

WELLS
FARGO

SECURITIES

Ten Issues in a Three-Percent Economy

Denver

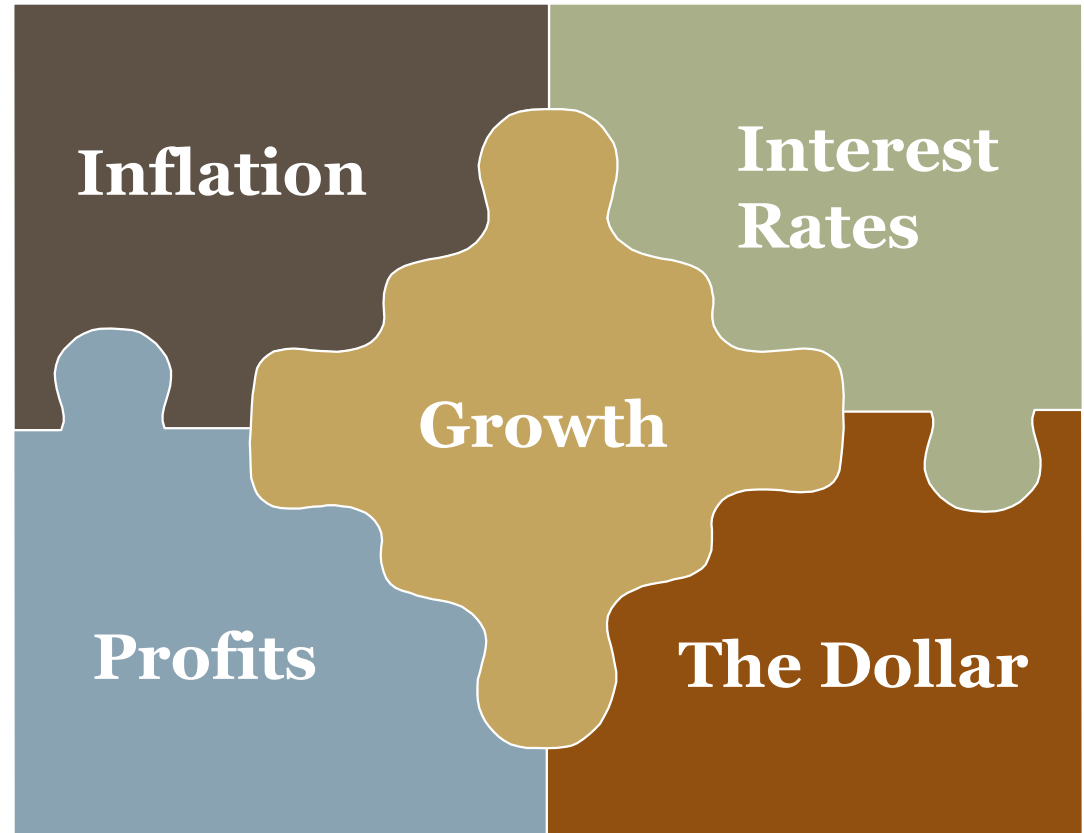
John E. Silvia, Chief Economist

March 15, 2018

Together we'll go far



Five benchmarks for good
decision making

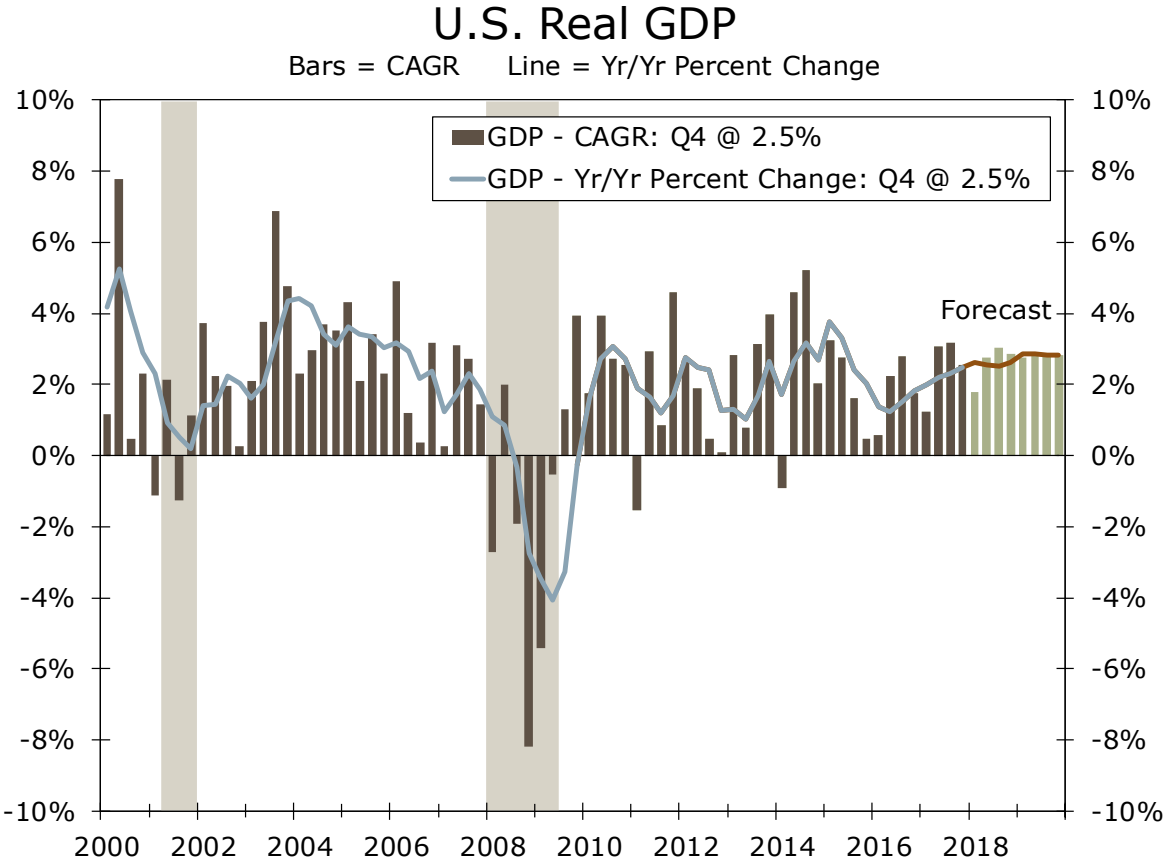


How do we compare to
consensus?

Expectations for the Future

- Above trend growth, no recession in the forecast
- Employment—cyclical and structural change
- Consumer & Business Fixed Investment solid—key support to growth
- In line with consensus on strong 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 2 percent plus post-Brexit
- China growth slower for 2018, 2019
- Continued Growth in Canada with BoC continuing to hike rates

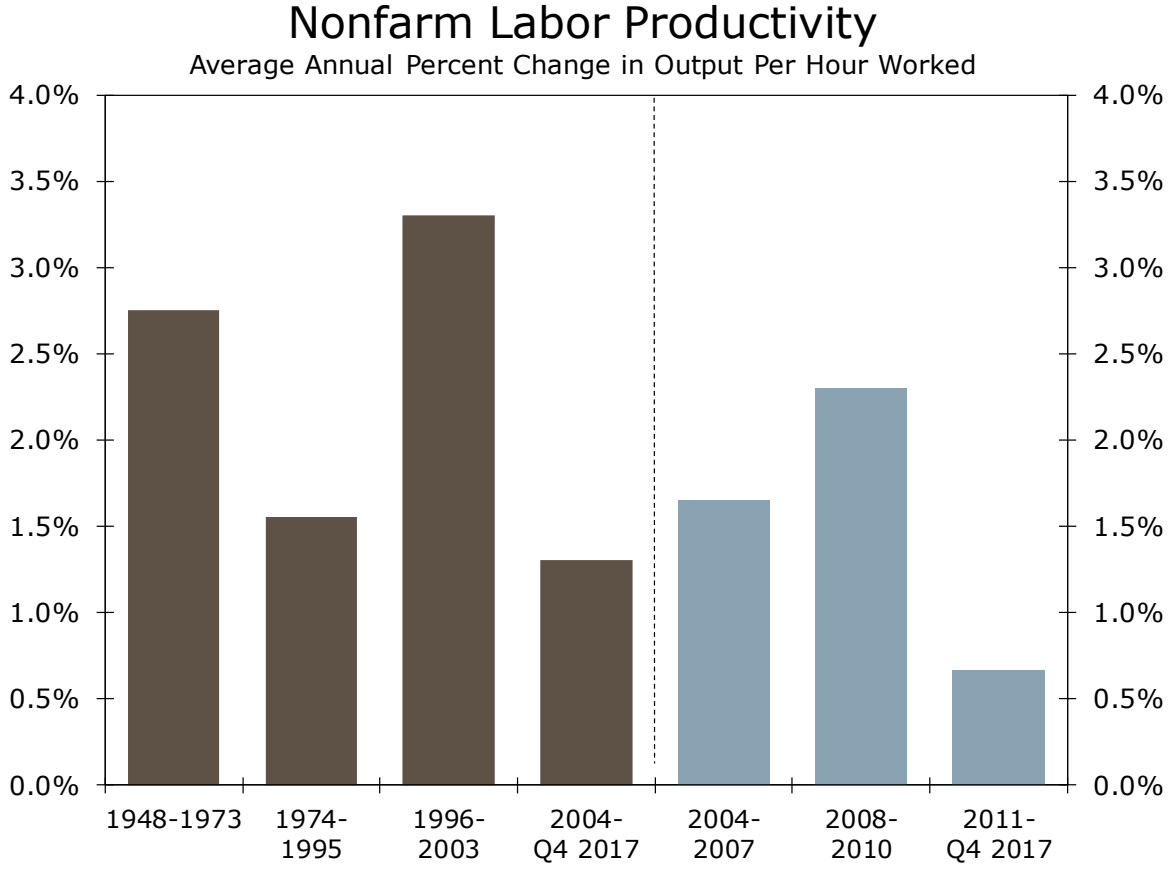
Above growth at 3 percent in the year ahead. A more balanced composition of domestic growth should prevail, but trade will be a drag going forward.



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

Supply-Side Challenges

Productivity growth has downshifted over the past cycle

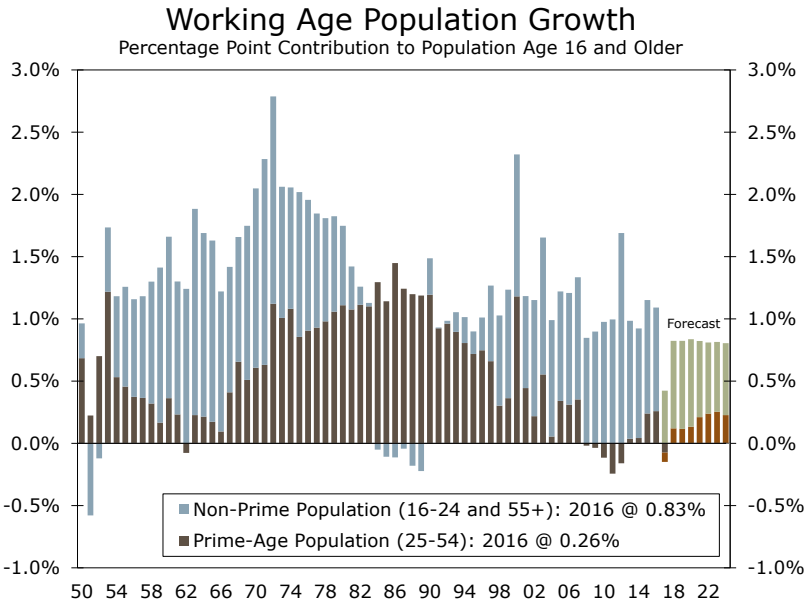


Source: U.S. Department of Labor and Wells Fargo Securities

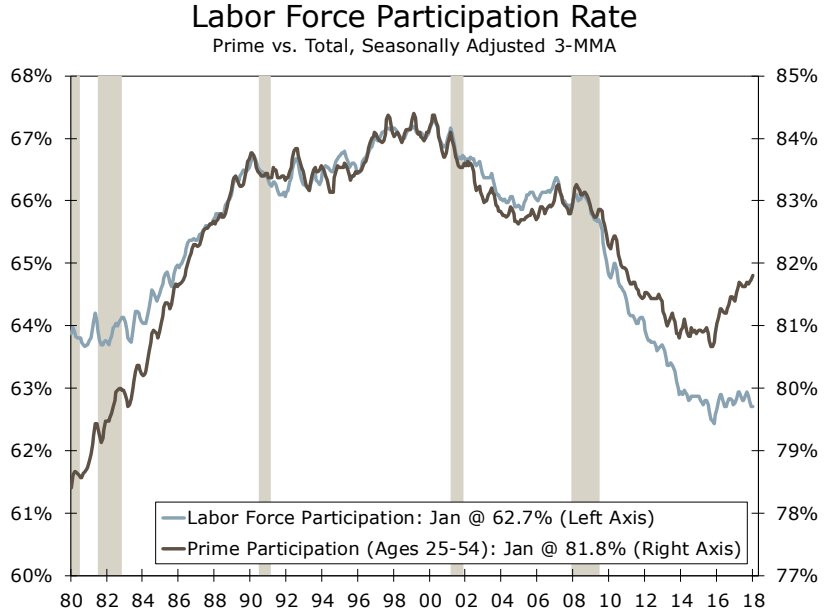
Potential Growth—Little Help from Labor Participation

