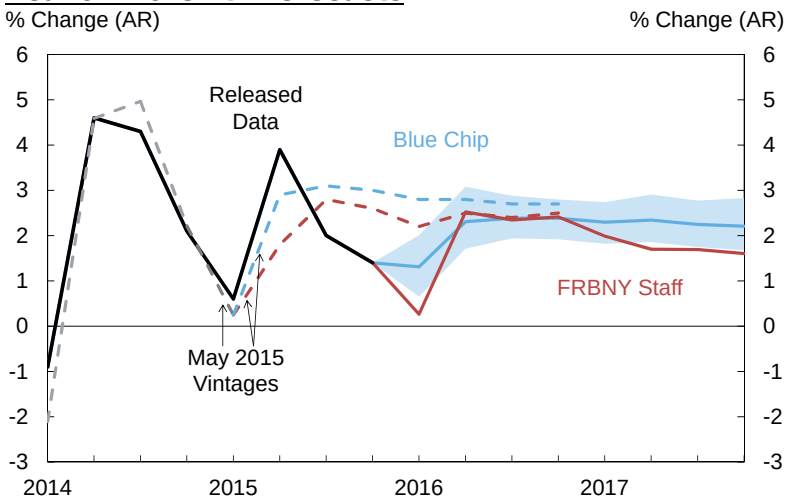
Staff GDP Forecast Summary

- Projected real growth: about 2% (Q4/Q4) in 2016 and 1¾% in 2017.
  - **Near-term forecast below that presented at May 2015 EAP.**
  - **Similar to Blue Chip consensus for 2016; below it for 2017.**
- Outlook reflects countervailing factors.

  Positive:
  - **Solid income growth and private balance sheets.**
  - **Bulk of investment decline in energy sector likely behind us.**
  - **Somewhat stimulative fiscal policy.**

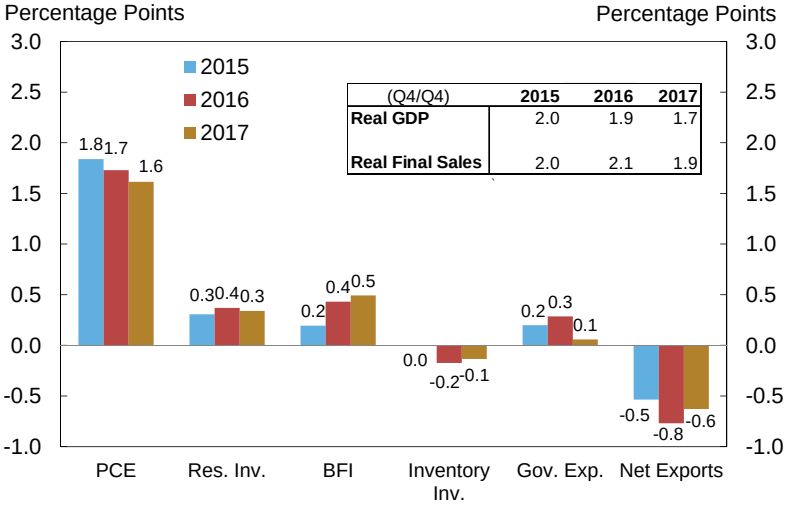
  Negative:
  - **Continued drag from net exports.**
  - **Sluggish business fixed investment.**
  - **Slow productivity growth.**

Real GDP Growth Forecasts



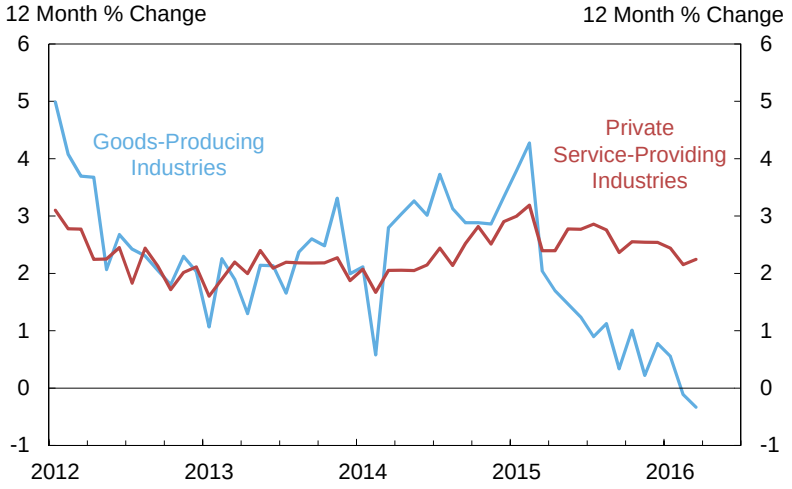
Note: The blue band represents the top 10 and bottom 10 averages of the Blue Chip survey.
Source: FRBNY Staff, BEA, and Blue Chip Economic Indicators

