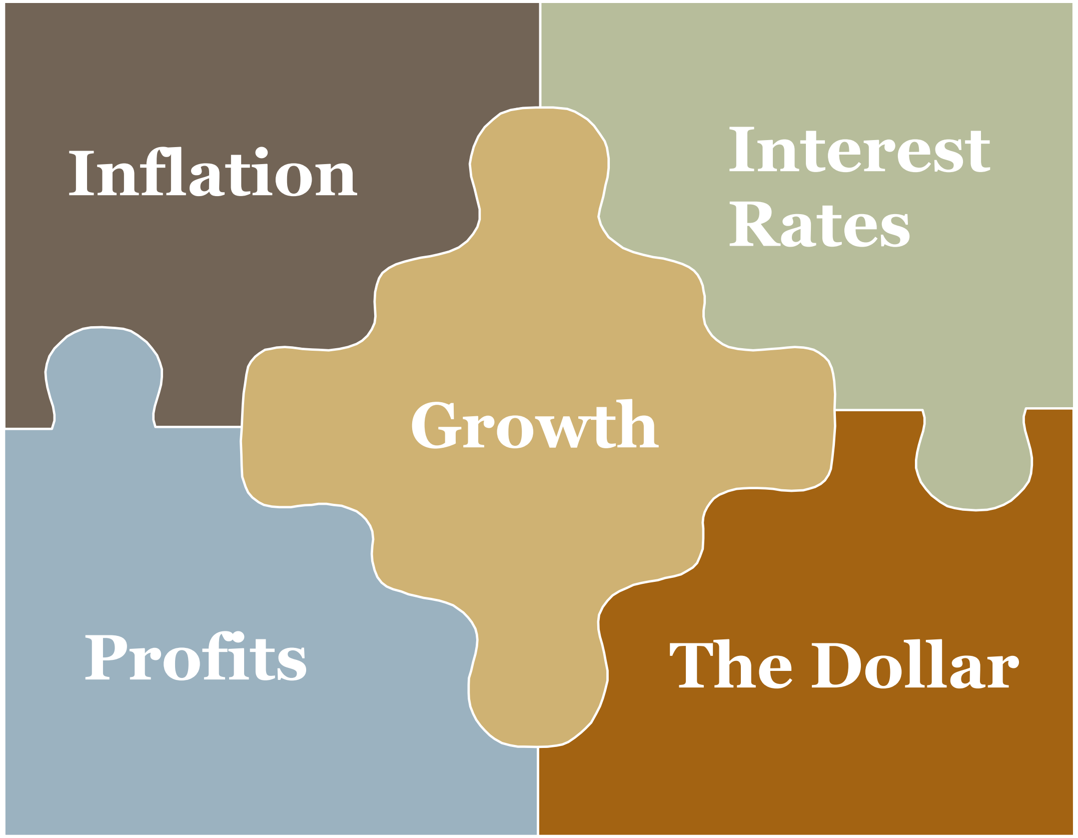
WELLS FARGO SECURITIES

Economics and Finance in a Two-Percent Economy
Appalachian State University

John E. Silvia, Chief Economist
March 31, 2017

Together we'll go far

Five benchmarks for good decision making

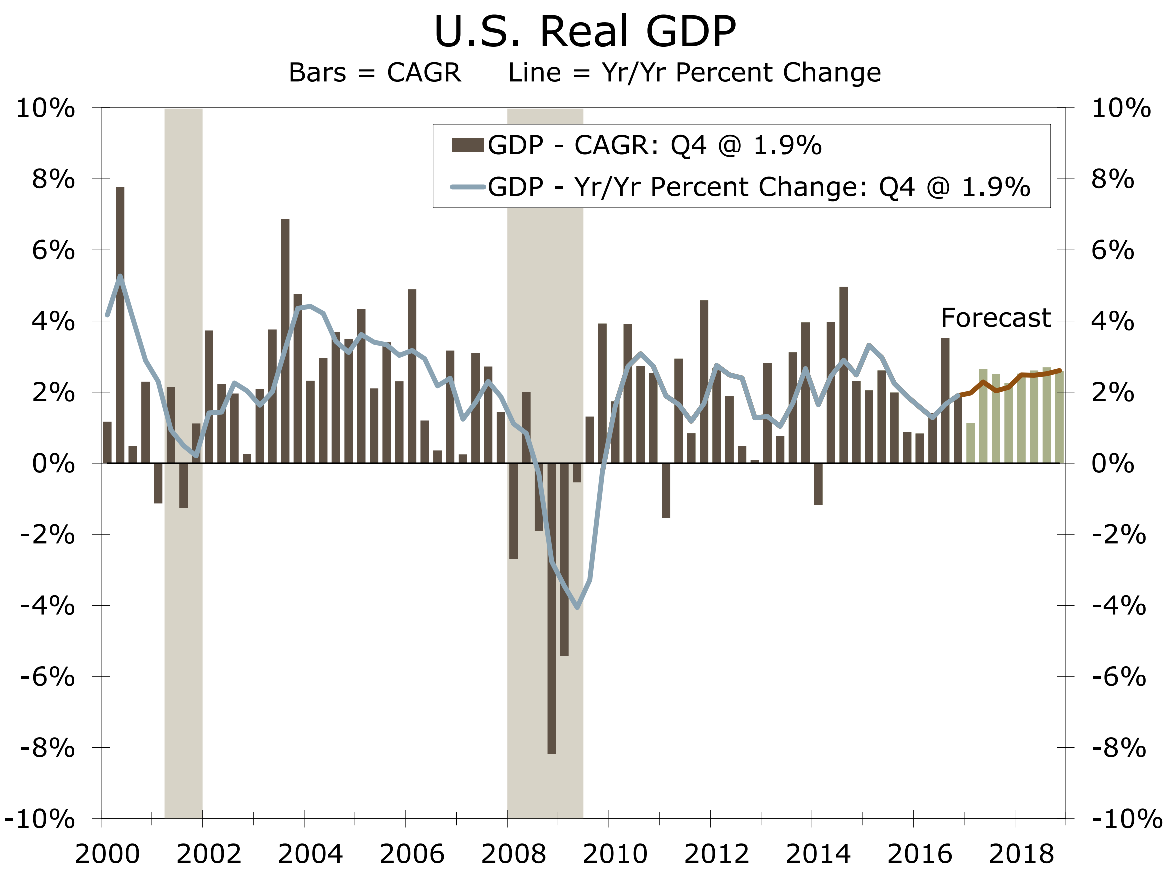


How do we compare to consensus?

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

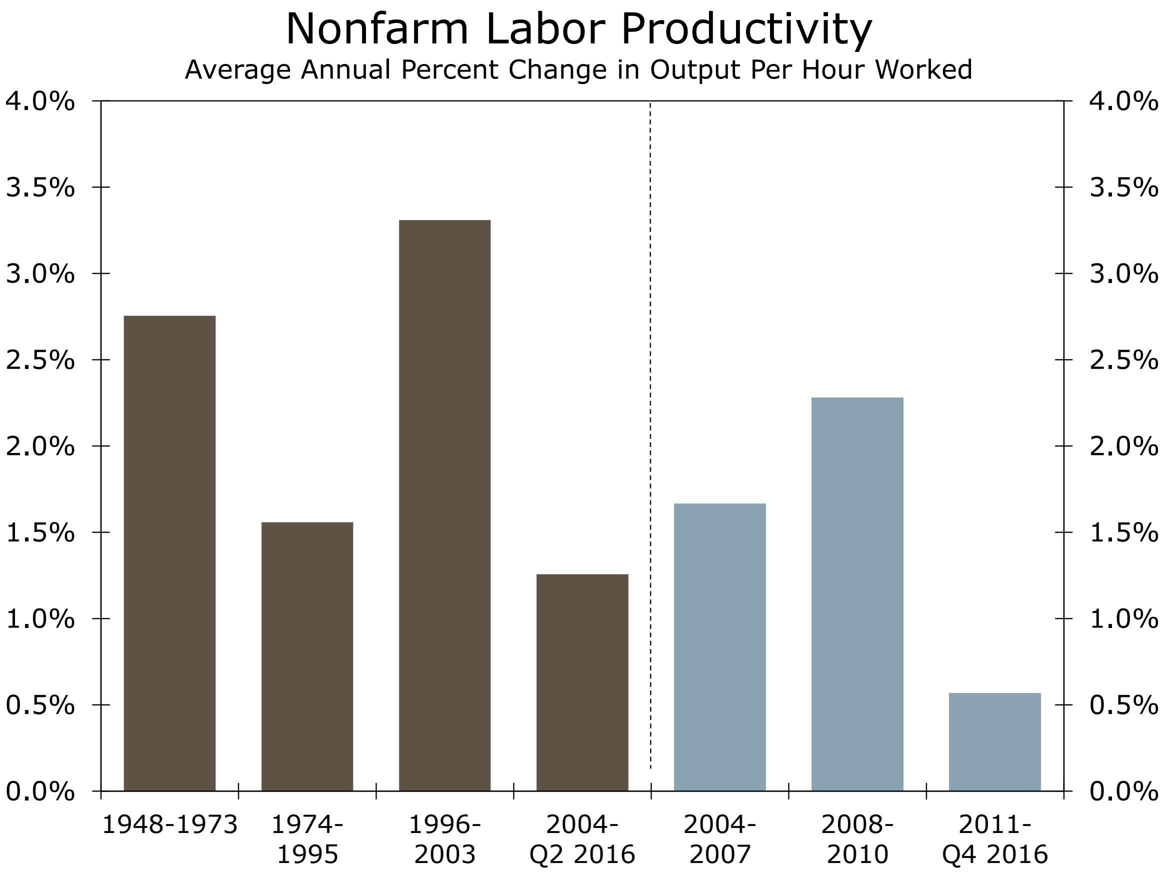
Trend growth at 2-2.5 percent in the year ahead. A more balanced composition of domestic growth should prevail, but trade will be a drag going forward.