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

Working Age Population

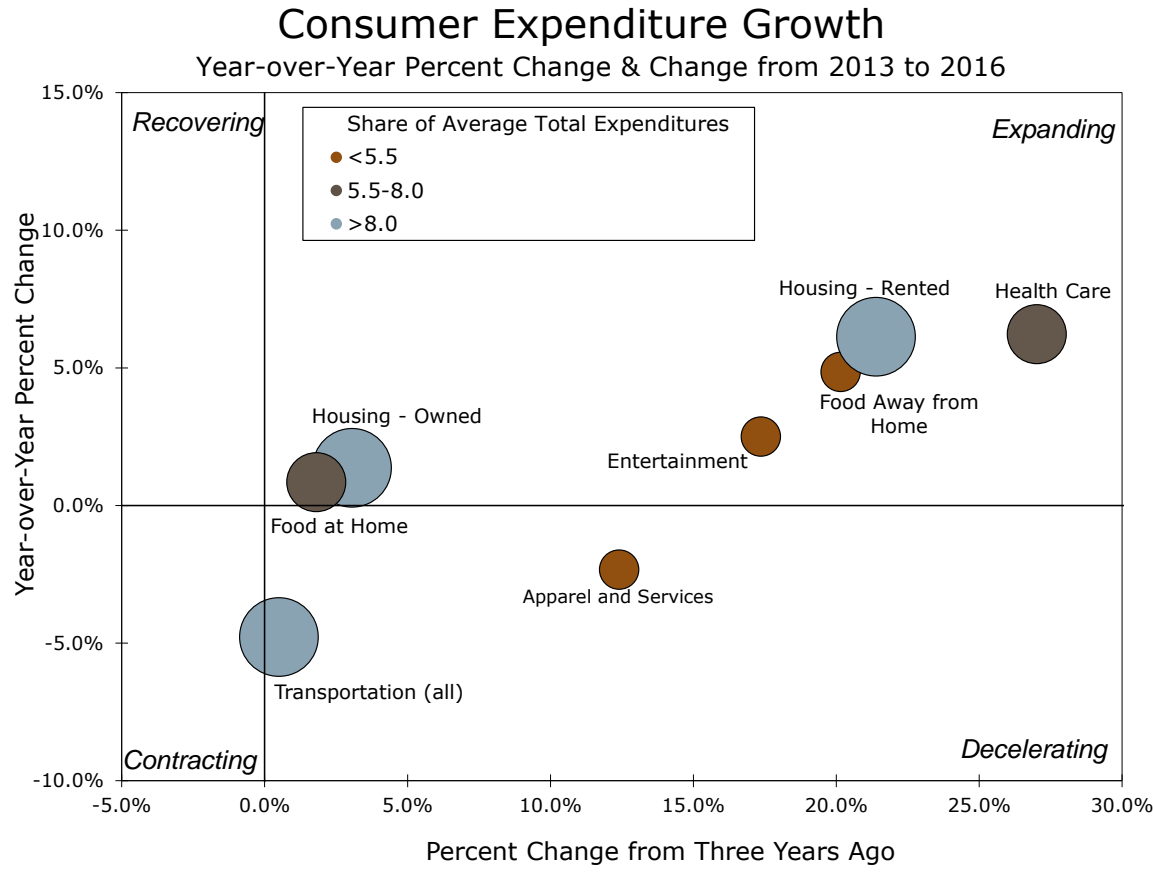


Labor Force Participation



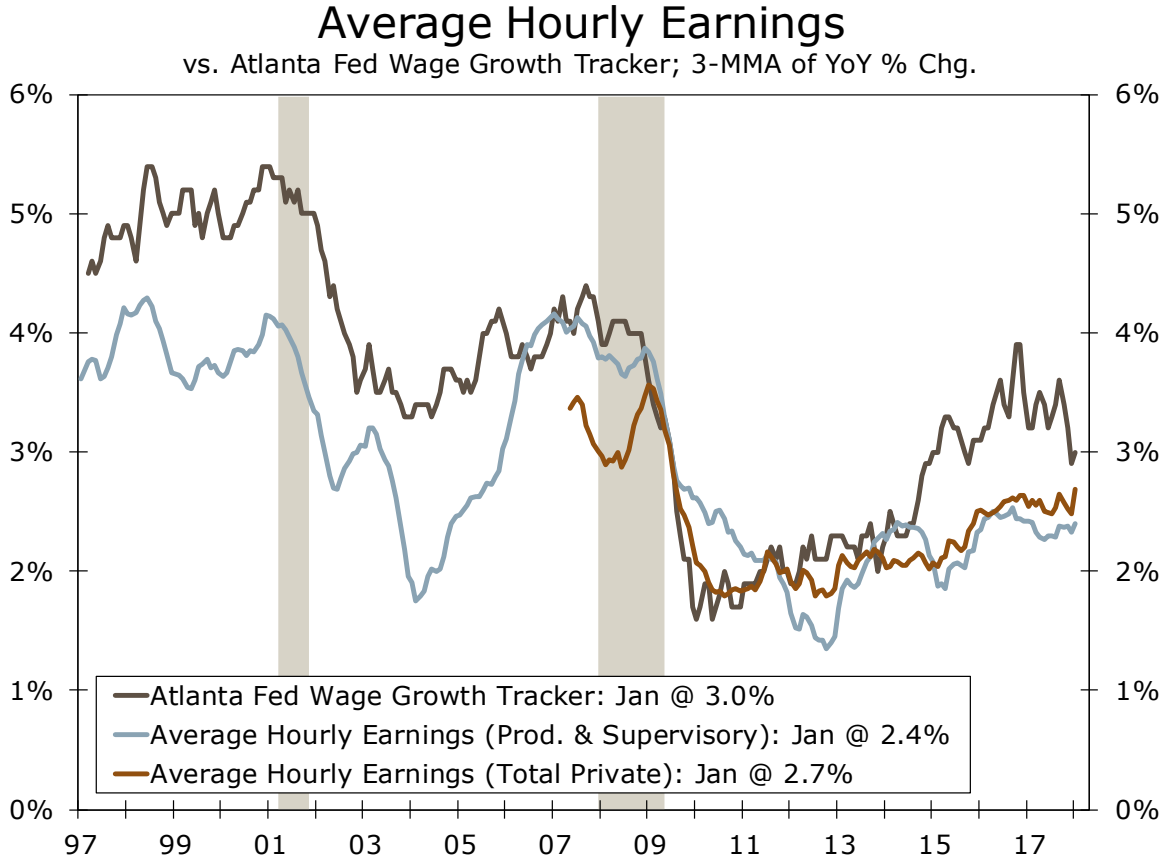
Source: U.S. Department of Labor and Wells Fargo Securities

Food away from home, rental housing, and health care spending have improved as the economy has picked up



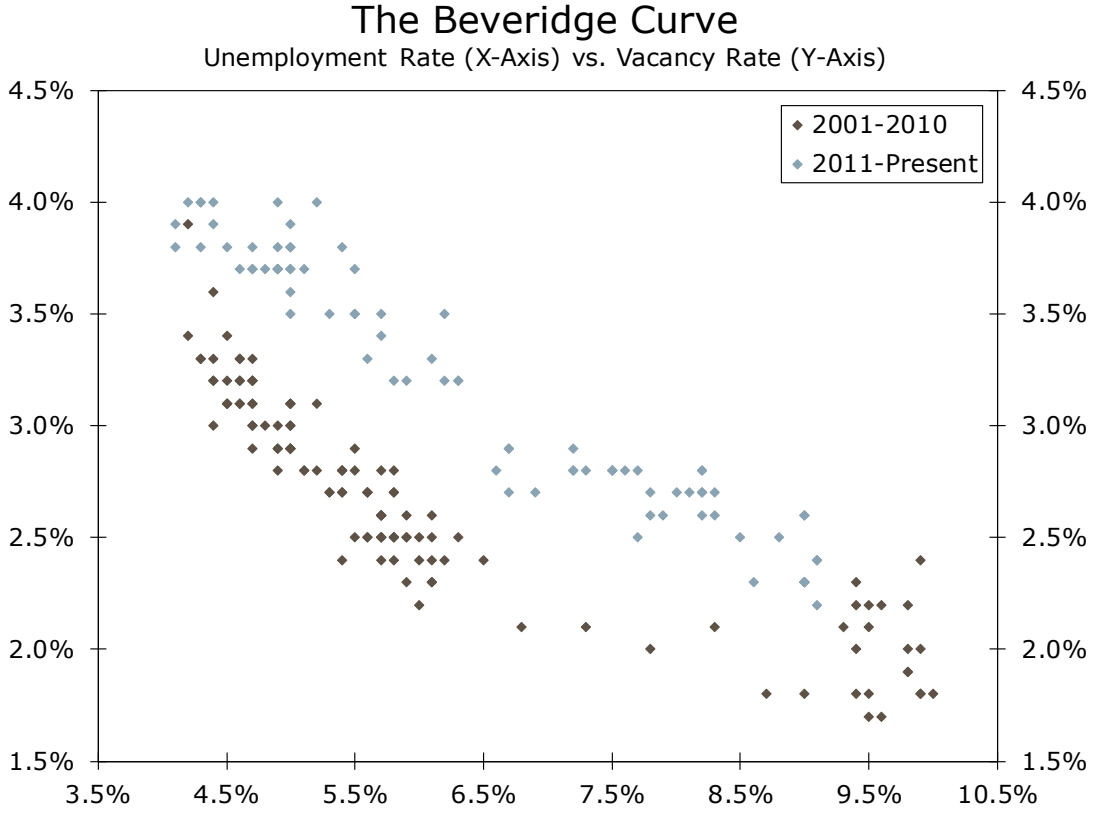
Source: U.S. Department of Labor and Wells Fargo Securities

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

The shift outward in the Beveridge curve provides evidence of a break in the link between job vacancies and available workers, as measured by the unemployment rate.



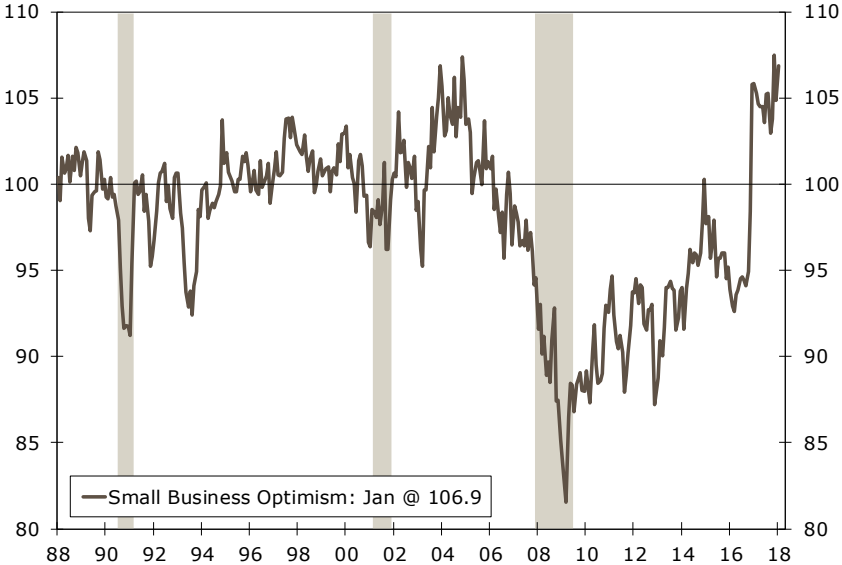
Source: U.S. Department of Labor and Wells Fargo Securities

Business owners have become much less worried about the regulatory environment. Sales and earnings trends also look more positive.