GDP Growth Contributions: 2015-17



Source: FRBNY Staff and Bureau of Economic Analysis

Aggregate Weekly Hours Worked



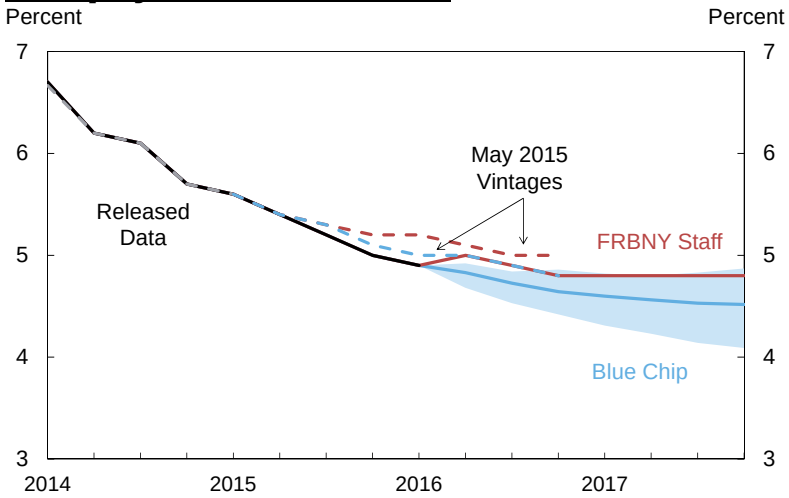
Source: Bureau of Labor Statistics

©2016 Federal Reserve Bank of New York

Staff Unemployment Forecast Summary

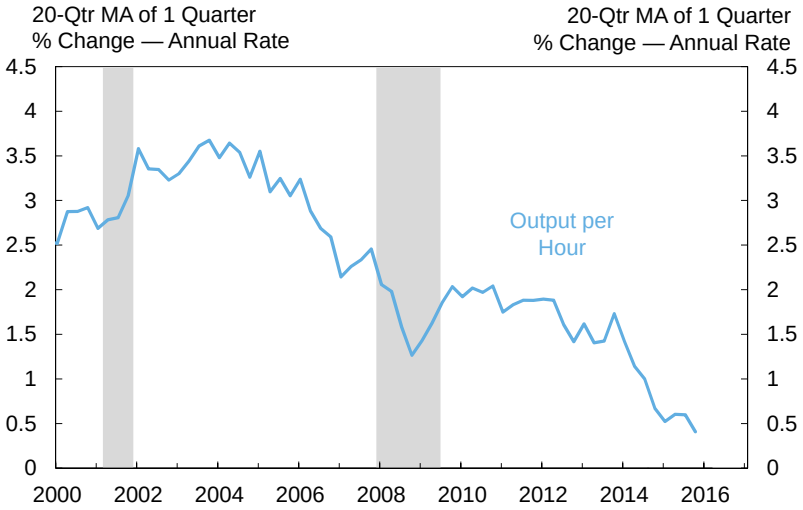
- Modestly above-potential growth leads to decline in unemployment rate to around 4¾% by end of 2016, with stable unemployment rate in 2017.
  - **Below FRBNY forecast at May 2015 EAP.**
  - **Less rapid decline than Blue Chip consensus.**
- Factors underlying this forecast.
  - **Population growth around 1.0%.**
  - **Productivity growth gradually rising back to assumed trend rate of 1¼% NFBS-basis (1% GDP-basis) in 2017.**
  - **Participation rate rises slightly over 2016 and 2017.**
  - **Slight uptick in average weekly hours.**