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

Supply-Side Challenges

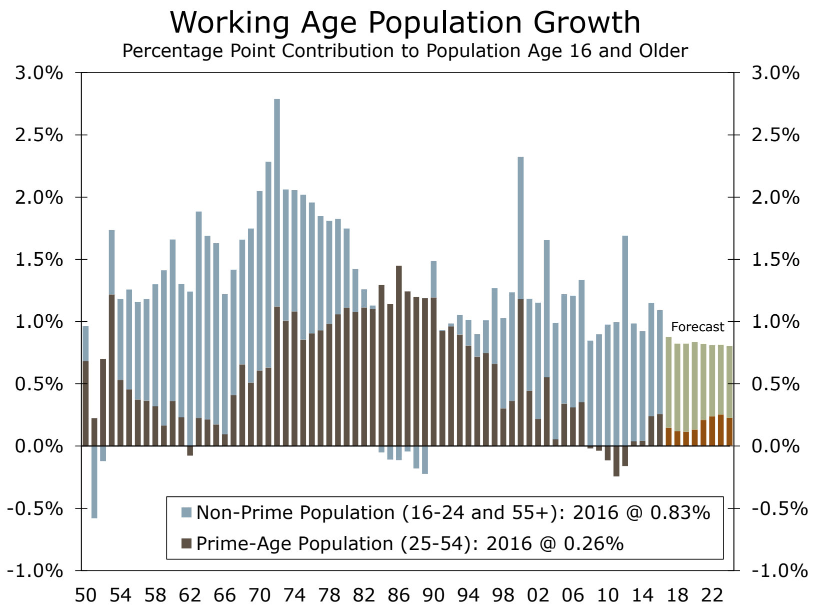
Productivity growth has downshifted over the past cycle



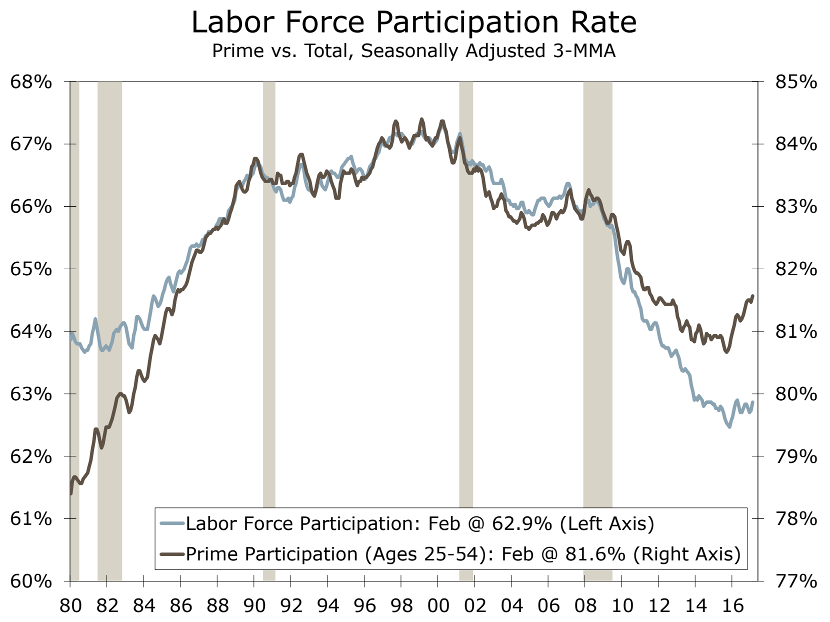
Source: U.S. Department of Labor and Wells Fargo Securities

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

Working Age Population

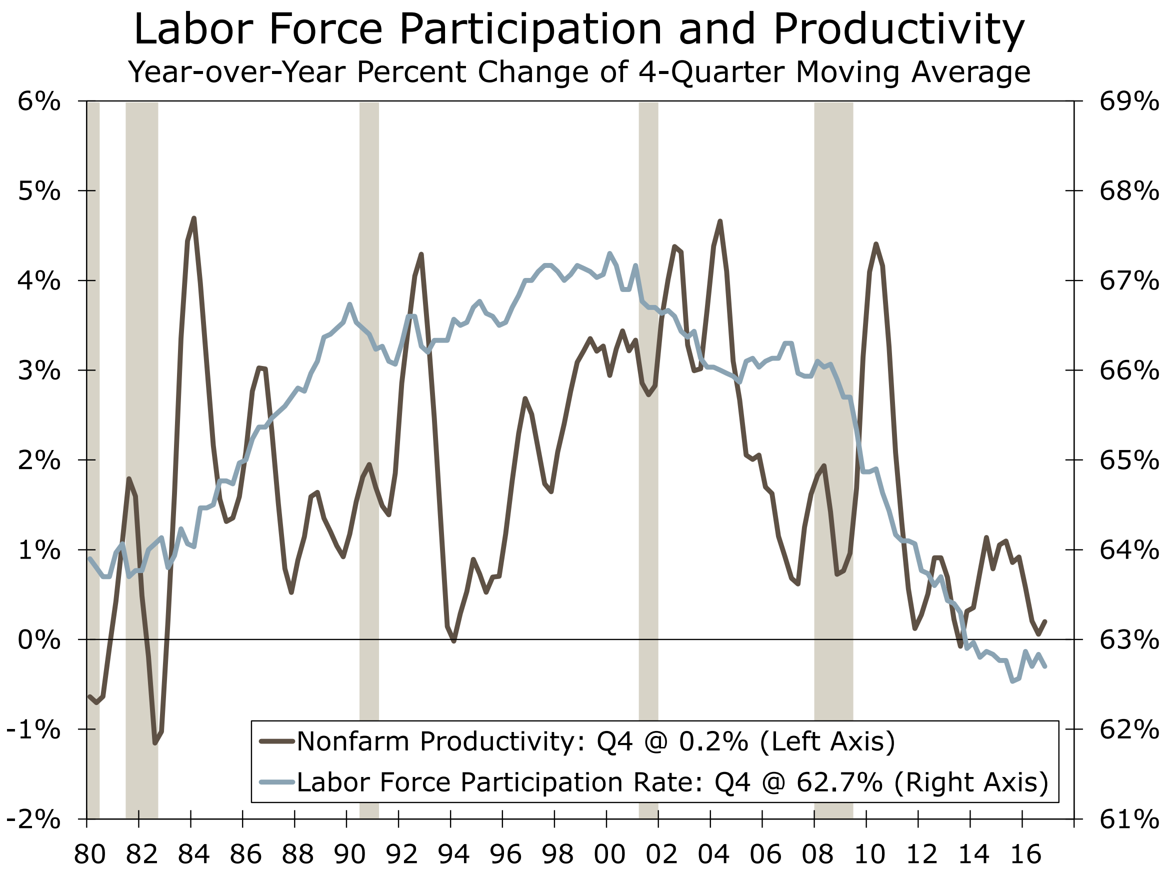


Labor Force Participation



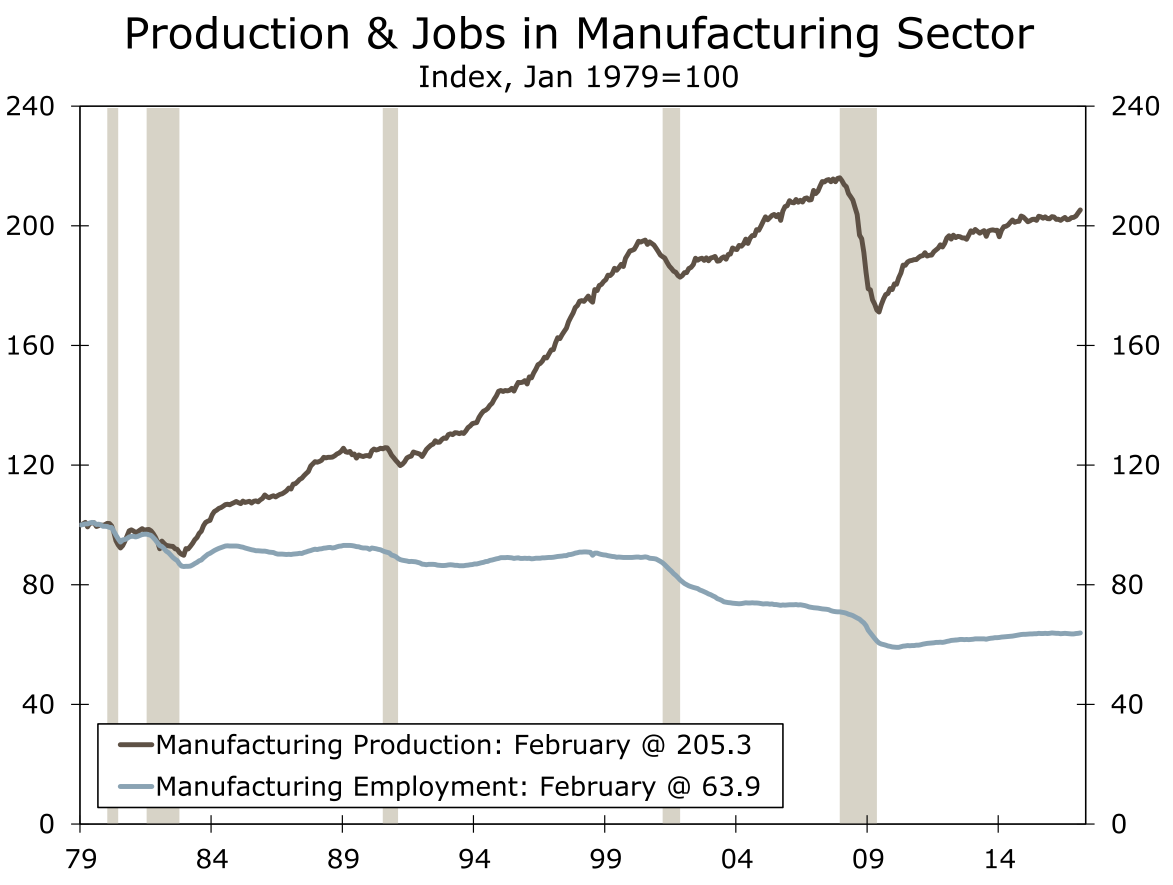
Source: U.S. Department of Labor and Wells Fargo Securities

Low labor force participation and lackluster productivity growth have lowered the path of potential GDP



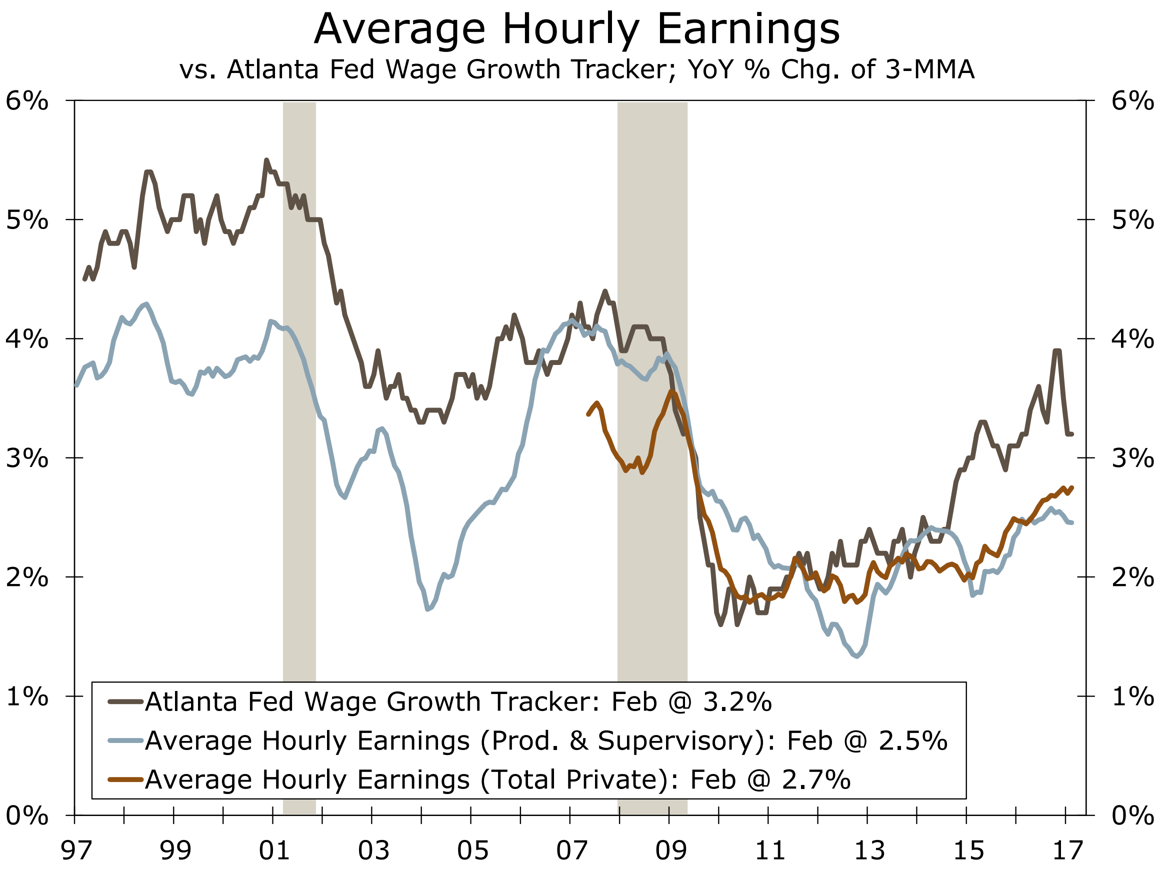
Source: U.S. Department of Labor and Wells Fargo Securities

