

WELLS
FARGO

SECURITIES

Economics and Finance in a Two-Percent Economy

GIC—Madrid

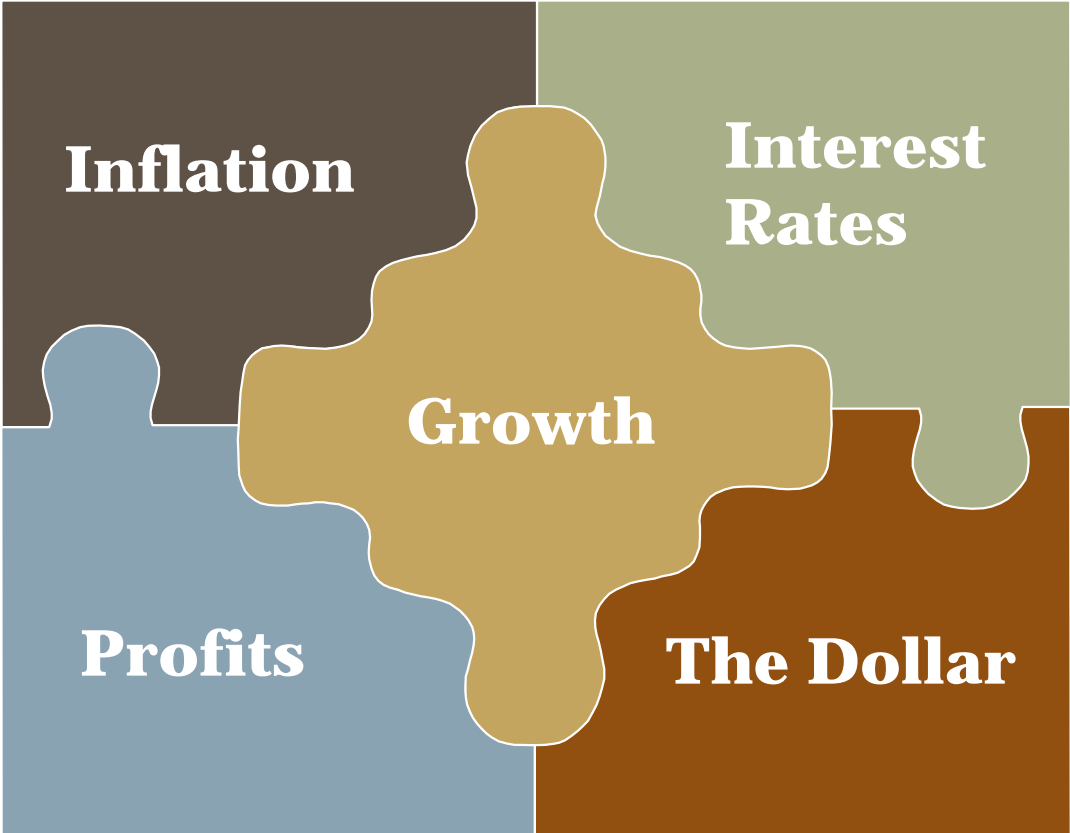
John E. Silvia, Chief Economist

March 27, 2017

Together we'll go far



Five benchmarks for good decision making

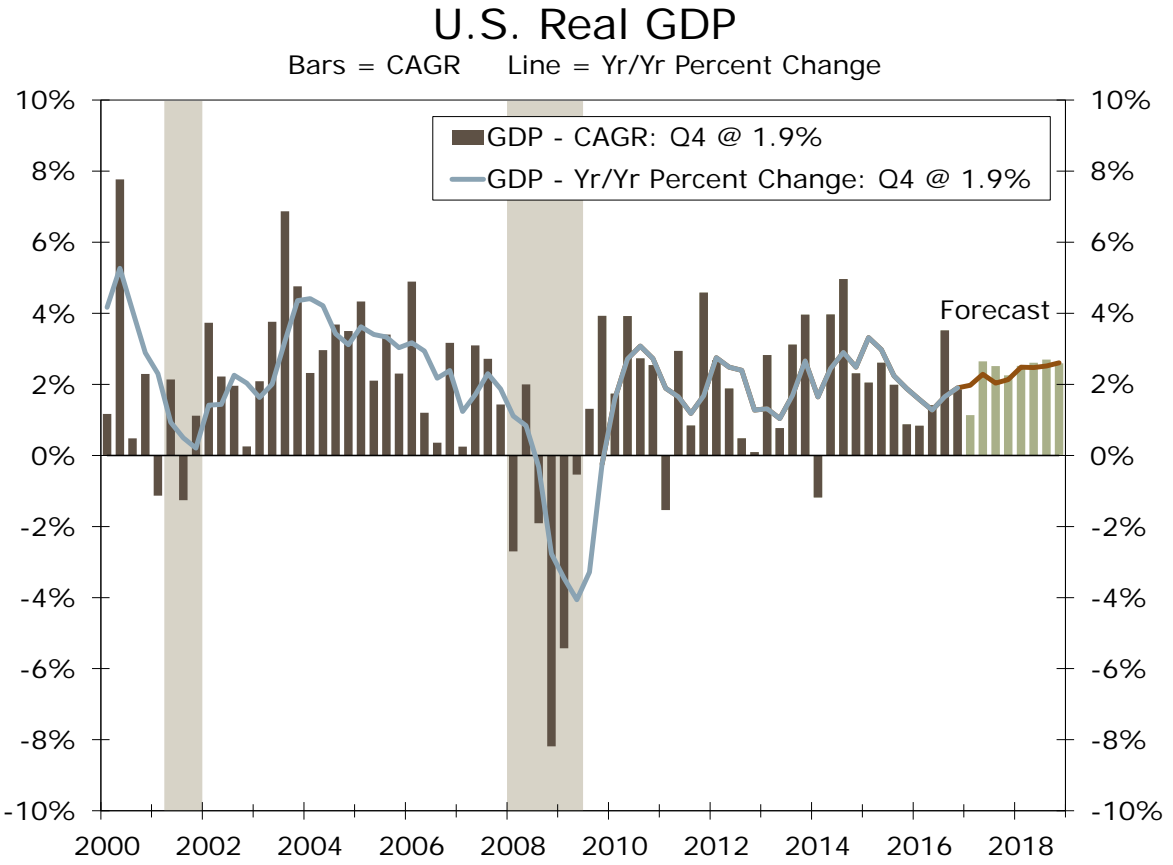


How do we compare to consensus?

Expectations for the Future

- Sustained trend growth, no recession in the forecast
- Employment—cyclical and structural change
- Consumer solid—key support to growth
- Below consensus on housing starts and auto sales
- Trade will be a drag on economic growth in the U.S.
- Unsustainable long-run fiscal policy
- Europe growth remains steady post-Brexit
- China growth slower for 2017, 2018

Trend growth at 2-2.5 percent in the year ahead. A more balanced composition of domestic growth should prevail, but trade will be a drag going forward.



Source: U.S. Department of Commerce and Wells Fargo Securities

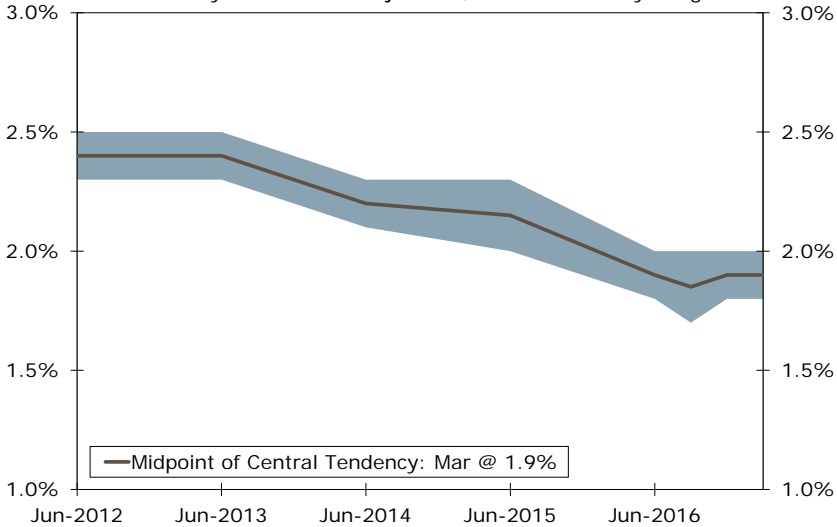
Supply-Side Challenges

Over the past several years, the Fed has dialed-back its own estimates of potential GDP growth as have private-sector economists and the Congressional Budget Office

Potential Growth

Long-Run GDP Projections

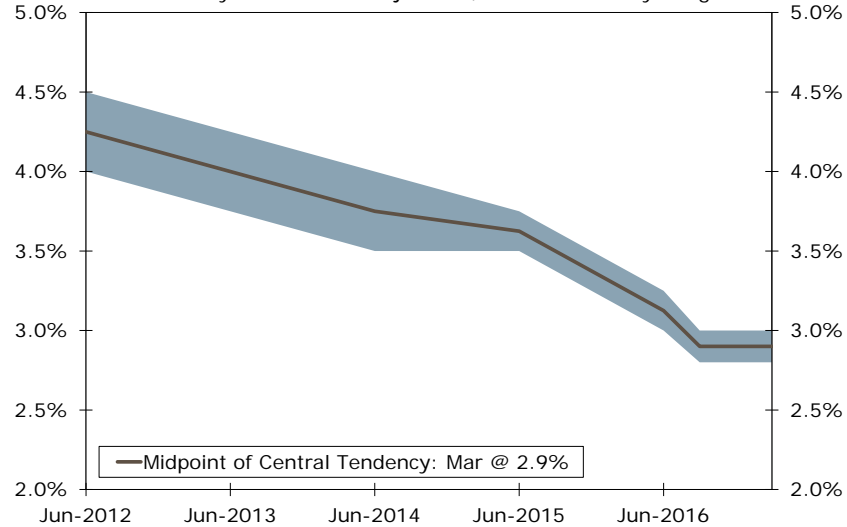
Summary of Economic Projections, Central Tendency Range



Neutral Fed Funds Rate

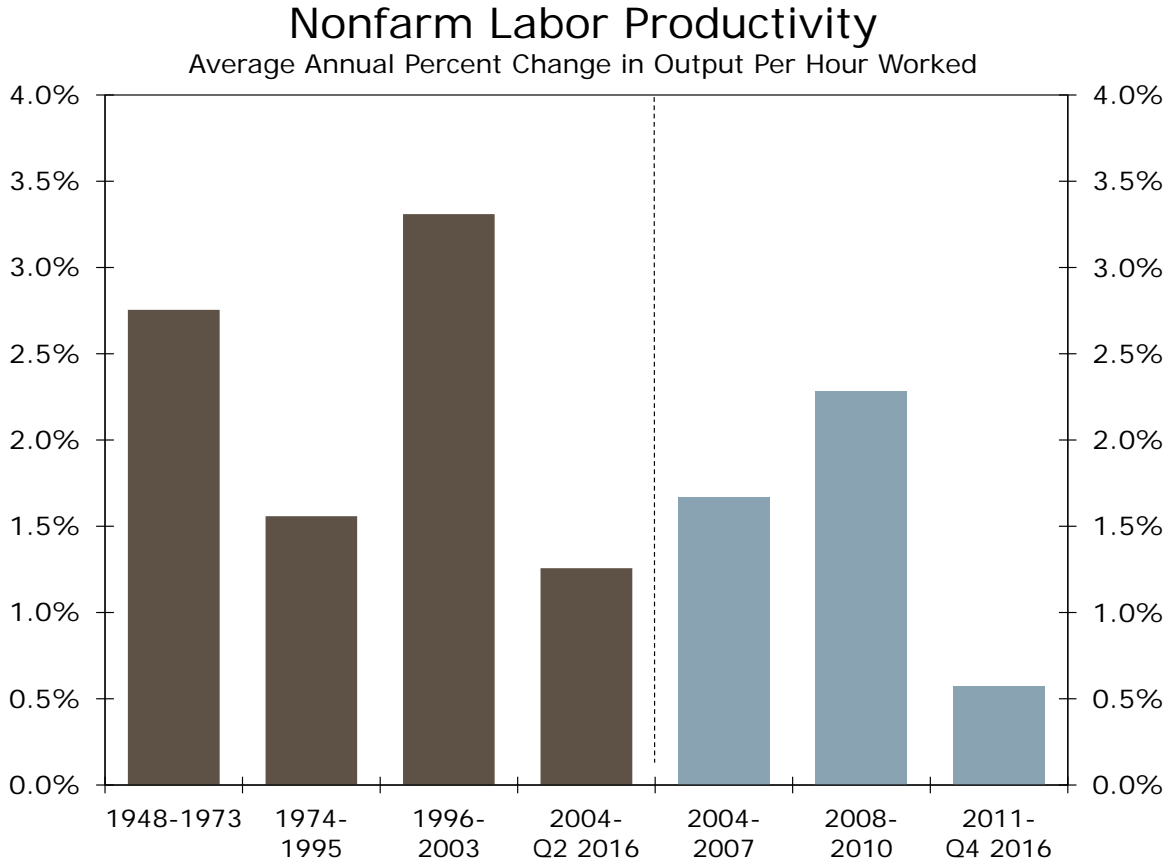
Long-Run Fed Funds Projections

Summary of Economic Projections, Central Tendency Range



Source: Federal Reserve Board and Wells Fargo Securities

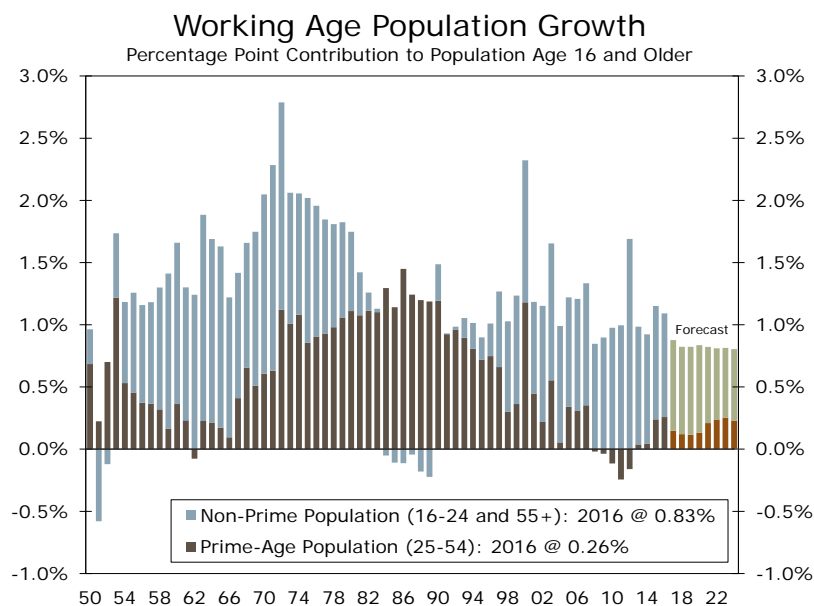
Productivity growth has downshifted over the past cycle



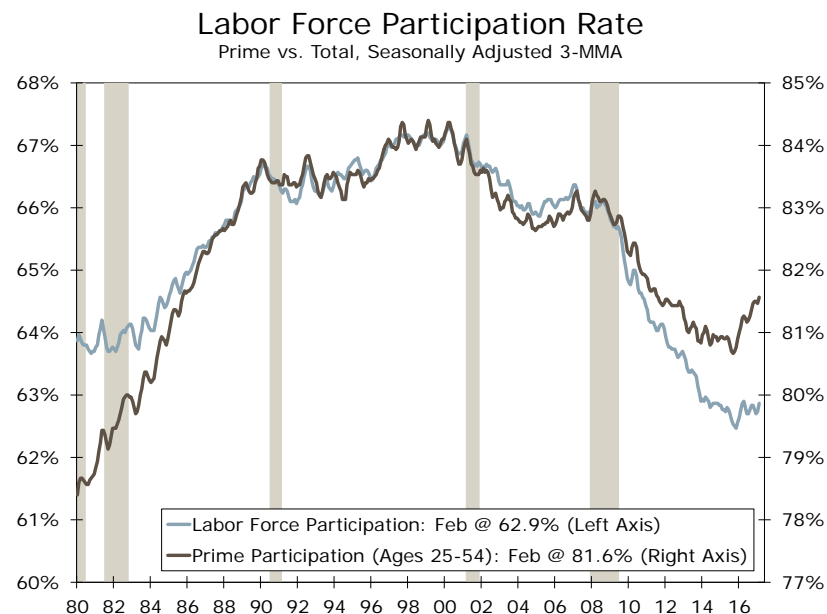
Source: U.S. Department of Labor and Wells Fargo Securities

Labor supply growth is slowing, particularly for prime-age workers. Labor force participation has improved but remains historically low.