Unemployment Rate Forecasts



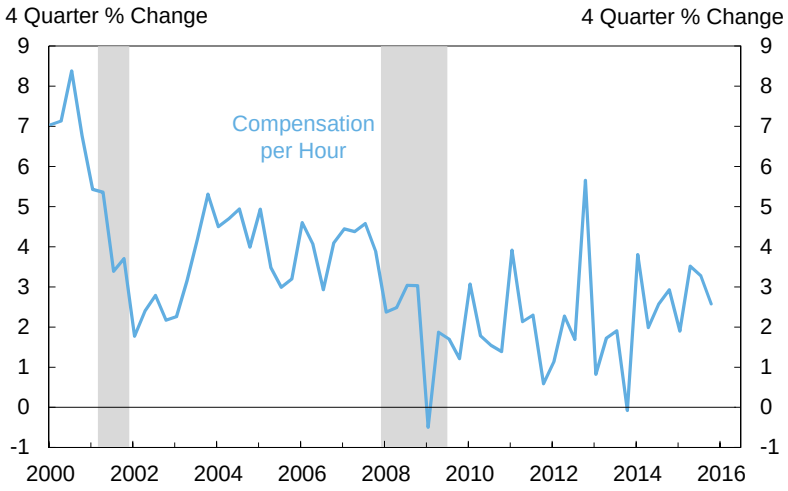
Note: The blue band represents the top 10 and bottom 10 averages of the Blue Chip survey.
Source: FRBNY Staff, BEA, and Blue Chip Economic Indicators

Productivity Growth: Nonfarm Business Sector



Source: Bureau of Labor Statistics
Note: Shading shows NBER recessions.

Compensation Growth: Nonfarm Business Sector



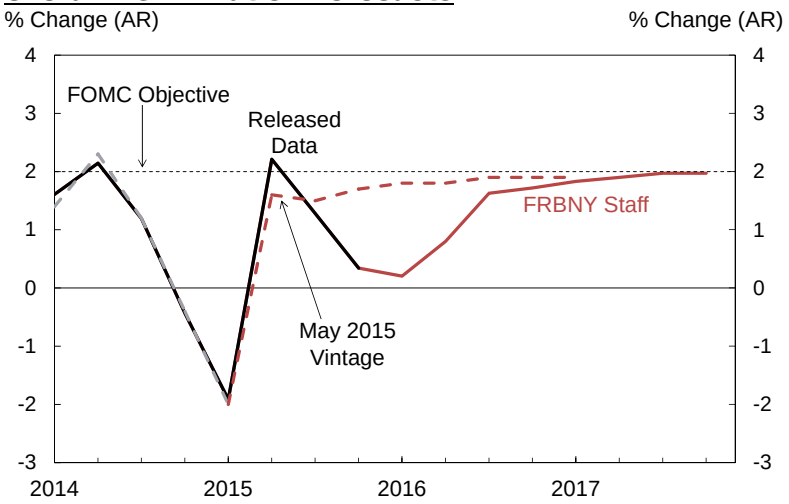
Source: Bureau of Labor Statistics
Note: Shading shows NBER recessions.

©2016 Federal Reserve Bank of New York

Staff Inflation Forecast Summary

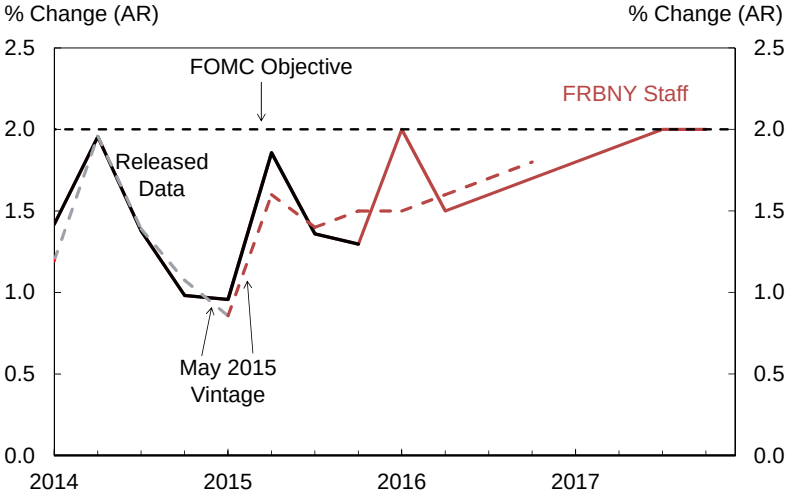
- As energy and import prices stabilize, inflation anticipated to rise gradually toward FOMC's longer-run goal.
  - **PCE inflation projected to reach 2% in 2017.**
- Underlying assumptions.
  - **Well-anchored longer-run inflation expectations.**
  - **Continued downward pressure on goods prices from past dollar appreciation.**
  - **Firming of global demand.**
  - **Dissipation of remaining slack by end of 2017.**