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



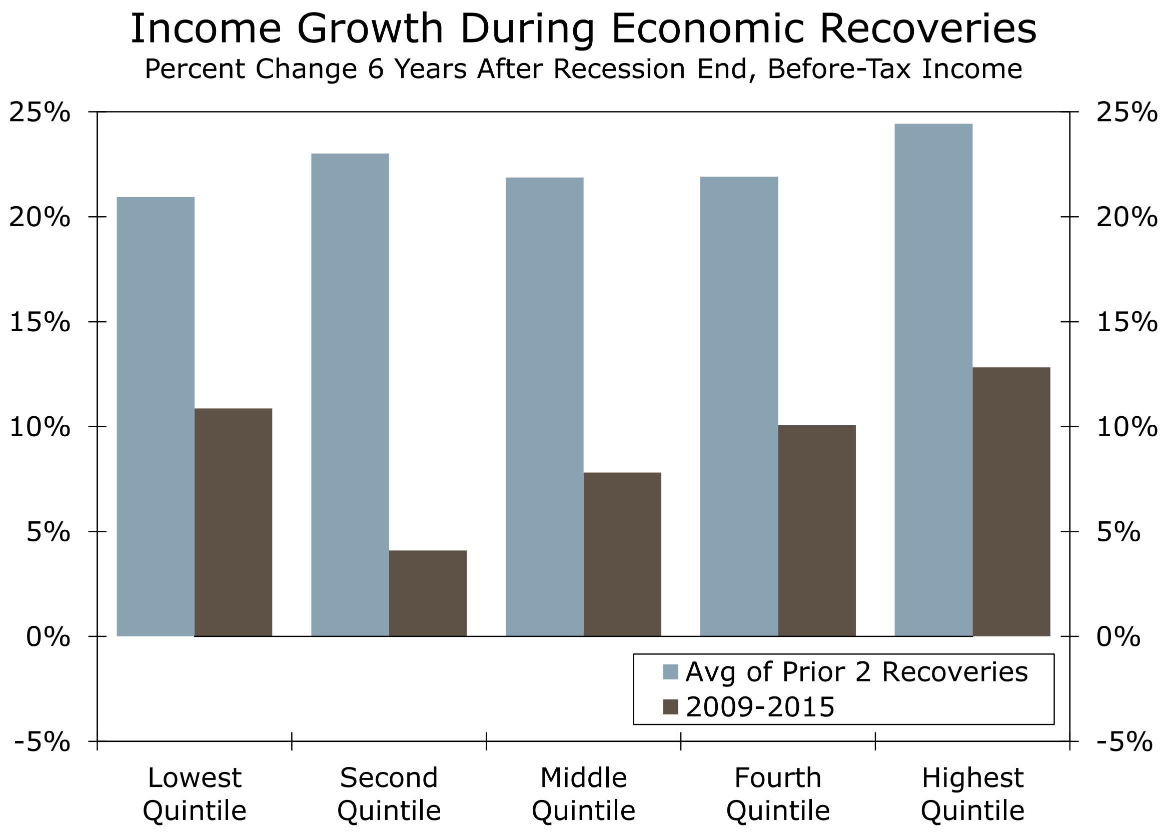
Source: U.S. Department of Labor, Federal Reserve Board and Wells Fargo Securities

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

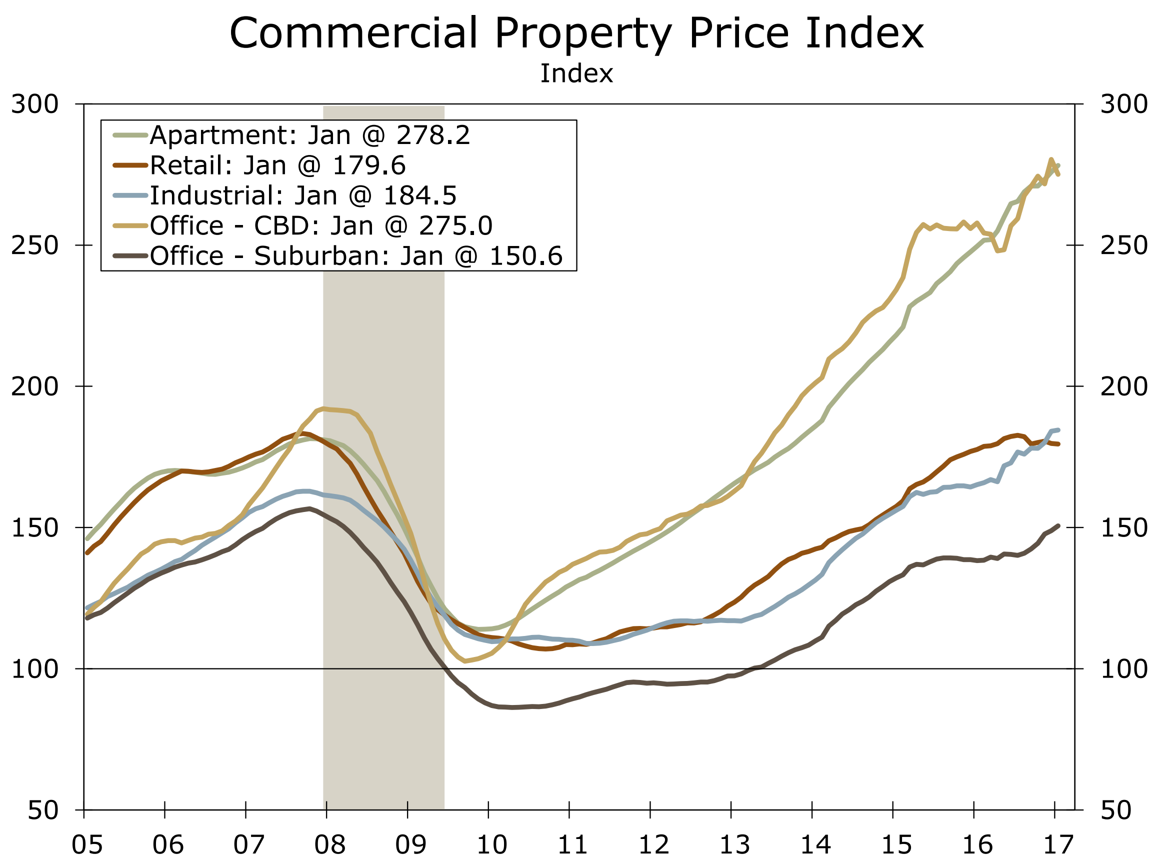
Income growth has finally begun to turn around but still lags prior recoveries



