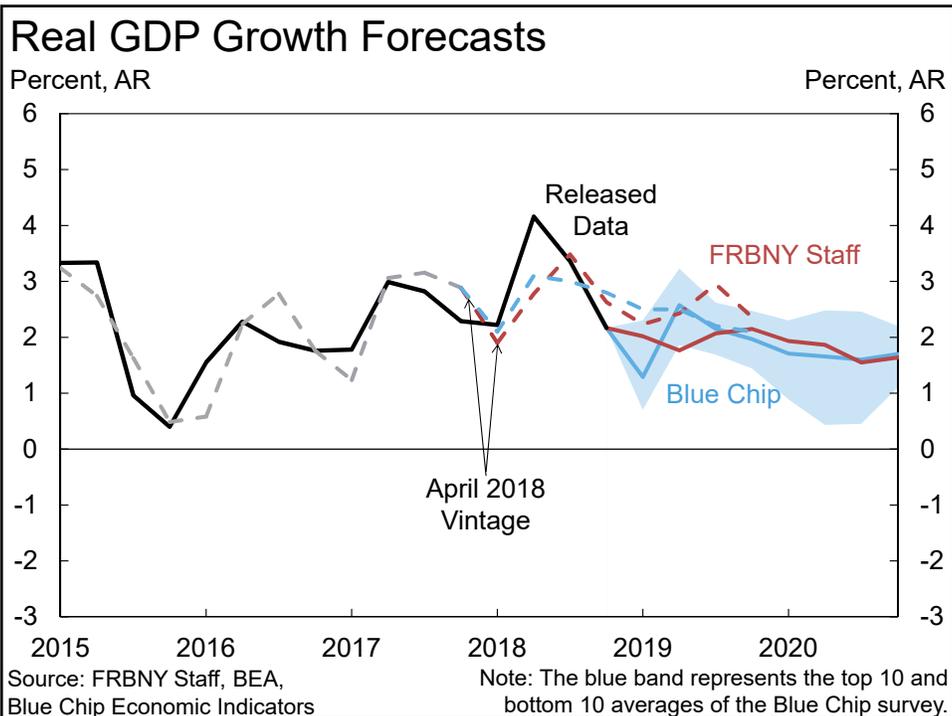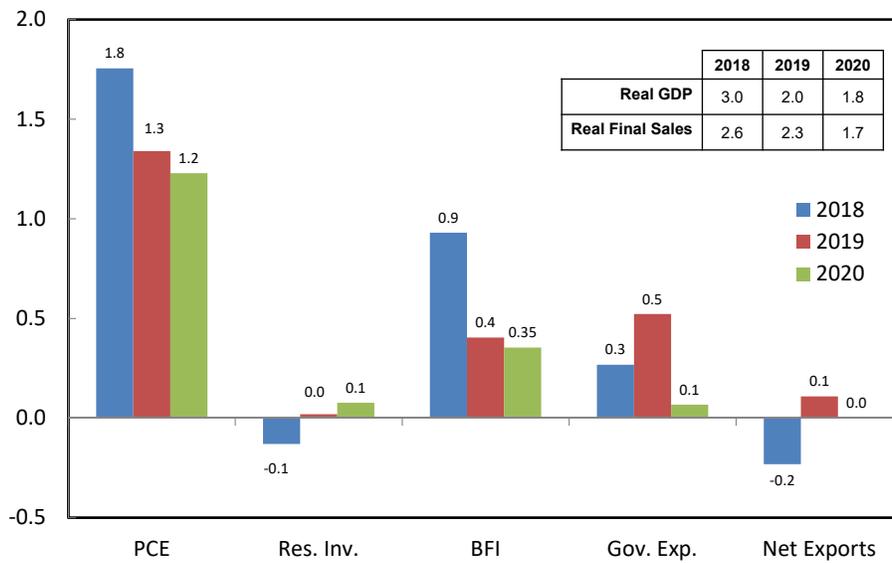# Staff GDP Forecast Summary

- Real growth: about 2.0% (Q4/Q4) in 2019 and 1.8% in 2020.
    - Forecast for 2019 weaker than the one presented at April 2018 EAP.
    - Forecasts for 2019 and 2020 similar to Blue Chip consensus.