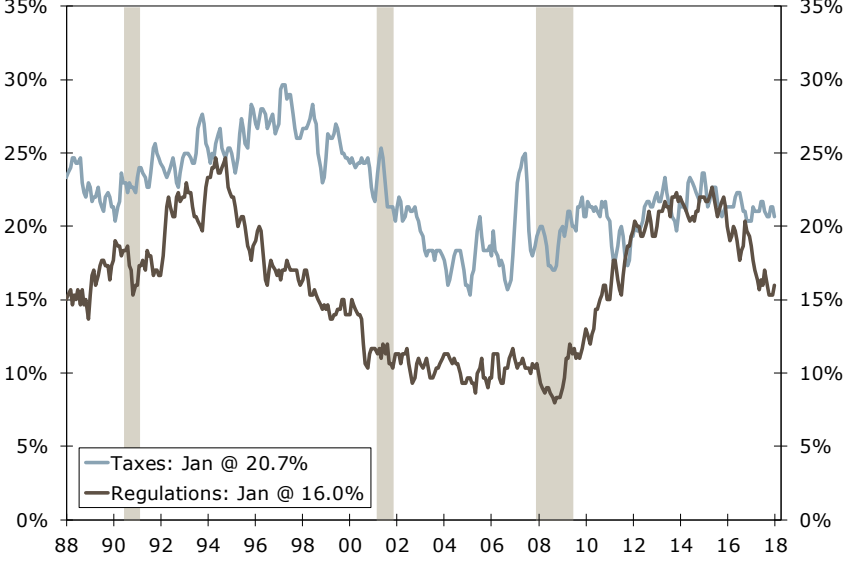
Small Business Optimism

Small Business Concerns

NFIB Small Business Optimism
Overall Index 1986 = 100



Small Business Most Important Problems
Single Most Important Problem Facing Firms, SA 3-MMA

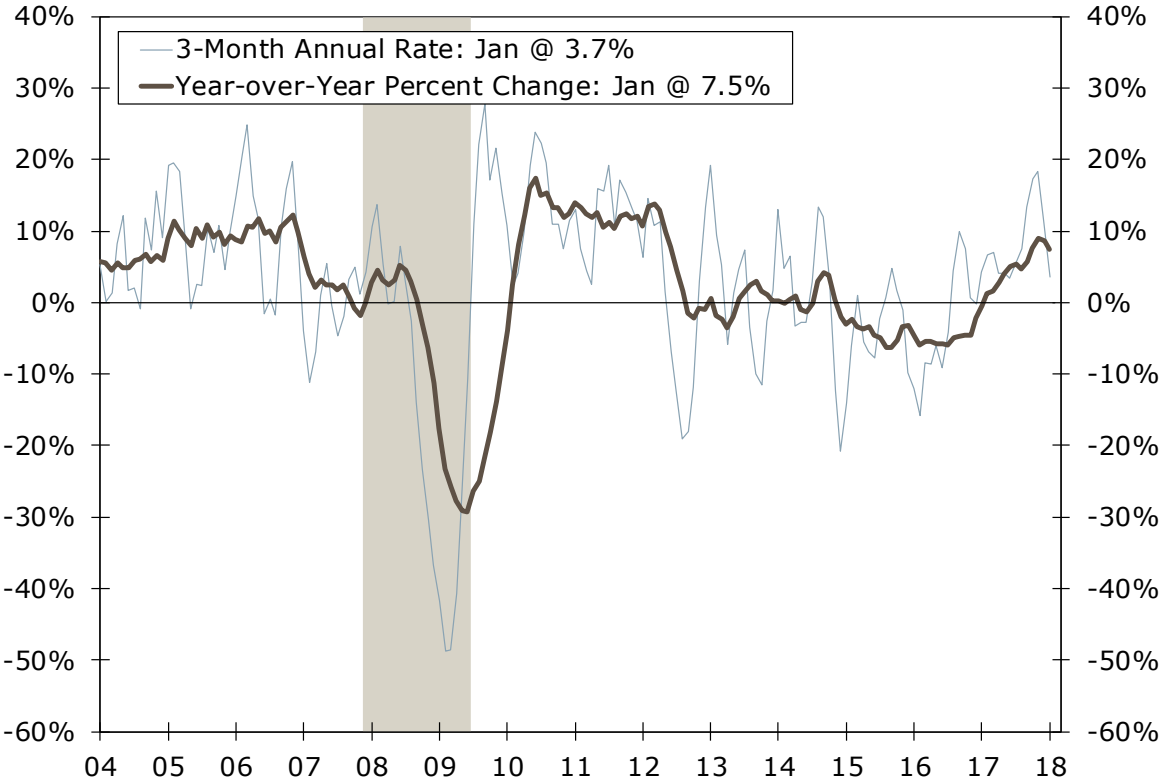


Source: National Federation of Independent Business (NFIB) and Wells Fargo Securities

Core capital goods orders and shipments, a good proxy for equipment spending, are running at multi-year highs.

Nondefense Capital Goods Orders, Ex-Aircraft

Series are 3-Month Moving Averages

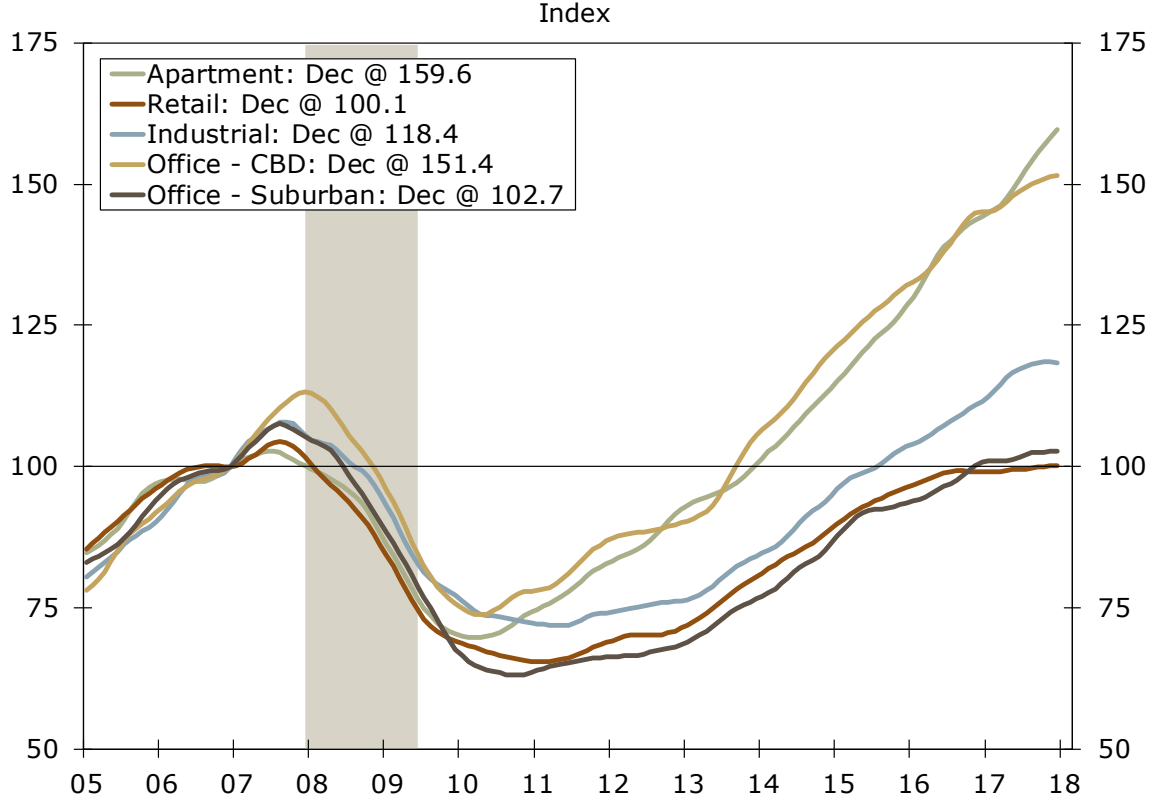


Source: U.S. Department of Commerce and Wells Fargo Securities

Divergence in Commercial Real Estate

High valuations have caught the Fed's attention

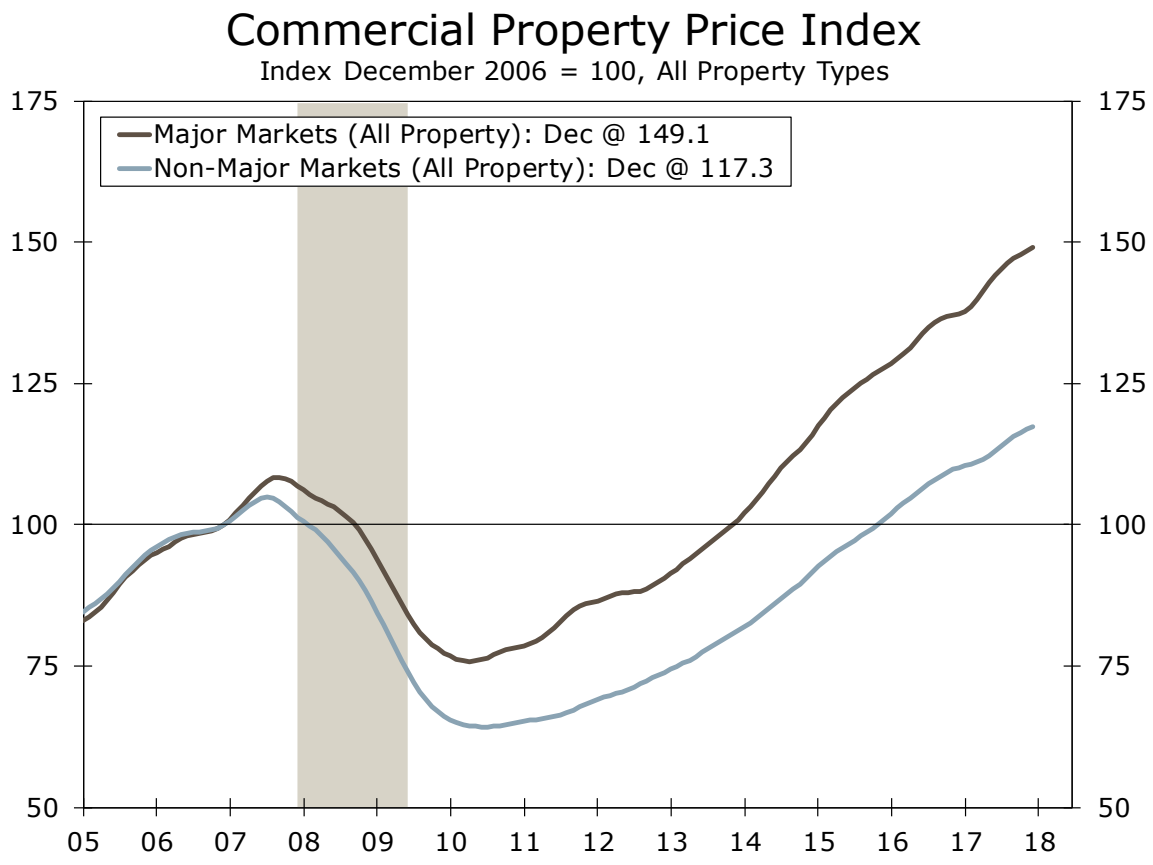
Commercial Property Price Index



Source: RCA and Wells Fargo Securities

Valuations have grown the fastest in major markets

- Los Angeles
- New York City
- Boston
- San Francisco



Source: RCA and Wells Fargo Securities

Unsustainable Fiscal Policy

Key Tax Law Changes

Individual Tax Code Changes

- Bill slashes marginal tax rates across the board
- Limits state & local income and property tax deductions to \$10,000
- Pass-throughs would be allowed to deduct up to 20 percent of income
- Doubles the standard deduction and the child tax credit
- Caps mortgage interest deduction at \$750K
- Doubles the estate tax exemption
- Keeps the Alternative Minimum Tax (AMT) but lifts the threshold to \$500K
- Maintains several deductions including medical expenses, student loans and private activity bonds (PABs)
- Repeals Obamacare individual mandate
- Individual cuts expire on December 31, 2025