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

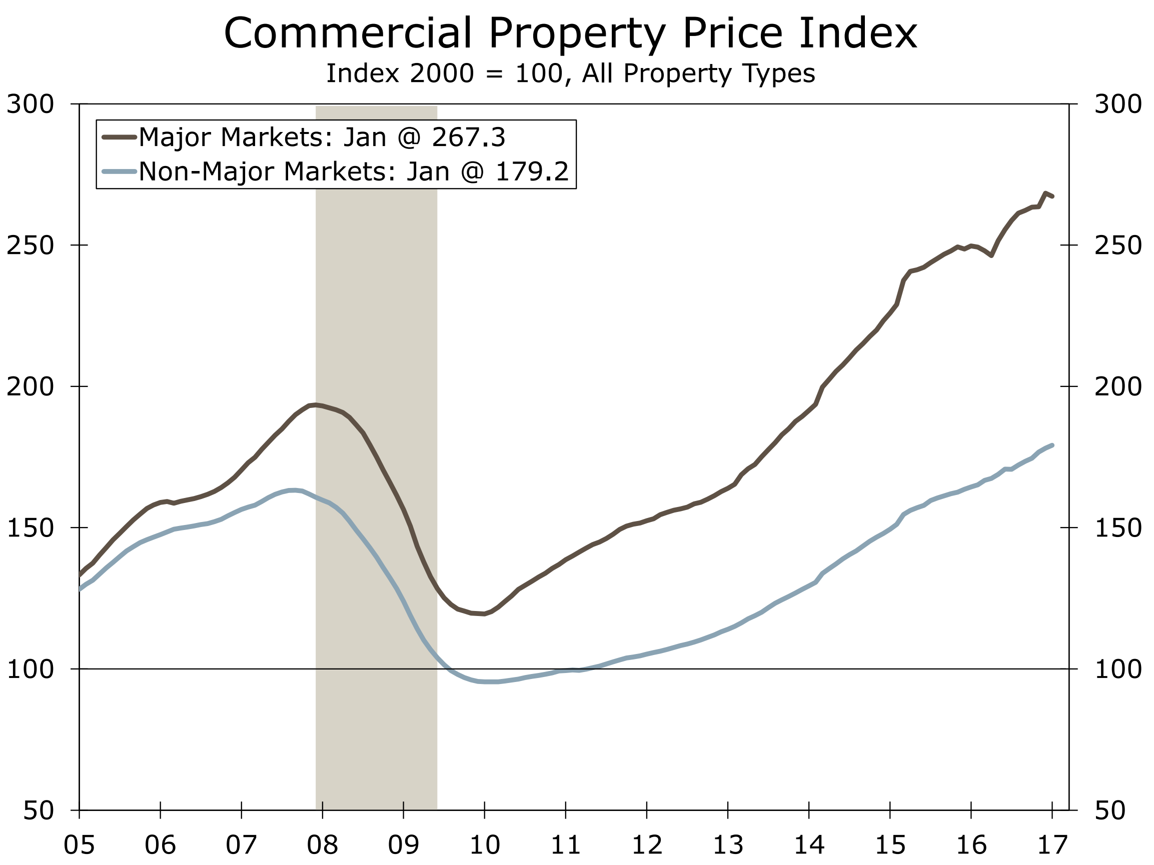
Divergence in Commercial Real Estate

High valuations have caught the Fed's attention



Source: RCA and Wells Fargo Securities

Valuations have grown the fastest in major markets

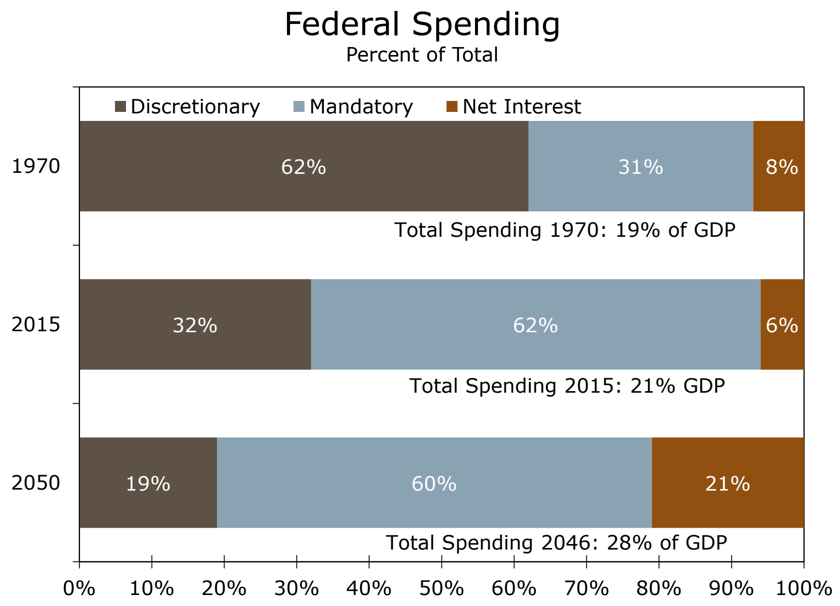


Source: RCA and Wells Fargo Securities

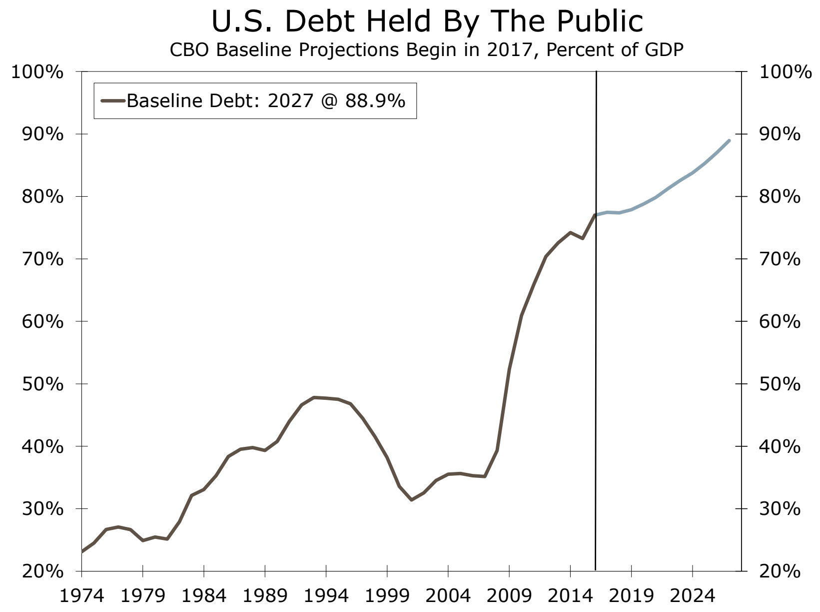
Unsustainable Fiscal Policy

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



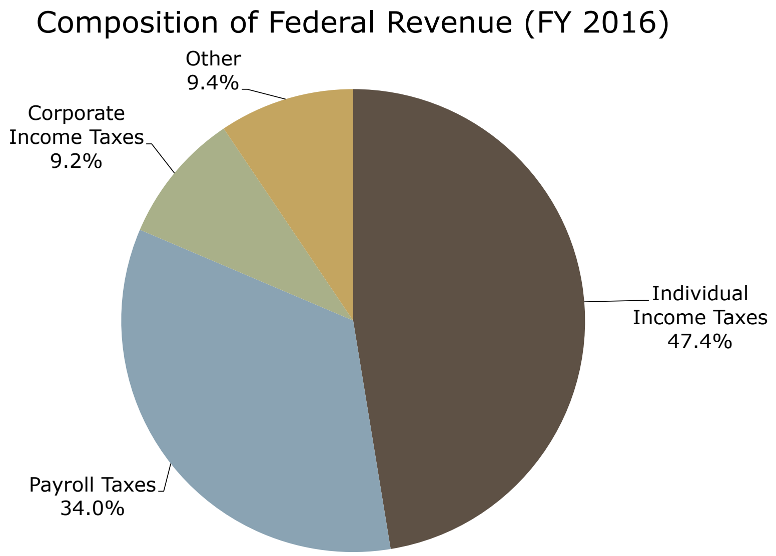
Federal Debt Continues to Rise



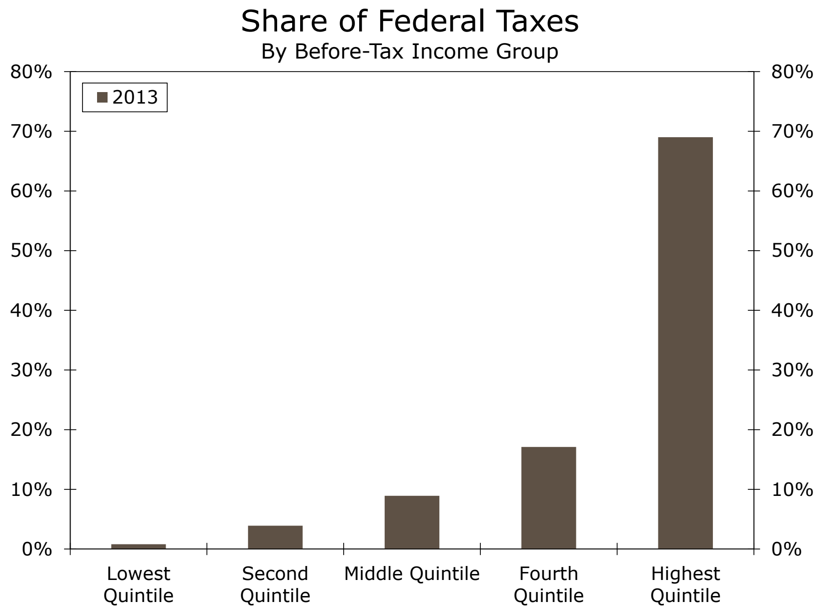
Source: Congressional Budget Office and Wells Fargo Securities

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

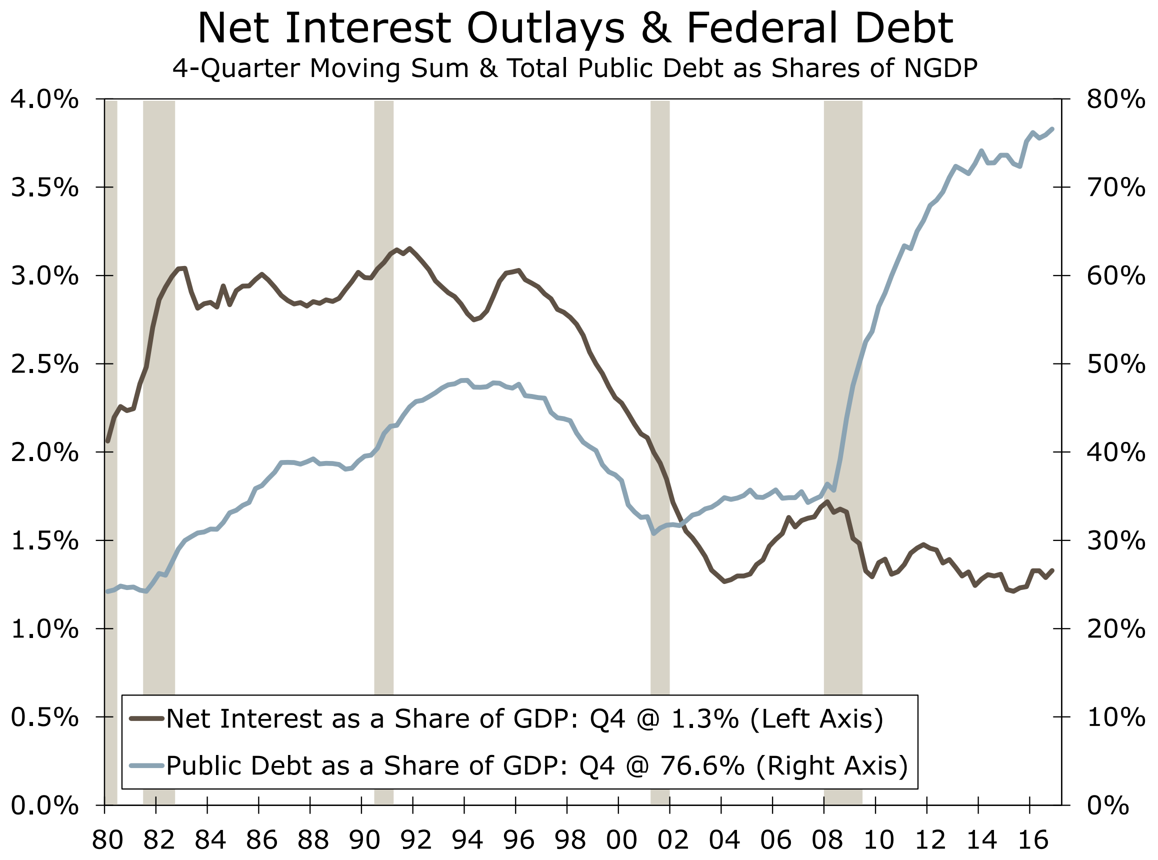


Federal Taxes Paid by Income Quintile



Source: Congressional Budget Office and Wells Fargo Securities

Despite a historically high debt-to-GDP ratio, net interest costs remain low—challenges going forward in the face of rising rates



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

Key Issues to Watch in the 115th Congress

Expectations for the Future

- Will Congressional leaders put the Affordable Care Act on the back burner and turn to other legislative priorities, or will ACA continue to consume precious time and delay other items on the agenda?
- 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 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

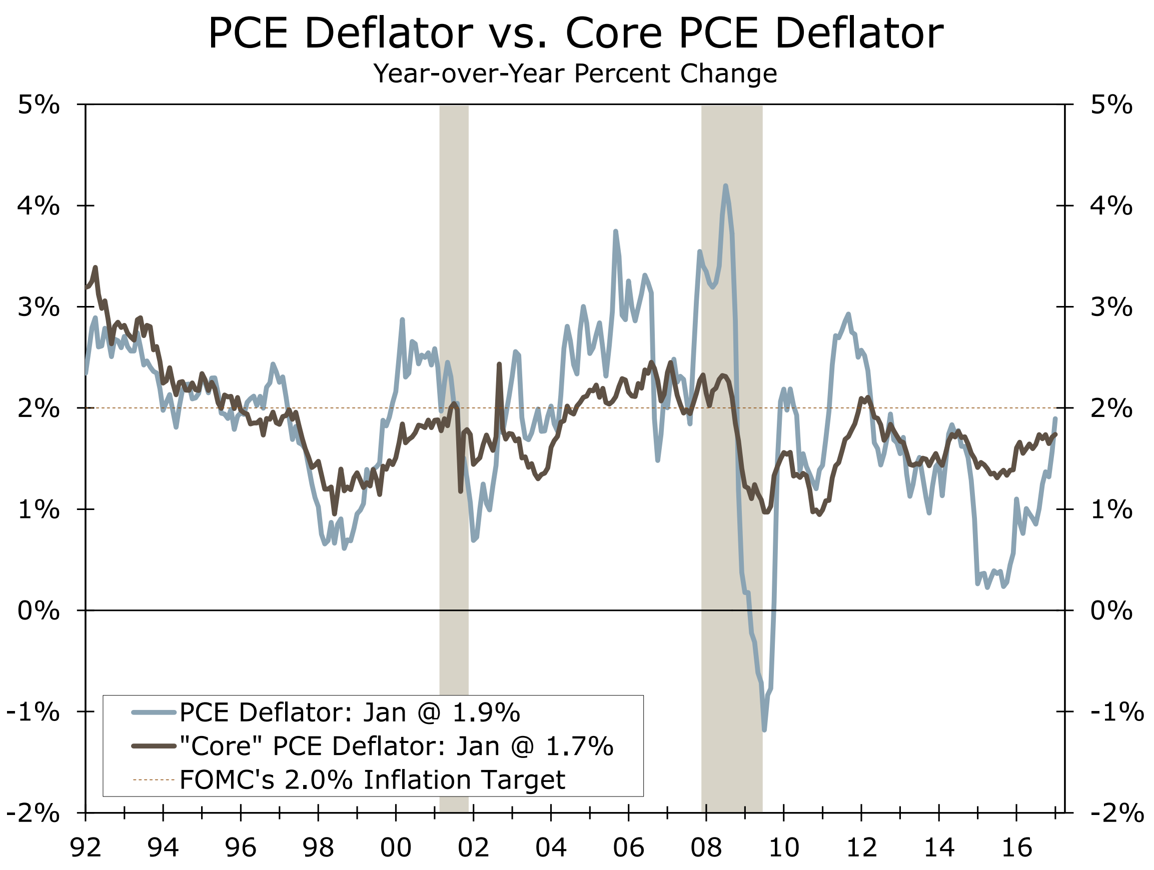
Who is at risk?