- Key factors underlying the forecast:

    Positives:
    - Strength in labor market and household balance sheets.
    - Sharp rebound in financial conditions from December 2018 levels.
    - Near-term path of government spending.

    Negatives:
    - Weak final domestic demand entering 2019.
    - Weaker global outlook; geopolitical and trade uncertainty.
    - High nonfinancial corporate debt.
    - Waning impetus from tax cuts.

Real GDP Growth Forecasts

Percent, AR

Source: FRBNY Staff, BEA, Blue Chip Economic Indicators

Note: The blue band represents the top 10 and bottom 10 averages of the Blue Chip survey.

GDP Growth Contributions

Percent

	2018	2019	2020
Real GDP	3.0	2.0	1.8
Real Final Sales	2.6	2.3	1.7

Legend: ■ 2018 ■ 2019 ■ 2020

Chart values by category:
- PCE: 1.8, 1.3, 1.2
- Res. Inv.: -0.1, 0.0, 0.1
- BFI: 0.9, 0.4, 0.35
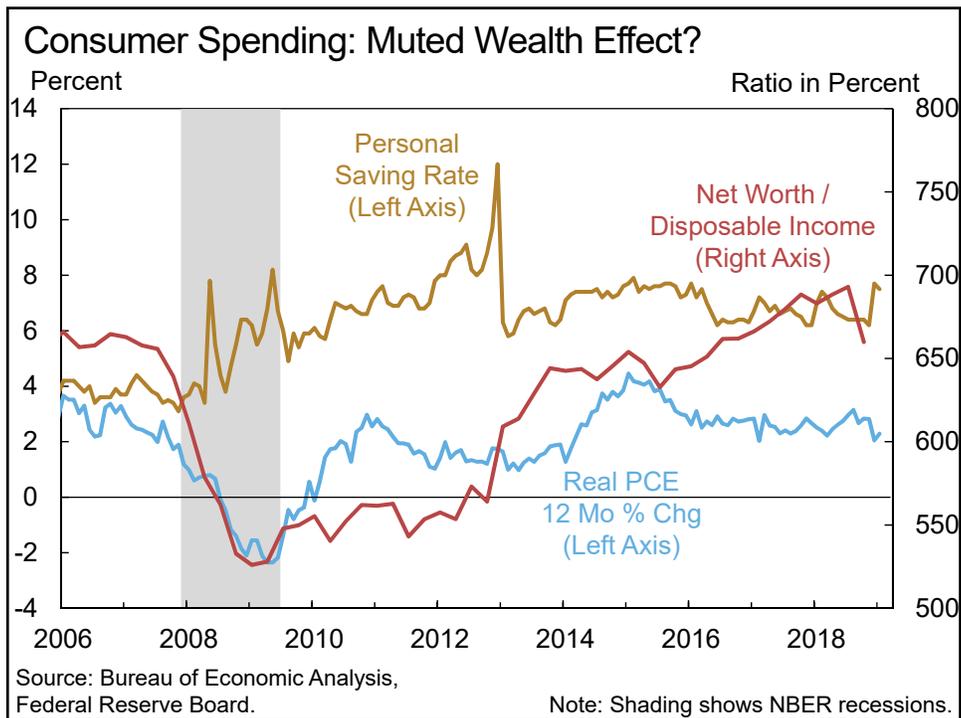- Gov. Exp.: 0.3, 0.5, 0.1
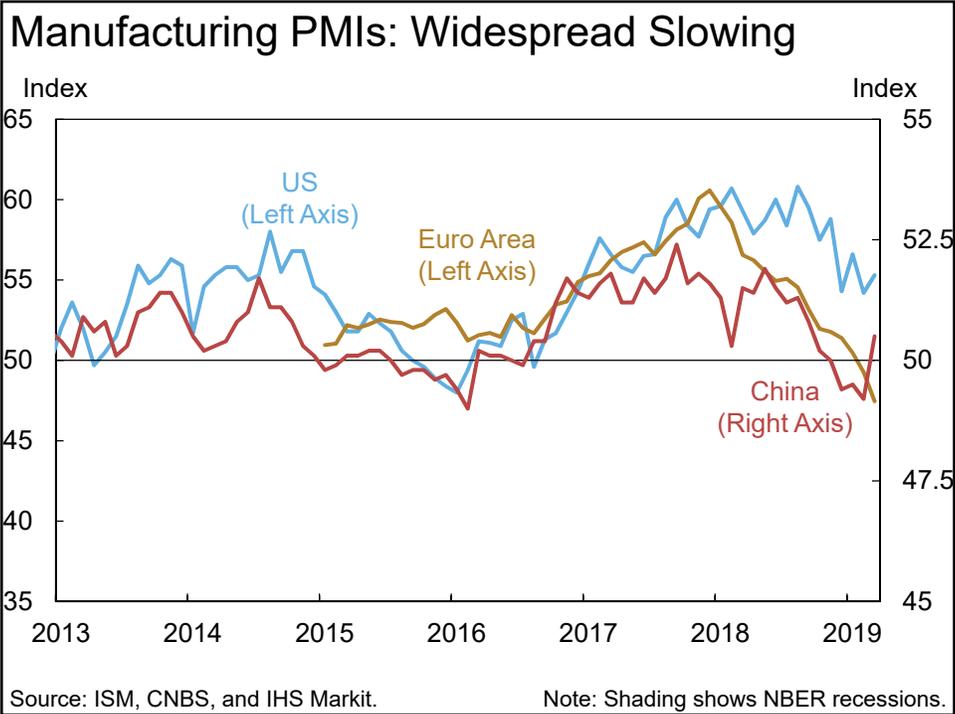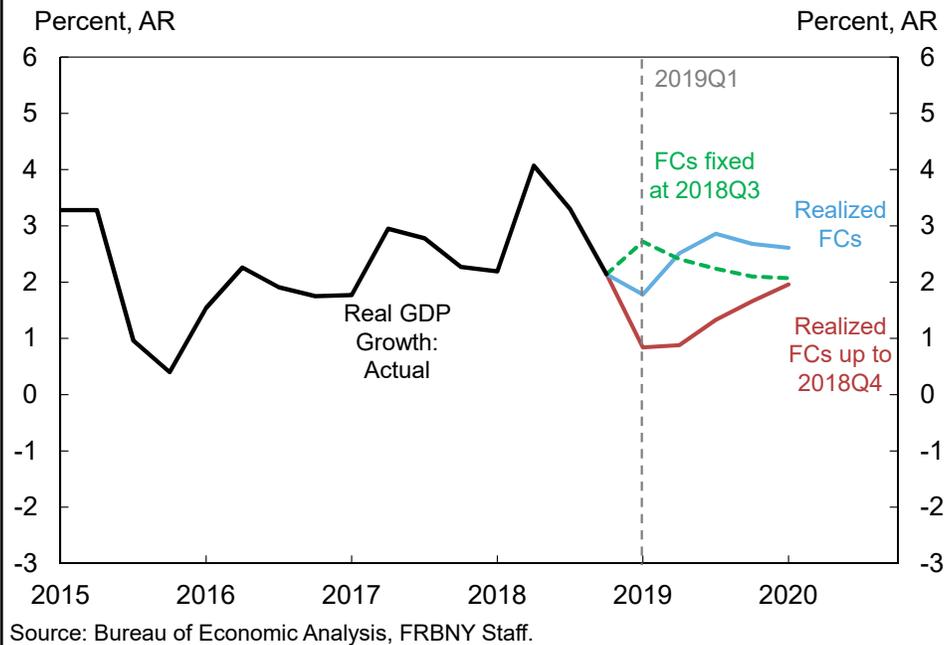- Net Exports: -0.2, 0.1, 0.0

