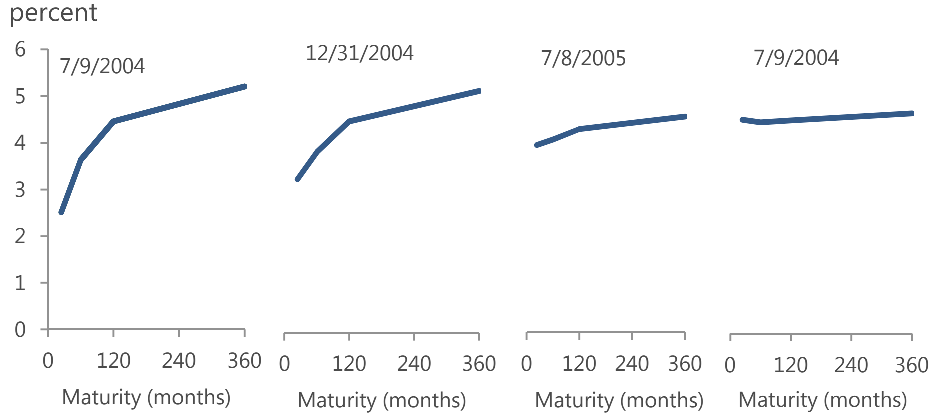
Meanwhile, economic data had earlier proved disappointing and by midyear were only fair to middling, at least as judged by the Citigroup Economic Surprise Index. Economists had been factoring in a slowing in activity associated with the onset of

Economic Data Surprises



Source: Citigroup, via Bloomberg as of 9/11/2017.

Nominal Treasury Yield Curve



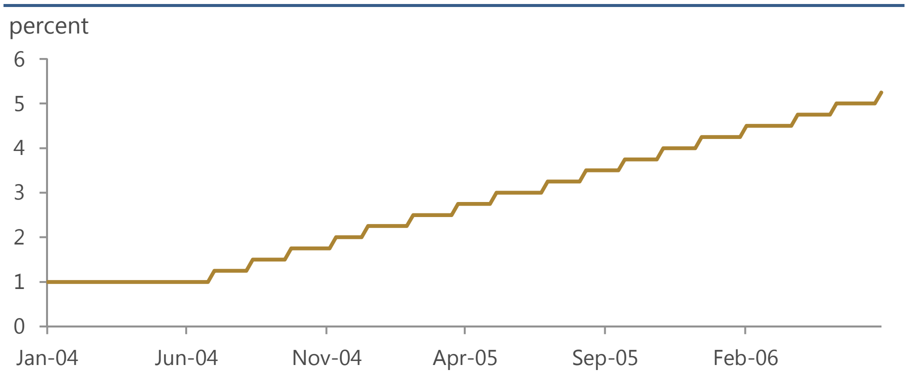
Source: Federal Reserve, via Bloomberg as of 9/11/2017

Fed tightening in the middle of the previous year as well as ongoing dollar appreciation. Over the course of 2005, longer-term nominal Treasury yields softened, flattening the yield curve and spawning a cottage industry of reports on the relationship of the term structure slope and business cycle turning points.

In the event, neither snow or rain nor heat nor gloom of night kept Fed officials from their appointed rounds of tightening monetary policy throughout. Alan Greenspan's FOMC hiked the target fed funds one-quarter percentage point at each of its eight regularly scheduled meetings. An important motivation for those central bankers was the desire to provide some cushion above what then seemed like an unusually low funds rate after their brush with unwelcome disinflation in the prior two years. The urgency to act was amplified, if not expressed publicly, by the desire to get the job done in the waning days of the chairman's term, clearing the deck for Greenspan's successor. Policy renormalization overrode data dependence.

Running the calendar forward, remember that this generation of officials, while espousing data dependence, have been willing to tighten this year even as data have proven disappointing out of the similar desire to renormalize the stance of policy. And as with their predecessors, they probably also fixate on a calendar date, February 3, 2018, when Janet Yellen's term as chair expires. If the string of inflation surprises turns around, as in the Standish forecast, they may well be willing to look past hurricane effects once again. We think the market odds on action in

Federal Fund Rate Target



Source: Federal Reserve, via Bloomberg as of 9/11/2017.

1 A useful summary of thirty years of Atlantic hurricanes is available here. The fourth hurricane that did not make the list was Emily, which mostly tracked through the Caribbean and took landfall on the US territory of Puerto Rico.

December are inverted—that they really are in the neighborhood of a three-of-five change of a 25-basis-point hike.

