Economic Outlook and Monetary Policy

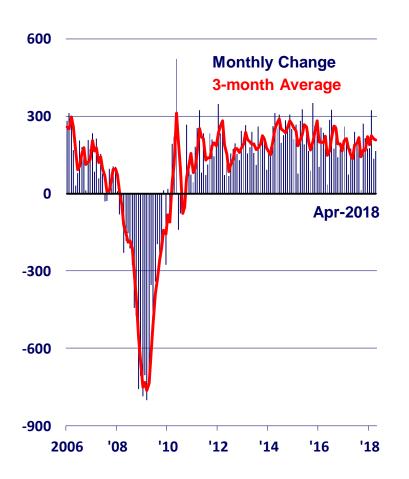
Federal Reserve Bank of Chicago Academic Advisory Council Meeting May 11, 2018

Spencer Krane
Senior Vice President
Federal Reserve Bank of Chicago

Labor Markets

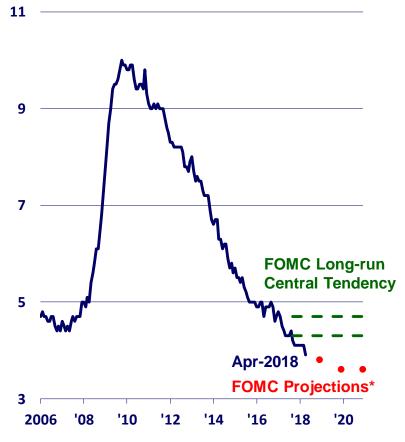
Nonfarm Payroll Employment

(change, thousands)



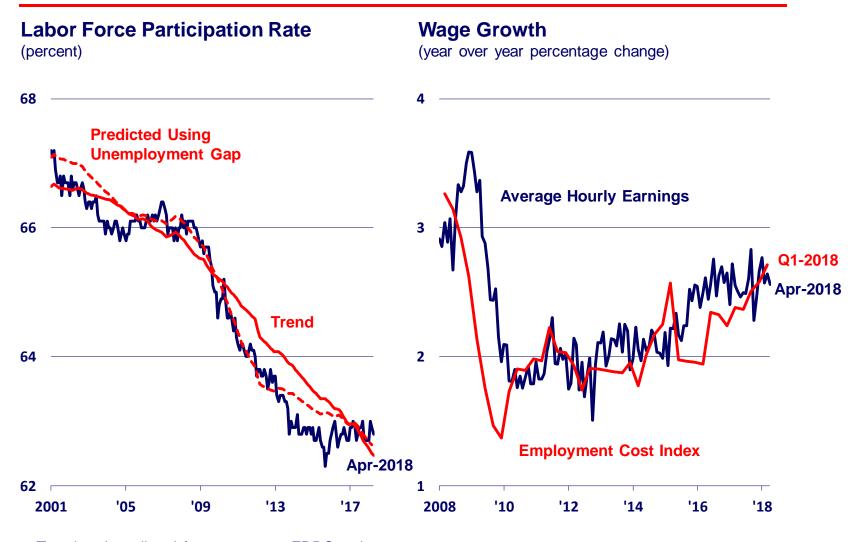
Unemployment Rate

(percent)



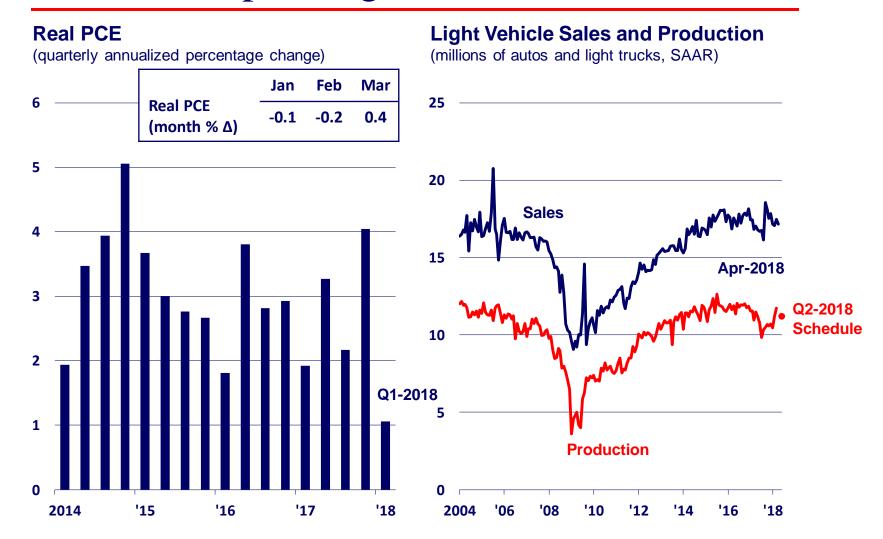
^{*} Median of projections from the March 2018 SEP

