MPAP Agenda October 20, 2017

Monetary Policy Advisory Panel Luncheon Meeting Agenda

Monetary Policy Normalization Amid Easing Financial Conditions

Background

Since this Panel last met in March, the economy has continued to expand slightly above its potential rate and overall labor market conditions generally strengthened further, despite the negative impact of major hurricanes. By contrast, inflation has slowed since the spring, leaving it further below the Federal Reserve's longer-run objective.¹

The growth outlook for the second half of the year remains relatively strong. The FRBNY staff nowcast projects real GDP growth of 1.7 percent for Q3 and 2.9 percent for Q4 (see Figure 1). According to the October Blue Chip Economic Indicators, the consensus of private forecasts has economic growth in the second half averaging about 2.5 percent. The median of the GDP growth projections of FOMC participants in the September Summary of Economic Projections (SEP) increased to 2.4 percent for 2017, well above the median projection for longer-run growth of 1.8 percent, while for 2018-19 it remained around 2 percent (see Figure 2). The inflation outlook continues to be subdued: both the consensus of private forecasts and the median of FOMC participants' projections for the current year are lower than they were in March, although inflation is still expected to reach 2 percent by 2019.

Measures of consumers' and businesses' confidence have remained at levels well above those that prevailed prior to the November election (see Figure 3). Equity market indexes have continued to trend upward throughout the year, and other indicators suggest that broader financial conditions have eased further in the recent months, with longer-term Treasury yields remaining relatively low, credit spreads narrowing modestly, and the trade-weighted dollar declining (see Figure 4).

The FOMC meanwhile has continued its gradual process of policy normalization. At the June FOMC meeting the Committee raised the target range for the federal funds rate to 1 to 1¹/₄ percent.

¹ For a more detailed review of economic developments, see the Research Staff's "<u>U.S. Economy in a Snapshot</u>", October 2017.

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At the September meeting it decided to begin to implement its plan to reduce the Federal Reserve's security holdings in October.²

The easing of financial conditions occurring as monetary policy accommodation is being reduced is somewhat reminiscent of the "Greenspan's Conundrum," or former Chair Alan Greenspan's observation in his February 2005 testimony to Congress that long-term interest rates had trended lower even as the FOMC had raised the level of the target federal funds rate by 150 basis points since June 2004. Recent research has shown that since 2000 long- and short-term nominal Treasury yields have often moved in opposite directions (see Figure 5). This finding raises potential issues about the monetary transmission mechanism as it suggests that broader financial conditions may not be in accord with the monetary policy stance, which could then weaken the impact of policy on the economy.

Finally, the normalization plan for the Fed's balance sheet has been thoroughly communicated and the reduction of the SOMA portfolio will be very gradual; consequently, the reaction of financial markets has been subdued so far. Nevertheless, some uncertainty surrounds the reaction of financial markets to the reduction of the size of the Fed's balance sheet over the next few years (see Figure 6).

At this meeting we would like you to share your views on some of the issues that policymakers need to confront in the current environment.

Discussion Issues

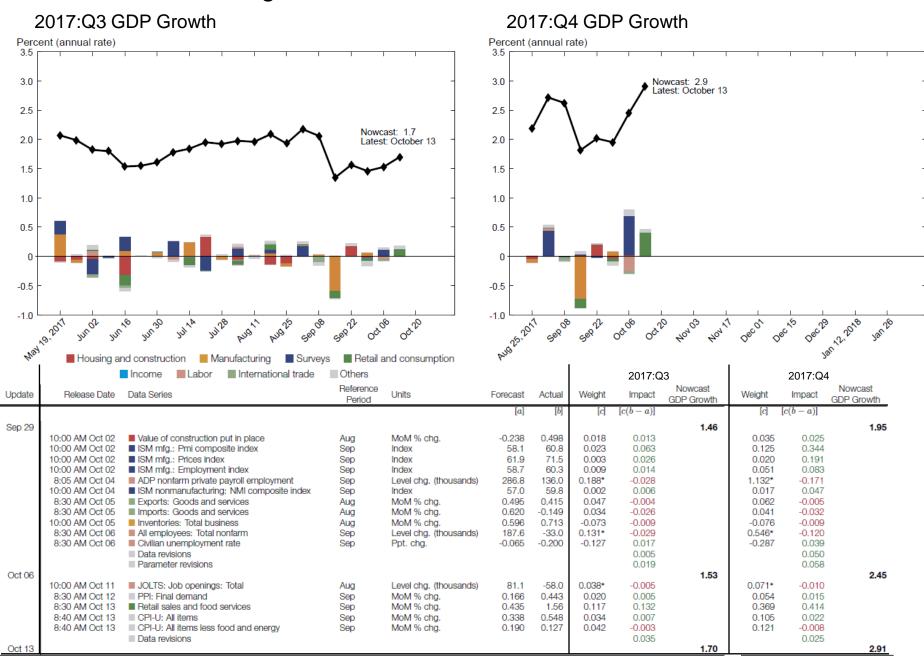
- Several factors appear to have put downward pressure on long-term yields, such as the global saving glut, slow productivity growth, and increased demand for safe and liquid assets, contributing to a weaker relationship between longer-term yields and short-term rates. How should monetary policy take these effects into account?
- In thinking about the Federal Reserve's balance sheet as normalization begins, how should interest rate policy factor in the potential reaction of financial markets to the reduction of the Federal Reserve's securities holdings?
- How should monetary policy account for the combination of below-objective inflation and easing financial conditions amid a tightening of the policy stance?