Source: Bureau of Economic Analysis, FRBNY Staff.

Fiscal Impetus

- Tax cuts helped to boost PCE and BFI in 2018.

- In 2019, impetus primarily through spending.

- Fiscal impetus essentially neutral in 2020.

Manufacturing PMIs: Widespread Slowing

Index (Left Axis) / Index (Right Axis)

US (Left Axis)
Euro Area (Left Axis)
China (Right Axis)

Source: ISM, CNBS, and IHS Markit.   Note: Shading shows NBER recessions.

Consumer Spending: Muted Wealth Effect?

Percent / Ratio in Percent

Personal Saving Rate (Left Axis)
Net Worth / Disposable Income (Right Axis)
Real PCE 12 Mo % Chg (Left Axis)

Source: Bureau of Economic Analysis, Federal Reserve Board.   Note: Shading shows NBER recessions.

Projected Growth Under Alternative Financial Conditions

Percent, AR

```
6                                    2019Q1
5
4                                 FCs fixed
                                  at 2018Q3          Realized
3                                                    FCs
2            Real GDP
             Growth:                                 Realized
1            Actual                                  FCs up to
                                                     2018Q4
0
-1
-2
-3
  2015    2016    2017    2018    2019    2020
```

Percent, AR

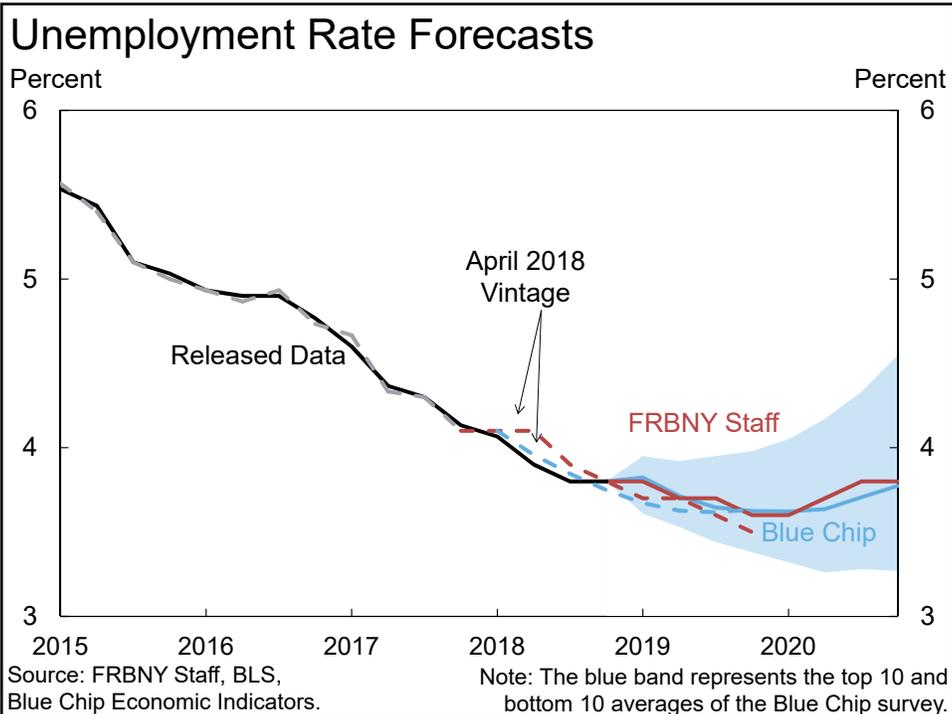Source: Bureau of Economic Analysis, FRBNY Staff.

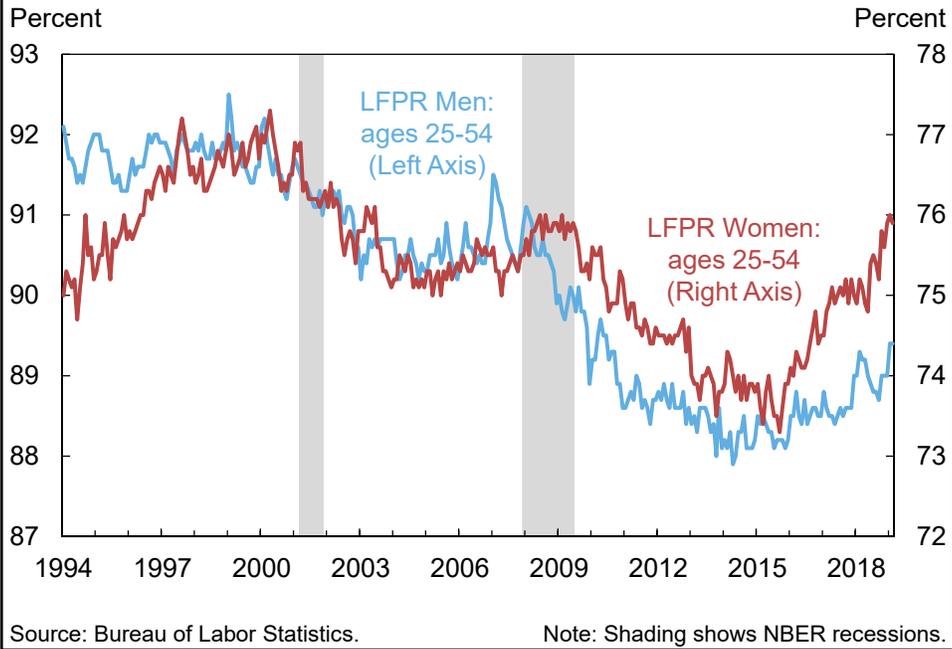## Financial Conditions: Limited Anticipated Impact on GDP