Labor Force Participation Rate and Wages



Trend and predicted from u gap are FRBC estimates

Consumer Spending



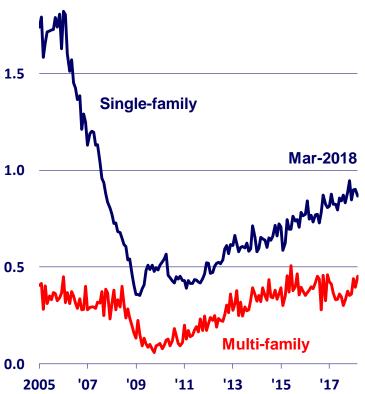
^{*}Annualized percentage change, January-February average from October-November average

Construction

Housing Starts

(millions of units, saar)

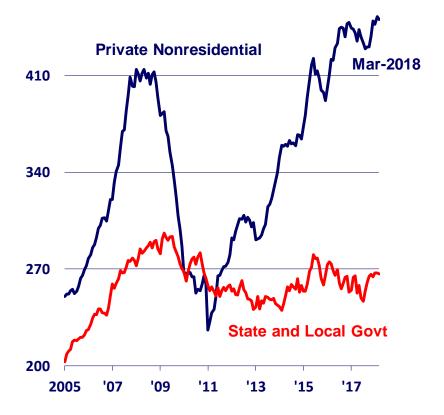




Private and Government Construction

(billions of dollars, saar)

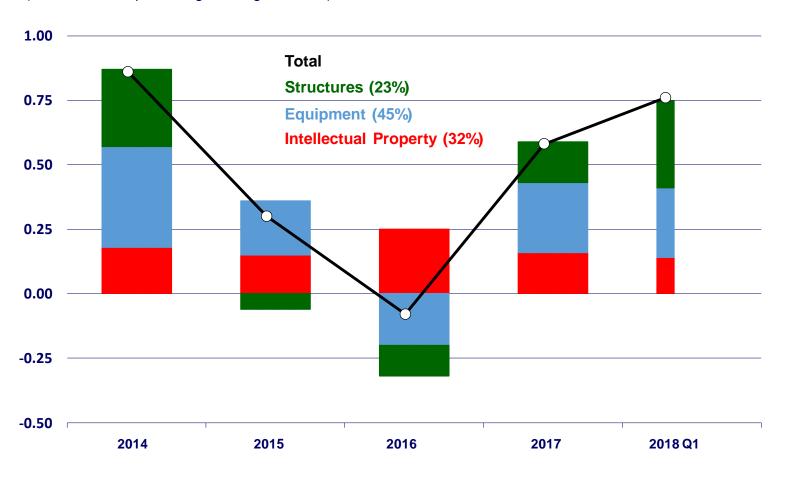
480 —



Investment

Private Nonresidential Fixed Investment

(contribution to percentage change in GDP)



Fiscal Policy

CBO Estimates of the Effects of Recent Fiscal Actions on the level of annual real GDP

	2018	2019	2020	2027
2017 Tax Act	0.3	0.6	0.8	0.6
2018 Bipartisan Budget and Appropriations Acts	0.3	0.6	n.a.	n.a