Working Age Population

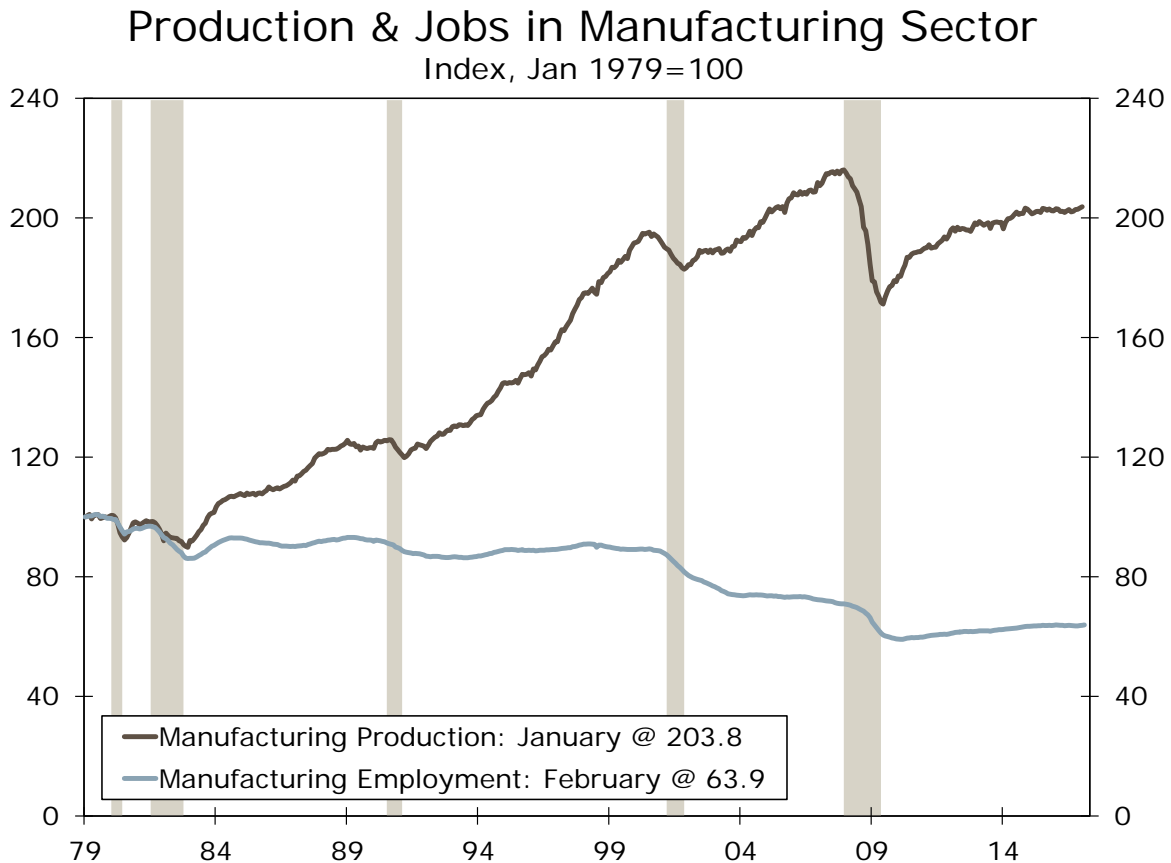


Labor Force Participation



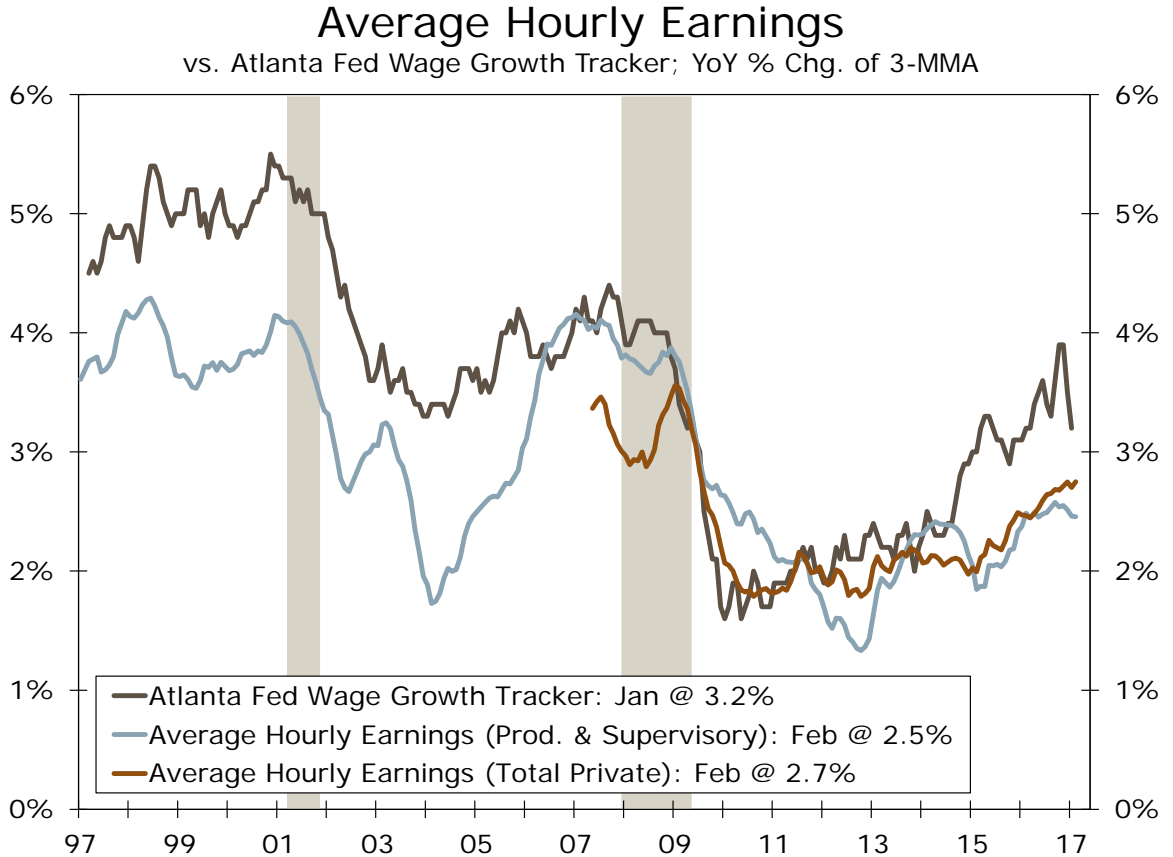
Source: U.S. Department of Labor and Wells Fargo Securities

Manufacturing output has more than doubled since the late 1970s, but employment has declined on a secular basis



Source: U.S. Department of Labor, Federal Reserve Board and Wells Fargo Securities

Average hourly earnings growth has picked up modestly but remains limited by lower-skilled workers entering the workforce and Baby Boomers beginning to retire—the Atlanta Fed measure tracks individuals over time, eliminating compositional effects on wage growth

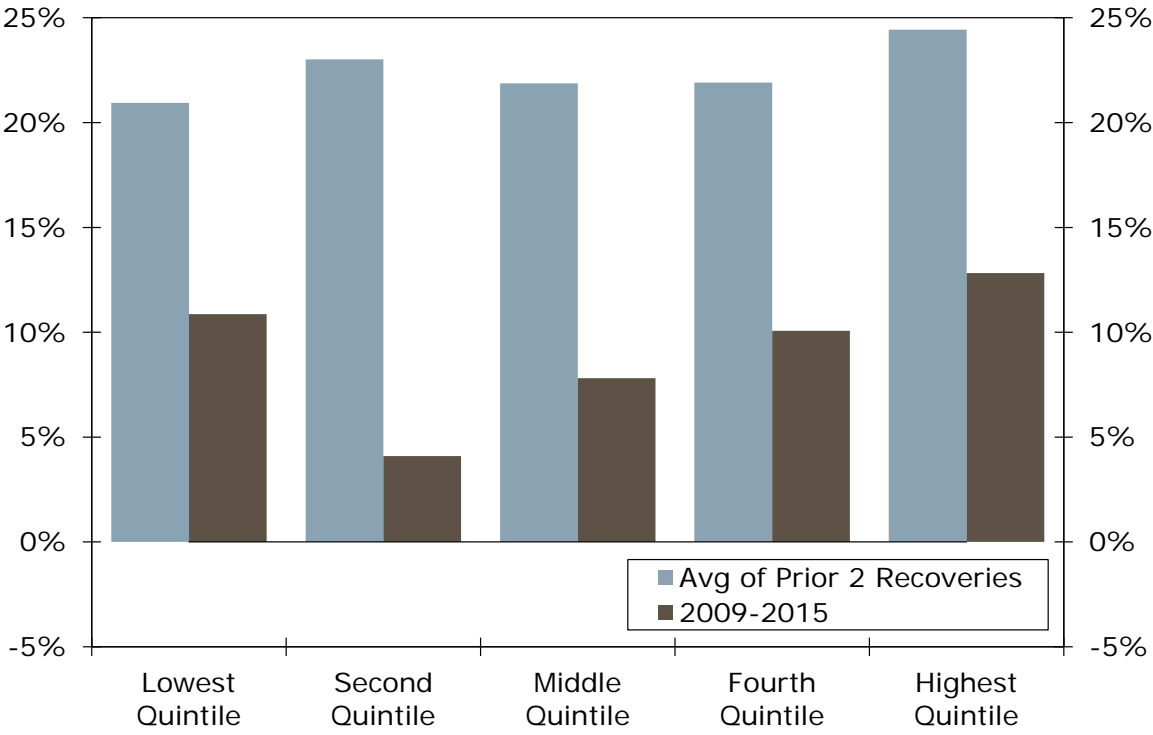


Source: U.S. Department of Labor, Federal Reserve Bank of Atlanta and Wells Fargo Securities

Income growth has finally begun to turn around but still lags prior recoveries

Income Growth During Economic Recoveries

Percent Change 6 Years After Recession End, Before-Tax Income

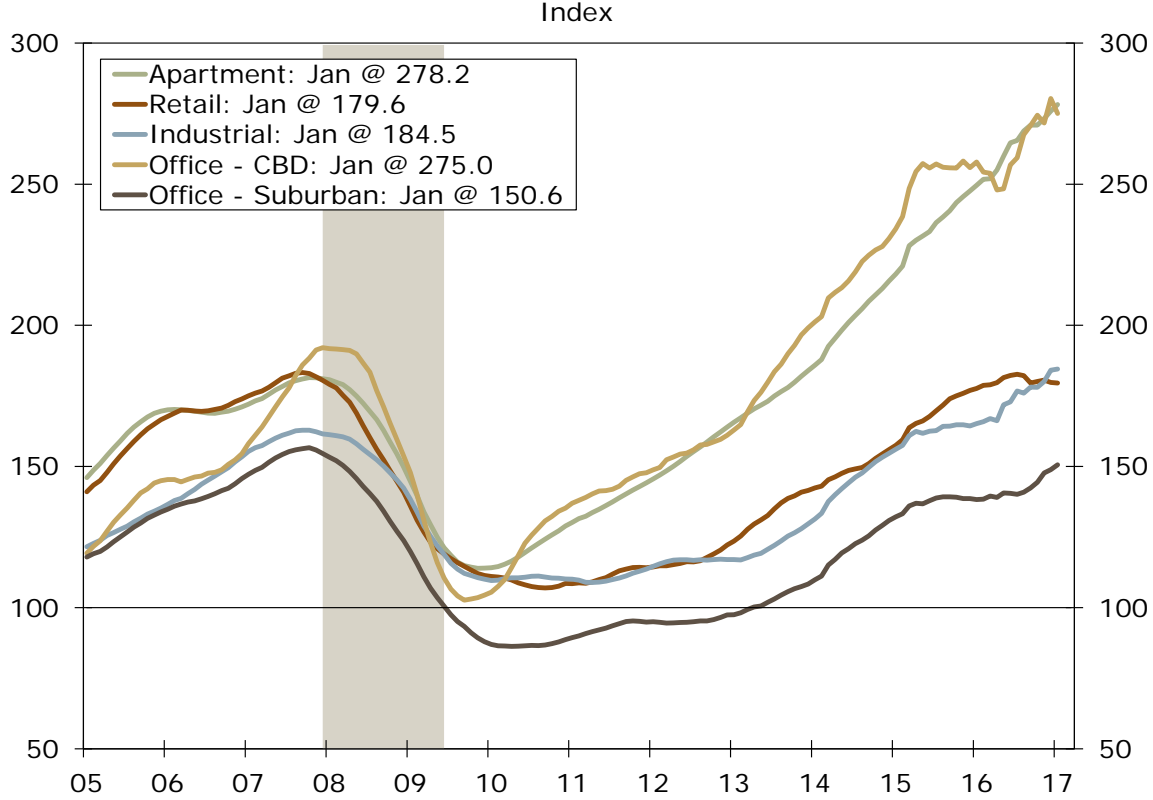


Source: U.S. Department of Labor and Wells Fargo Securities

Divergence in Commercial Real Estate

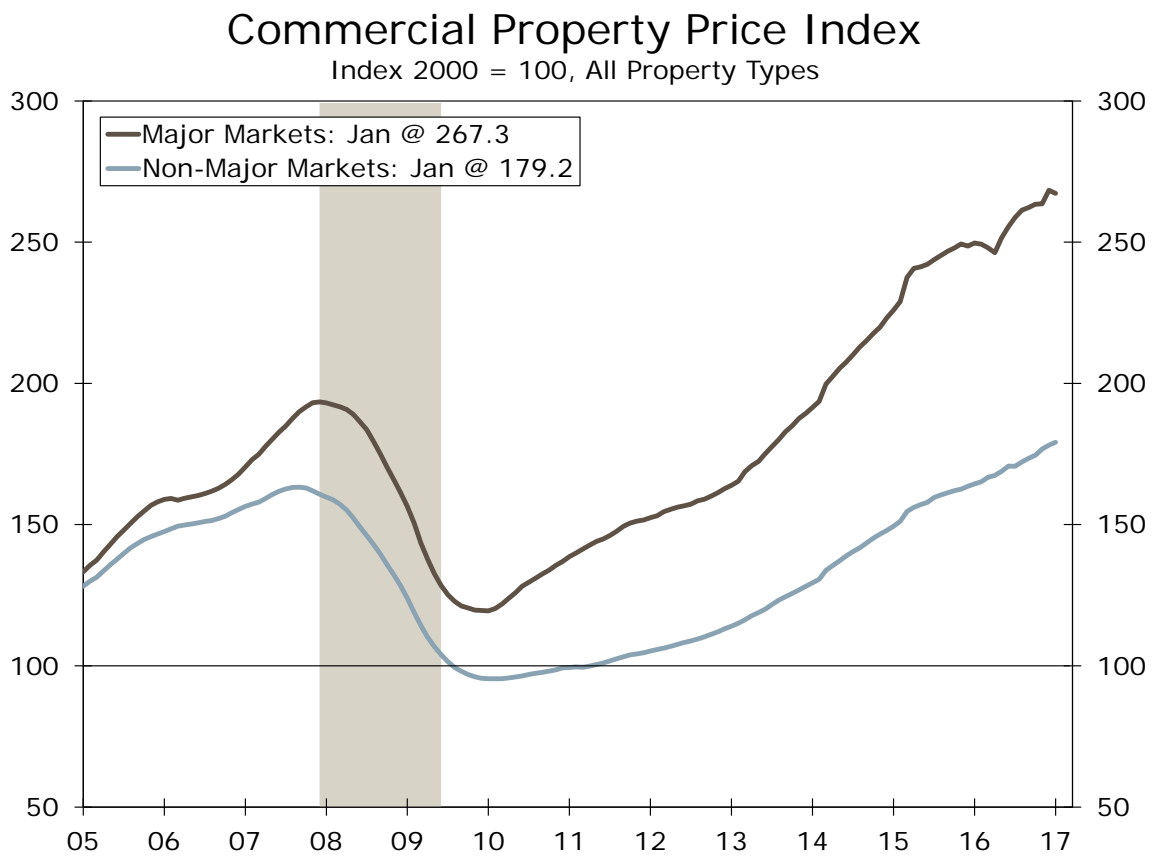
High valuations have caught the Fed's attention