- 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.

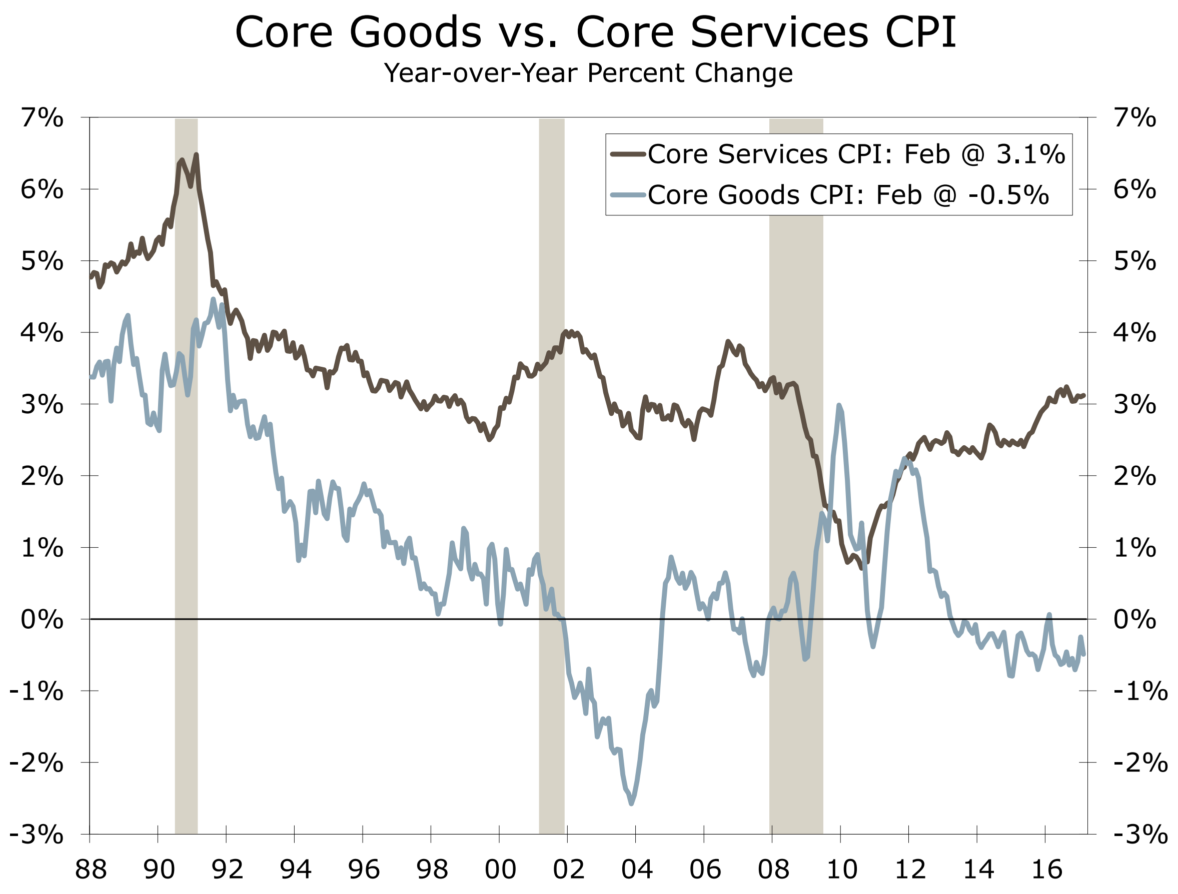

Core Inflation
Interest Rates
Yield Curve
Key Drivers
The Dollar
Wage-Price Spiral
Market Expectations

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



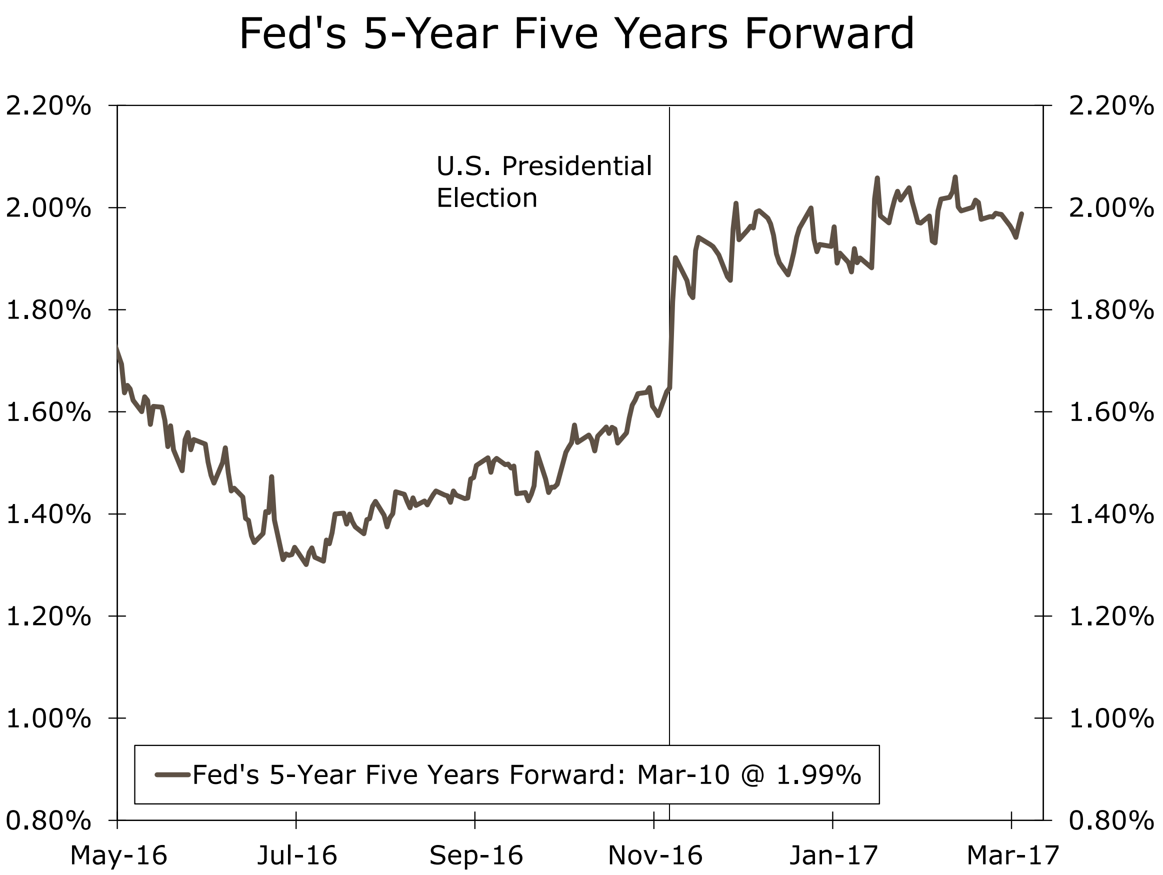
Source: U.S. Department of Commerce and Wells Fargo Securities

Inflation for services has been much firmer than for commodities



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

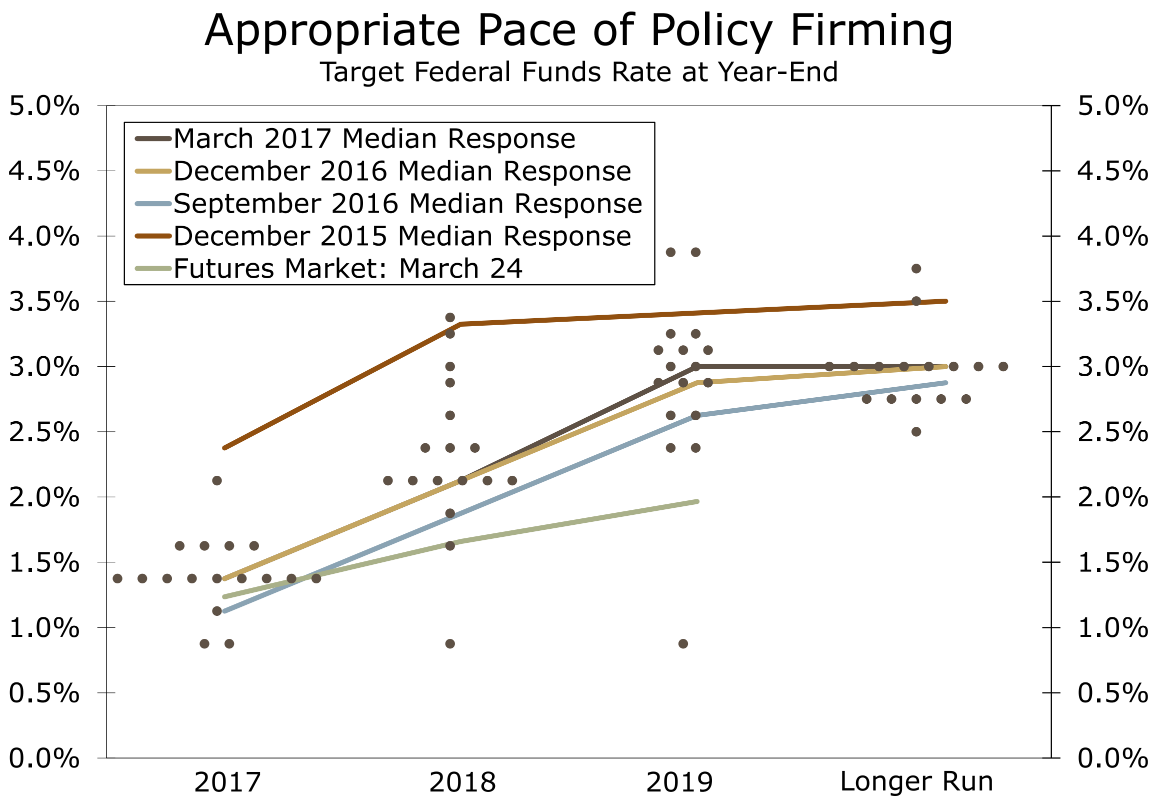
The jump in inflation expectations was sharp and sustained