Source: CBO Budget and Economic Outlook: 2018 to 2028, April 2018

FOMC Forecasts

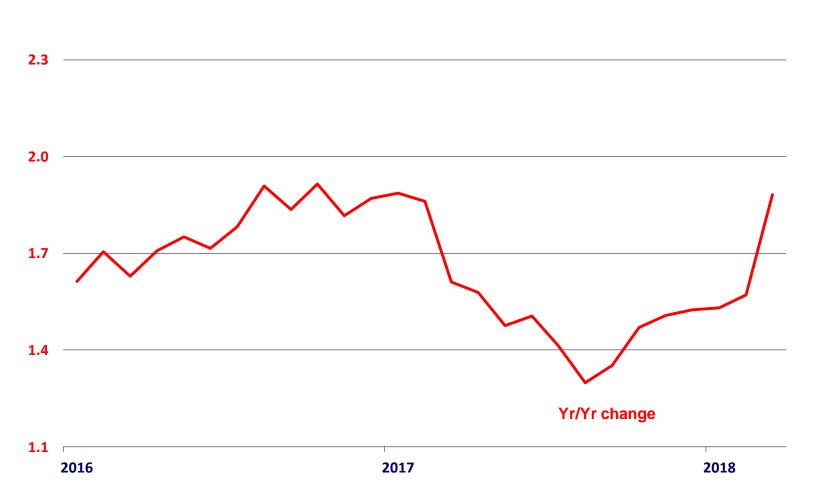
Median forecast, March 2018 Summary of Economic Projections

Variable	2018	2019	2020	LR
GDP ¹	2.7	2.4	2.0	1.8
Dec. proj.	2.5	2.1	2.0	1.8
Unemployment ²	3.8	3.6	3.6	4.5
Dec. proj.	<i>3.9</i>	3.9	4.0	4.6
Memo: April 10 Blue Chip				
GDP	2.8	2.6		2.0 ³
Unemployment	3.9	3.6		4.3 ³

- 1. Q4-to-Q4 percent change
- 2. Q4 Average
- 3. From March 10, 2018 Blue Chip consensus

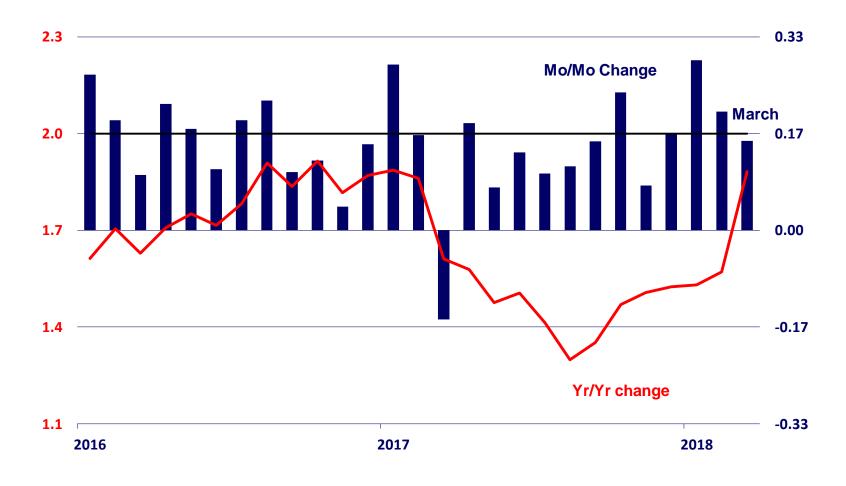
Core PCE Inflation

(12-month percentage change in core PCE)

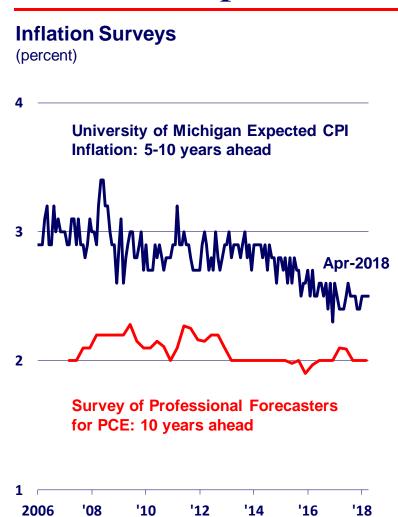


Core PCE Inflation

(monthly and yearly percentage change in core PCE)