Commercial Property Price Index



Source: RCA and Wells Fargo Securities

Valuations have grown the fastest in major markets

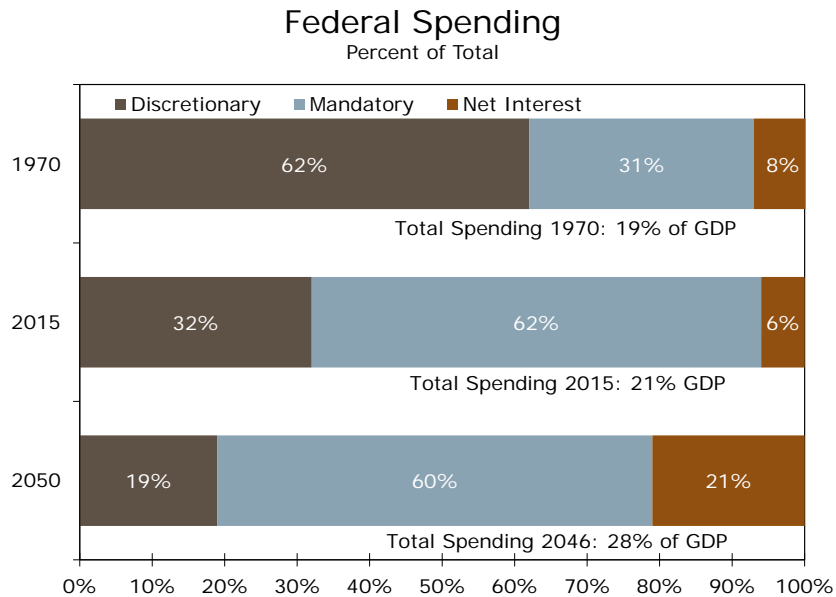


Source: RCA and Wells Fargo Securities

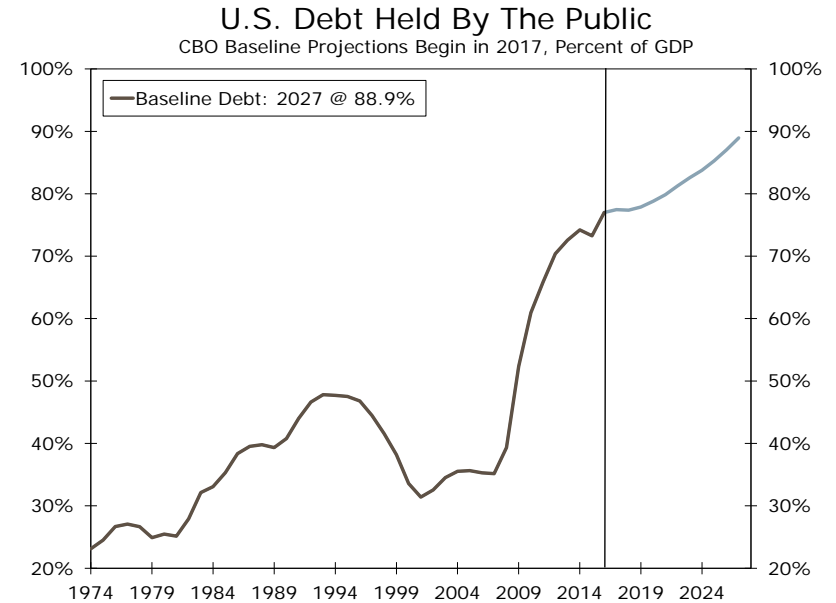
Unsustainable Fiscal Policy

The composition of federal spending has shifted dramatically.
The CBO projects that the debt-to-GDP ratio will surpass 88 percent by 2027.

Composition of Federal Spending



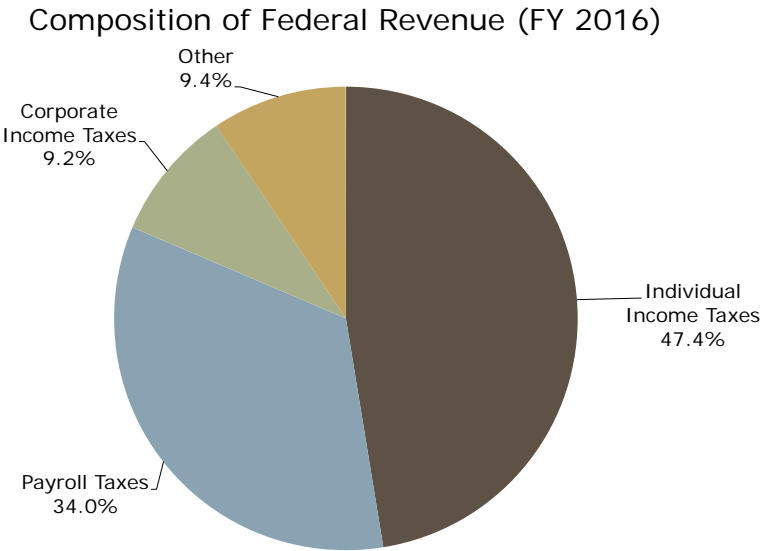
Federal Debt Continues to Rise



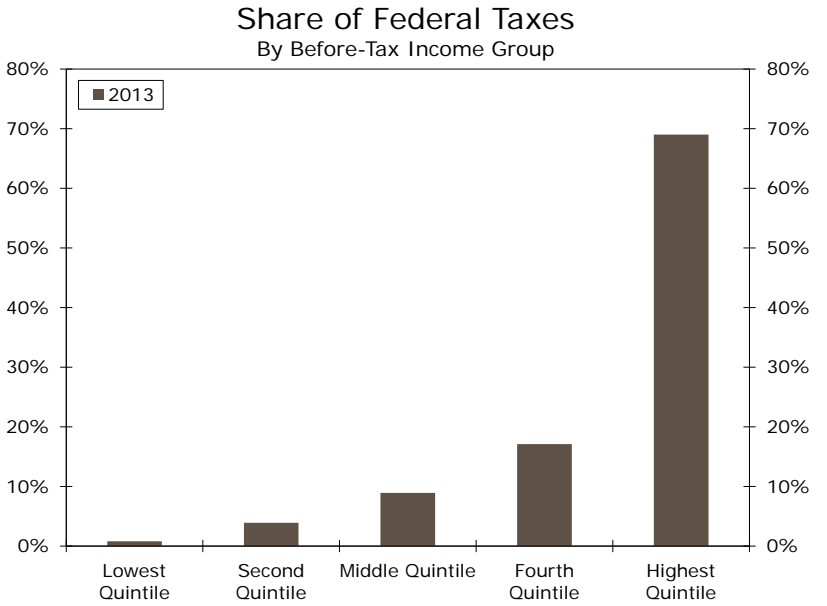
Source: Congressional Budget Office and Wells Fargo Securities

Corporate income tax receipts accounted for less than 10 percent of federal revenues in FY 2016. The top income quintile pays an outsized share of federal taxes.

Composition of Federal Revenues



Federal Taxes Paid by Income Quintile



Source: Congressional Budget Office and Wells Fargo Securities

Key Issues to Watch in the 115th Congress

Expectations for the Future

- Affordable Care Act repeal will be the top priority. Committing to replacing ACA would likely slow down the process, delaying other legislative priorities.
- Some form of corporate/individual income tax cuts/reforms are likely. Deficit-neutrality will likely be the key challenge, as will progressivity.
- Other policy areas, such as infrastructure spending, immigration reform and regulatory changes, are likely to play out over time and may take longer than markets and some commentators currently anticipate. The path forward on trade remains highly uncertain.
- Consider that in 2009 Democrats controlled the House, the White House and had a supermajority in the Senate yet failed to enact a highly-sought cap-and-trade bill.
- Political capital, like its financial cousin, is a finite resource.

Corporate Tax Reform—As Proposed by House Republicans—Summary

Corporate Tax Reform—Winners and Losers*

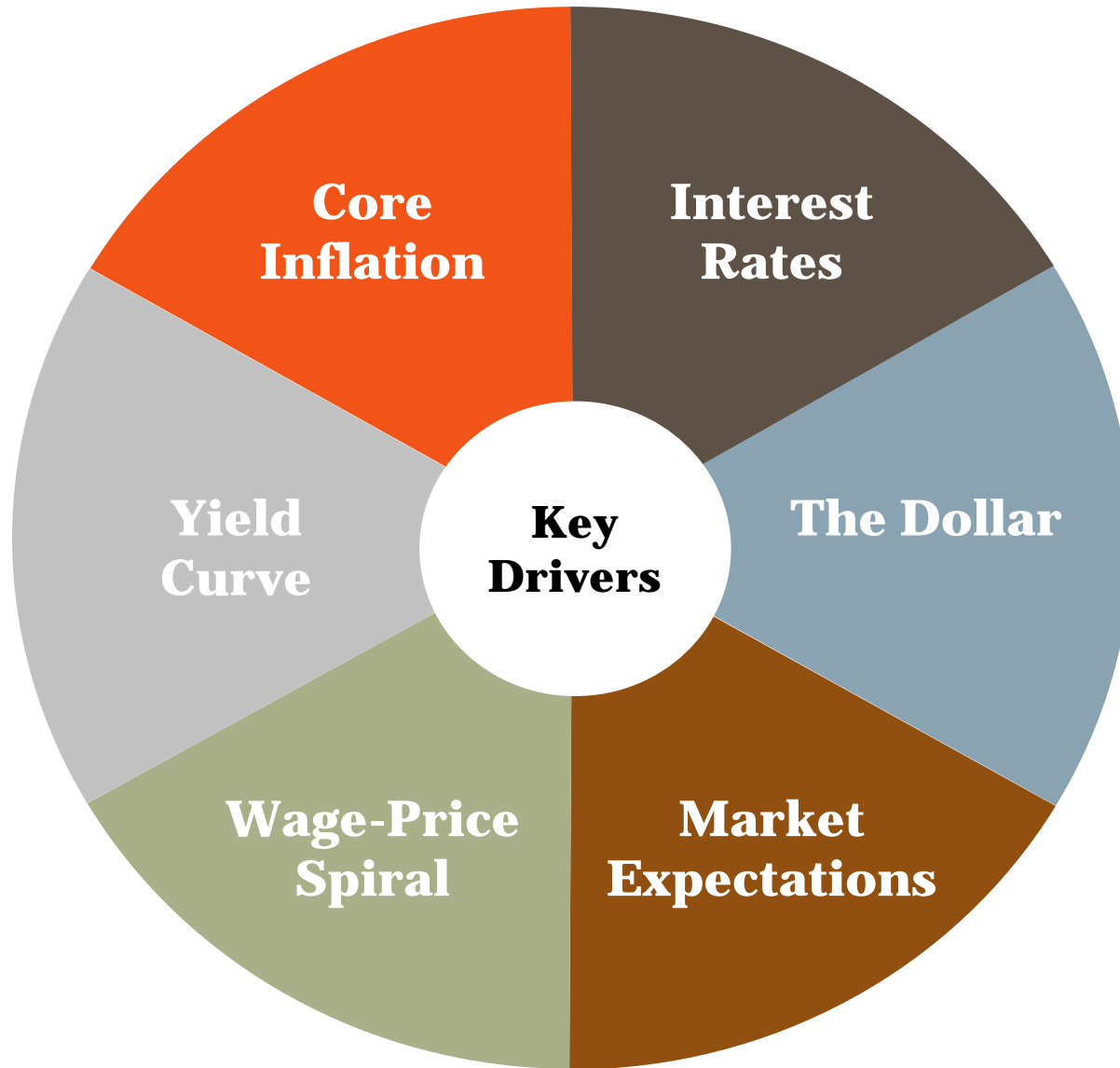
Who is positioned to benefit?

- High cash taxpayers
- Cash rich and capital intensive industries
- Domestic producers
- Issuers with overseas cash/earnings
- Companies with low cost, long-term debt
- Sectors:
 - IG: Technology, Pharmaceuticals, E&P & Metals
 - HY: Technology, Food & Beverage, Services, Telecom

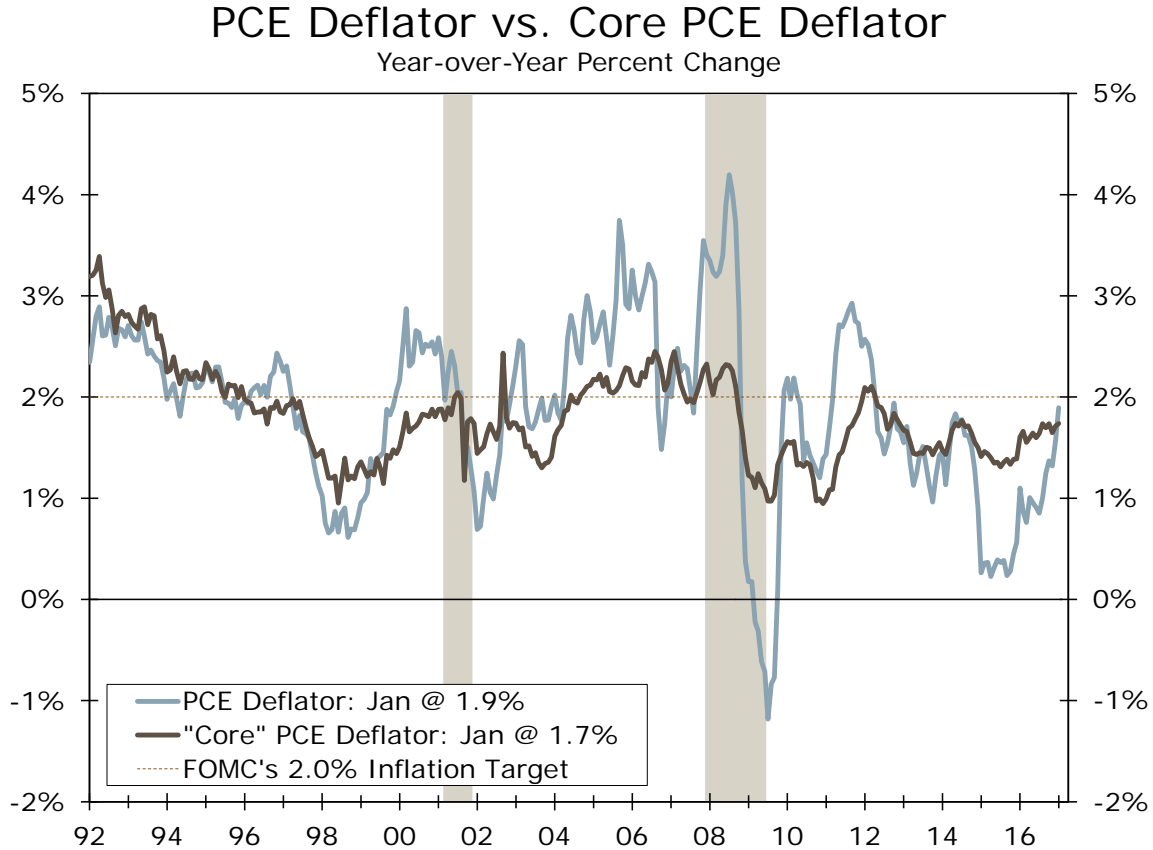
Who is at risk?