Overall PCE Inflation Forecasts



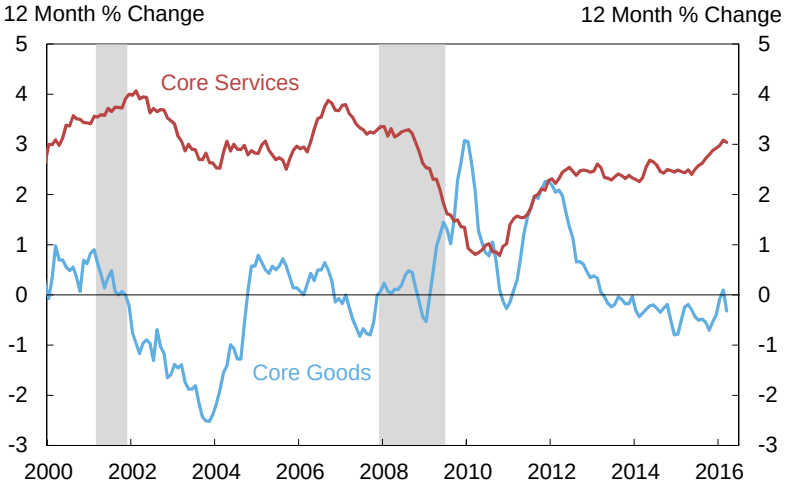
Source: FRBNY Staff and Bureau of Economic Analysis

Core PCE Inflation Forecasts



Source: FRBNY Staff and Bureau of Economic Analysis

CPI Core Goods and Core Services Inflation



Source: Bureau of Labor Statistics

Note: Shading shows NBER recessions.

©2016 Federal Reserve Bank of New York

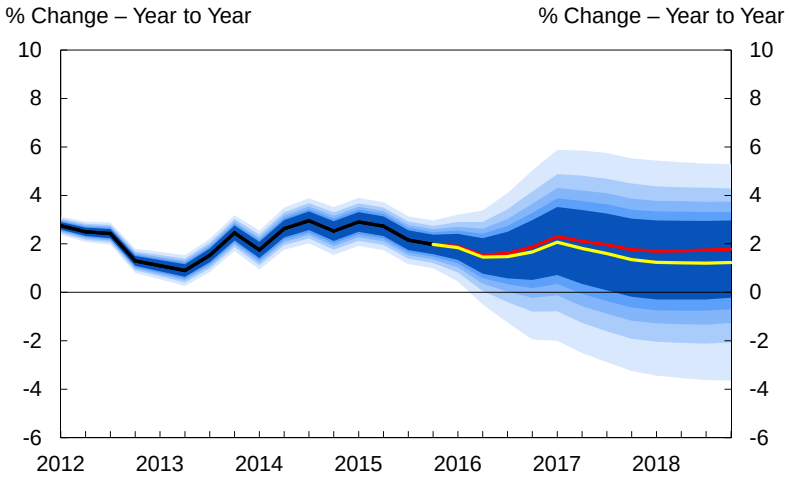
Risks to FRBNY Staff Real Activity Outlook

- Balance of risks slightly skewed to the downside in 2016, with greater downside risk in 2017.
- Major risks

  Upside:
  - **Underlying fundamentals for consumer spending and housing are stronger than expected.**
  - **Global growth strengthens and dollar declines, with less net export drag than expected.**

  Downside:
  - **Financial conditions tighten more than expected.**
  - **Slower global growth has larger spillover to U.S. growth.**

Real GDP Growth Forecast Distribution



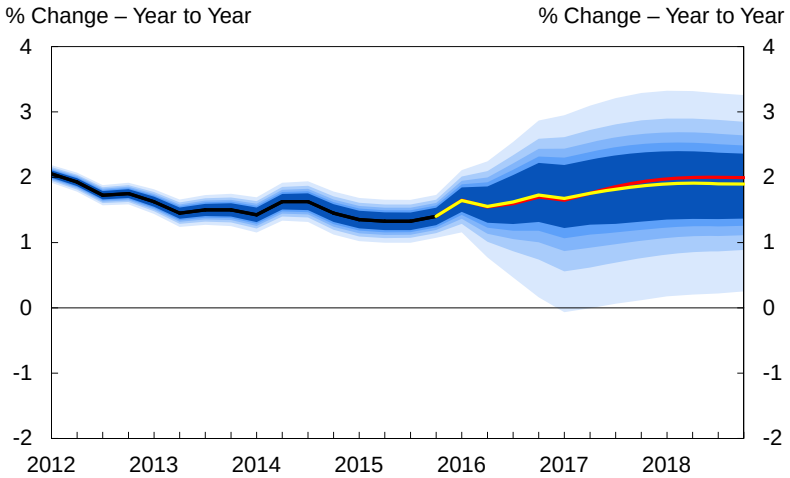
Risks to FRBNY Staff Inflation Outlook

- Risks roughly balanced in 2016, and slightly skewed to the downside in 2017.

