## Monetary Policy Advisory Panel Luncheon Meeting Agenda

## A 2016 redux, or a turning point?

By many measures, the U.S. economy is solid. Payroll employment continued to post strong gains in January, and despite a recent rise, unemployment remains below most estimates of its longer-run normal rate. Although official estimates of GDP for 2018Q4 are not yet available,<sup>1</sup> most projections put 2018(Q4/Q4) real GDP growth at around 3 percent. At the same time, inflation has moderated since mid-year and now appears to have been running slightly below 2 percent.

However, beginning in mid-September a combination of some softer U.S. economic data (particularly in housing), a marked slowdown in foreign economies (notably China), ongoing trade tensions between the U.S. and China as well as other geopolitical instability led to a deterioration of consumer and business sentiment (see Figure 2) and a significant shift in financial markets. From then through the end of the year, credit spreads widened, equity indexes fell and volatility increased (see Figure 3).

With this backdrop, even though the policy actions and communications surrounding the December FOMC meeting were largely anticipated by markets, they were perceived as a sign that policymakers were not sufficiently attuned to the evolving environment. Hence, despite subsequent communications indicating that policy was more flexible than such perceptions,<sup>2</sup> financial markets' turbulence lingered with sizable declines in risk asset prices by year-end.

At its January meeting, with the reading of the U.S. economy somewhat complicated by a limited data flow due to the partial government shutdown, the FOMC communicated more explicitly that its policy approach would be flexible and data dependent. It also stated that taking into account recent global economic and financial developments and muted inflation pressure, it could be more patient in determining policy adjustments. The communications prior to and at the meeting,

<sup>&</sup>lt;sup>1</sup> Figure 1 shows the latest NY Fed Staff Nowcast (interactive version <u>here</u>). A summary of recent assessment of economic conditions is in the February NY Fed Staff's "<u>U.S. Economy in a Snapshot</u>".

<sup>&</sup>lt;sup>2</sup> See John Williams' <u>CNBC interview</u> of December 21, 2018

appear to have somewhat calmed markets,<sup>3</sup> but financial conditions remain tighter than they were in September.

The current situation bears similarities to the turbulence of financial markets during the summer of 2015 through early 2016. That turbulence as well appears to have originated at least partly from concerns about the U.S. and global outlooks, and featured widening of credit spreads, fall of long-term yields, decline in risk asset prices and increased volatility (see shaded areas in Figures 2 and 3). Meanwhile business sentiment declined, especially for manufacturers. Even though the median projections of the federal funds rate in the December 2015 SEP were consistent with the funds rate increasing 100bps over 2016, the FOMC would not raise the policy rate again until December 2016.

A number of commentators now assess the economic slowdown of 2015-16 as a 'manufacturing recession' that didn't extend to the whole economy. One interpretation of financial developments during this period was that financial markets were alerting to that. How should we read these signals today?

### Related NYFed Staff Analyses

Our internal analyses show that market signals are relevant for both the point projection and the forecast distribution of GDP growth. While none of these analyses is thus far predicting doom, they suggest that the tightening of financial conditions since the fall may shave off 30 to 50 basis points from growth in 2019Q1.

In a DSGE model with financial frictions,<sup>4</sup> a tightening of financial conditions is captured by the widening of corporate credit spreads. The model allows one to interpret the source of widening spreads in terms of structural shocks, primarily: a credit risk shock, that reflects tightening of credit to firms and has a moderate impact on output growth; and a safety/liquidity shock that contracts both consumption and investment resulting in a more detrimental impact on growth (see Figure 4). Comparing the tightening of financial conditions in mid-2015 with that in the fall of 2018 reveals that the shocks behind the widening of spreads in both episodes have similar nature: the shock with the largest impact on the spreads is the one of a relatively benign nature (see Figure 5).

<sup>&</sup>lt;sup>3</sup> Note that the <u>December SEP</u> shows that FOMC participants had at that time already lowered their expected path for the federal funds rate target.

<sup>&</sup>lt;sup>4</sup> Del Negro, Marco and Frank Shorfheide, "DSGE Model-Based Forecasting," in Graham Elliott and Allan Timmermann (eds.), Handbook of Economic Forecasting, Vol. 2, Elsevier, 2013.