² See the <u>September FOMC statement</u>. The plan is described in the <u>June 2017 Addendum to the Policy Normalization Principles and Plans</u>. Details of the plan implementation are in the <u>Implementation Note</u> issued separately on September 20, 2017.

³ Hanson, Samuel G., David O. Lucca and Jonathan H. Wright, 2017. "<u>Interest Rate Conundrums in the Twenty-First Century</u>," New York Fed Staff Report n.810.

⁴ This <u>speech</u> by New York Fed President Dudley discusses the importance of financial conditions in conducting monetary policy as well as changing relationship between policy rates and financial conditions.

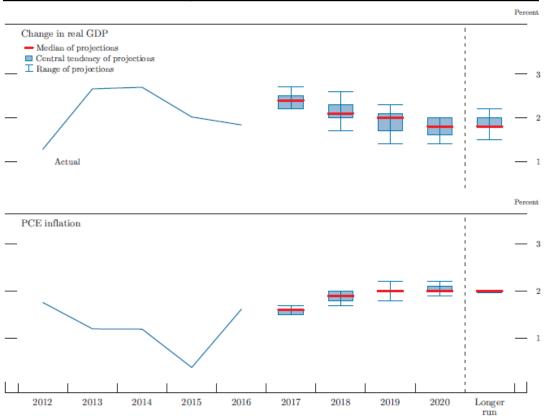
Figure 1 - New York Fed Staff Nowcast*



^{*}updated every Friday at 11:15 a.m. here

Figure 2 – Summary of Economic Projections (SEP)

	Median					
Variable	2017	2018	2019	2020	Longer run	
Change in real GDP: Sept.	2.4	2.1	2.0	1.8	1.8	
March projection	2.1	2.1	1.9	n.a.	n.a.	
Unemployment Rate: Sept.	4.3	4.1	4.1	4.2	4.6	
March projection	4.5	4.5	4.5	n.a.	4.7	
PCE inflation: Sept.	1.6	1.9	2.0	2.0	2.0	
March projection	1.9	2.0	2.0	n.a.	n.a.	
Core PCE inflation: Sept.	1.5	1.9	2.0	2.0	n.a.	
March projection	1.9	2.0	2.0	n.a.	n.a.	

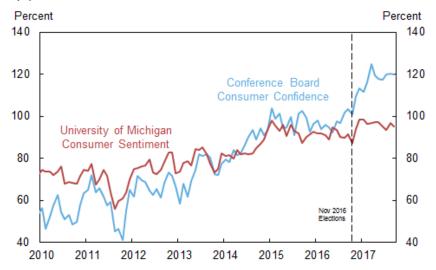


Source: Summary of Economic Projections, March and September 2017

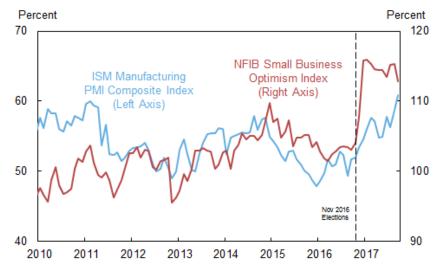
Figure 3 – Consumer and Business Confidence Measures