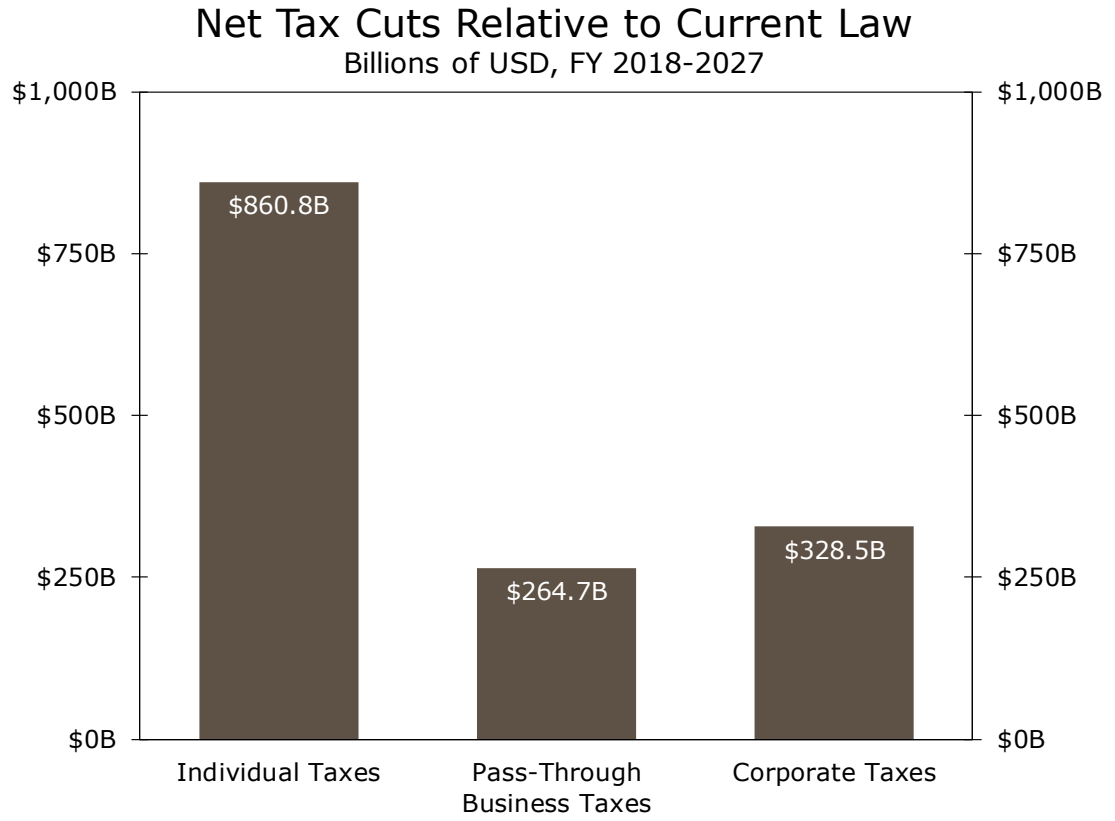
Business Tax Code Changes

- Permanently reduces the corporate tax rate to 21% from the current 35% federal rate starting in 2018
- Corporate AMT repealed
- Business interest expense deductions are capped at 30 percent of EBITDA for 4 years and 30 percent of EBIT thereafter
- The bill allows for full and immediate expensing of business capital investments. This provision expires in five years.
- Ends the current worldwide corporate tax system by switching to a territorial system. Existing profits held abroad are taxed at 15.5 percent for cash and cash equivalents and 8 percent for reinvested foreign earnings.

Tax Legislation: A Comparison		
1986 Tax Reform Act	2001/2003 Bush Tax Cuts	Tax Cuts and Jobs Act
Revenue Neutral	Not Revenue Neutral	Not Revenue Neutral
Permanent	Temporary	Corporate Changes Mostly Permanent, Individual Changes Mostly Temporary
Individual Tax <i>Cut</i> of \$120 Billion Over 5 Years	Individual Tax Cut of Roughly \$1.5 trillion over 10 Years	Individual Tax Cuts of Roughly \$860 Billion over 10 Years
Corporate Tax <i>Increase</i> of \$120 Billion Over 5 Years	No Major Corporate Changes	Corporate/Pass-Through Business Tax Cuts of Roughly \$600 Billion over 10 Years
Divided Government (Democratically Controlled House)	Single-Party Control	Single-Party Control
Revenue Neutral Design Made the Impact on Future Surpluses/Deficits Less of a Factor	Before the Tax Change, Projected Budget Balance Over 10 Years: <i>Surplus</i> of \$5.6 Trillion	Before the Tax Change, Projected Budget Balance Over 10 Years: <i>Deficit</i> of \$10.1 trillion

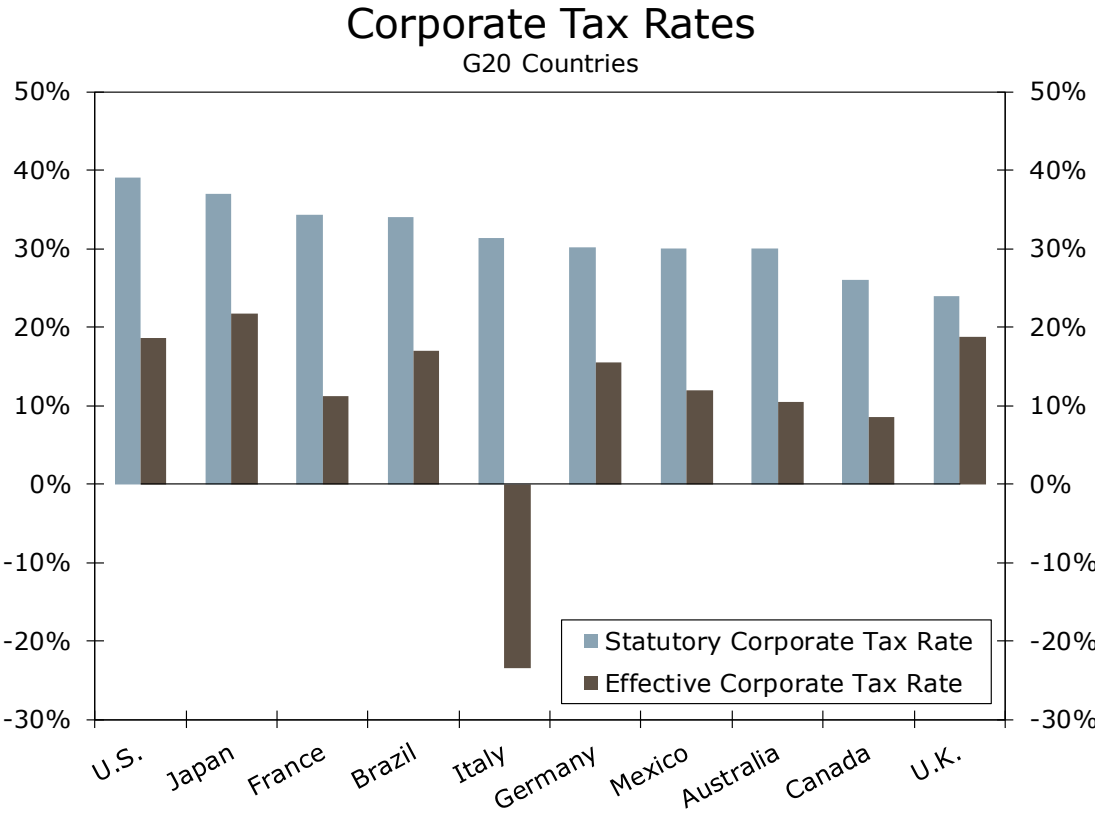
Projected figures come from CBO and JCT

The new tax plan cuts taxes on businesses and corporations by about \$600 billion, plus frees up profits previously being held abroad for tax reasons.



Source: Joint Committee on Taxation and Wells Fargo Securities

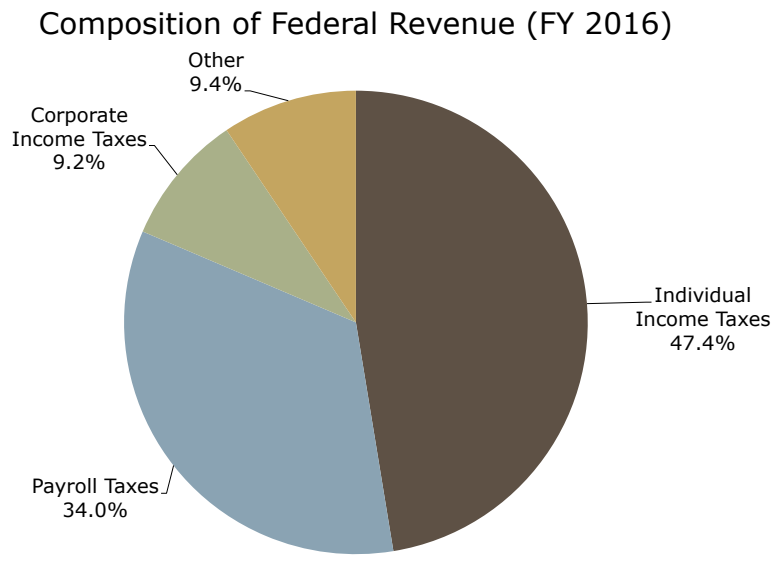
Previously, the United States had the highest statutory corporate tax rate in the G20.