- Low cash taxpayers
- Cash and capital light companies
- Issuers with high cost, short-term debt
- Debt-financed payouts to equity holders
- Sectors:
 - IG: Retail, Autos, Utilities (Hold Co.)
 - HY: Retail, Consumer Products

*Bory et. al. (February 2017). "Credit Connections: Corporate Tax Reform—Speculation on Speculation." Wells Fargo Credit Strategy.



Inflation is approaching the FOMC's target—average less than two percent since 1992

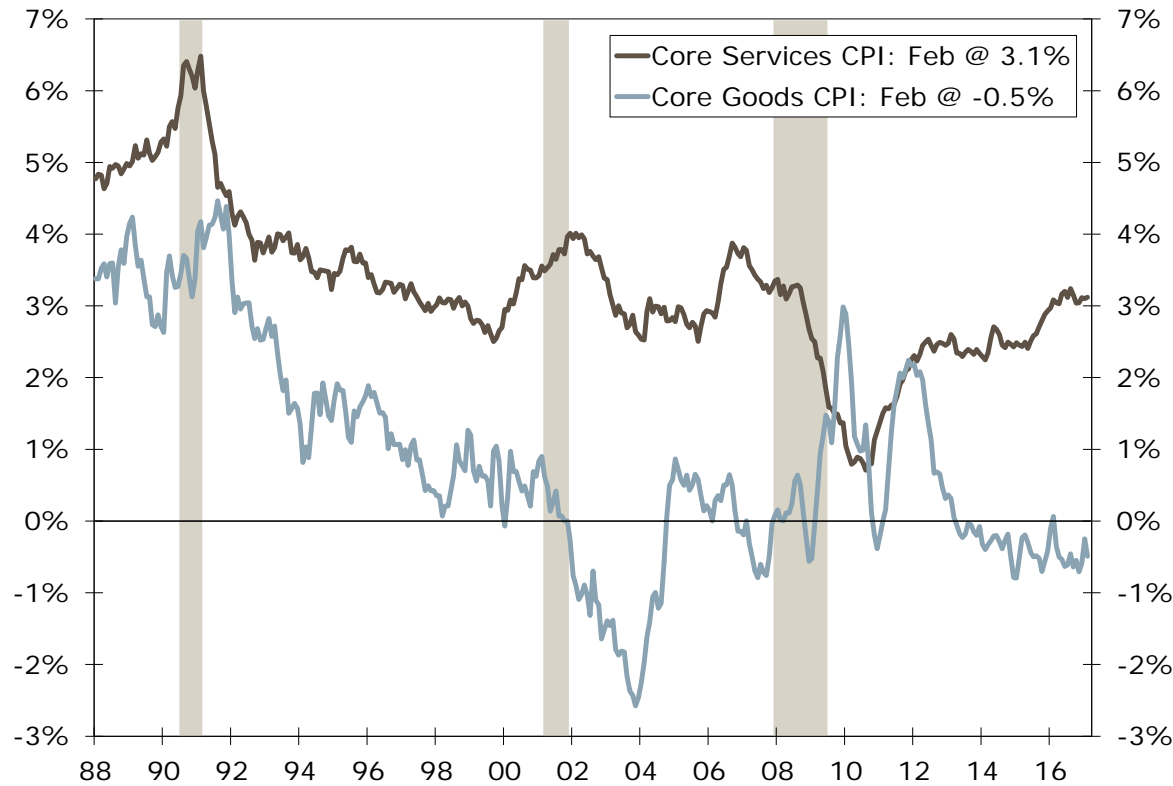


Source: U.S. Department of Commerce and Wells Fargo Securities

Inflation for services has been much firmer than for commodities

Core Goods vs. Core Services CPI

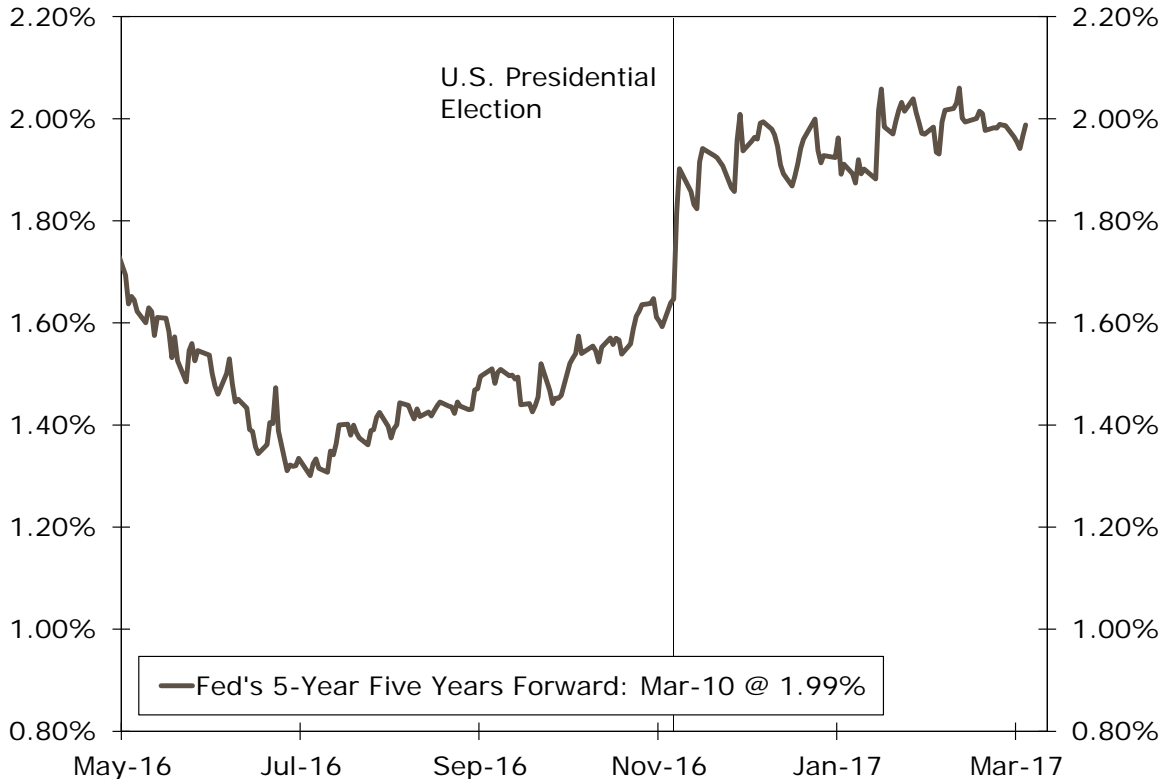
Year-over-Year Percent Change



Source: U.S. Department of Labor and Wells Fargo Securities

The jump in inflation expectations was sharp and sustained

Fed's 5-Year Five Years Forward



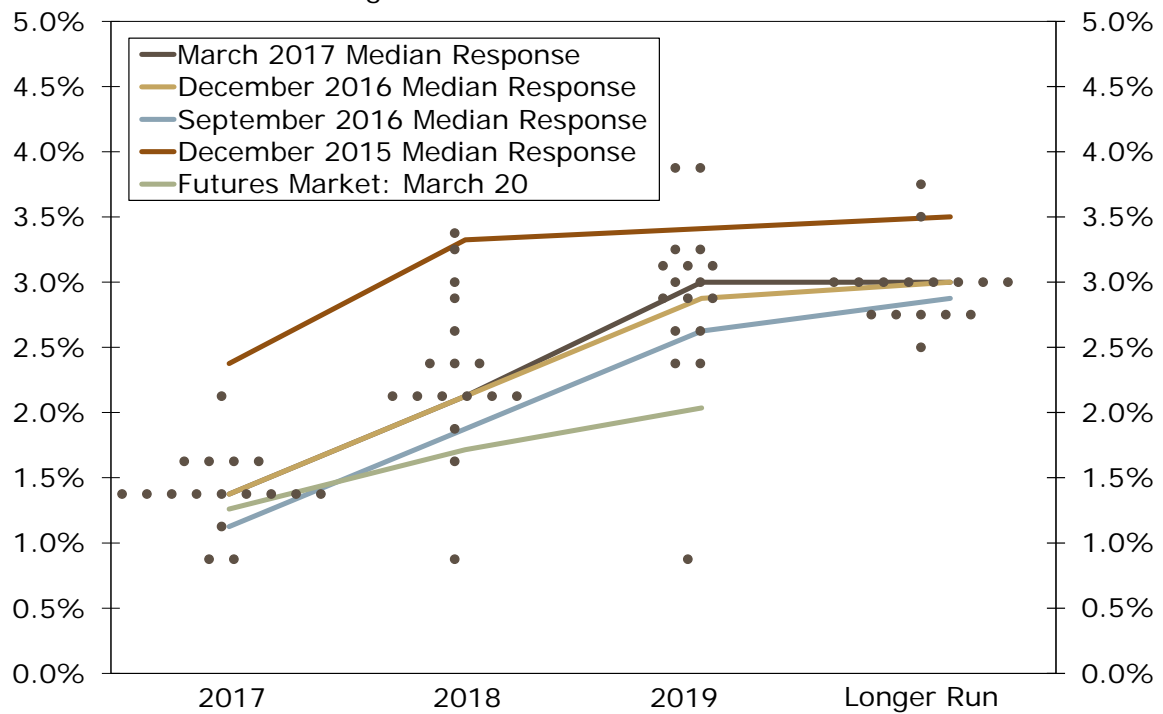
Source: Bloomberg LP and Wells Fargo Securities

Interest Rate Path

After several years of downward revisions, the FOMC modestly adjusted the dots up at the December meeting

Appropriate Pace of Policy Firming

Target Federal Funds Rate at Year-End

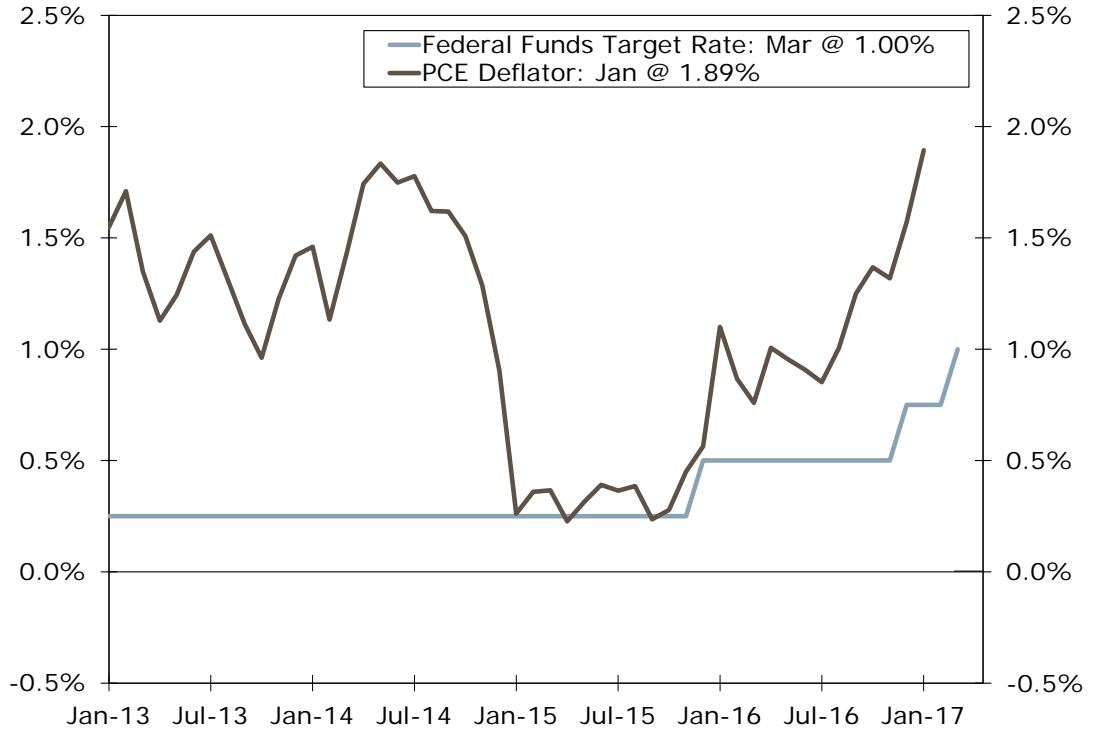


Source: Federal Reserve Board, Bloomberg LP and Wells Fargo Securities

Inflation is gaining momentum.
Fed funds rate to follow?
Declining real rates.