- BVAR scenarios for real GDP growth rate
  - Financial conditions (FCs) measured using 10-year Treasury yields, BAA spreads, and S&P 500 index.

- Other factors affecting the forecast:
  - High ratio of nonfinancial corporate debt to GDP.
  - Household debt at moderate levels.
  - Bank lending standards tightened somewhat in 2018:Q4.
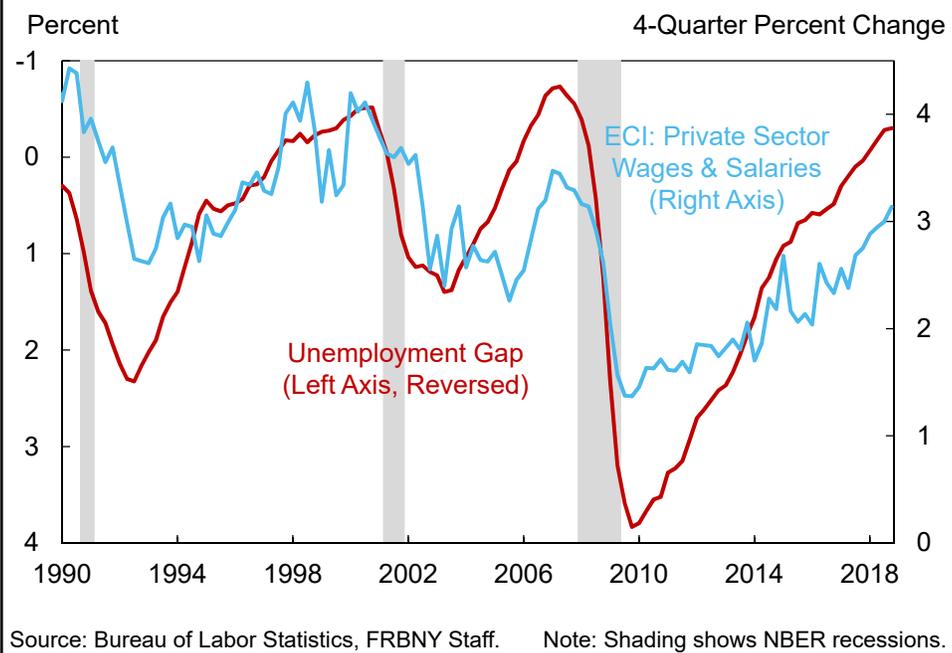
Staff Unemployment Rate Forecast Summary

- Growth above potential contributes to unemployment rate of 3.6% at end-2019 and 3.8% at end-2020.
  - Projected path slightly higher than that presented at April 2018 EAP.
  - Staff projection similar to Blue Chip consensus.
- Key factors underlying this forecast:
  - Population (prime-age workers) growth around 1% (0.5%).
  - Productivity growth somewhat below assumed trend rate of 1.25% on a GDP-basis.
  - Participation rate flat over 2019 - 2020.
  - Average weekly hours little changed (34.5).

Unemployment Rate Forecasts

Source: FRBNY Staff, BLS, Blue Chip Economic Indicators.

Note: The blue band represents the top 10 and bottom 10 averages of the Blue Chip survey.

Pick Up in Prime Age Labor Force Participation

Percent   Percent

LFPR Men: ages 25-54 (Left Axis)

LFPR Women: ages 25-54 (Right Axis)

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

Compensation Growth Higher with Tighter Labor Market

Percent   4-Quarter Percent Change

ECI: Private Sector Wages & Salaries (Right Axis)

Unemployment Gap (Left Axis, Reversed)

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

Staff Inflation Forecast Summary

- Inflation anticipated to be slightly above FOMC's longer-run goal by 2020.
  - Core PCE inflation projected to be about 1.8% in 2019 and 2.1% in 2020. Same projection for total PCE inflation.