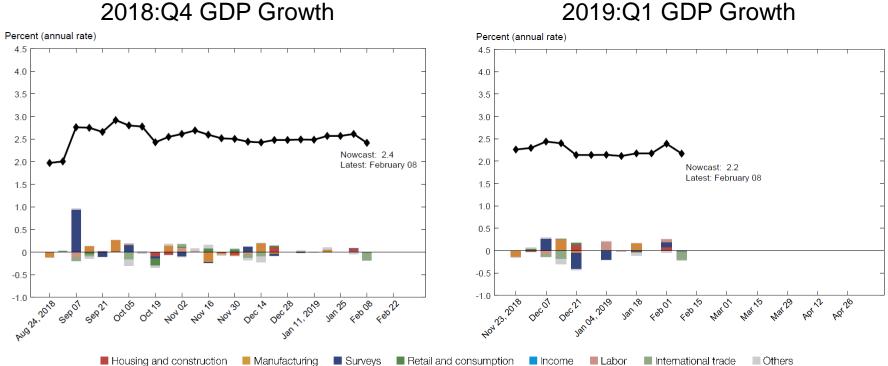
Other NY Fed staff research<sup>5</sup> has shown that a deterioration of financial conditions indicates increased downside risks to economic growth, as it lowers the left tail of the conditional distribution of GDP growth (see Figure 6).

### Discussion Items

- Does the recent financial markets turbulence signal a future significant downturn, or represent an "overreaction" to slower growth prospects?
- Do these developments represent 'crosscurrents' that could be addressed with a prudent policy that puts further tightening on hold in the near term, as was the case in 2016?
- What data are most important for detecting whether the economy is approaching a turning point? What role is the global slowdown playing, with the associated tightening of policy space abroad?

<sup>&</sup>lt;sup>5</sup> Adrian, Tobias, Nina Boyarchenko and Domenico Giannone, "Vulnerable Growth" <u>NY Fed Staff Report sr794</u>.

## Figure 1 – New York Fed Staff Nowcast



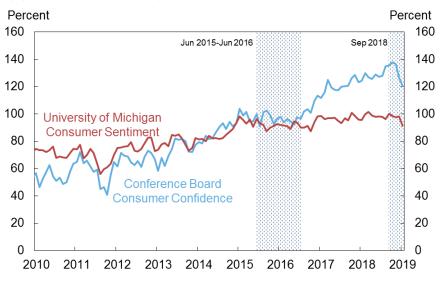
Housing and construction

Surveys Retail and consumption Income

Others International trade

							2018:Q4			2019:Q1		
Update	Release Date	Data Series	Reference Period	Units	Forecast	Actual	Weight	Impact	Nowcast GDP Growth	Weight	Impact	Nowcast GDP Growth
					[a]	[b]	[c]	[c(b - a)]		[c]	[c(b-a)]	
Jan 25									2.57			2.17
	8:05 AM Jan 30	ADP nonfarm private payroll employment	Jan	Level chg. (thousands)	198.4	213.0	0.072*	0.001		1.768*	0.026	
	10:00 AM Jan 31	New single family houses sold	Nov	MoM % chg.	3.01	16.9	0.005	0.066		0.005	0.063	
	8:30 AM Feb 01	Civilian unemployment rate	Jan	Ppt. chg.	-0.013	0.100	-0.095	-0.011		-0.324	-0.036	
	8:40 AM Feb 01	All employees: Total nonfarm	Jan	Level chg. (thousands)	155.9	304.0	0.069*	0.010		0.549*	0.081	
	10:00 AM Feb 01	ISM mfg.: Pmi composite index	Jan	Index	55.0	56.6	-0.000	-0.000		0.073	0.119	
	10:00 AM Feb 01	ISM mfg.: Prices index	Jan	Index	55.6	49.6	-0.000	0.000		0.009	-0.054	
	10:00 AM Feb 01	Merchant wholesalers: Inventories: Total	Nov	MoM % chg.	0.340	0.259	-0.064	0.005		-0.063	0.005	
	10:00 AM Feb 01	Value of construction put in place	Nov	MoM % chg.	0.248	0.792	0.012	0.006		0.019	0.010	
	10:00 AM Feb 01	ISM mfg.: Employment index	Jan	Index	54.3	55.5	0.006	0.006		0.037	0.042	
		Data revisions						-0.041			-0.042	
Feb 01									2.61			2.39
	10:00 AM Feb 05	ISM nonmanufacturing: NMI composite index	Jan	Index	57.8	56.7	0.000	-0.000		0.016	-0.018	
	8:30 AM Feb 06	Exports: Goods and services	Nov	MoM % chg.	1.04	-0.619	0.039	-0.065		0.043	-0.071	
	8:30 AM Feb 06	Imports: Goods and services	Nov	MoM % chg.	1.05	-2.88	0.031	-0.123		0.031	-0.120	
		Data revisions		0				-0.007			-0.011	
Feb 08									2.41			2.17
	8											