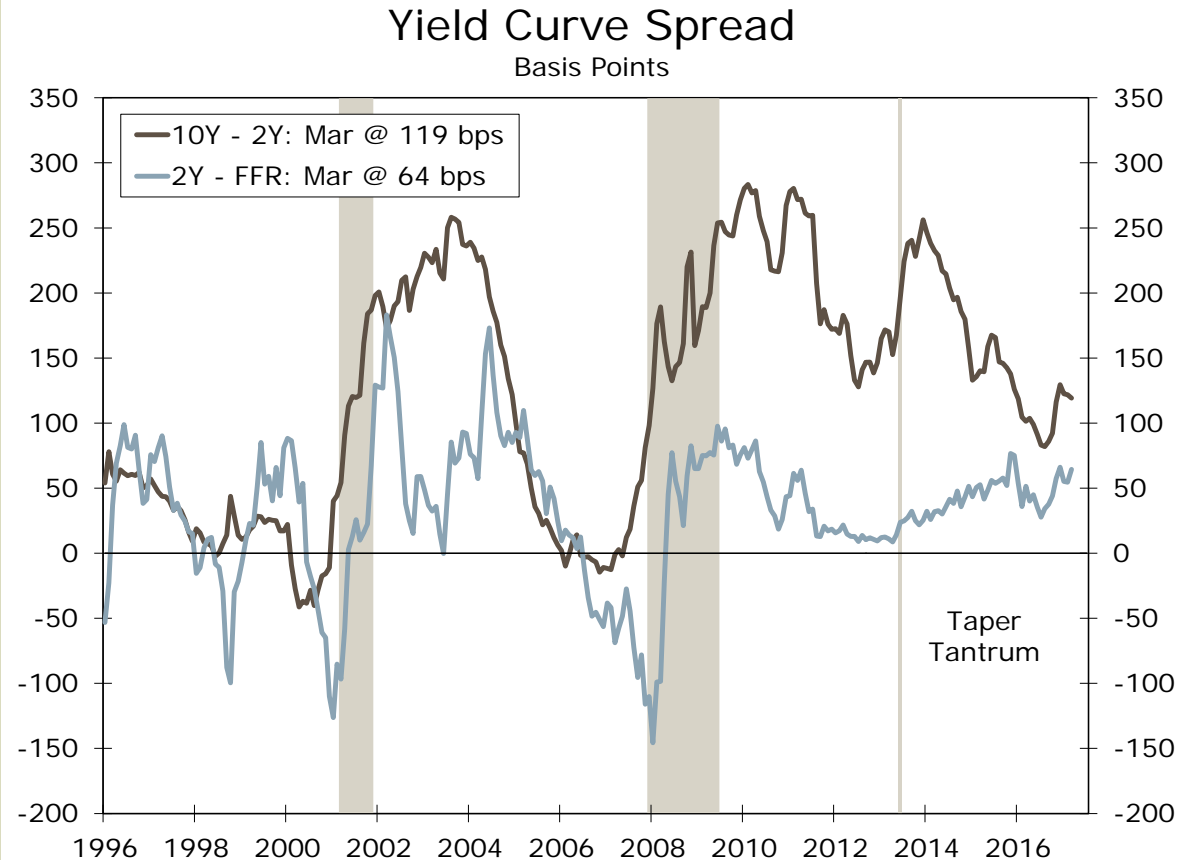
PCE Deflator and the Federal Funds Rate

Year-over-Year Percent Change, Target Rate



Source: Federal Reserve Board, U.S. Department of Labor and Wells Fargo Securities

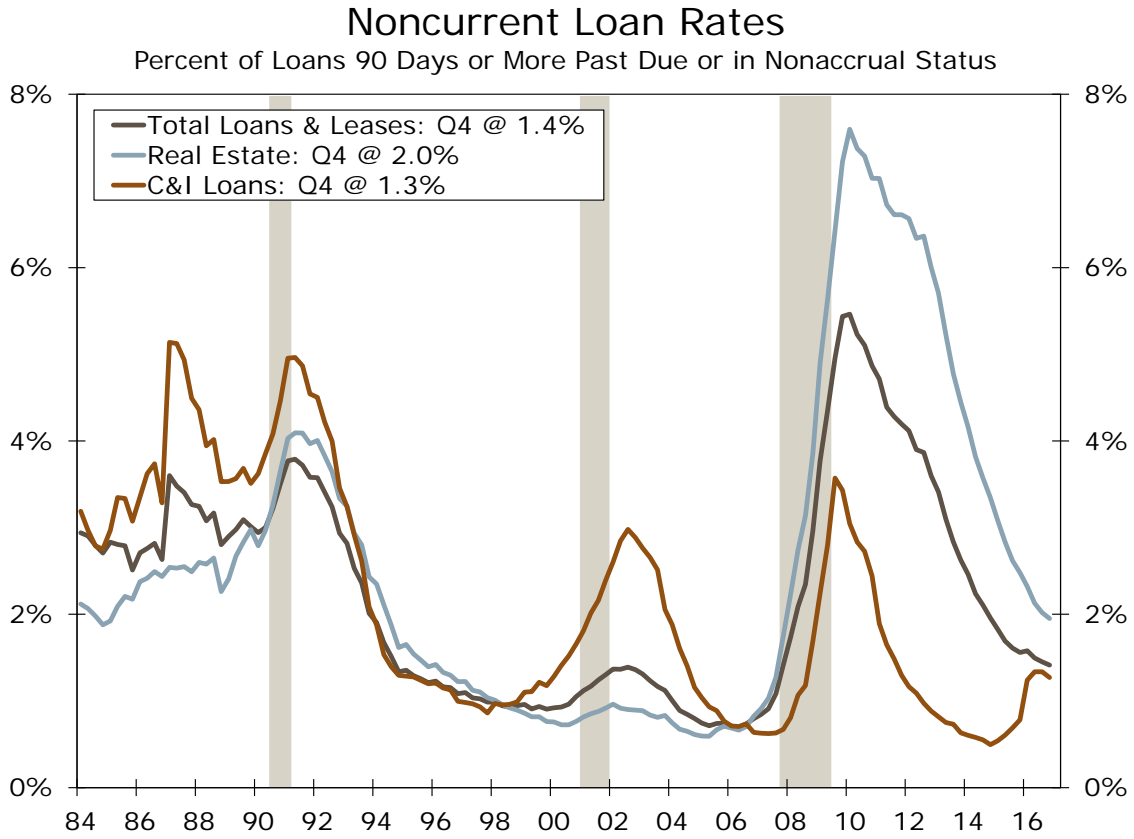
The yield curve flattened after the Taper Tantrum in 2013 but steepened post-election. We expect a flatter yield curve as 2017 progresses.



Source: Federal Reserve Board and Wells Fargo Securities

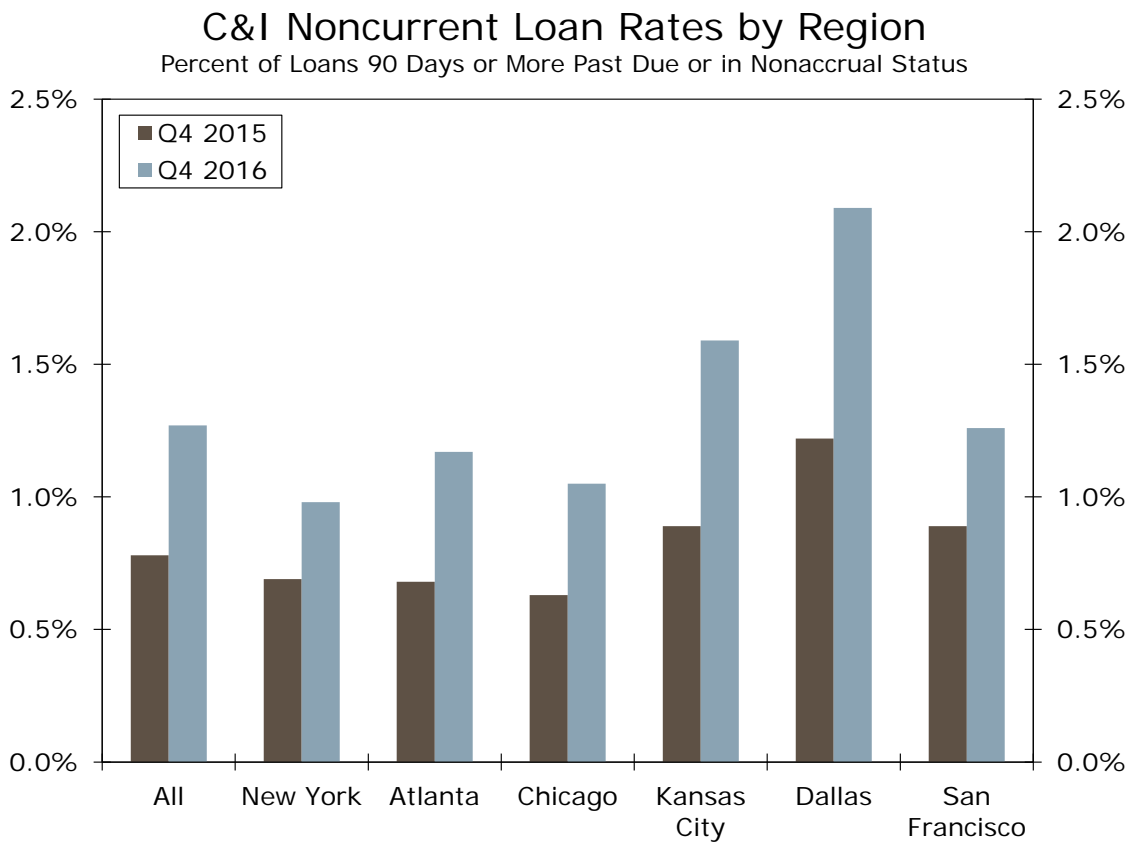
Business Lending, Profits and the U.S. Dollar

The noncurrent loan rate for commercial & industrial loans increased for six consecutive quarters but has since leveled off



Source: FDIC and Wells Fargo Securities

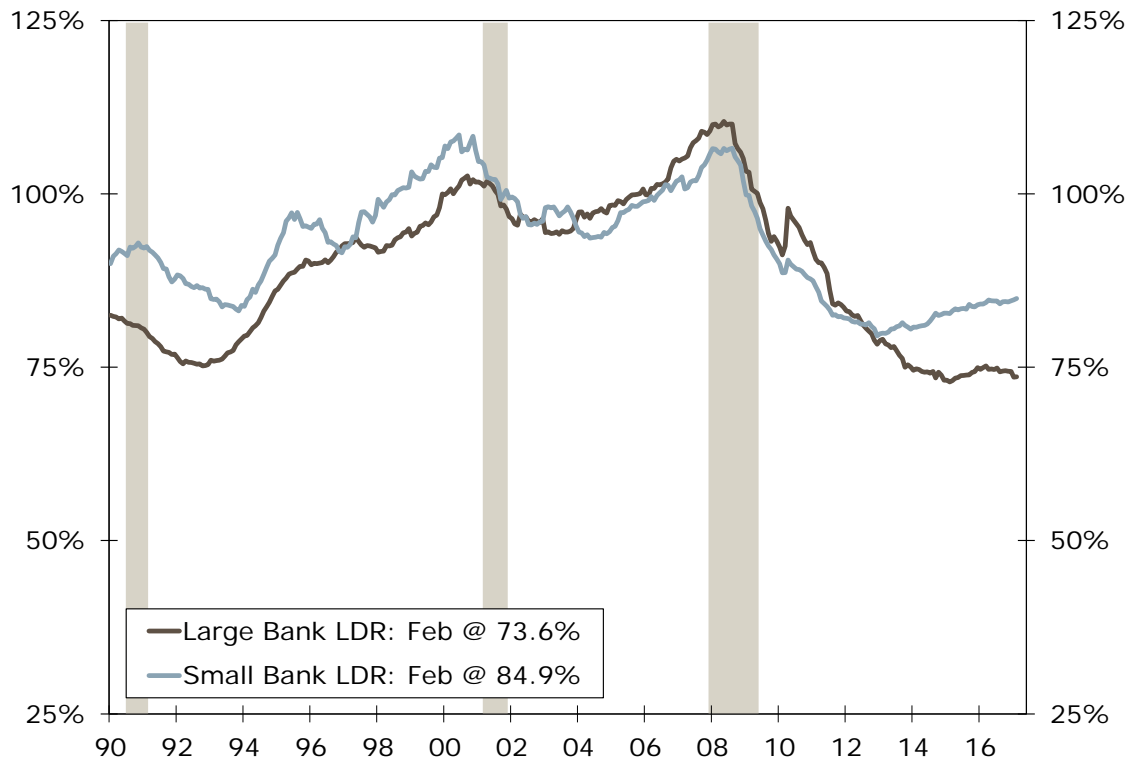
Delinquencies are up across the nation, but particularly in energy-centric districts



Source: FDIC and Wells Fargo Securities

Loan-to-deposit ratios are historically low

U.S. Commercial Bank Loan-to-Deposit Ratio

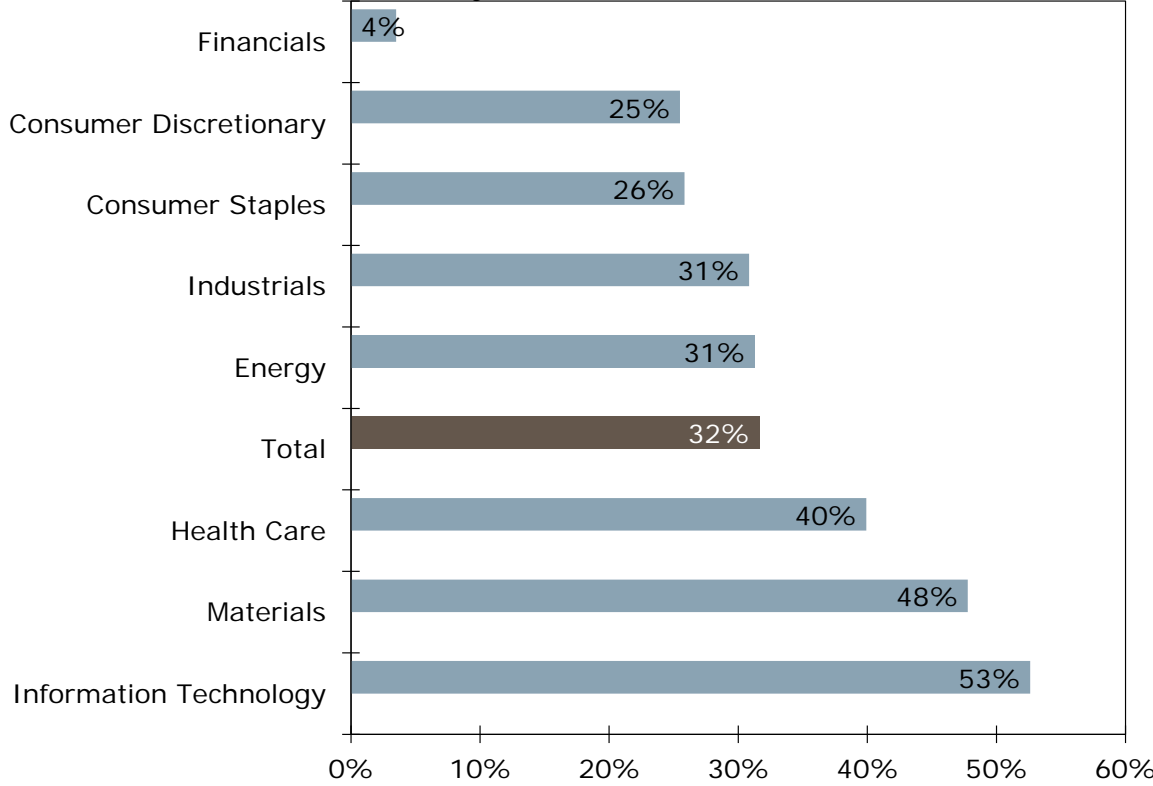


Source: Federal Reserve Board and Wells Fargo Securities

IT and Materials earn the highest share of their revenues abroad, making those industries the most at risk to the stronger dollar—Invoicing in dollars?