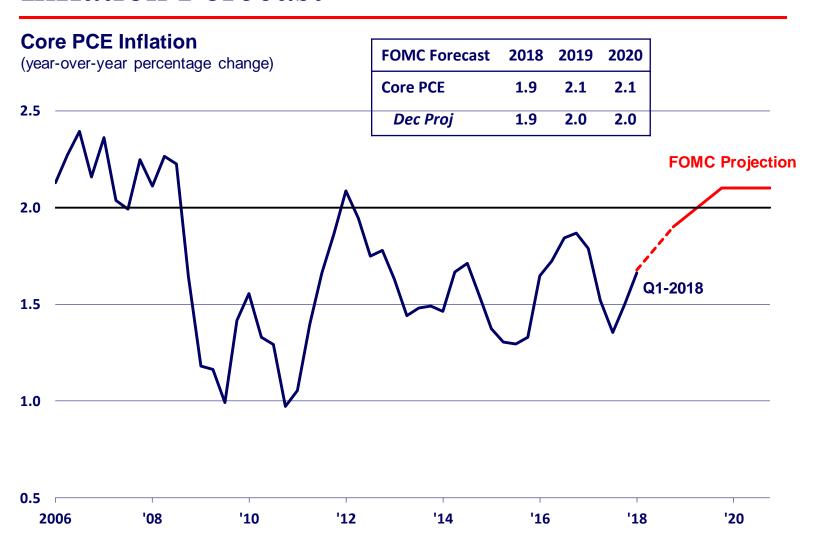
Inflation Expectations



TIPS 5-year, 5-year forward **CPI Inflation Compensation** (percent)



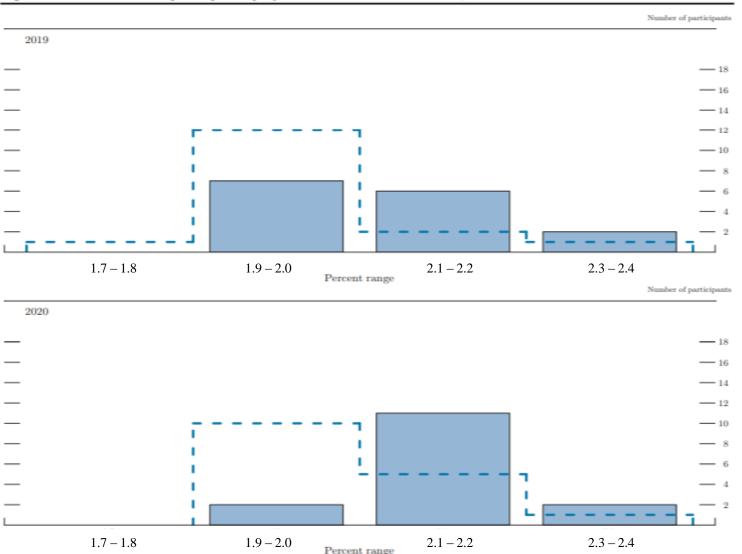
Inflation Forecast



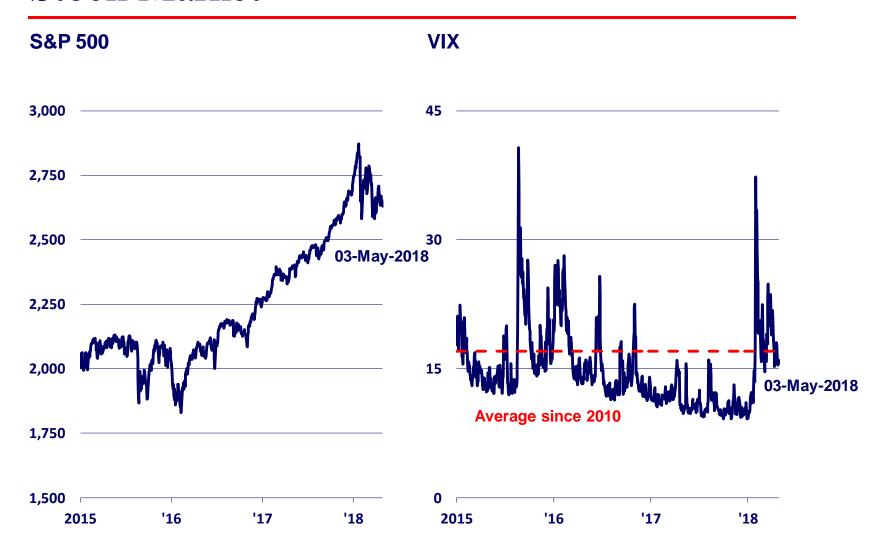
FOMC projections are the median values for core PCE inflation as reported from the March 2018 release of the SEP.