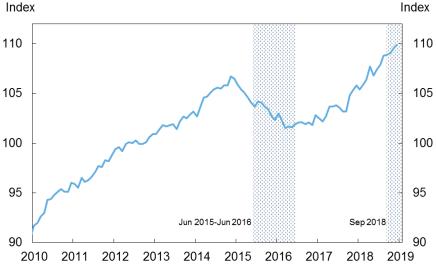
# Figure 2 – Consumer and Business Confidence Measures

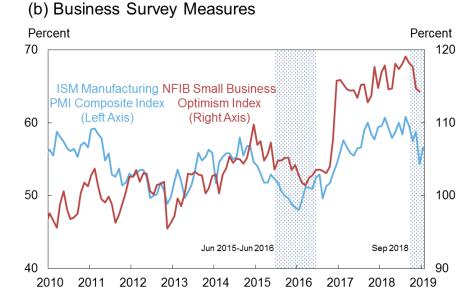


(a) Consumer Survey Measures

Source: University of Michigan, Conference Board

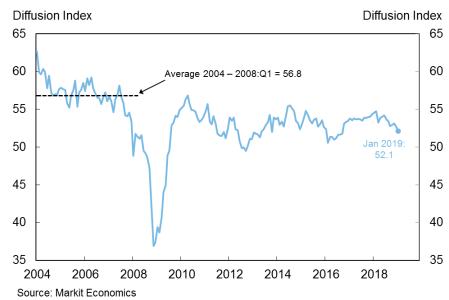
### (c) Industrial Production Index



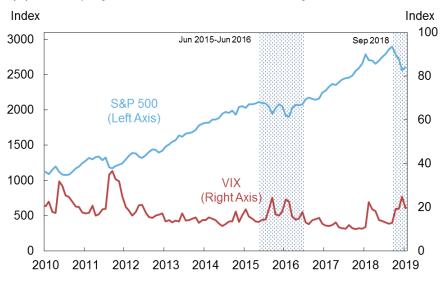


Source: Institute of Supply Management, National Federation of Independent Business

#### (d) Global Composite PMI



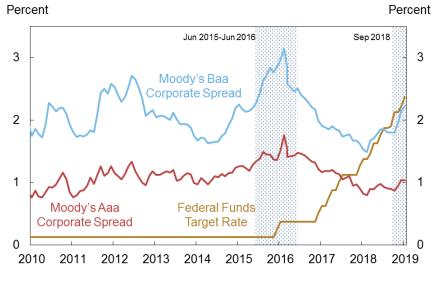
# Figure 3 – Financial Conditions

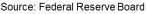


(a) US Equity Market Index and Volatility

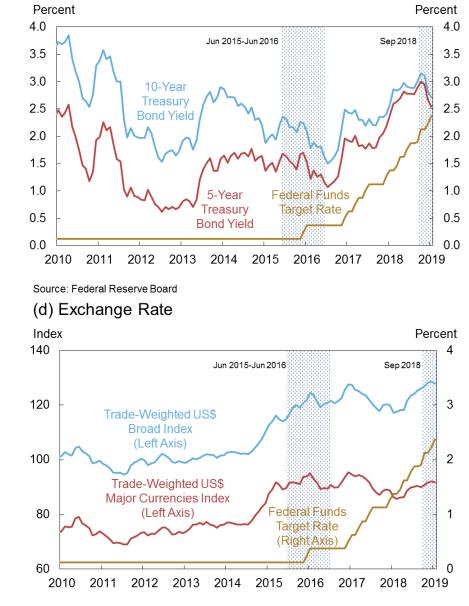
Source: Standard & Poor's via Haver Analytics