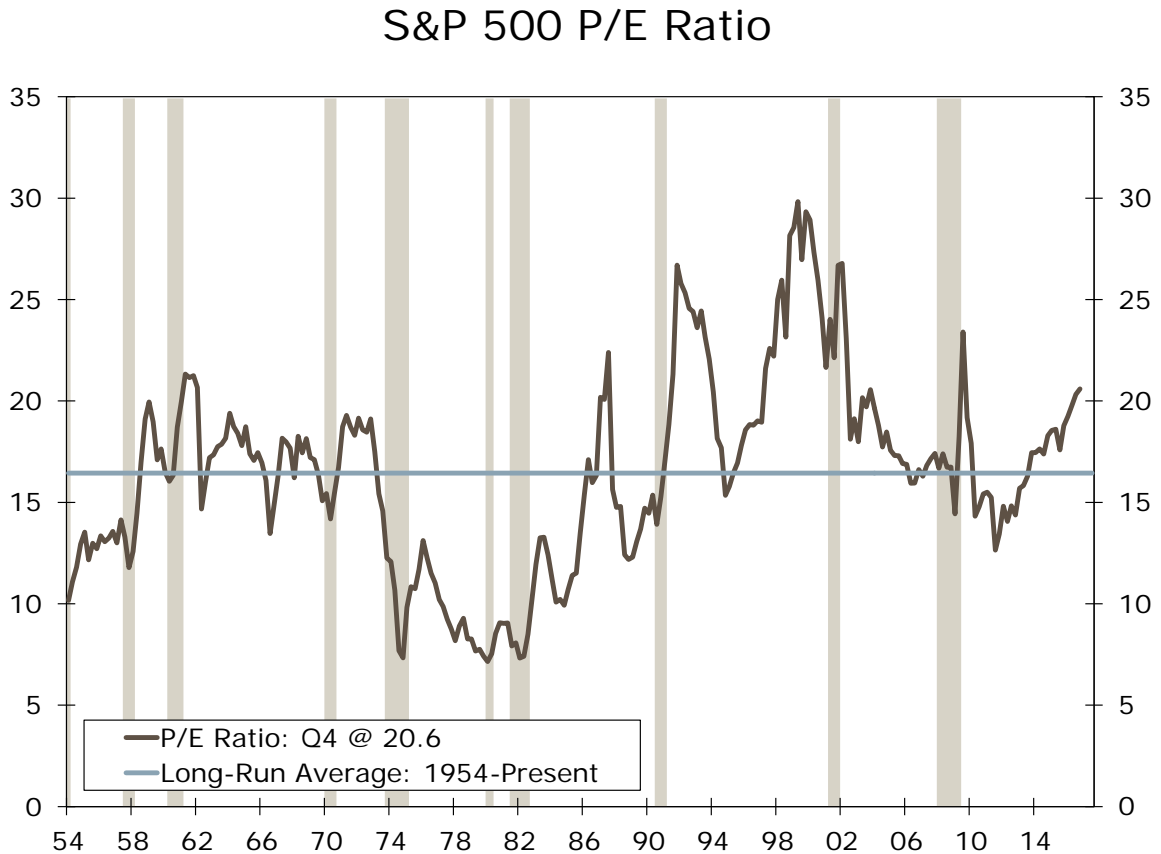
Percent of S&P Revenues Earned Abroad

By Sector, Q4 2016



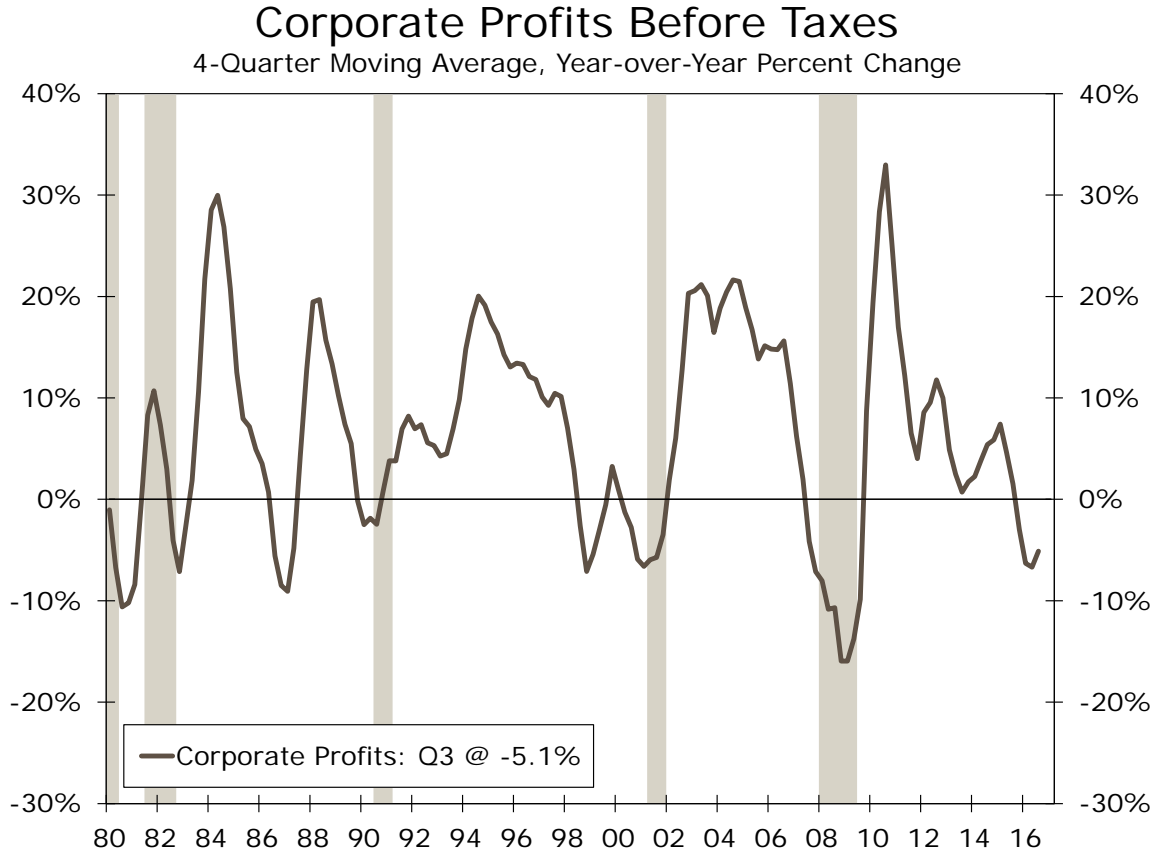
Source: Bloomberg LP and Wells Fargo Securities

The S&P 500 P/E ratio has risen above its long-run average. Deviations from the average can be persistent.



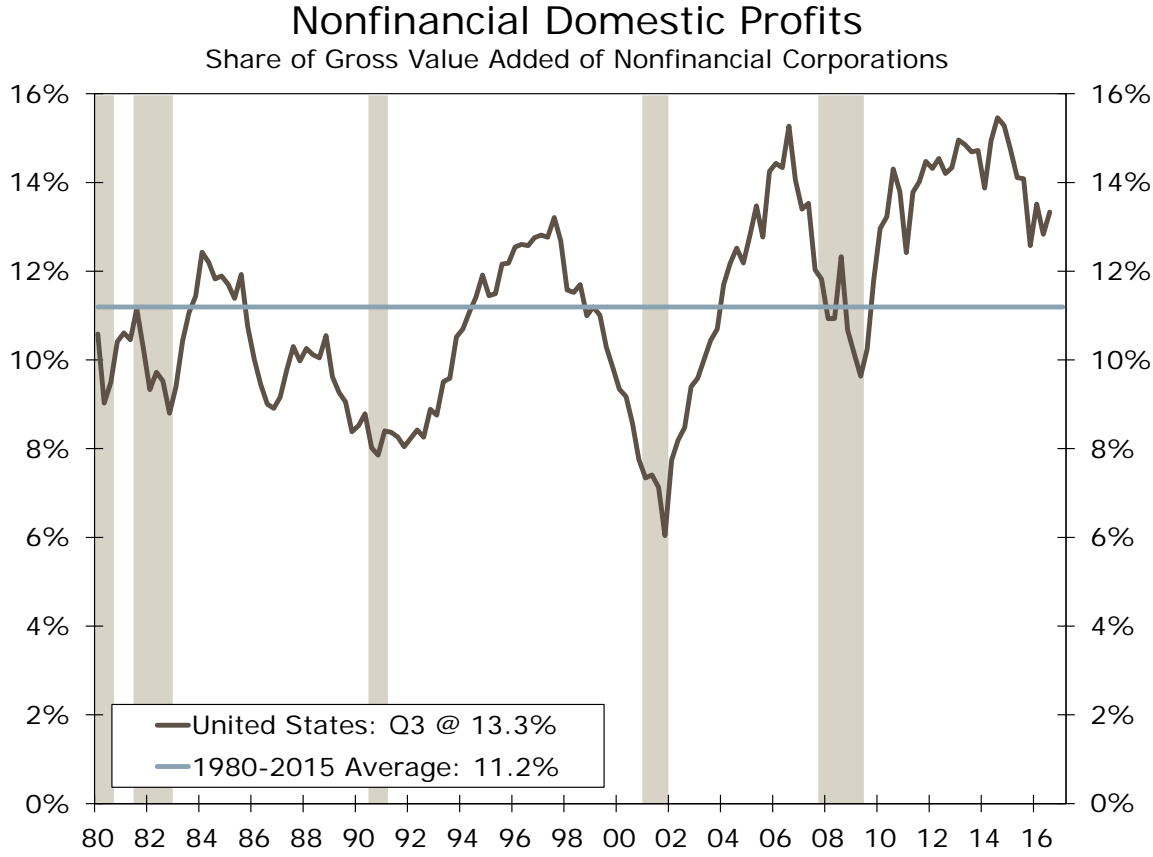
Source: Bloomberg LP and Wells Fargo Securities

Corporate profit growth has slowed recently—typical mid- to late-cycle slowdown



Source: U.S. Department of Commerce and Wells Fargo Securities

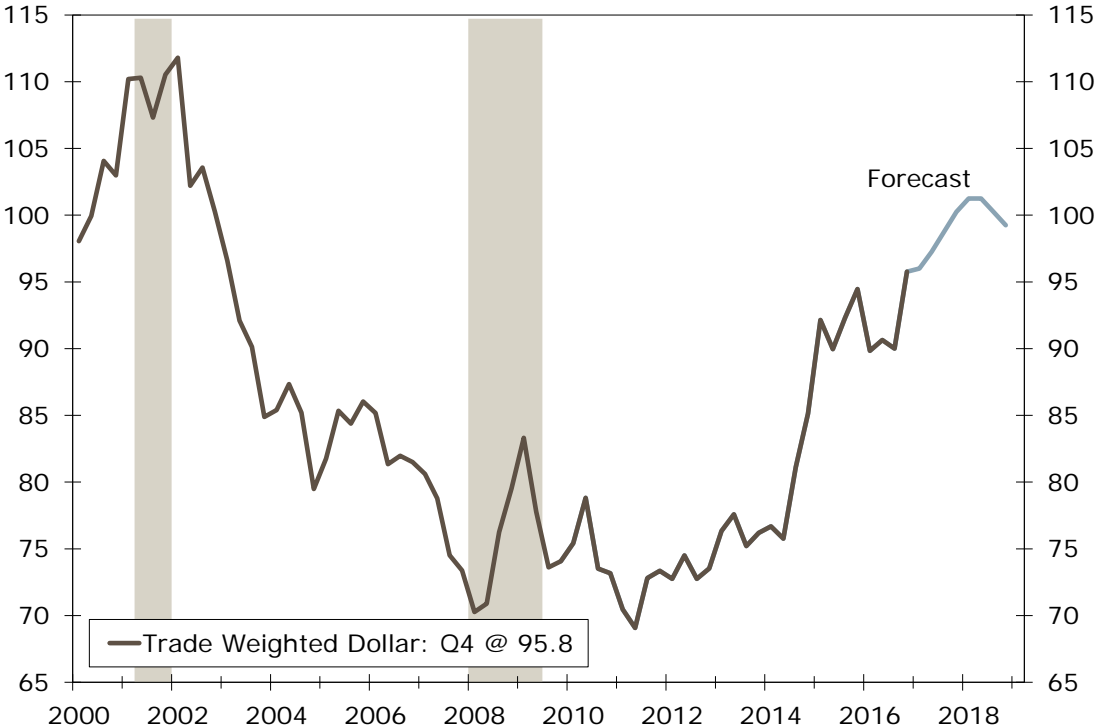
Corporate profits as a share of gross value added remains historically high but is now past its peak



Source: U.S. Department of Commerce and Wells Fargo Securities

Dollar appreciation should be more modest moving forward. Interventions from other countries (China, Mexico) limit dollar gains.

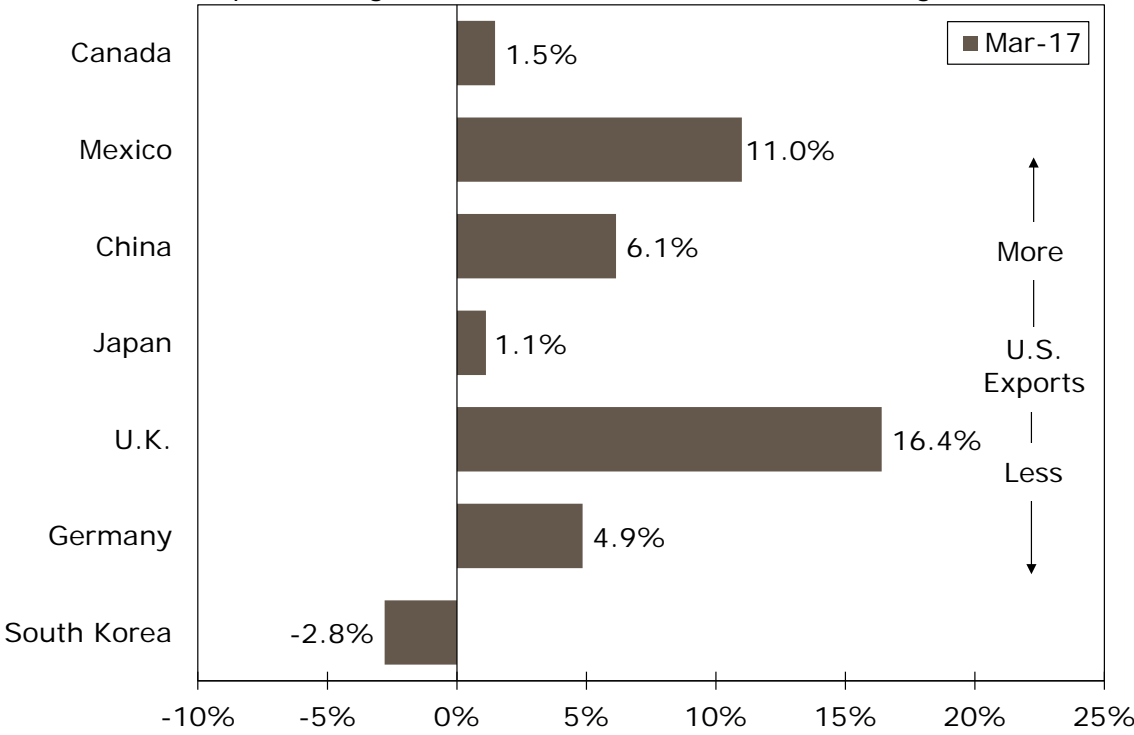
Trade Weighted Dollar Major Currency Index, 1973 = 100



Source: Federal Reserve Board and Wells Fargo Securities

The dollar has appreciated against most of our large trading partners over the past year, but movements have varied significantly