  Upside:
  - **Resource slack may be lower than currently estimated.**
  - **More modest effect of dollar appreciation on domestic prices.**
  - **Possible reversal of past several years' slowdown in health care price inflation.**

  Downside:
  - **Stronger global disinflationary pressures emerge.**
  - **Inflation expectations becoming unanchored on downside because of persistent low inflation environment.**

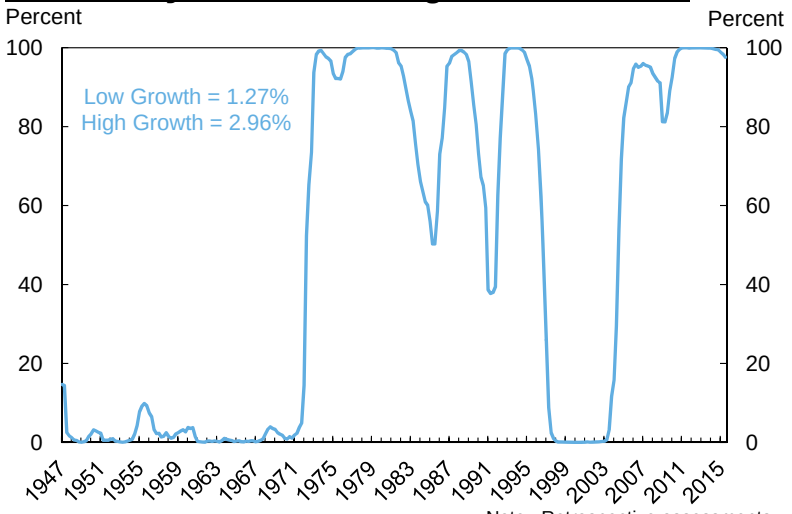
Core PCE Inflation Forecast Distribution



©2016 Federal Reserve Bank of New York

REFERENCE SLIDES

Productivity: Low-Growth Regime Probabilities



Source: Author's Calculations

Note: Retrospective assessments in real time (up to March 2016)