- Key factors underlying this projection:
  - Well-anchored longer-run inflation expectations.
  - Tight labor market provides a small boost to core inflation.

Core PCE Inflation Forecast

Percent, AR

Percent, AR

April 2018 Vintage

FRBNY Staff

Released Data

FOMC Objective

Source: Bureau of Economic Analysis, FRBNY Staff.

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Core Services Inflation Still Cyclically Sensitive

Percent

4-Quarter Percent Change

Unemployment Gap (Left Axis, Reversed)

PCE Deflator: Core Services (Right Axis)

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

Core Goods Inflation Less Sensitive to Import Prices

12-Month Percent Change

12-Month Percent Change

Import Price Index: Nonpetroleum Imports, 16 Month Lead (Right Axis)

PCE Deflator: Core Goods (Left Axis)

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

Risks to FRBNY Staff Real Activity Outlook

- Risks to staff growth forecast are tilted slightly to the downside.

  Upside:
  - Positive resolution of geopolitical and trade tensions.
  - Further pickup in business and consumer optimism.

  Downside:
  - Tightening of financial conditions redux.
  - Greater spillovers from slowing global growth.

- Uncertainty around outlook remains quite high.

Risks to FRBNY Staff Inflation Outlook

- Risks to staff inflation forecast also tilted slightly to the downside.
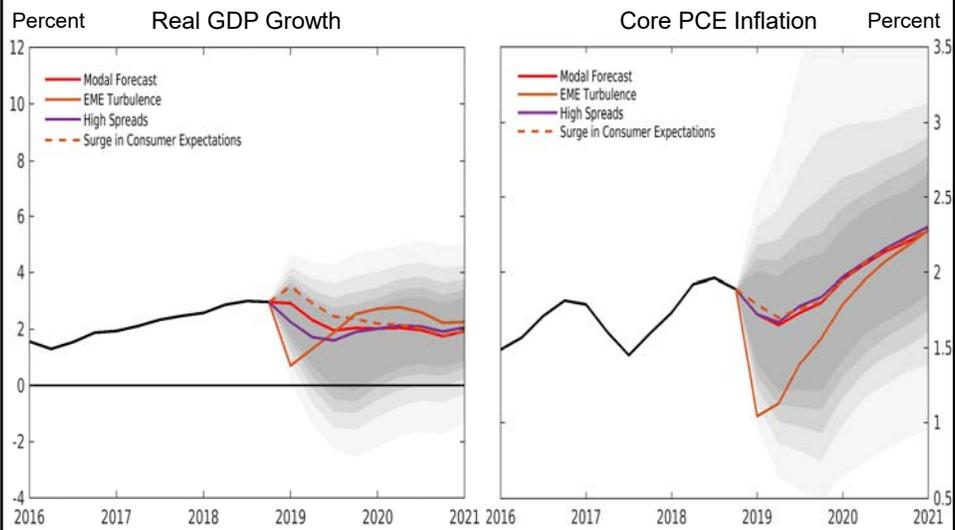
  Upside:
  - Aggregate demand pressure pushes inflation higher more quickly than anticipated.

  Downside:
  - Inflation expectations may be below levels consistent with 2 percent after long period of below-2 percent inflation.
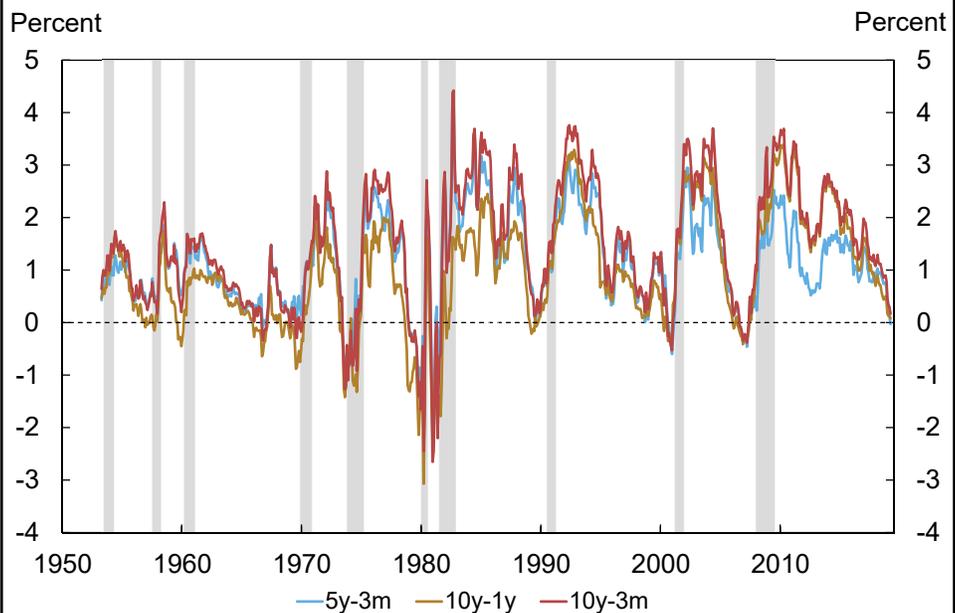 - Spillovers from weak global demand.