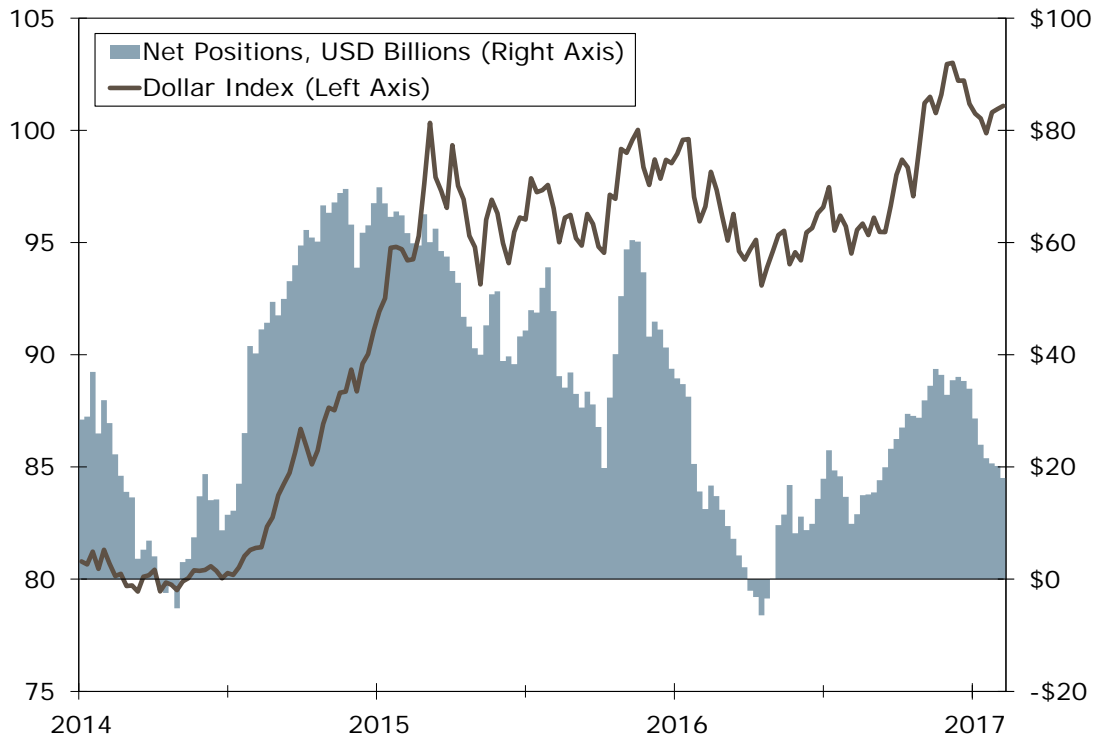
U.S. Dollar Appreciation vs. Top Export Destinations Top 7 Trading Partners, Year-over-Year Percent Change



Source: Federal Reserve Board and Wells Fargo Securities

Bullish sentiment on the dollar has eased a bit from its post-election peak

USD Index and IMM Positioning

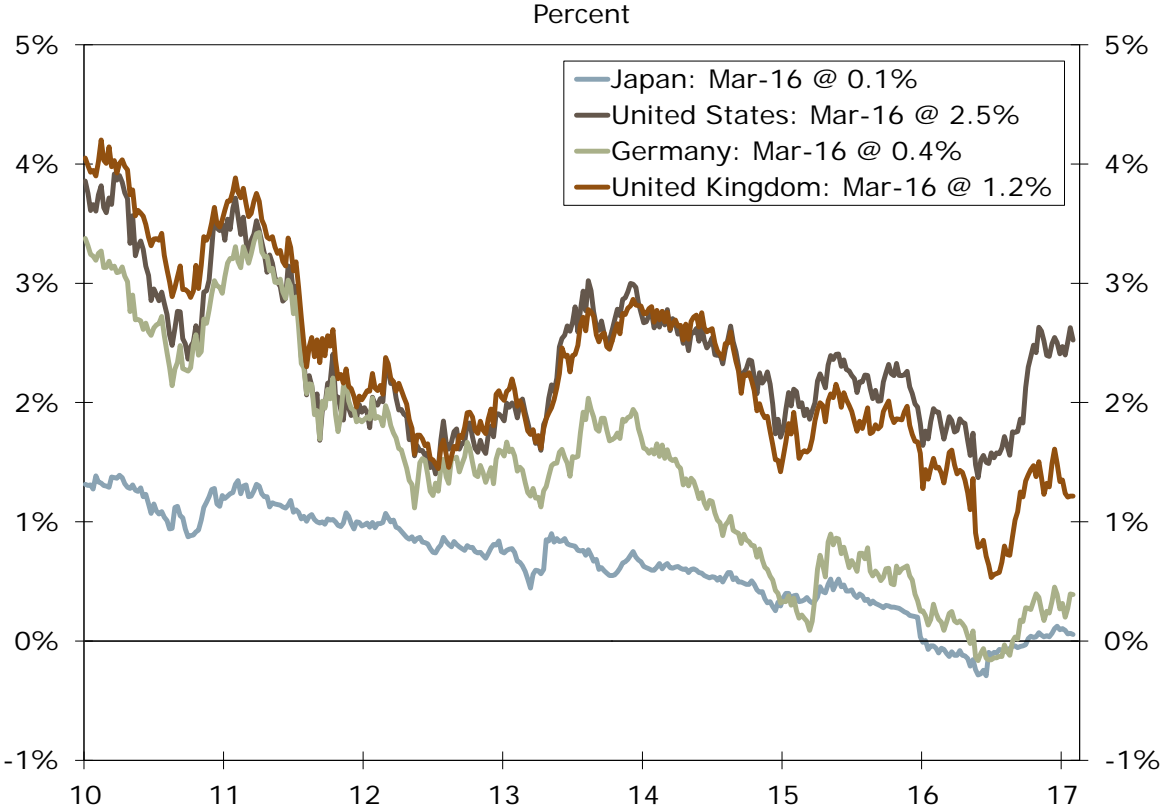


Source: Bloomberg LP and Wells Fargo Securities

International Outlook

Government bond yields have declined across the globe but have jumped since the election

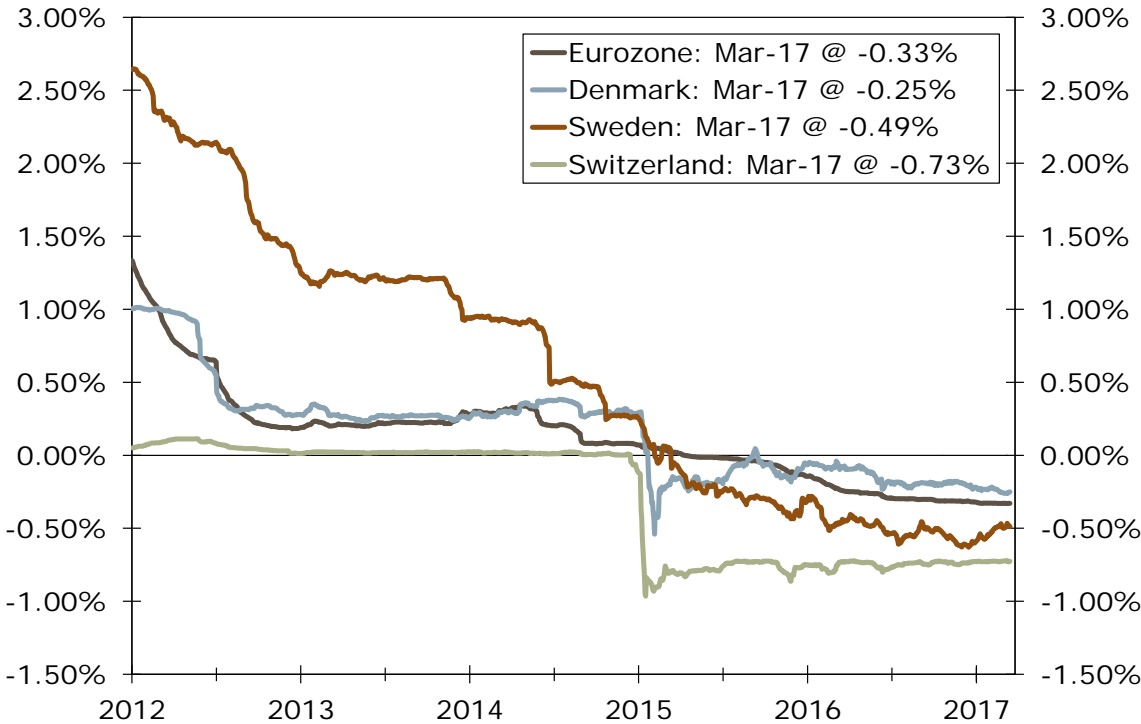
10-Year Government Bond Yields



Source: Federal Reserve Board, IHS Global Insight and Wells Fargo Securities

But short-term rates remain firmly negative

3-Month Interbank Offered Rates



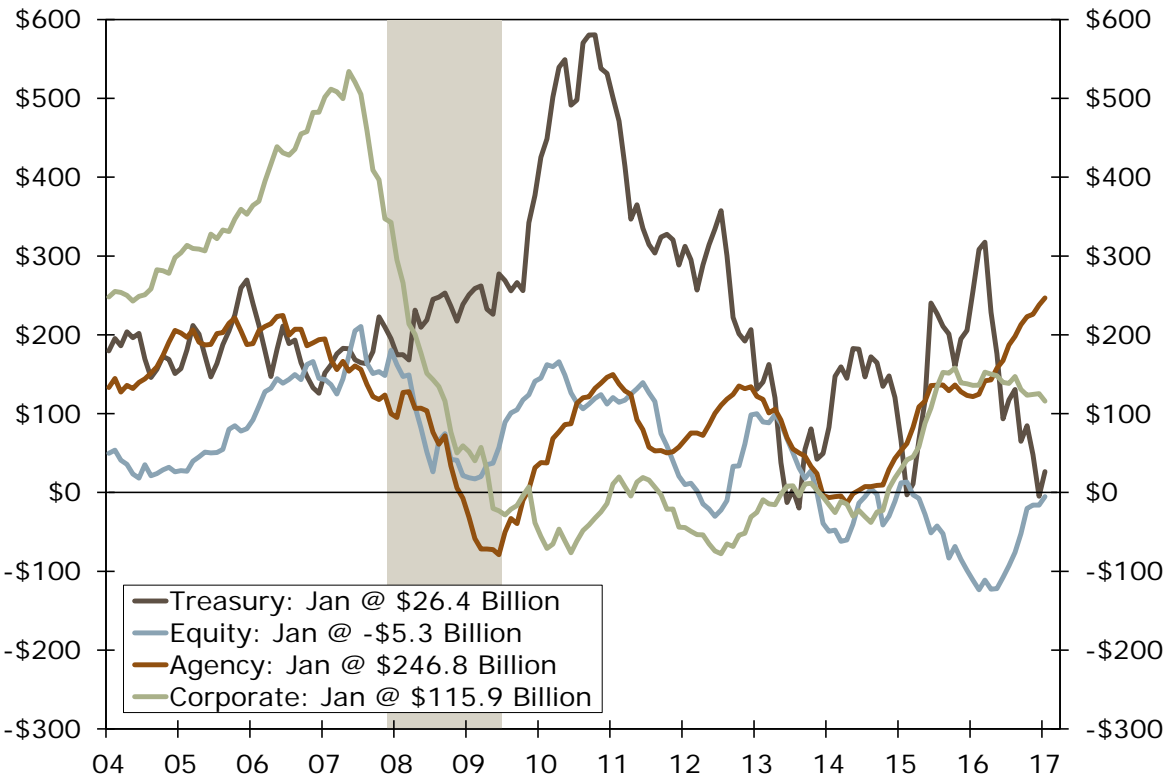
Source: Bloomberg LP and Wells Fargo Securities

Capital flows and asset allocation by global investors play a role in rate determinations