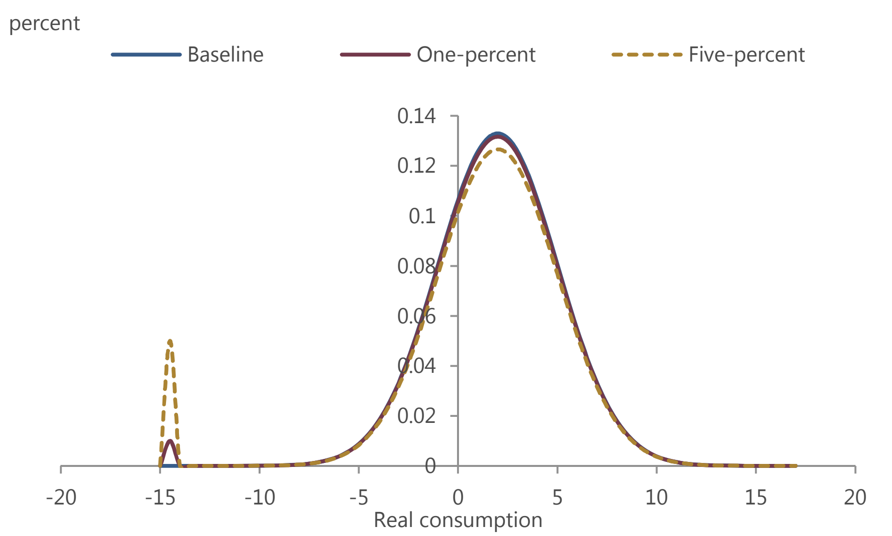
Part of the reason Treasury yields have fallen over the past few months, we think, owes to the inappropriate trimming of Fed expectations. But another part owes to a different manmade threat to the world order. Sabre rattling on the Korean Peninsula has increased the weight put on the disturbingly adverse outcome of direct conflict involving North and South Korea that embitters the relationship between their sponsors, China and the US. The economic theory of rare disaster risk has progressed considerably owing to the work of Harvard University's Robert Barro. The idea is conveyed in the figure, which plots various possible distributions of real consumption. We are familiar with pricing risk assets for possibilities in the smooth center of the distribution. Geopolitical tensions create the remote possibility of a disaster in which consumption is slashed, seen as the hump in the far left tail.

Three points to note.

First, a rise in disaster risk, from zero to 1 percent to 5 percent in the figure, shifts the core of the distribution almost imperceptibly, making it difficult to discern in the real-time volatility of asset prices. Second, the experience of the Great Recession tells them what correlation among market yields to expect: When output falls a lot, nominal, real, and break-even inflation rates on safe-haven Treasury securities fall and other spreads to them widen. Third, risk-averse investors, especially those more directly in harm's way along the Asian Pacific Rim, will want to insure against that adverse event by taking advantage of those correlations.

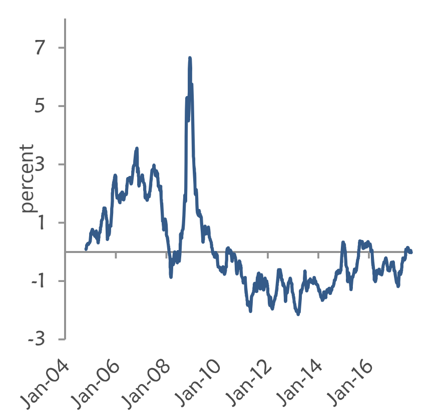
We think what we have seen of late is the market manifestation of heightened geopolitical tensions. We claim no edge into the mind of Kim Jong-un, but knowing that there is an unknowable helps to make better sense of current asset prices. Nominal, real, and break-even Treasury rates are lower than the cyclical position of the economy warrants because that acyclical and atypical risk intrudes. As inflation reasserts itself and the Fed tightens more than currently expected, cyclical pressures will reshape yields. However, unless there is a material change in the geopolitical situation, those movements will be around levels embodying disaster-risk premiums and discounts.

Distribution of Outcomes with Disaster Risk

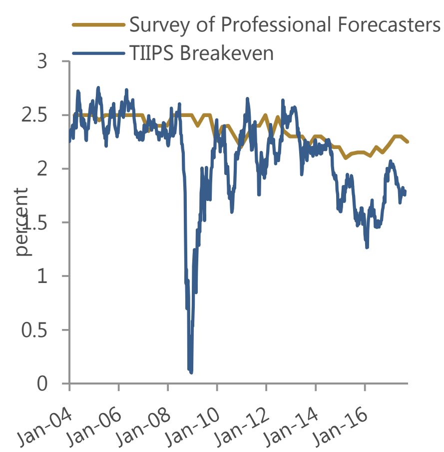


Source: Standish as of 9/11/2017

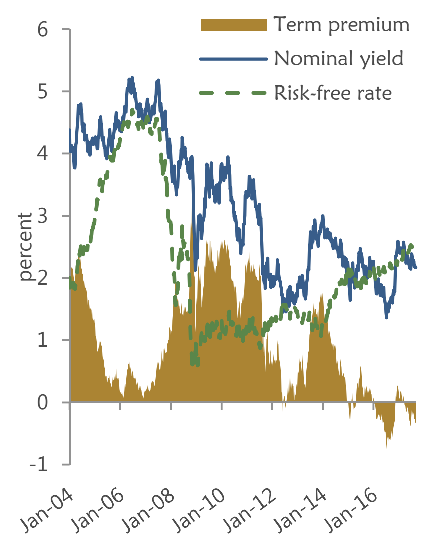
Two-year Treasury Indexed Yield



Ten-year Inflation Compensation



Ten year Treasury Yields



Source: Federal Reserve via Bloomberg as of 9/11/2017

STANDISH
A BNY MELLON COMPANY℠

Standish Mellon Asset Management Company LLC
Boston • Pittsburgh • San Francisco

Standish Mellon Asset Management (UK) Limited
London

www.standish.com • info@standish.com

This commentary is provided for general information only and should not be construed as investment advice or a recommendation. You should consult with Standish to determine whether any particular investment strategy is appropriate. These views are current as of the date of this communication and are subject to change as economic and market conditions dictate. Though these views may be informed by information from publicly available sources that we believe to be accurate, we can make no representation as to the accuracy of such sources nor the completeness of such information. Please contact Standish for current information about our views of the economy and the markets. Portfolio composition is subject to change, and past performance is no indication of future performance.

BNY Mellon is one of the world's leading asset management organizations, encompassing BNY Mellon's affiliated investment management firms, wealth management services and global distribution companies. BNY Mellon is the corporate brand for The Bank of New York Mellon Corporation. Standish is a registered investment adviser and BNY Mellon subsidiary. WP/Sept2017/9-13-17/BR