Source: Bloomberg LP and Wells Fargo Securities

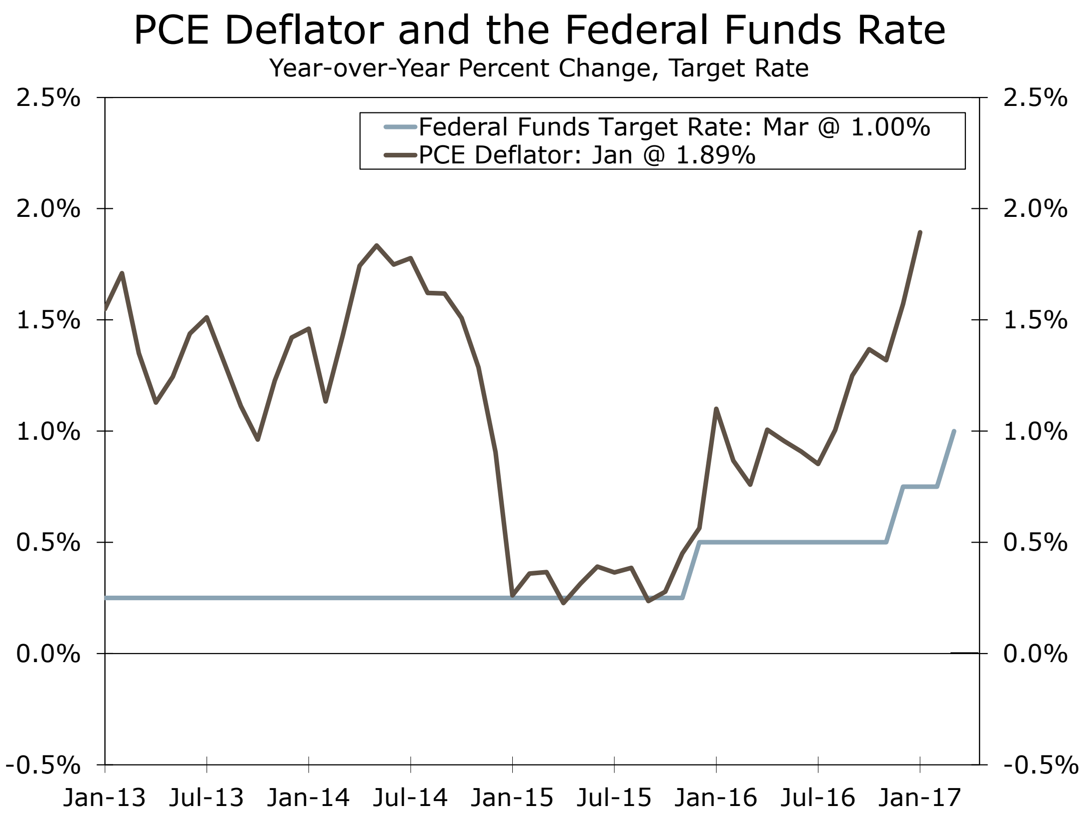
Interest Rate Path

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



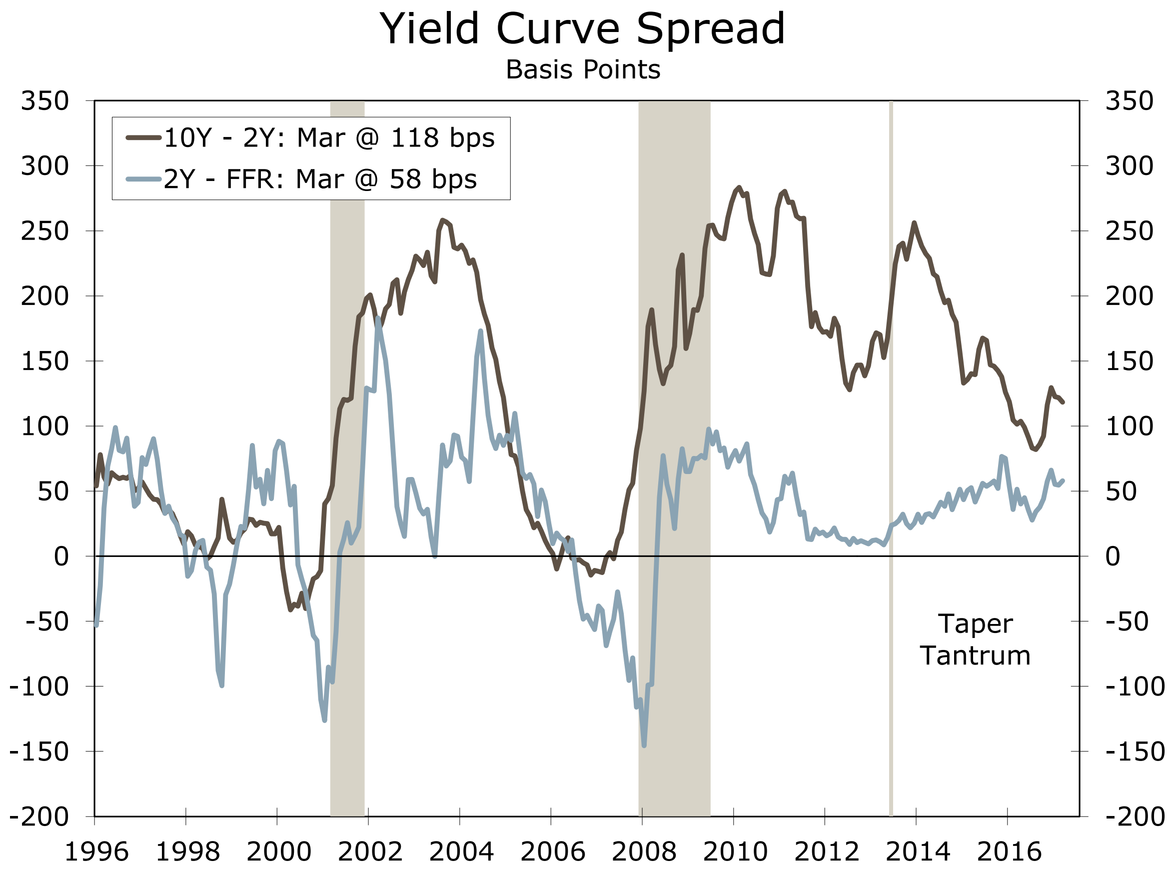
Source: Federal Reserve Board, Bloomberg LP and Wells Fargo Securities

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



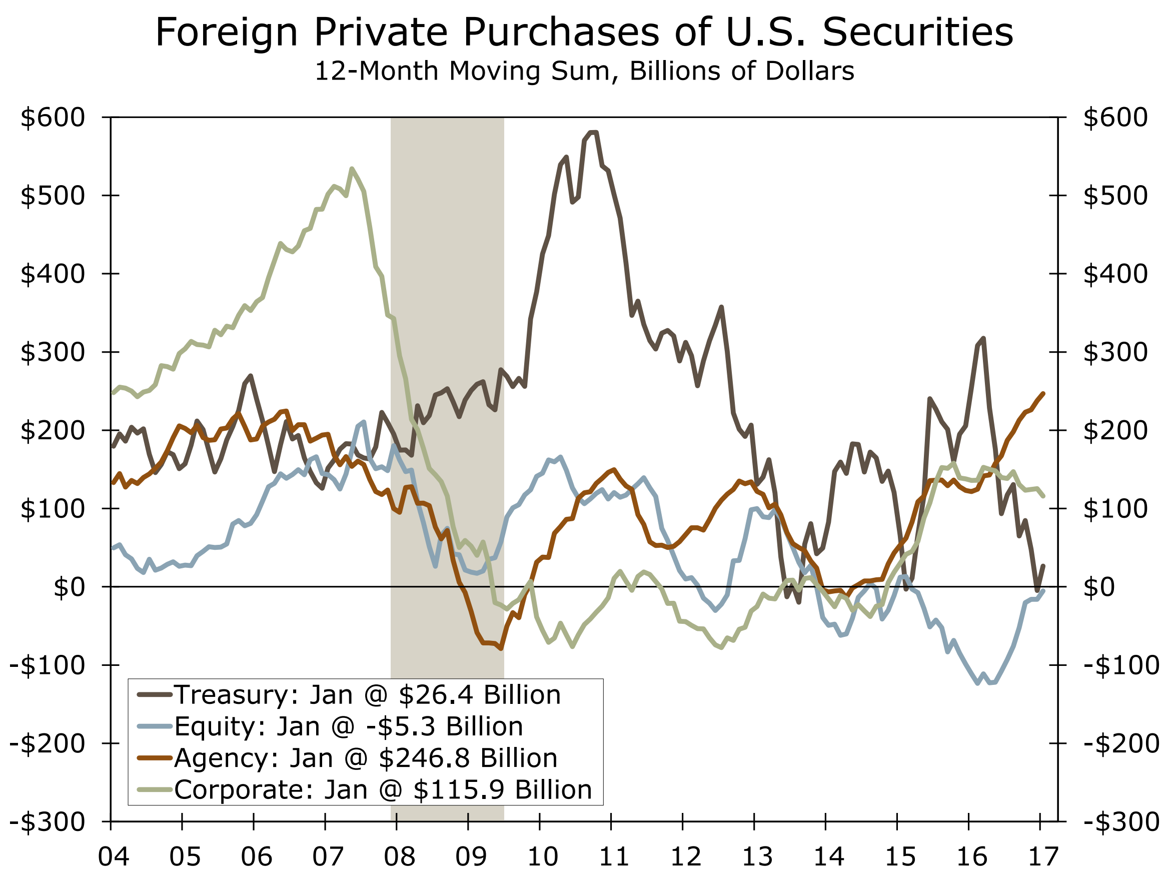
Source: Federal Reserve Board, U.S. Department of Labor and Wells Fargo Securities

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

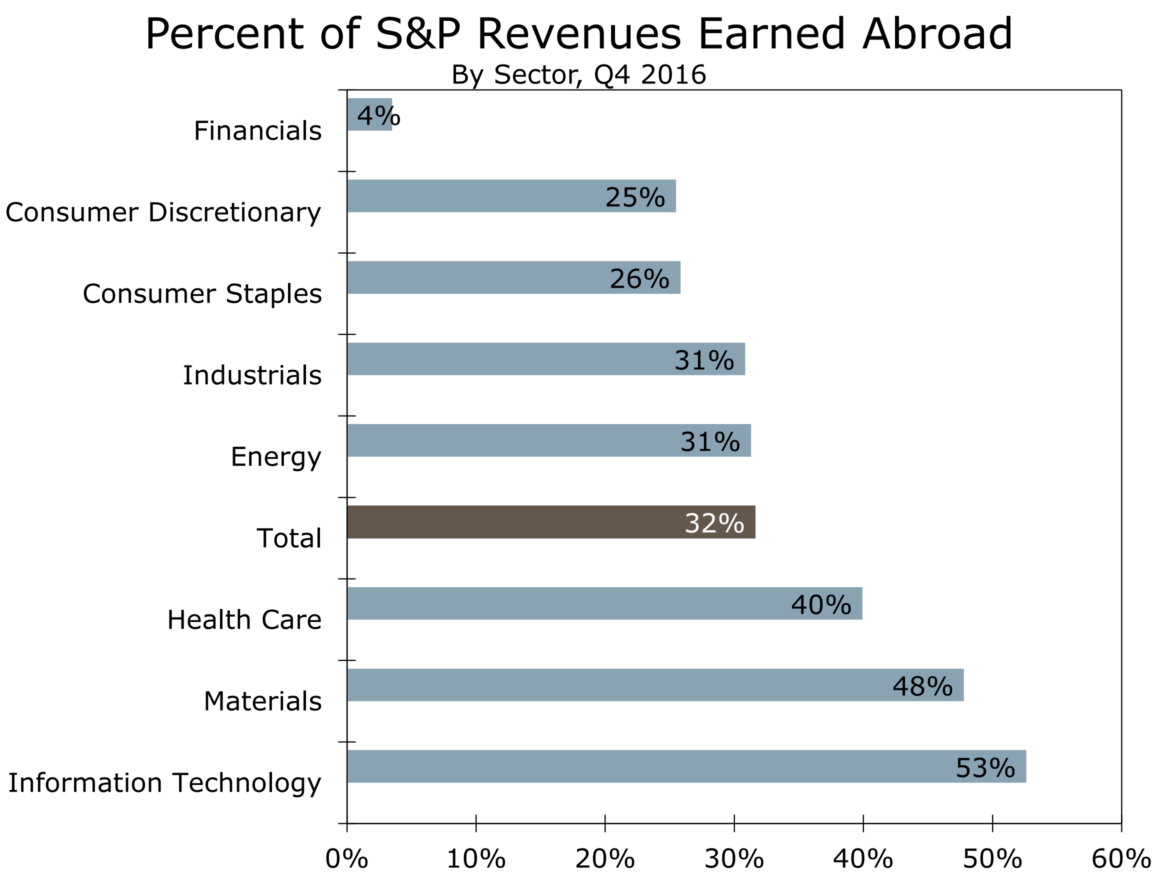
Capital flows and asset allocation by global investors play a strong role in rate determinations