- Uncertainty around inflation outlook near historical levels.

Growth and Inflation Under Alternative Scenarios

Percent   Real GDP Growth

- Modal Forecast
- EME Turbulence
- High Spreads
- Surge in Consumer Expectations

Core PCE Inflation   Percent

- Modal Forecast
- EME Turbulence
- High Spreads
- Surge in Consumer Expectations

Source: BVAR scenarios. FRBNY Staff.

Information From Flatter Treasury Yield Curve?

Percent   Percent

Legend: 5y-3m, 10y-1y, 10y-3m

Source: Federal Reserve Board.   Note: Shading shows NBER recessions.

Reference Slides

Staff Forecast Details

	2018 Q4	2019 Q1	2019 Q2		2018 Q4/Q4	2019 Q4/Q4	2020 Q4/Q4
Summary	*Actual*	4/3	4/3		*Actual*	4/3	4/3
Real GDP	*2.2*	2.0	1.8		*3.0*	2.0	1.7
Total PCE Deflator	*1.5*	0.8	1.7		*1.9*	1.8	2.1
Core PCE Deflator	*1.8*	1.5	1.8		*1.9*	1.8	2.1
Nonfarm Business Sector							
Output	*3.1*	2.3	2.0		*3.5*	2.3	1.9
Hours	*1.2*	1.3	0.7		*1.9*	1.2	0.7
Productivity Growth	*1.9*	1.0	1.3		*1.6*	1.1	1.2
Compensation	*3.9*	3.3	3.5		*2.8*	3.6	3.8
Unit Labor Costs	*2.0*	2.3	2.2		*1.0*	2.5	2.6
Real GDP Growth Contributions**							
Final Sales to Domestic Purchasers	*2.1*	1.6	2.7		*2.8*	2.3	1.7
Private	*2.2*	1.1	2.1		*2.6*	1.8	1.7
Consumption	*1.7*	0.5	1.8		*1.8*	1.3	1.2
BFI: Equipment	*0.4*	0.2	0.1		*0.3*	0.1	0.1
BFI: Nonresidential Structures	*-0.1*	0.1	0.0		*0.1*	0.0	0.0
BFI: Intellectual Property Products	*0.5*	0.2	0.2		*0.4*	0.2	0.2
Residential Investment	*-0.2*	0.1	-0.1		*-0.1*	0.0	0.1
Government	*-0.1*	0.6	0.6		*0.3*	0.5	0.1
Federal	*0.1*	0.2	0.5		*0.2*	0.4	0.0
State and Local	*-0.1*	0.3	0.1		*0.1*	0.2	0.1
Inventory Investment	*0.1*	-0.5	-0.9		*0.4*	-0.3	0.0
Net Exports	*-0.1*	0.9	0.0		*-0.2*	0.1	0.0
Exports	*0.2*	0.8	0.2		*0.3*	0.3	0.4
Imports	*-0.3*	0.1	-0.2		*-0.5*	-0.3	-0.4