Less appetite for Treasuries
growing appetite for Agencies

Foreign Private Purchases of U.S. Securities

12-Month Moving Sum, Billions of Dollars

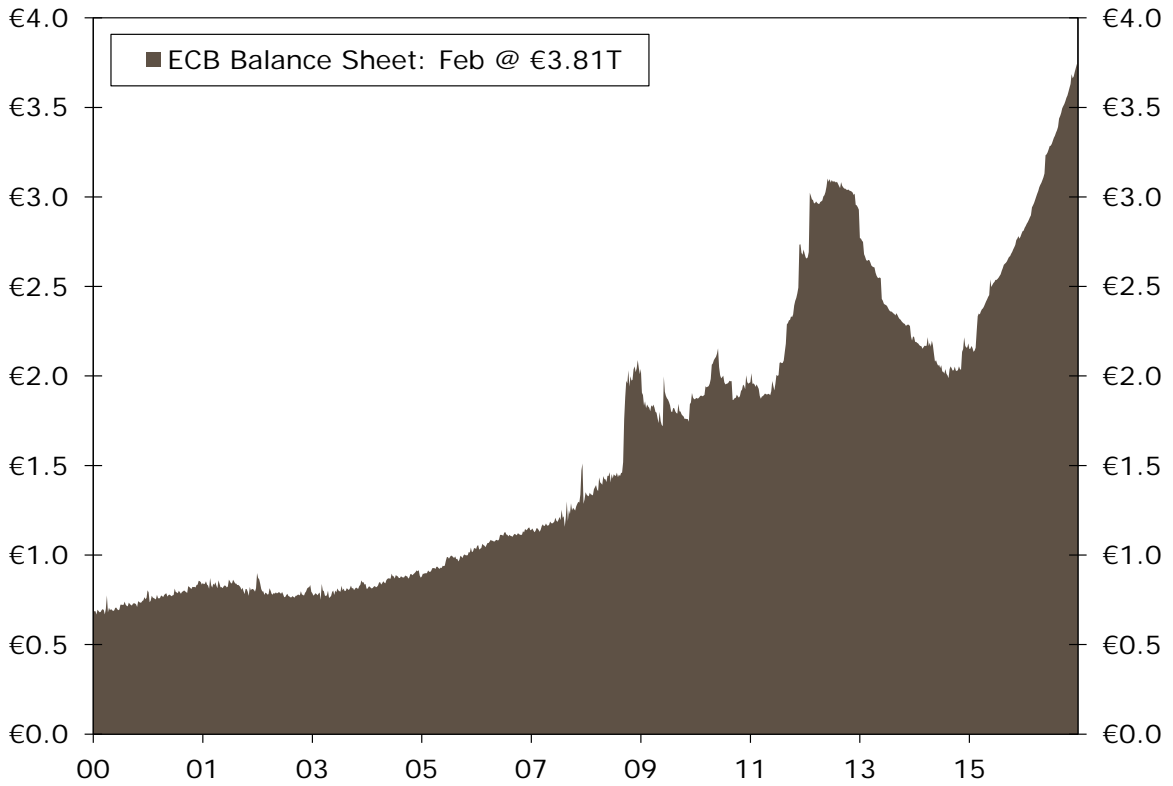


Source: U.S. Department of the Treasury and Wells Fargo Securities

The ECB's QE program should remain operational through at least March 2017

ECB Balance Sheet

Trillions of Euros

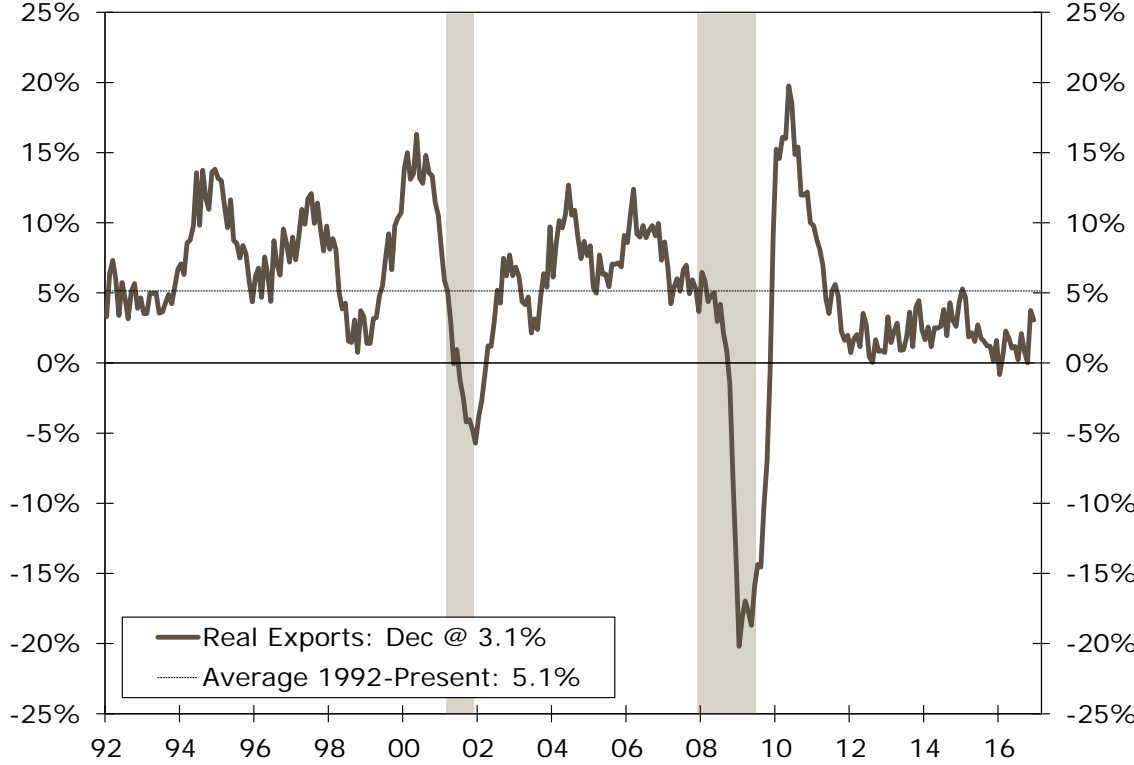


Source: IHS Global Insight and Wells Fargo Securities

Global trade has slowed over the past year

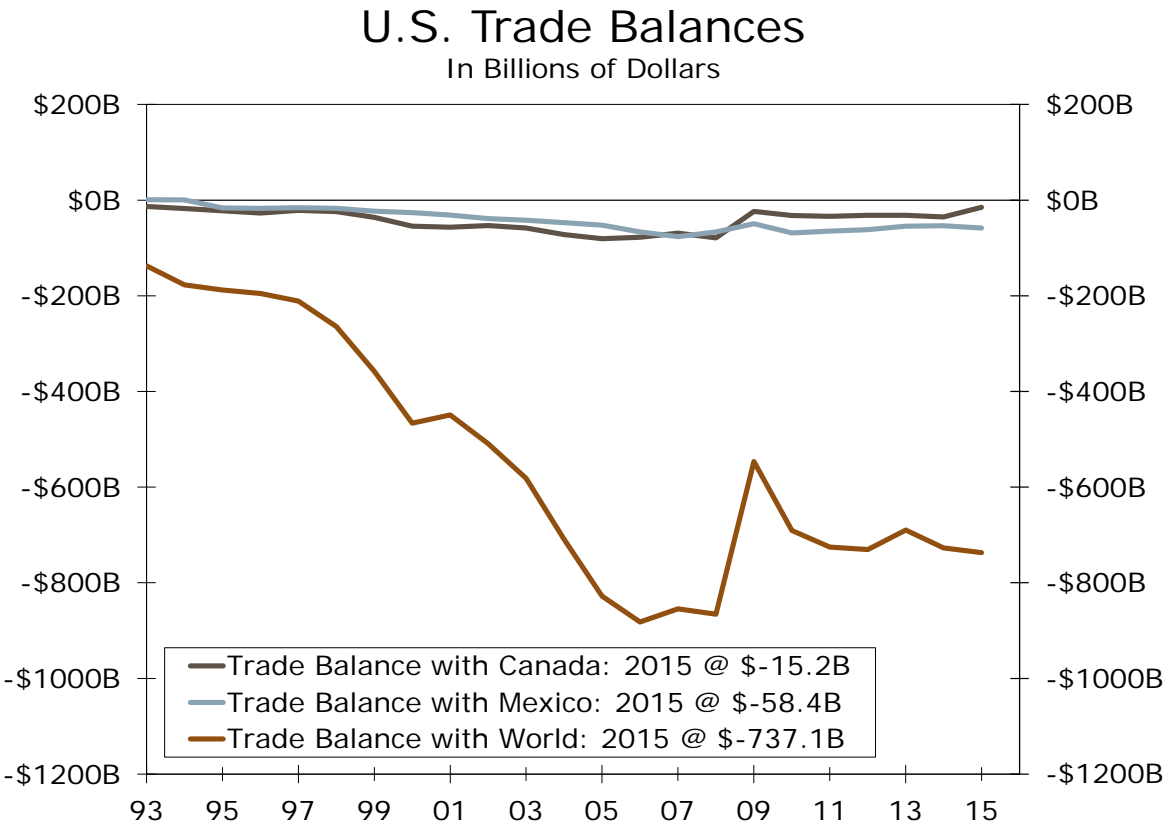
Global Export Volumes

Year-over-Year Percent Change



Source: IHS Global Insight and Wells Fargo Securities

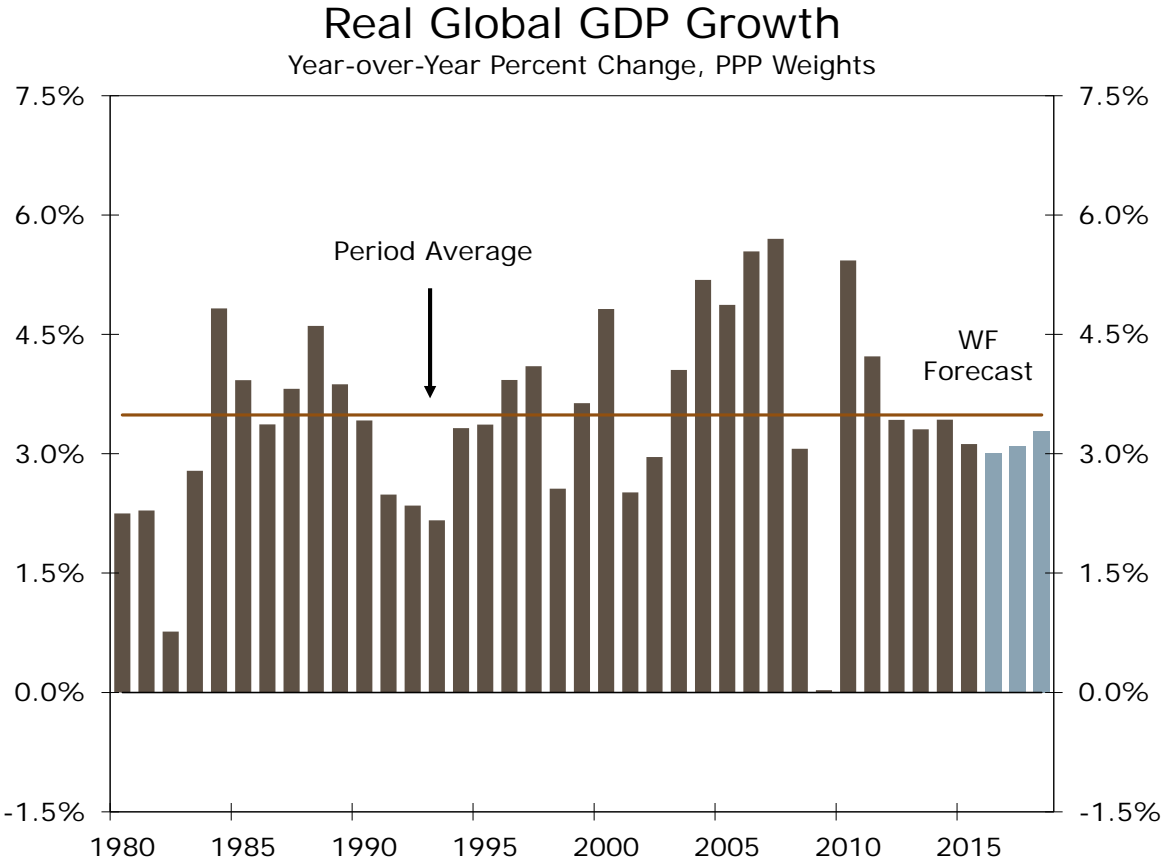
The U.S. trade balance with Canada and Mexico is modest compared to the rest of the world—particularly China



Source: U.S. Department of Commerce and Wells Fargo Securities

2016 will likely mark the weakest year for global economy since 2009, but we see gradual improvement in coming years

OECD's updated forecast:
 3.3% in 2017
 3.6% in 2018



Source: International Monetary Fund and Wells Fargo Securities

Growth

- **Continued moderate growth led by domestic consumer**
-

Inflation

- **Rising, but is the pace slow enough to delay additional Fed moves?**
-

Interest Rates

- **Rising short rates, but relatively flat long rates as capital flows favor the U.S.**
-

Dollar

- **Stronger dollar as rates and growth favor U.S.**
-

Profits

- **A late cycle slowdown**

Wells Fargo U.S. Economic Forecast

	Actual				Forecast								Actual			Forecast	
	2016				2017				2018				2014	2015	2016	2017	2018
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q					
Real Gross Domestic Product ¹	0.8	1.4	3.5	1.9	1.1	2.6	2.5	2.3	2.5	2.6	2.7	2.6	2.4	2.6	1.6	2.1	2.5
Personal Consumption	1.6	4.3	3.0	3.0	2.2	2.7	2.4	2.2	2.7	2.9	3.0	2.9	2.9	3.2	2.7	2.7	2.7
Business Fixed Investment	-3.4	1.0	1.4	1.3	5.2	4.4	4.4	4.7	4.4	4.9	4.8	4.6	6.0	2.1	-0.5	3.5	4.6
Equipment	-9.5	-2.9	-4.5	1.9	6.6	4.2	3.9	4.3	3.8	4.3	4.2	3.7	5.4	3.5	-2.9	2.7	4.1
Intellectual Property Products	3.8	9.0	3.2	4.5	3.7	4.5	4.7	5.0	5.1	4.8	4.7	4.5	3.9	4.8	4.9	4.5	4.8
Structures	0.1	-2.1	12.0	-4.5	4.7	4.9	5.2	5.5	6.0	6.3	6.5	6.7	10.3	-4.4	-3.0	3.5	5.6
Residential Construction	7.8	-7.8	-4.1	9.6	9.2	6.7	6.5	6.3	5.8	5.6	5.4	5.4	3.5	11.7	4.9	5.4	5.9
Government Purchases	1.6	-1.7	0.8	0.3	-0.6	1.5	1.4	1.5	1.8	1.8	1.5	1.5	-0.9	1.8	0.8	0.4	1.6
Net Exports ²	0.0	0.2	0.9	-1.7	-0.5	-0.4	-0.3	-0.4	-0.5	-0.6	-0.5	-0.5	-0.1	-0.7	-0.1	-0.5	-0.5
Inventories ²	-0.4	-1.2	0.5	0.9	-0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.2	-0.4	0.2	0.0
Nonfarm Payroll Change ³	196	164	239	148	213	160	155	150	150	145	145	140	250	226	187	169	145
Unemployment Rate	4.9	4.9	4.9	4.7	4.7	4.7	4.6	4.6	4.5	4.5	4.4	4.4	6.2	5.3	4.9	4.7	4.5
Consumer Price Index ⁴	1.1	1.1	1.1	1.8	2.7	2.6	2.8	2.7	2.4	2.6	2.6	2.6	1.6	0.1	1.3	2.7	2.6
Quarter-End Interest Rates ⁵																	
Federal Funds Target Rate	0.50	0.50	0.50	0.75	1.00	1.25	1.25	1.50	1.50	1.75	2.00	2.25	0.25	0.27	0.52	1.25	1.88
Conventional Mortgage Rate	3.69	3.57	3.46	4.20	4.30	4.36	4.41	4.44	4.46	4.48	4.55	4.62	4.17	3.85	3.65	4.38	4.53
2 Year Note	0.73	0.58	0.77	1.20	1.34	1.66	1.75	1.93	2.02	2.11	2.26	2.41	0.46	0.69	0.83	1.67	2.20
10 Year Note	1.78	1.49	1.60	2.45	2.55	2.62	2.68	2.72	2.75	2.78	2.86	2.94	2.54	2.14	1.84	2.64	2.83

Forecast as of: March 15, 2017

¹ Compound Annual Growth Rate Quarter-over-Quarter

² Percentage Point Contribution to GDP

³ Average Monthly Change

⁴ Year-over-Year Percentage Change

⁵ Annual Numbers Represent Averages

Source: U.S. Department of Commerce, U.S. Department of Labor, Federal Reserve Board, Freddie Mac and Wells Fargo Securities

Wells Fargo International Economic Forecast

(Year-over-Year Percent Change)

	GDP			CPI		
	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
Global (PPP Weights)	3.0%	3.1%	3.3%	3.1%	3.5%	3.7%
Global (Market Exchange Rates)	2.7%	2.9%	3.1%	3.1%	3.5%	3.7%
Advanced Economies ¹	1.8%	2.0%	2.3%	0.7%	2.2%	2.1%
United States	1.6%	2.1%	2.5%	1.3%	2.7%	2.6%
Eurozone	1.7%	1.8%	2.0%	0.2%	1.7%	1.8%
United Kingdom	1.8%	1.8%	1.8%	0.7%	2.3%	2.2%
Japan	1.0%	1.1%	0.9%	-0.1%	0.6%	0.9%
Korea	2.7%	2.5%	2.6%	1.0%	2.1%	1.7%
Canada	1.4%	2.1%	1.9%	1.4%	1.8%	2.0%
Developing Economies ¹	4.2%	4.1%	4.3%	5.5%	4.8%	5.3%
China	6.7%	6.3%	5.8%	2.0%	1.5%	2.0%
India ²	7.8%	7.0%	7.0%	5.0%	4.1%	5.5%
Mexico	2.3%	-1.0%	1.6%	2.8%	6.6%	6.1%
Brazil	-3.6%	0.7%	2.7%	8.7%	4.9%	5.5%
Russia	-0.2%	1.4%	2.1%	7.1%	4.4%	4.5%

Forecast as of: March 15, 2017

¹Aggregated Using PPP Weights

²Forecasts Refer to Fiscal Year

Source: International Monetary Fund and Wells Fargo Securities

Appendix

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<http://www.wellsfargo.com/economics>

Recent Special Commentary

Date	Title	Authors
U.S. Macro		
March-09	Till Debt Do Us Part: How Leveraged Is the Typical Boomer?	Silvia, House & Pugliese
March-07	Boomer Balance Sheets: Nothing Great about That Recession	Silvia, House & Pugliese
March-06	FOMC Update: Decision in a Data/Policy Fog	Silvia
February-28	Boom or Bust? The Baby Boomers in Their Golden Years	Silvia, House & Pugliese
February-27	The Girl with the Draggin' W-2	Quinlan, Batcheller & House
U.S. Regional		
March-09	Georgia Labor Market Update: January 2017	Vitner, Feik & Batcheller
March-07	Quarterly Census of Employment and Wages: Q3 2016	Vitner & Feik
March-03	California's Unemployment Rate Declines to 5.1 Percent	Vitner
March-01	Regional Variance in Homeownership	Vitner & Batcheller
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