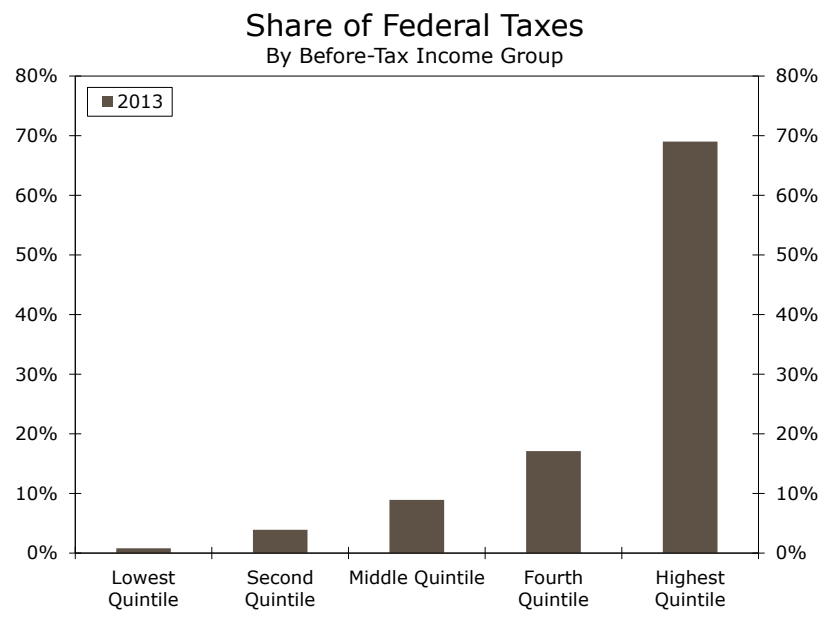
Source: CBO and Wells Fargo Securities

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

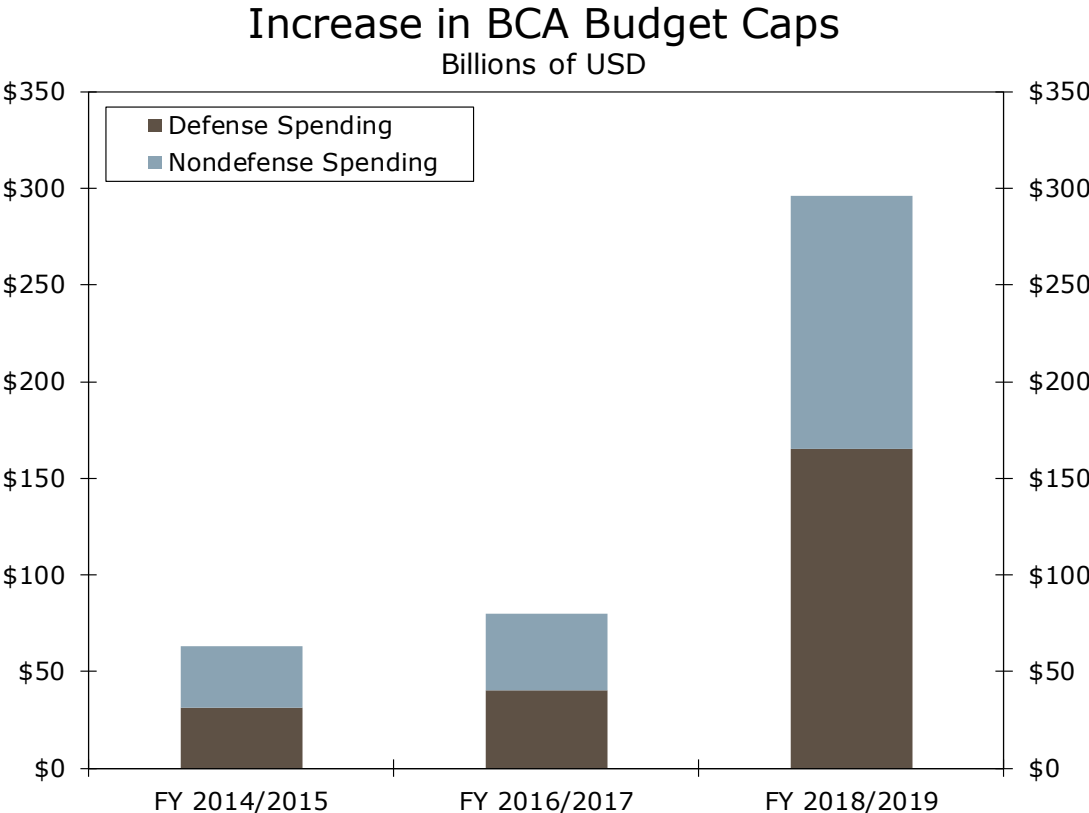


Federal Taxes Paid by Income Quintile



Source: Congressional Budget Office and Wells Fargo Securities

Policy makers are not unwilling to lift spending caps to provide relief from austerity measures



Source: Congressional Budget Office and Wells Fargo Securities

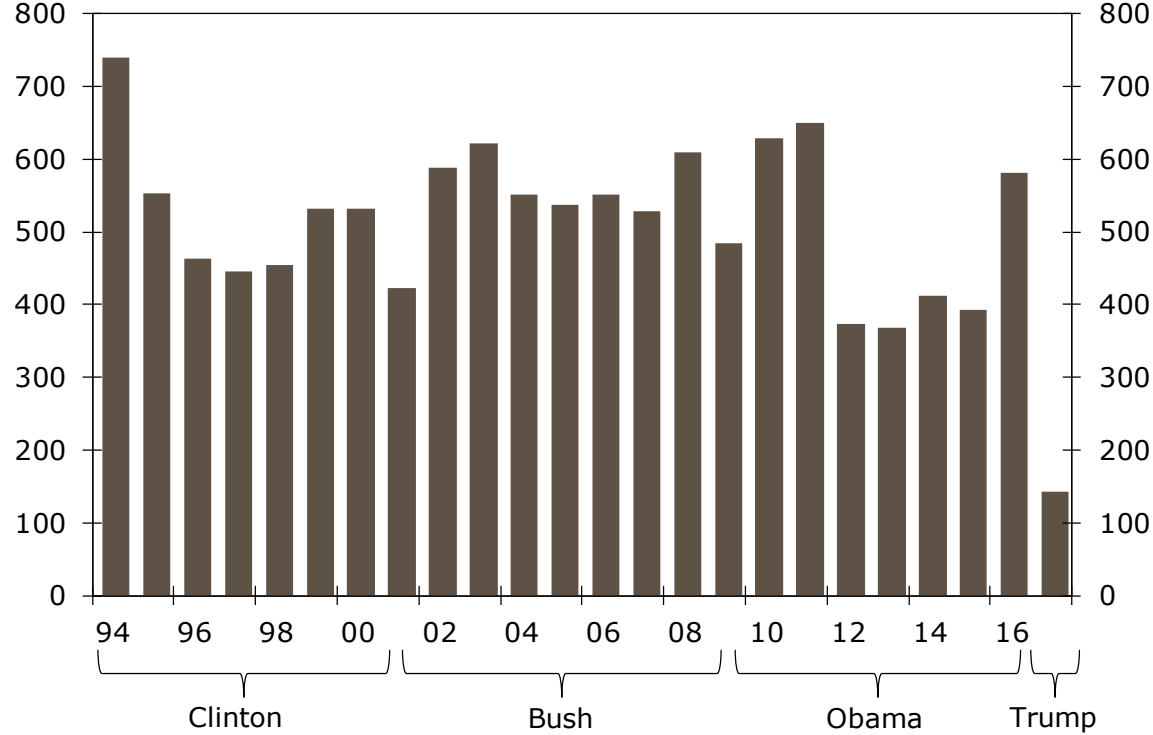
Deregulation

- Leveraged Loans: Banking supervisors are reconsidering guidelines
 - **Impact:** Gives more leeway for banks to finance private-equity buyouts
- Volcker Rule: Wall Street regulators are drafting changes to the rule that restricts banks from speculative trading unless it is done on their customers' behalf
 - **Impact:** Cuts millions of dollars in regulatory costs for Wall Street banks and allows banks to engage in broader range of trades and investments
- Arbitration Rule: Congress reversed a rule completed by the Consumer Financial Protection Bureau under Obama-era leadership that would have made it easier for consumers to bring class-action lawsuits against banks by restricting requirements that customers use arbitration to resolve disputes
 - **Impact:** Banks can more easily include arbitration requirements in their contracts.
- Brokers' Conflicts of Interest: The Securities and Exchange Commission is expected to propose new conflict-of-interest restrictions on stockbrokers advising individual investors, a step toward creating consistent federal standards for all brokerage accounts
 - **Status:** In process – SEC proposal expected by the second quarter. Labor's rules have been partially delayed into 2019

The number of new regulations put in place in the first year of the Trump administration is the lowest among the last four administrations

Major New Regulatory Changes

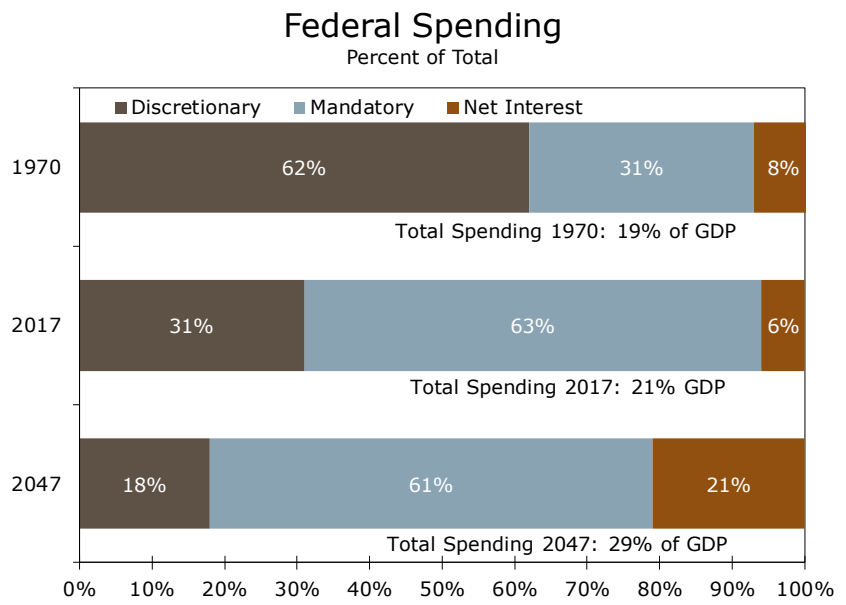
Number of Rules Reviewed By the OIRA Each Year



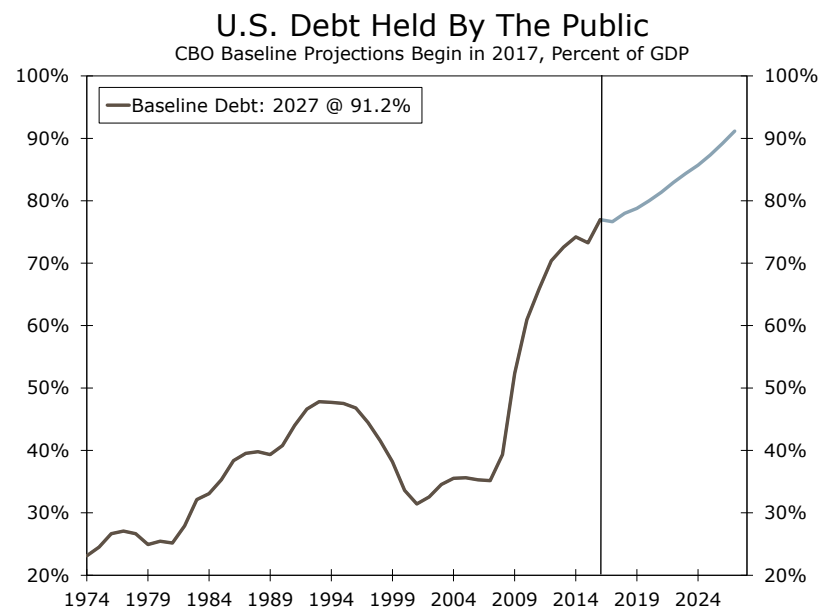
Source: Office of Information and Regulatory Affairs and Wells Fargo Securities

The composition of federal spending has shifted dramatically.
 The CBO projects that the debt-to-GDP ratio will surpass 91 percent by 2027.

Composition of Federal Spending



Federal Debt Continues to Rise

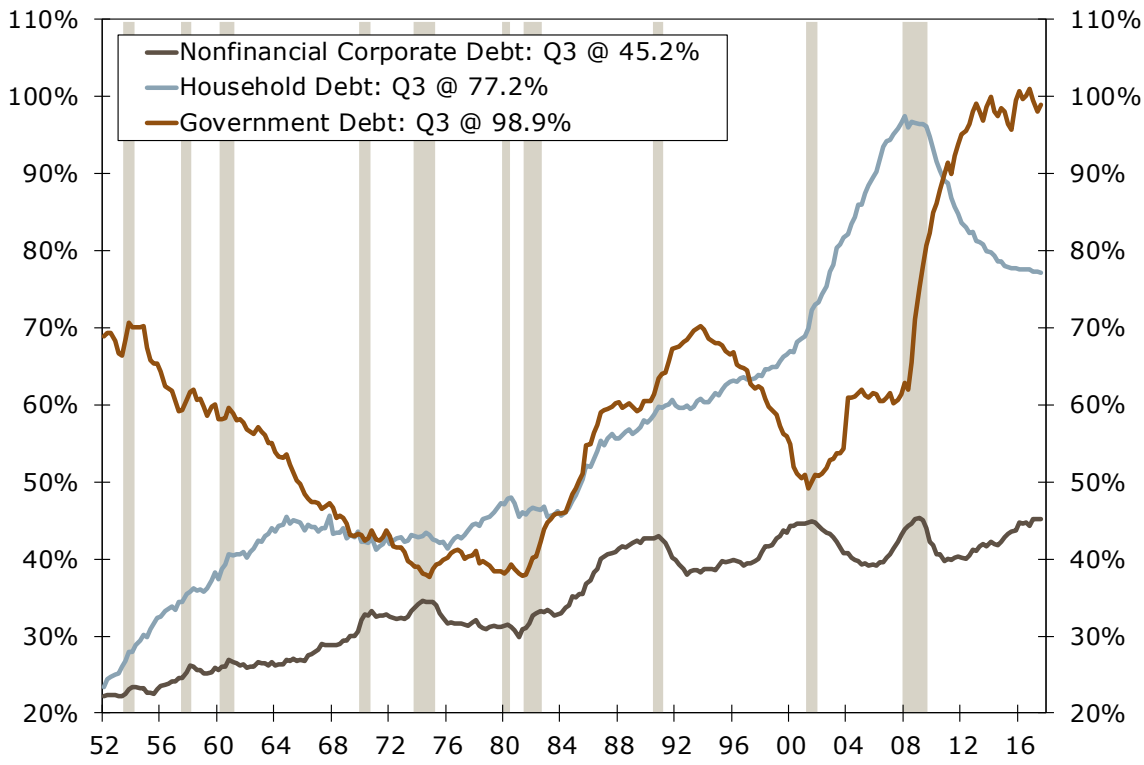


Source: Congressional Budget Office and Wells Fargo Securities

Since 1982, the growth in debt has been a greater issue for the government sector than for the nonfinancial corporate sector.