### (c) Corporate Spreads





(b) Long-Term Treasury Yields

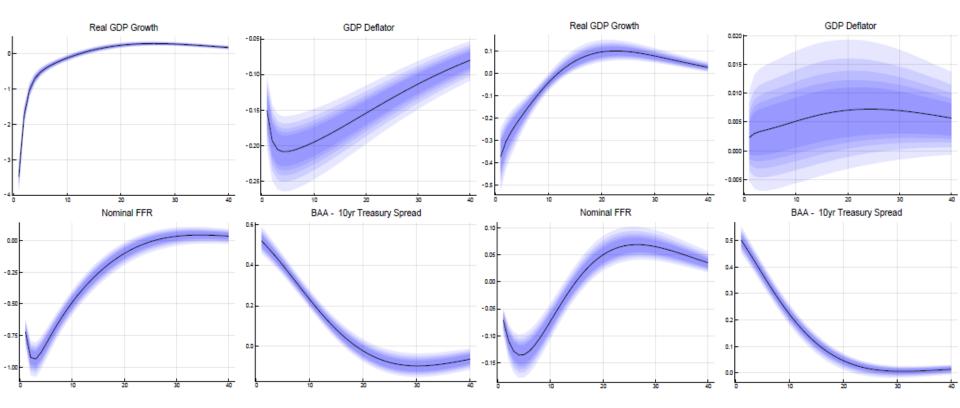


Source: Federal Reserve Board

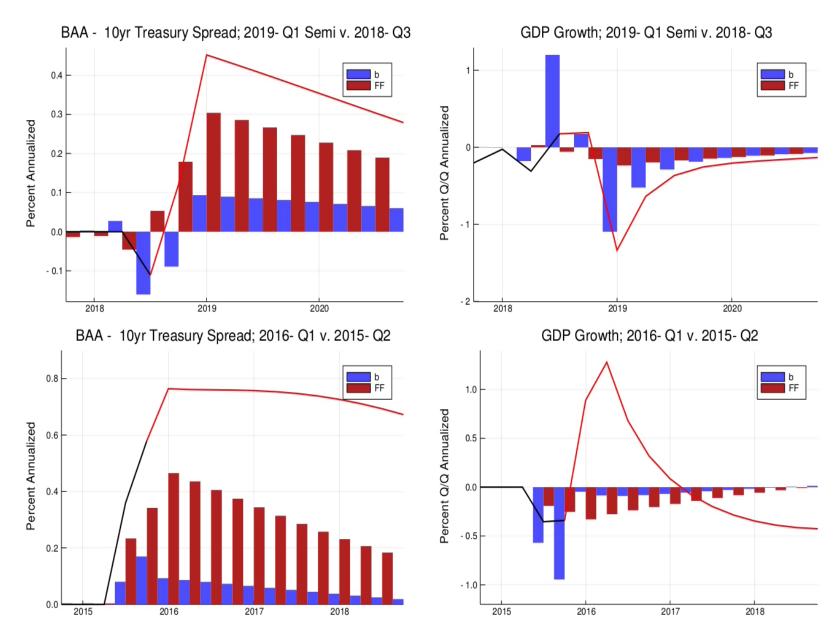
# Figure 4 – DSGE Model Impulse Responses

(a) Safety/Liquidity Shock

(b) Credit Risk Shock



# Figure 5: DSGE Model Forecast Decompositions



# Figure 6 – Vulnerable Growth

## (a) Quantile Regression: NFCI

## (b) Predicted Distribution of GDP Growth

Realized - Median

Average annualized GDP growth, one-year ahead (percent) Average annualized GDP growth, one-year ahead (percent) 15 10 5 0 -5 -10 -15 1973 2005 2009 0 2 3 5 -1 Δ NFCI Sources: FRED, Federal Reserve Bank of St. Louis; authors' calculations.

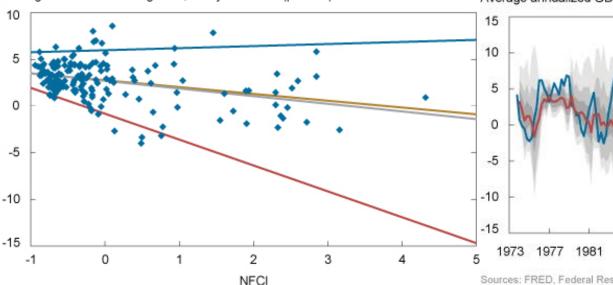
Sources: FRED, Federal Reserve Bank of St. Louis; authors' calculations.

Notes: OLS is ordinary least squares; NFCI is the Chicago Fed's National Financial Conditions Index.

Note: The shaded areas correspond to different confidence intervals around the median; the lightest gray corresponds to [5, 95] percentile interval, the median gray to [10, 90] percentile interval, and the dark gray to the [25, 75] percentile.

2013

2017



0.95