SEP Inflation Forecast Distribution

Figure 3.D. Distribution of participants' projections for core PCE inflation, 2018-20



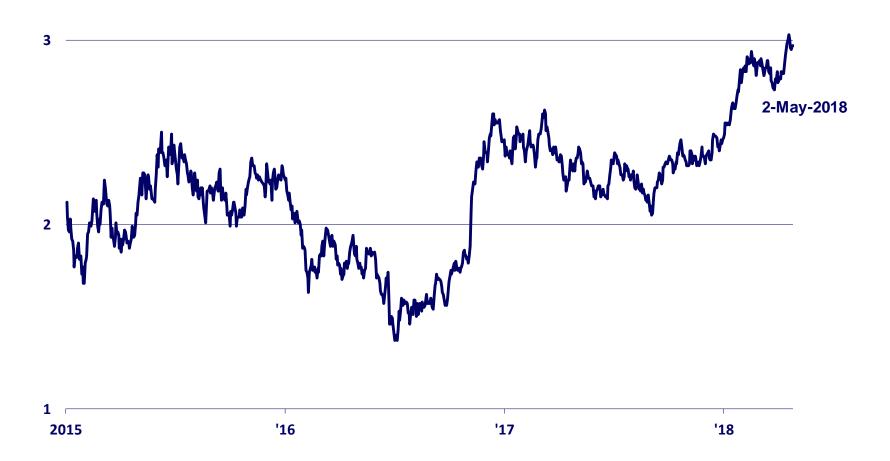
Stock Market



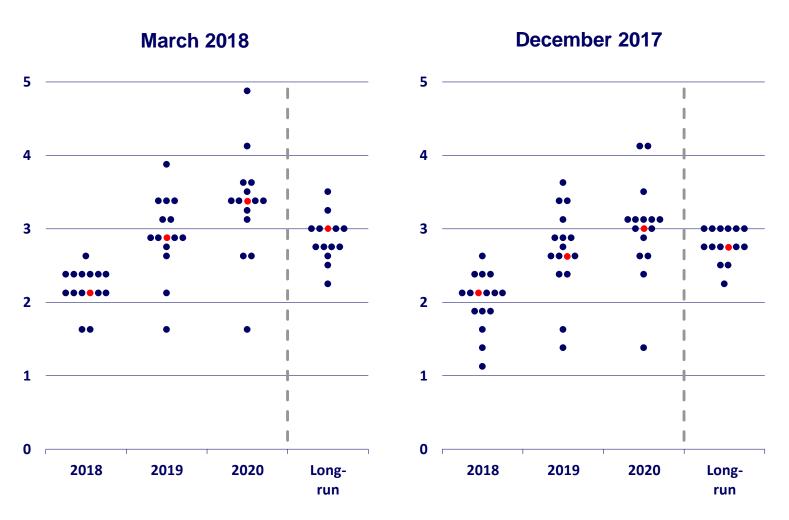
Treasury Rates

10 Year Treasury

(percent)