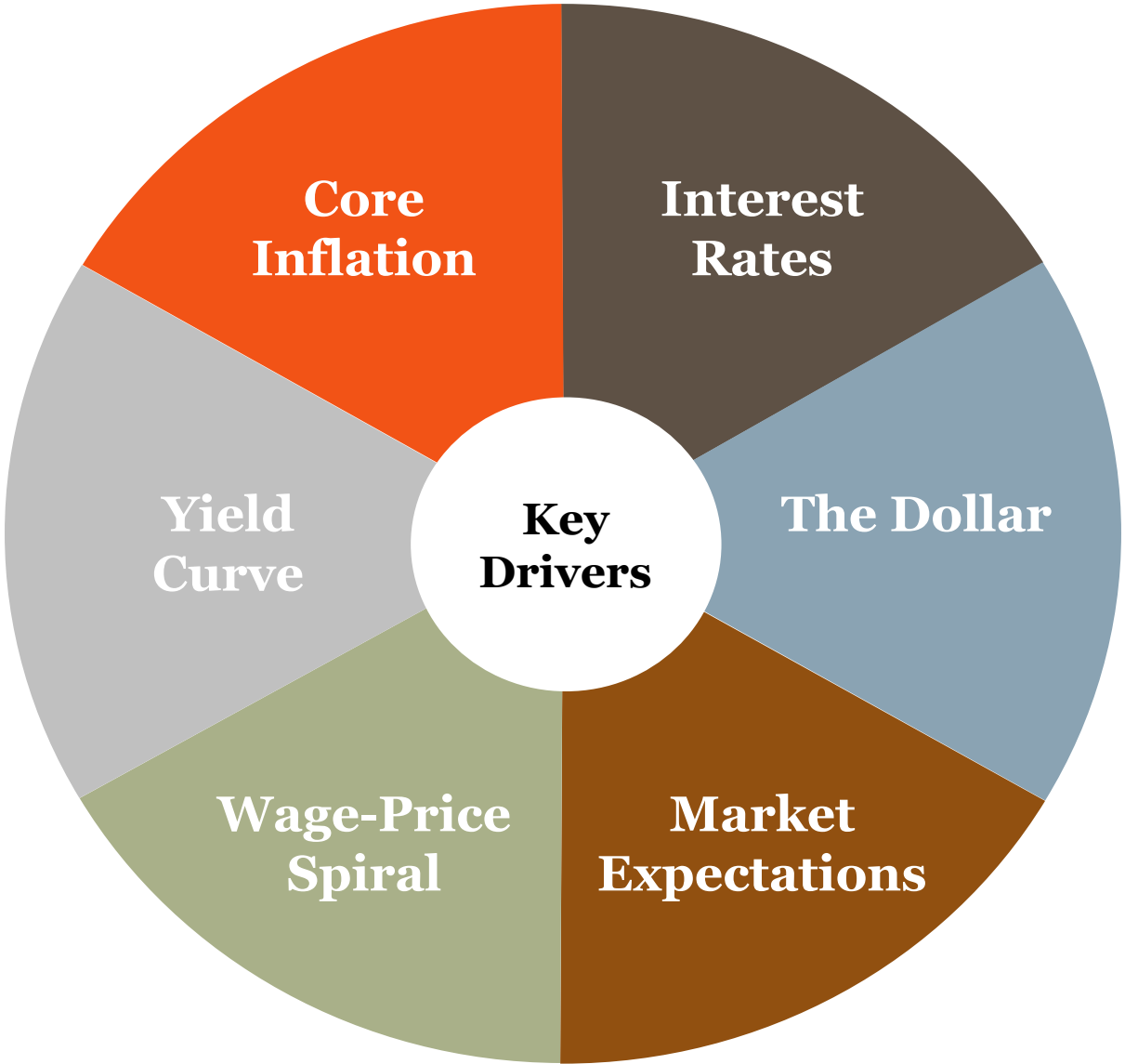
Credit Market Debt as a Share of GDP

Total Sector Debt

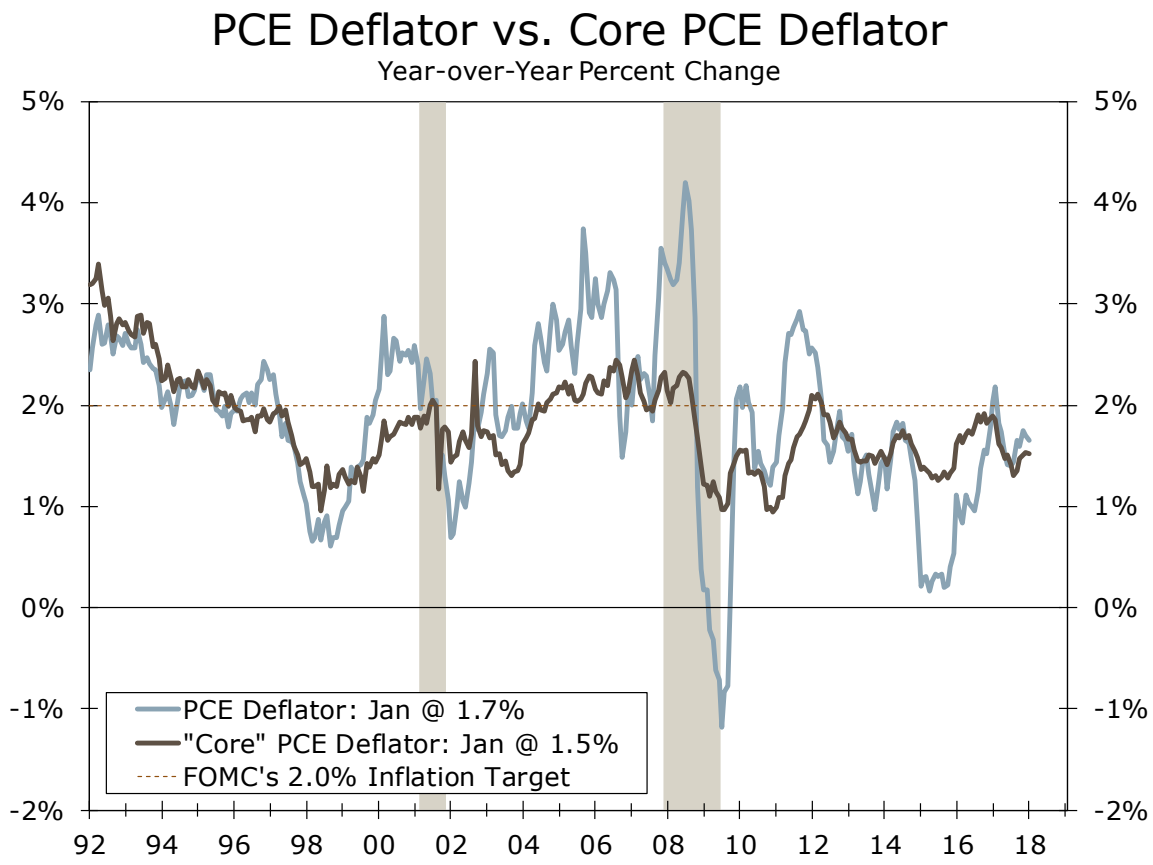


Source: Federal Reserve Board and Wells Fargo Securities

Inflation: Bifurcation



Inflation consistently below the FOMC's target – mean reverting at 2.3 percent from 1984-2017:
Long period of adjustment.
Expect 2 percent-plus in Q2.