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

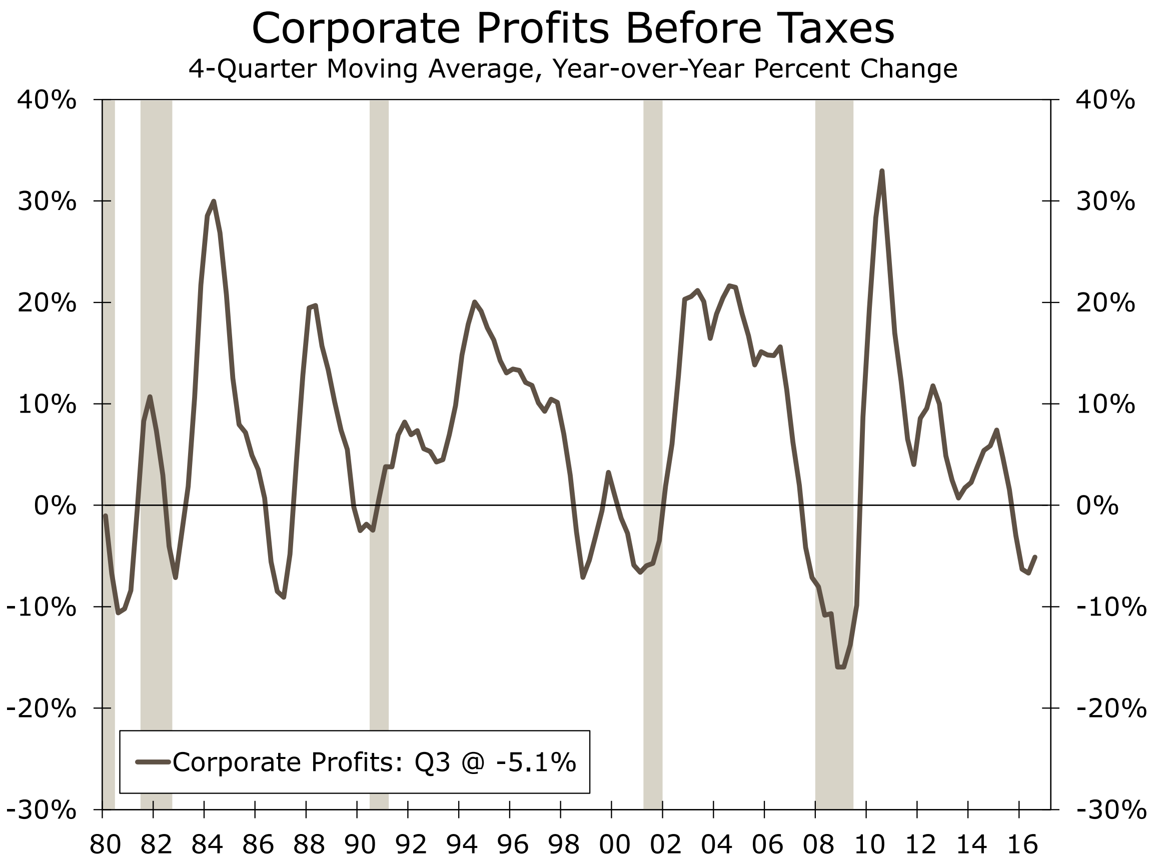
Profits and the U.S. Dollar

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?



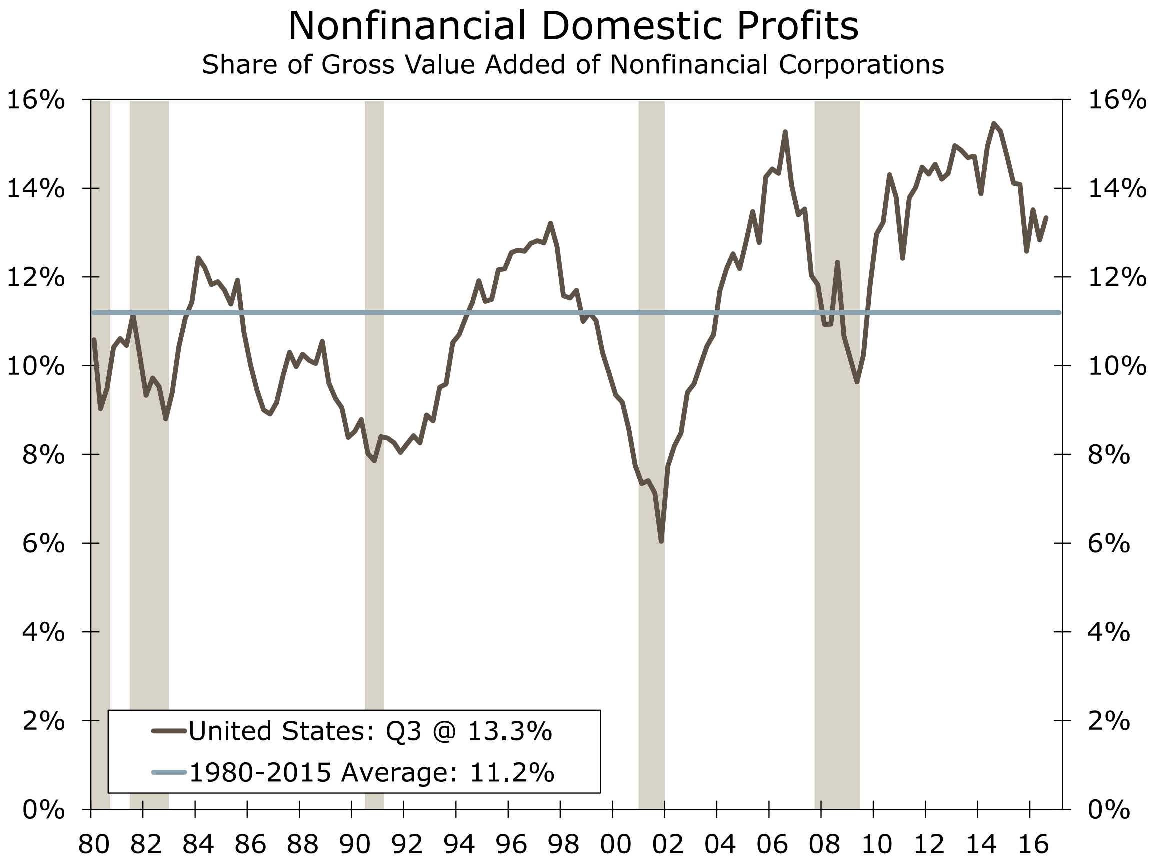
Source: Bloomberg LP and Wells Fargo Securities

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



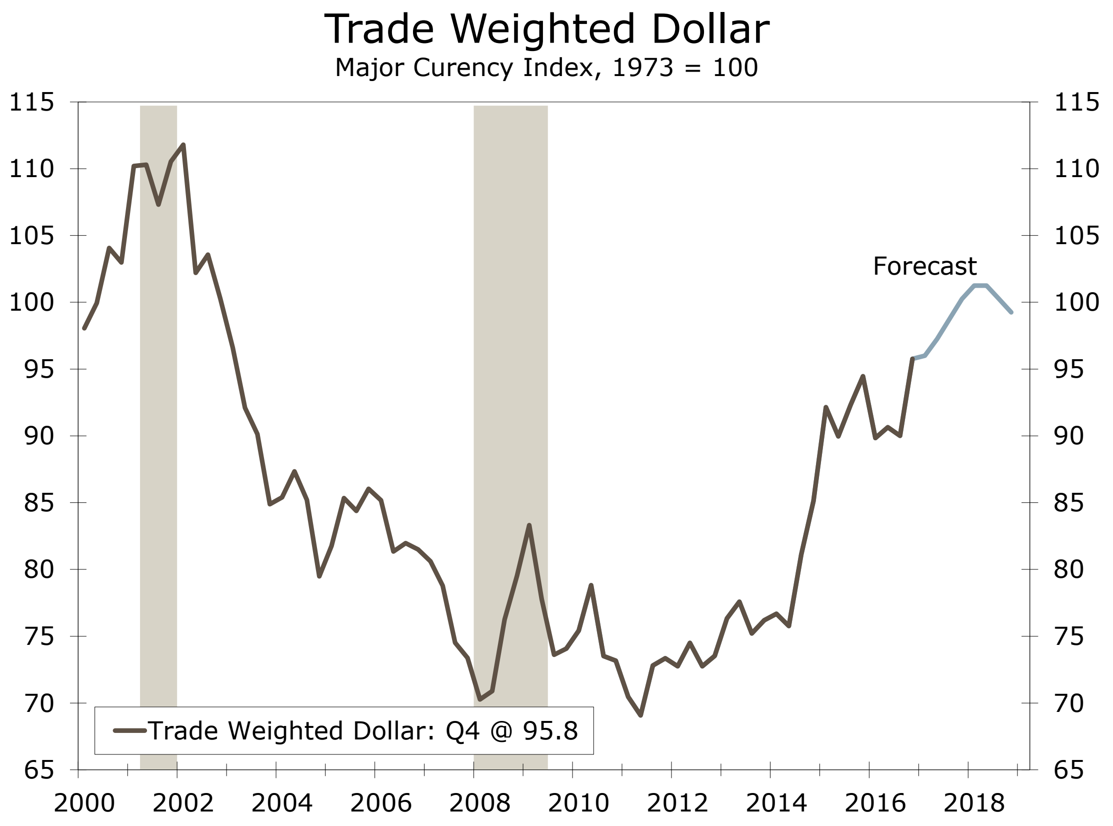
Source: U.S. Department of Commerce and Wells Fargo Securities