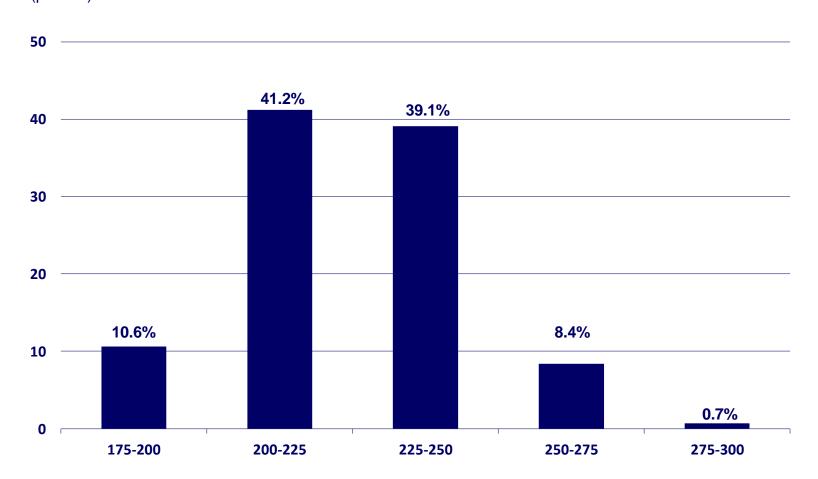
Appropriate Pace of Policy Firming



Red dots indicate median

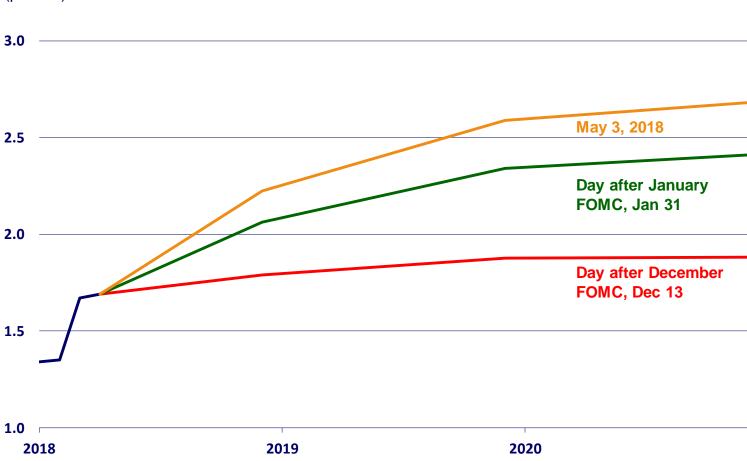
Market Pricing of Policy Firming

Target Rate Probabilities for Dec 2018 Fed Meeting (percent)



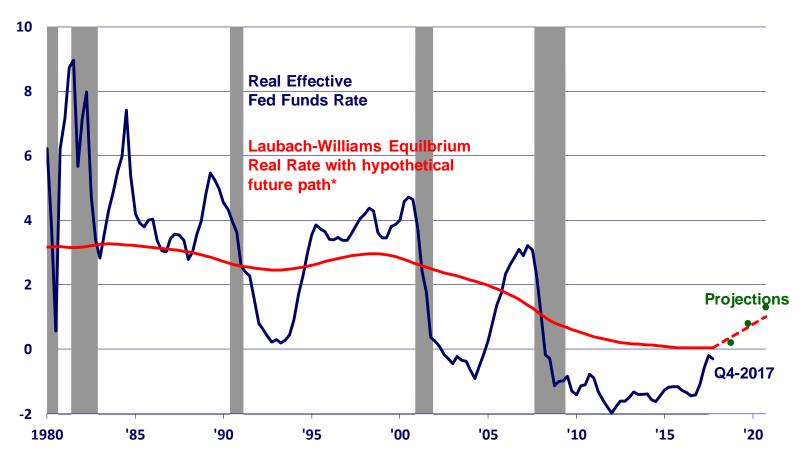
Fed Funds Futures

Market Pricing for Federal Funds Rate at Year End (percent)



Real Interest Rates

Effective Real Fed Funds and Laubach-Williams Equilibrium Real Rates (percent)



Real federal funds rate is the effective federal funds rate minus four-quarter core PCE inflation. Projections are the median SEP projection for the federal funds rate minus the median SEP four-quarter core PCE inflation. Shaded bars indicate NBER date recessions. *Hypothetical path for real rate assumes a gradual uptrend to 1 percent (which is the SEP LR assumption) by end of 2020