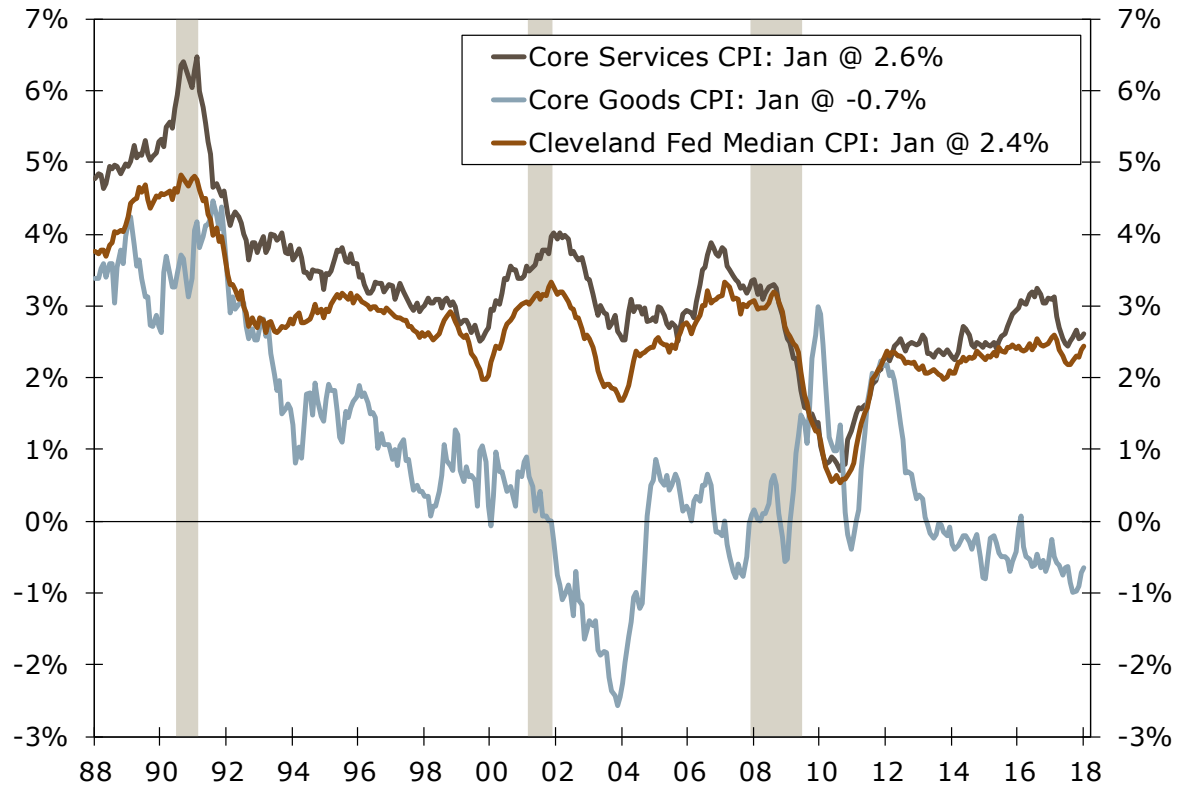


Source: U.S. Department of Commerce and Wells Fargo Securities

Inflation for services has been much firmer than for commodities

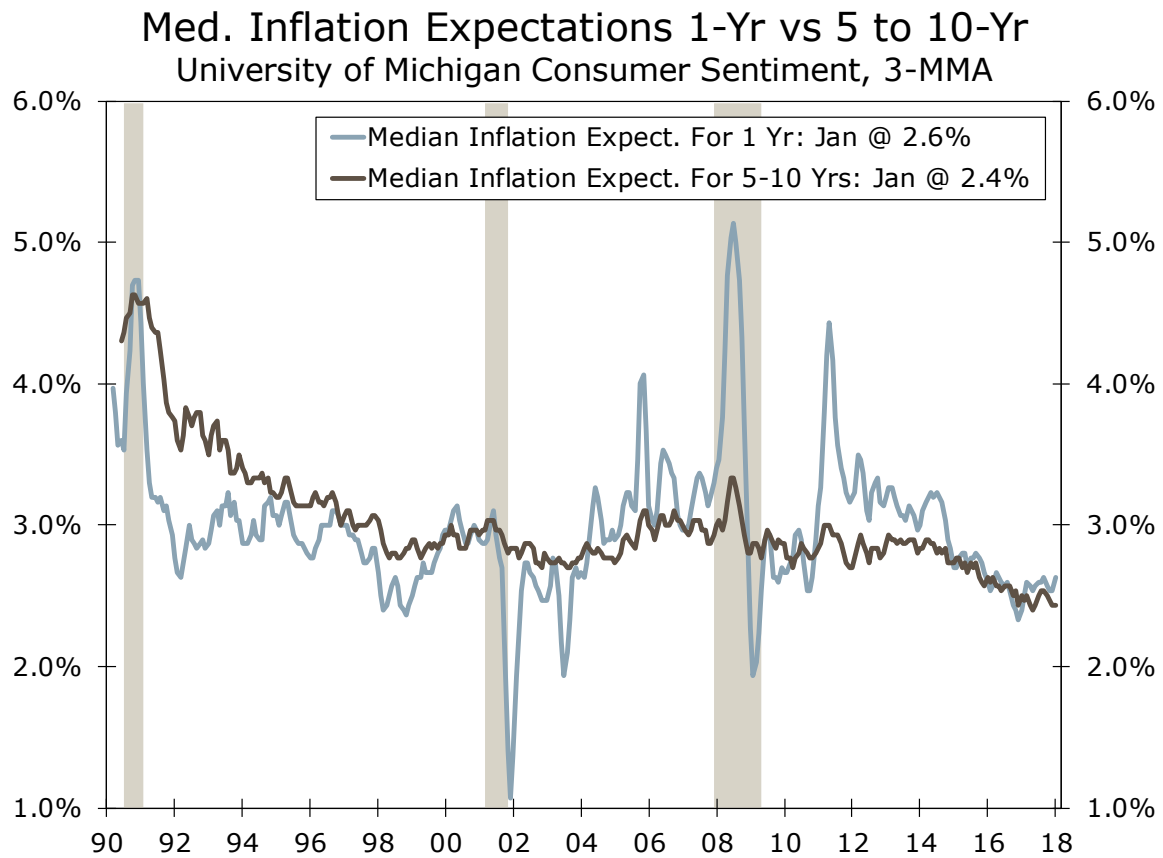
Core Goods vs. Core Services CPI

Year-over-Year Percent Change



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

Inflation expectations, influenced by the recent trend in inflation, are still at historically low levels.



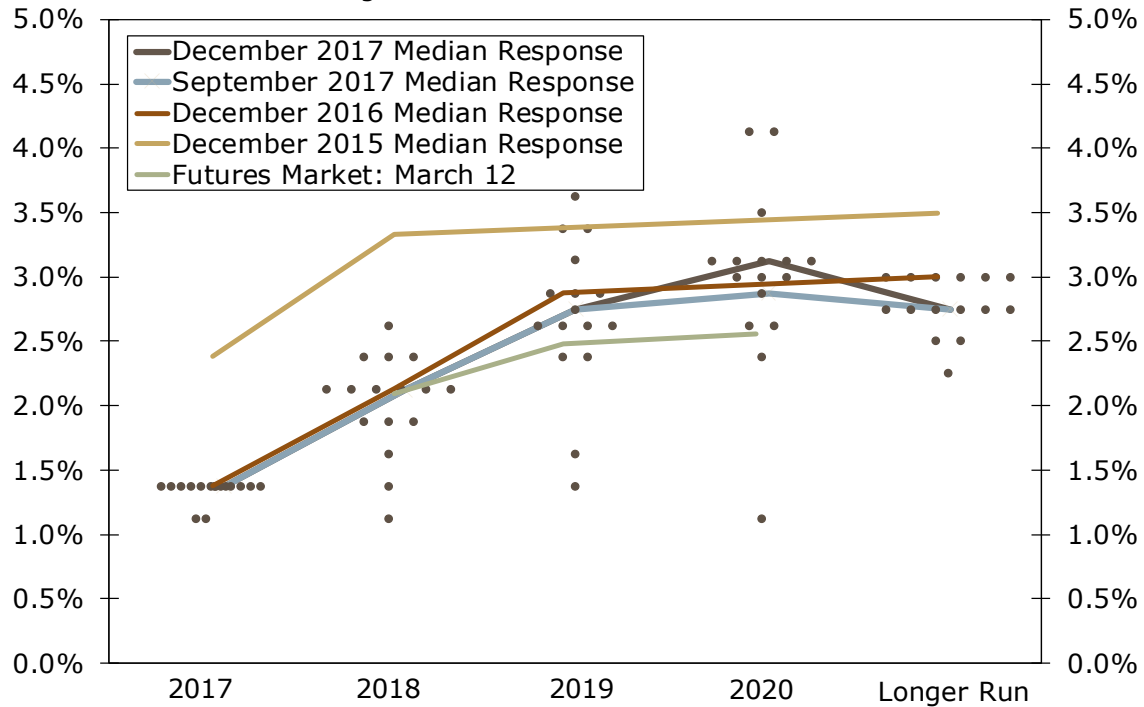
Source: University of Michigan and Wells Fargo Securities

Interest Rate Path

FOMC members' target for the Fed funds rate continues to overshoot market expectations

Appropriate Pace of Policy Firming

Target Federal Funds Rate at Year-End

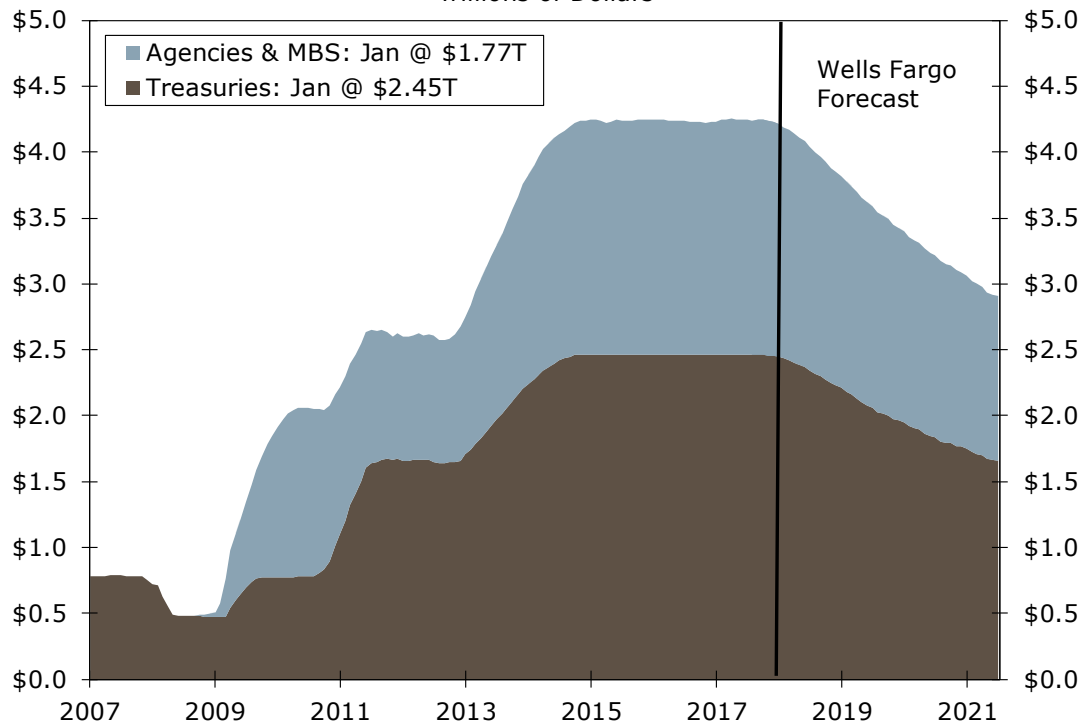


Source: Federal Reserve Board, Bloomberg LP and Wells Fargo Securities

As the Fed tapers its reinvestment of maturing assets, its balance sheet will gradually shrink