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



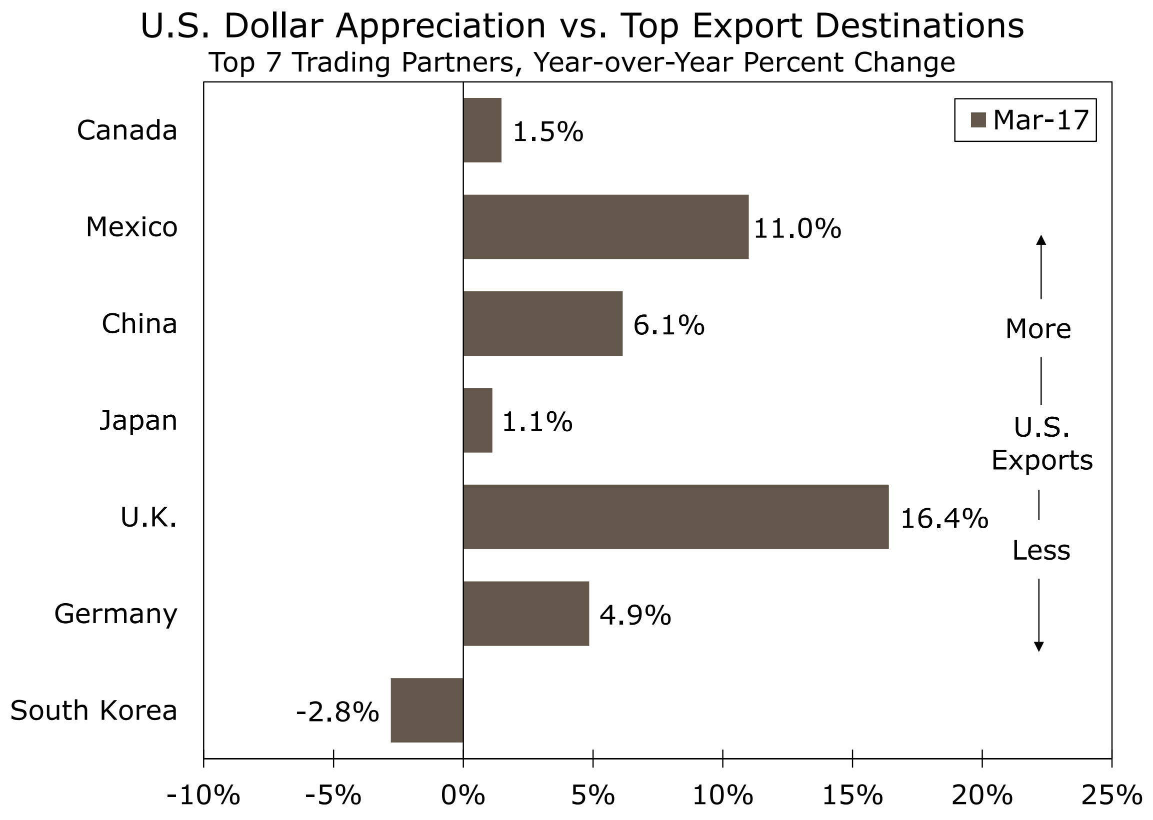
Source: U.S. Department of Commerce and Wells Fargo Securities

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



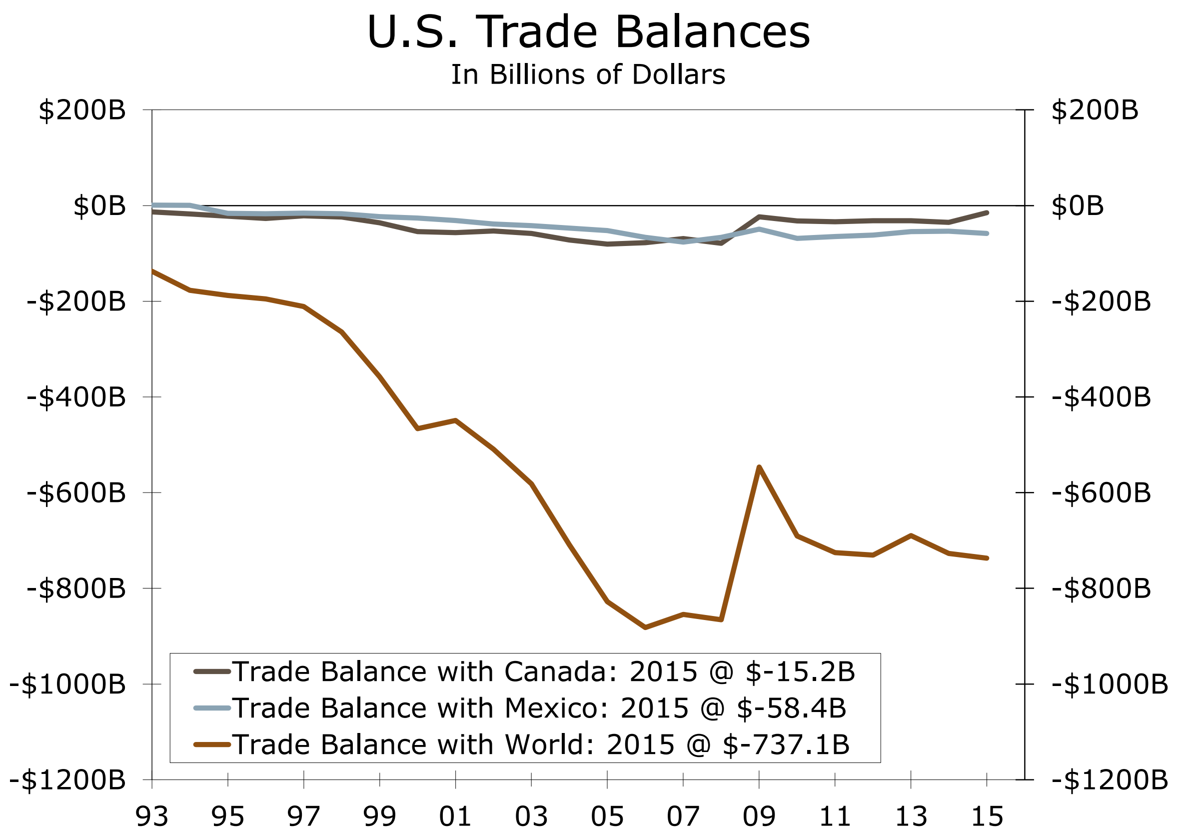
Source: Federal Reserve Board and Wells Fargo Securities

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



Source: Federal Reserve Board 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

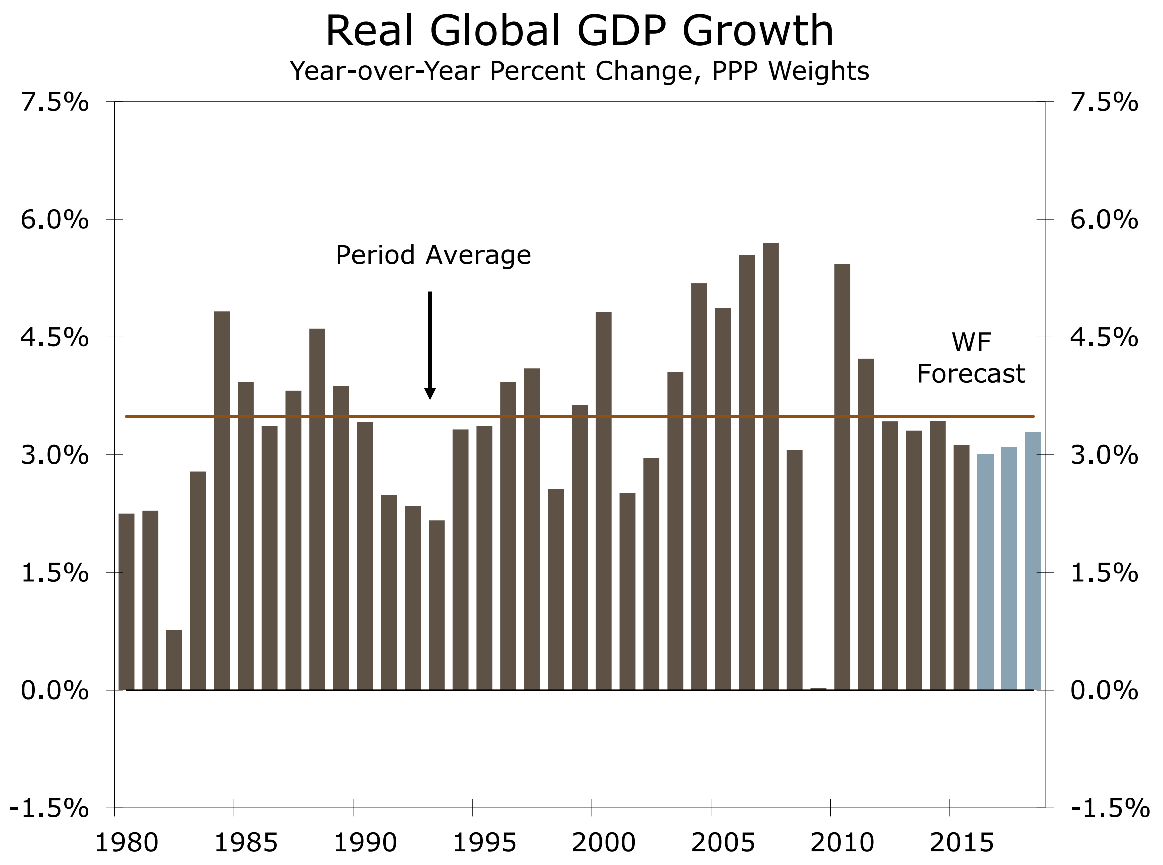
Global trade has clearly downshifted

Source: IHS Global Insight and Wells Fargo Securities

Growth in China will likely continue to downshift to a more sustainable pace

Source: Bloomberg LP and Wells Fargo Securities

We expect global economic growth will remain below its long-run trend



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

Appendix

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Recent Special Commentary

Date	Title	Authors
	U.S. Macro	
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March-23	RV Demand Expected to Remain Strong	Aleman
March-21	Which Boomers Will Be Working in Their "Retirement" Years?	Silvia, House & Pugliese
March-20	Capitol Hill Update: ACA Replacement Bill Revealed	Brown & Pugliese
March-16	Will Working Longer Solve Boomers' Retirement Shortfall?	Silvia, House & Pugliese
	U.S. Regional	
March-24	Florida Labor Market Update: February 2017	Vitner, Feik & Batcheller
March-24	California's Unemployment Rate Falls to 5 Percent in February	Vitner, Feik & Batcheller
March-24	Texas Labor Market Update: February 2017	Vitner, Feik & Batcheller
March-24	North Carolina Labor Market Update: February 2017	Vitner, Feik & Batcheller
March-24	New York Labor Market Update: February 2017	Vitner, Feik & Batcheller
	Global Economy	
March-24	MPC: Between a Rock and a Hard Place?	Bryson
March-22	Argentina's Economy Tumbles in 2016	Alemán
March-22	More Light on Mexican 2016 GDP: The Demand Side	Alemán
March-21	Chilean Economy Grows 1.6 Percent in 2016	Alemán
March-16	Global Chartbook: March 2017	Bryson, House, Causey & Pershing
	Interest Rates/Credit Market	
March-22	Solid Asset Appreciation Boosts Household Net Worth in Q4	Silvia & Pugliese
March-15	Shifting Benchmarks: What is an Investor To Do?	Silvia
March-08	FDIC Quarterly Points to Healthy Turn in Credit Markets	Silvia & Pugliese
March-01	Household Borrowing Accelerate at Year-End	Silvia & Pugliese
February-22	Credit and Growth: A Partnership Not Opposition	Silvia
	Real Estate	
March-01	Regional Variance in Homeownership	Vitner & Batcheller
February-22	CRE Credit: Fed Concerns, Tighter Standards & Less Demand	Silvia & Batcheller
February-14	Housing Continues to Move Toward a New Equilibrium	Vitner & Batcheller
February-08	Commercial Real Estate Chartbook: Q4	Khan & Causey
January-11	2017 Private Nonresidential Construction Outlook	Khan

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