©2016 Federal Reserve Bank of New York

FRBNY Forecast Details

	2015 Q4	2016 Q1			2016 Q2			2015 Q4/Q4	2016 Q4/Q4			2017 Q4/Q4		
Summary	*Actual*	01/20	03/04	04/14	01/20	03/04	04/14	Actual	01/20	03/04	04/14	01/20	03/04	04/14
Real GDP	*1.4*	2.1	1.8	0.3	2.1	2.3	2.5	2.0	2.0	2.1	1.9	1.7	1.7	1.7
Total PCE Deflator	*0.3*	0.0	-0.2	0.2	1.6	1.1	0.8	0.5	1.3	1.0	1.1	1.8	1.9	1.9
Core PCE Deflator	*1.3*	1.3	1.7	2.0	1.3	1.4	1.5	1.4	1.4	1.5	1.7	1.7	1.8	1.9
Nonfarm Business Sector														
Output	*1.0*	2.6	2.2	0.2	2.6	2.8	3.1	2.1	2.4	2.6	2.3	2.0	2.1	2.1
Hours	*3.2*	1.6	2.2	1.9	1.3	1.7	1.1	1.6	1.4	1.7	1.6	1.1	1.0	1.3
Productivity Growth	*-2.2*	1.0	0.0	-1.8	1.3	1.1	2.0	0.5	1.0	0.8	0.6	1.0	1.1	0.8
Compensation	*1.1*	3.0	2.9	2.7	3.2	3.0	2.8	2.6	3.3	3.2	3.0	3.7	3.3	3.4
Unit Labor Costs	*3.3*	2.0	2.9	4.4	1.9	1.9	0.8	2.1	2.3	2.3	2.3	2.7	2.2	2.6
Real GDP Growth Contributions**														
Final Sales to Domestic Purchasers	*1.7*	3.5	3.1	1.0	3.2	3.5	3.6	2.5	3.2	3.3	2.8	2.4	2.5	2.5
Private	*1.7*	3.2	2.8	0.8	2.9	3.2	3.2	2.3	2.9	3.0	2.5	2.3	2.4	2.4
Consumption	*1.7*	1.8	2.2	0.8	1.8	2.0	2.2	1.8	1.7	2.0	1.7	1.5	1.5	1.6
BFI: Equipment	*-0.1*	0.4	0.2	-0.3	0.4	0.4	0.2	0.2	0.3	0.4	0.2	0.2	0.2	0.2
BFI: Nonresidential Structures	*-0.1*	0.1	-0.1	-0.2	0.1	0.1	0.1	-0.1	0.1	0.1	0.0	0.1	0.1	0.1
BFI: Intellectural Property Products	*0.0*	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.1
Residential Investment	*0.3*	0.6	0.3	0.3	0.4	0.5	0.5	0.3	0.4	0.3	0.4	0.3	0.4	0.3
Government	*0.0*	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.0	0.0	0.1
Federal	*0.2*	0.1	0.0	-0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0
State and Local	*-0.1*	0.2	0.3	0.3	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1
Inventory Investment	*-0.2*	-0.2	-0.5	-0.1	0.1	-0.1	-0.6	0.0	0.0	-0.2	-0.2	0.0	-0.1	-0.1
Net Exports	*-0.1*	-1.1	-0.8	-0.6	-1.2	-1.1	-0.5	-0.5	-1.1	-1.1	-0.8	-0.7	-0.7	-0.6
Exports	*-0.3*	-0.3	-0.4	-0.3	0.0	0.0	0.1	-0.1	-0.1	-0.1	0.0	0.2	0.2	0.2
Imports	*0.1*	-0.8	-0.3	-0.4	-1.2	-1.1	-0.6	-0.5	-1.1	-1.0	-0.8	-0.8	-0.9	-0.8
Real GDP Components' Growth Rates														
Final Sales to Domestic Purchasers	*1.7*	3.4	3.0	1.0	3.1	3.5	3.5	2.5	3.1	3.3	2.8	2.3	2.4	2.4
Consumption	*2.4*	2.7	3.2	1.2	2.6	3.0	3.2	2.7	2.5	2.9	2.5	2.2	2.2	2.3
BFI: Equipment	*-2.1*	6.0	4.0	-5.5	6.0	6.0	4.0	2.5	5.7	6.5	3.0	3.5	4.0	4.0
BFI: Nonresidential Structures	*-5.1*	4.0	-5.0	-7.0	4.0	4.0	2.0	-3.5	4.0	3.1	1.1	3.5	4.0	4.0
BFI: Intellectural Property Products	*-0.1*	6.0	6.0	5.0	6.0	6.0	6.0	3.6	5.7	5.7	5.5	3.5	3.5	3.5
Residential Investment	*10.1*	20.8	8.2	8.7	12.9	14.3	16.1	9.4	13.4	10.0	10.5	9.1	9.8	8.8
Government: Federal	*2.3*	2.0	0.0	-1.5	2.0	2.4	2.4	0.9	2.0	1.8	1.4	-0.5	-0.5	-0.5
Government: State and Local	*-1.2*	1.4	2.5	2.6	1.4	1.4	1.5	1.2	1.4	1.7	1.7	0.7	0.7	0.8
Inventory Investment	*n/a*	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Net Exports	*n/a*	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Exports	*-2.0*	-2.7	-3.6	-2.1	0.2	0.3	0.7	-0.6	-0.7	-0.8	-0.1	1.7	1.8	1.6
Imports	*-0.7*	5.4	2.3	2.6	8.2	8.1	3.8	2.9	7.2	6.6	5.1	5.6	5.9	5.5
Labor Market														
Nonfarm Payroll Employment	*240*	162	352	226	141	177	197	231	152	207	205	129	116	142
Unemployment Rate***	*5.0*	4.9	4.9	4.9	4.9	4.8	5.0	5.0	4.8	4.7	4.8	4.8	4.7	4.8
Income														
Real Disposable Personal Income	*2.3*	2.2	4.7	2.9	2.4	3.6	4.0	2.3	1.8	2.7	3.0	1.4	1.8	2.1
Personal Saving Rate***	*5.0*	5.3	5.4	5.3	5.2	5.5	5.5	5.0	4.9	5.6	5.5	4.3	5.5	5.5

*End-of-period value
**Grow th contributions may not sum to total due to rounding.
***Quarterly values are the average rate for the quarter. Yearly values are the average rate for Q4 of the listed year.
Blue and *italic* text indicate released data; darker colors indicate the most recent forecast.

©2016 Federal Reserve Bank of New York