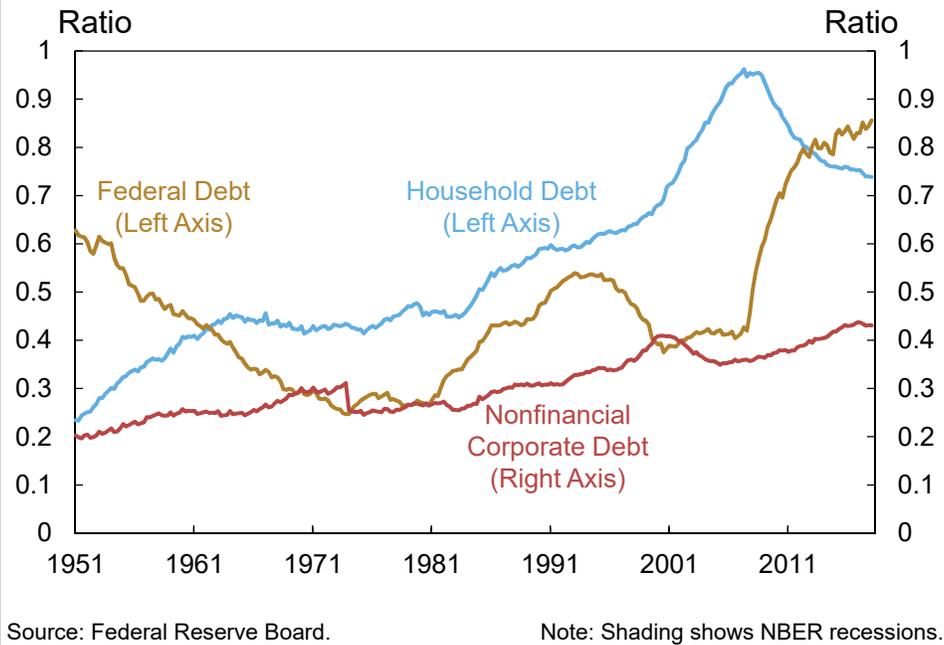|	2018 Q4	2019 Q1	2019 Q2		2018 Q4/Q4	2019 Q4/Q4	2020 Q4/Q4
Real GDP Components' Growth Rates							
Final Sales to Domestic Purchasers	*2.1*	1.6	2.6		*2.7*	2.2	1.7
Consumption	*2.5*	0.8	2.6		*2.6*	2.0	1.8
BFI: Equipment	*6.6*	3.0	2.0		*5.8*	2.2	2.0
BFI: Nonresidential Structures	*-3.9*	2.0	1.0		*4.9*	1.2	1.5
BFI: Intellectual Property Products	*10.7*	5.0	5.0		*10.2*	5.0	4.0
Residential Investment	*-4.7*	2.0	-1.8		*-3.3*	0.5	2.0
Government: Federal	*1.1*	3.7	8.4		*2.7*	5.5	0.2
Government: State and Local	*-1.3*	3.1	1.0		*0.8*	1.5	0.5
Inventory Investment	*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
Exports	*1.8*	6.7	1.4		*2.3*	2.7	3.6
Imports	*2.0*	-0.4	1.2		*3.4*	1.7	2.8
Labor Market							
Nonfarm Payroll Employment (Average per Month, Thousands)	*216*	141	131		*221*	148	82
Unemployment Rate***	*3.8*	3.9	3.8		*3.8*	3.6	3.8
Income							
Real Disposable Personal Income	*4.3*	2.8	1.2		*3.3*	1.7	1.3
Personal Saving Rate***	*6.8*	7.2	6.8		*6.8*	6.3	5.6

*End-of-period value

**Growth 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;

Range of Existing r* Estimates

Source: Estimates from Laubach and Williams (2003), Kiley (2015), Lubik and Matthes (2015), Johanssen and Mertens (2018), Holston, Laubach, and Williams (2016), Crump, Eusepi, and Moench (2018), Christensen and Rudebusch (2017), Del Negro et al. (2017), and Del Negro et al. (2018).

Cyclically Adj. Federal Revenues and Outlays

Change as Percent of Potential GDP

Source: Congressional Budget Office.

Debt to GDP Ratios

Federal Debt (Left Axis)

Household Debt (Left Axis)

Nonfinancial Corporate Debt (Right Axis)

Source: Federal Reserve Board.

Note: Shading shows NBER recessions.

Bank Lending Standards

Net Percent Reporting Tightening on C&I loans (Left Axis)

Net Percent Reporting More Willingness to Make Consumer Installment Loans (Right Axis, Reversed)

Source: Federal Reserve Board.

Note: Shading shows NBER recessions.

Economic Policy Uncertainty