(a) Consumer Confidence Measures

Source: University of Michigan, Conference Board



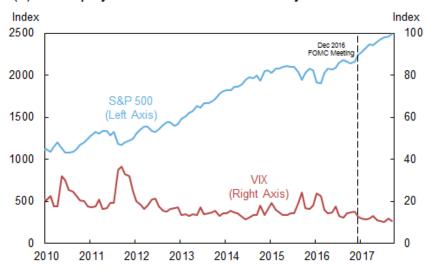
(b) Business Confidence Measures



Source: University of Michigan, Conference Board

Figure 4 – Financial Conditions

(a) US Equity Market Index and Volatility



Source: Standard & Poor's via Haver Analytics

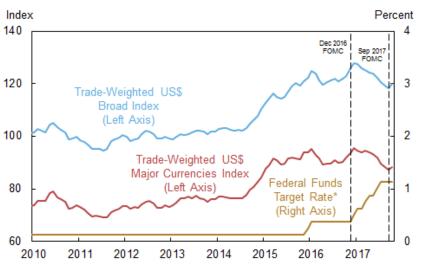
Figure 4 – Financial Conditions (cont.)†

(b) Long-Term Treasury Yields



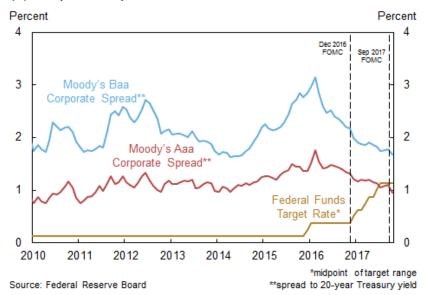
Source: Federal Reserve Board *midpoint oftarget range

(d) Exchange Rate

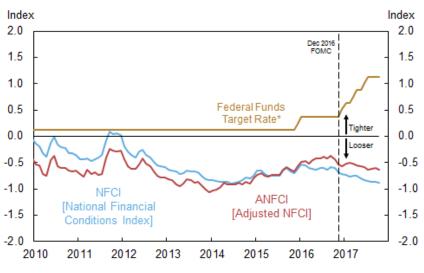


*midpoint of target range

(c) Corporate Spreads



(e) Chicago Fed National Financial Conditions Index



Source: Federal Reserve Bank of Chicago *midpoint of target range

Source: Federal Reserve Board

Figure 5 – Bond Yield Conundrums

Regression
$$y_{t+h}^{10} - y_t^{10} = \alpha_h + \beta_h (y_{t+h}^1 - y_t^1) + \epsilon_{t,t+h}$$

- $-y_t^n$ is the n-year rate at t
- Sensitivity is β_h where $h = \{\text{day, month, ...,year}\}$

Results

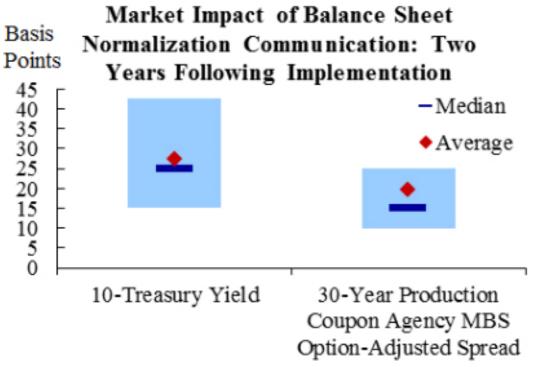
 β_h from 10y zero coupon yield/IC regression on 1y rate

	(1) Nominal	(2) Nominal	(3) Real	$^{(4)}$ IC	• [(1), (2)
Daily	0.56*** [0.02]	0.85*** [0.03]	0.53*** [0.03]	0.33*** [0.02]	• [(1)]: Si
Monthly	0.46***	0.64***	0.38***	0.28***	
Quarterly	0.48***	0.42***	0.21**	0.25^* [0.13]	• [(2)]: β – Post-2
Semi-annual	0.50*** [0.04]	0.31*** [0.07]	0.19** [0.08]	0.15 $[0.10]$	6/12-
Yearly	0.56*** [0.05]	0.18*** [0.04]	0.12** [0.06]	0.09* [0.05]	• [(3),(4)
Sample	1971-1999	2000-2015	2000-2015	2000-2015	real yie

- [(1), (2)]: More excess sensitivity (β_{day}) post-2000
- [(1)]: Similar β_h similar across h pre-2000
- [(2)]: β_h drops at lower frequency post-2000
 - Post-2000 conundrums (10y and 1y move opposite over 6/12-months) are much more frequent
- [(3),(4)]: Much of the drop in post-2000 β_h in the real yield but IC drops too

Source: Hanson, Lucca, Wright, "Interest Rate Conundrums in the Twenty-First Century," 2017

Figure 6 – Expectations of Market Participants



Source: Survey of Primary Dealers and Survey of Market Participants, July 2017.

Note: The light blue bars represent the middle 50% of responses.

Source: Potter, Simon, October 11, 2017 speech