Forecasted Federal Reserve Balance Sheet

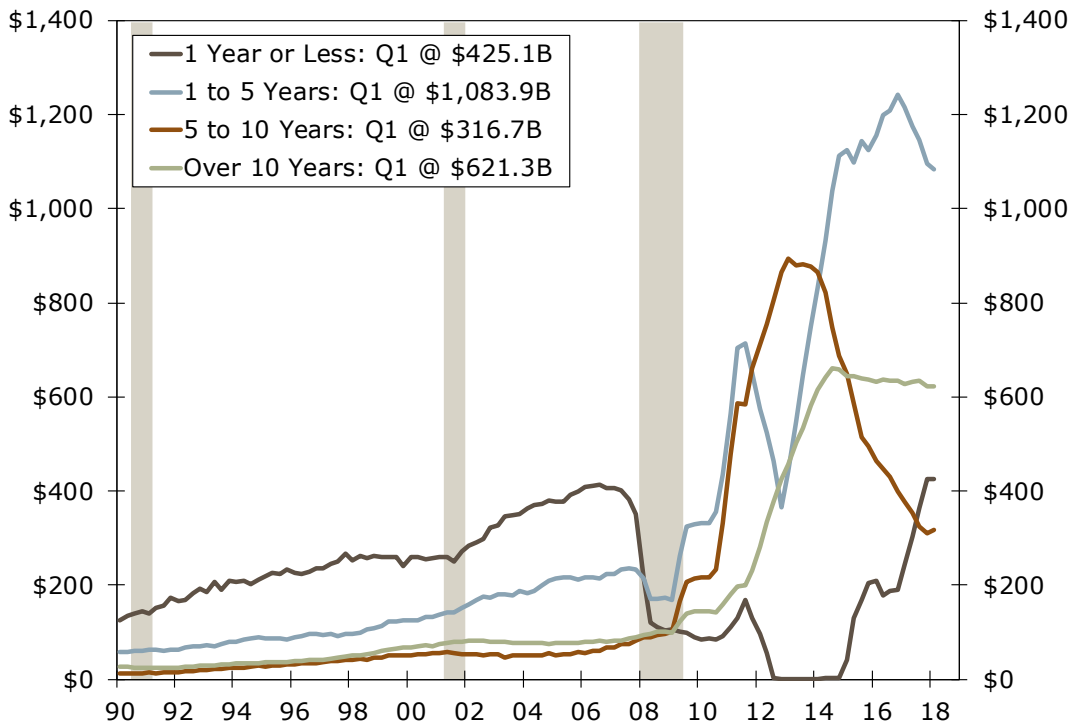
Trillions of Dollars



Source: Federal Reserve Board and Wells Fargo Securities

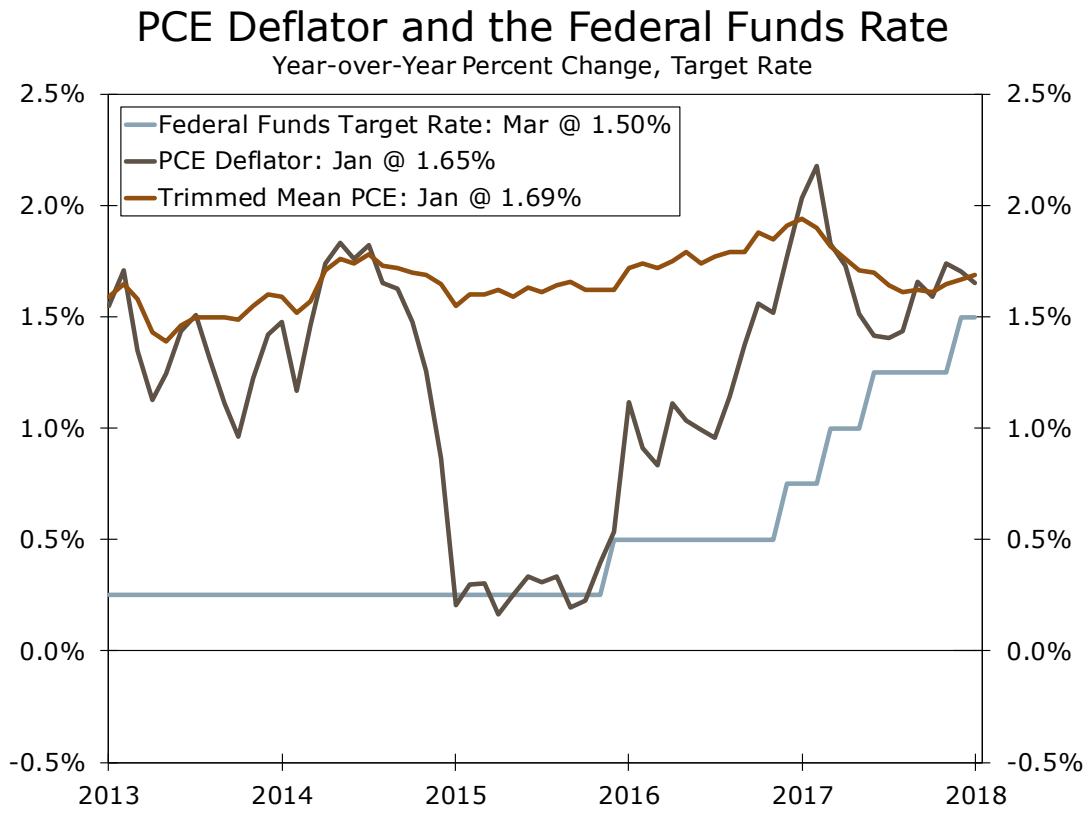
The entire curve is represented in the Fed's portfolio, however the 1 to 5 years Treasury security comprises the largest percentage

Fed Holdings of U.S. Treasuries, By Maturity



Source: Federal Reserve Board and Wells Fargo Securities

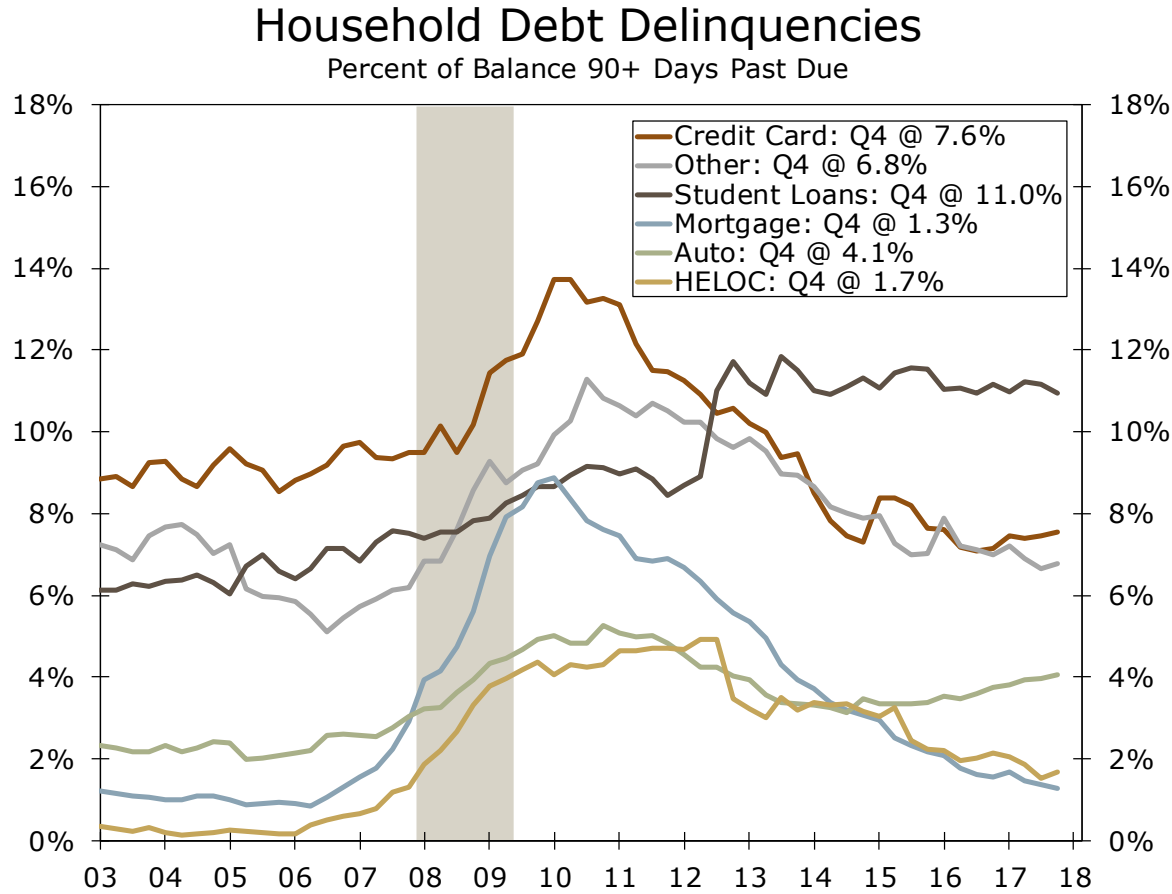
Inflation has lost momentum.
Will the Fed adjust its policy path?



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

Tighter credit standards and a strengthening economy have helped to improve the credit position of households over the past few years—with the exception of student debt.

The sustained upward trend in auto delinquencies is concerning.

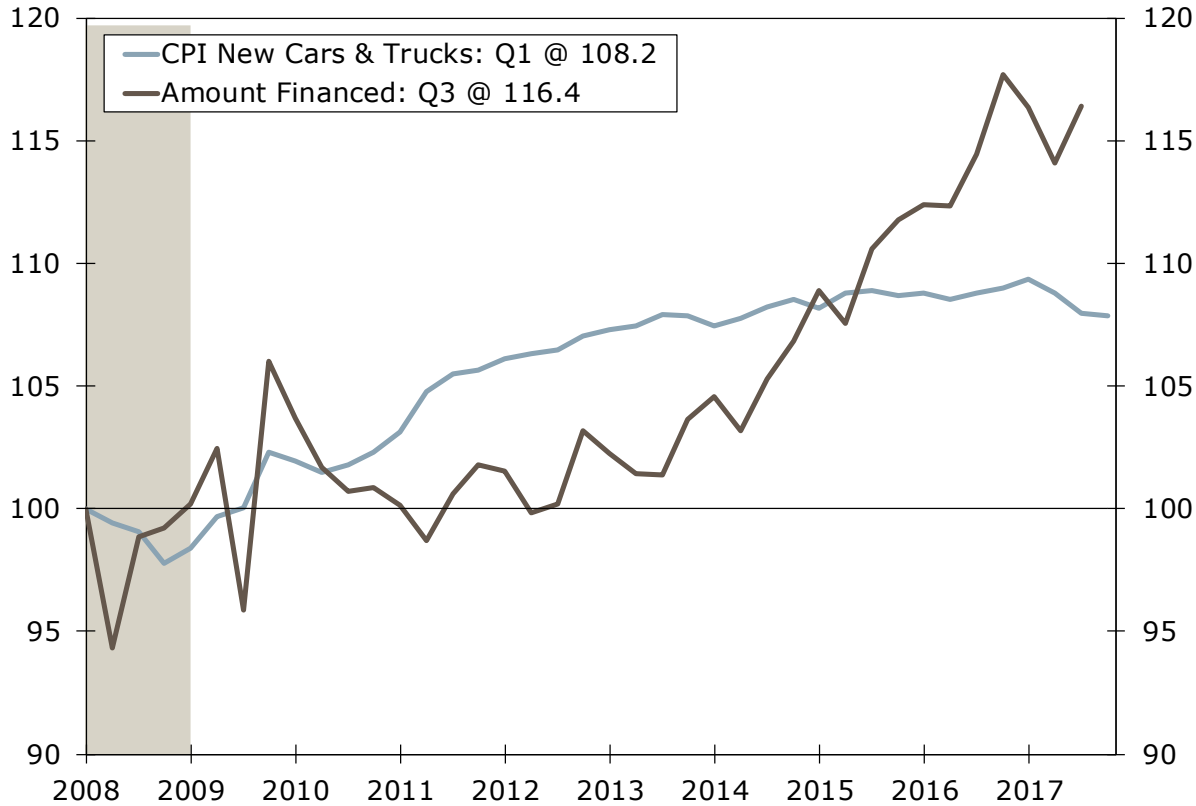


Source: FRBNY and Wells Fargo Securities

An increasingly larger share of auto purchases are being financed with debt.

Auto Lending: Amount Financed vs. Prices

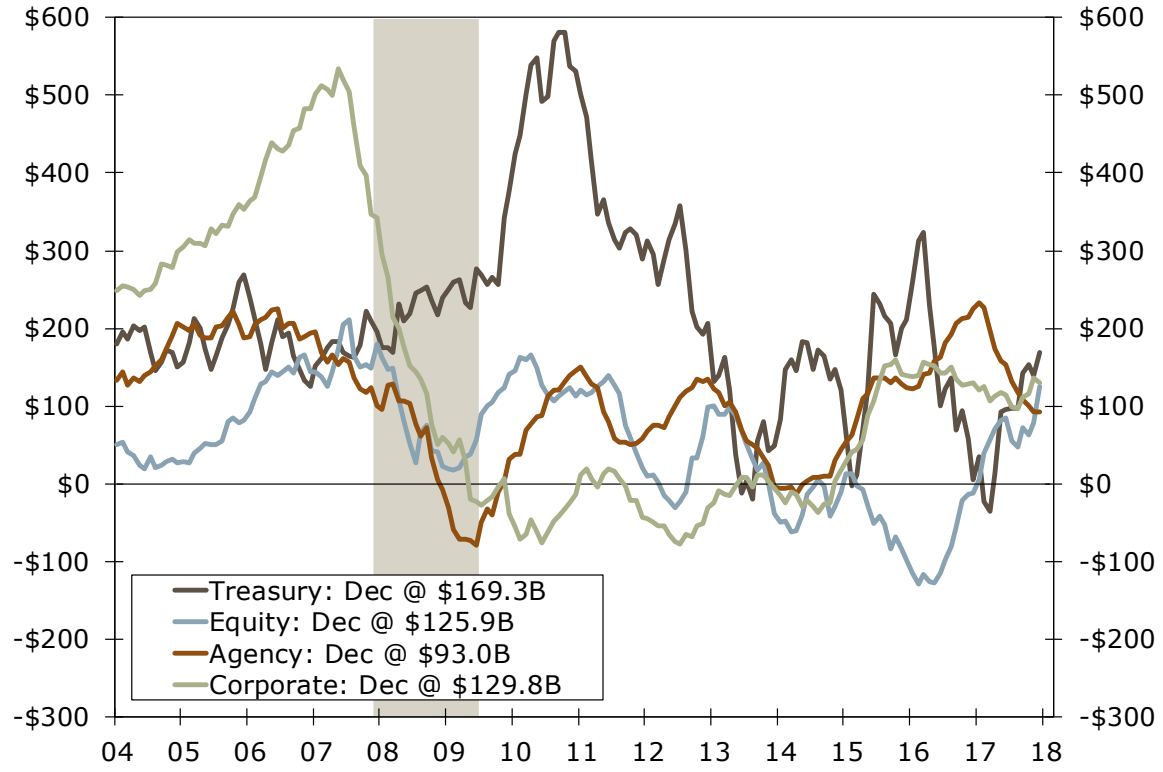
Index Jan 2008 = 100



Source: Federal Reserve Board and Wells Fargo Securities

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

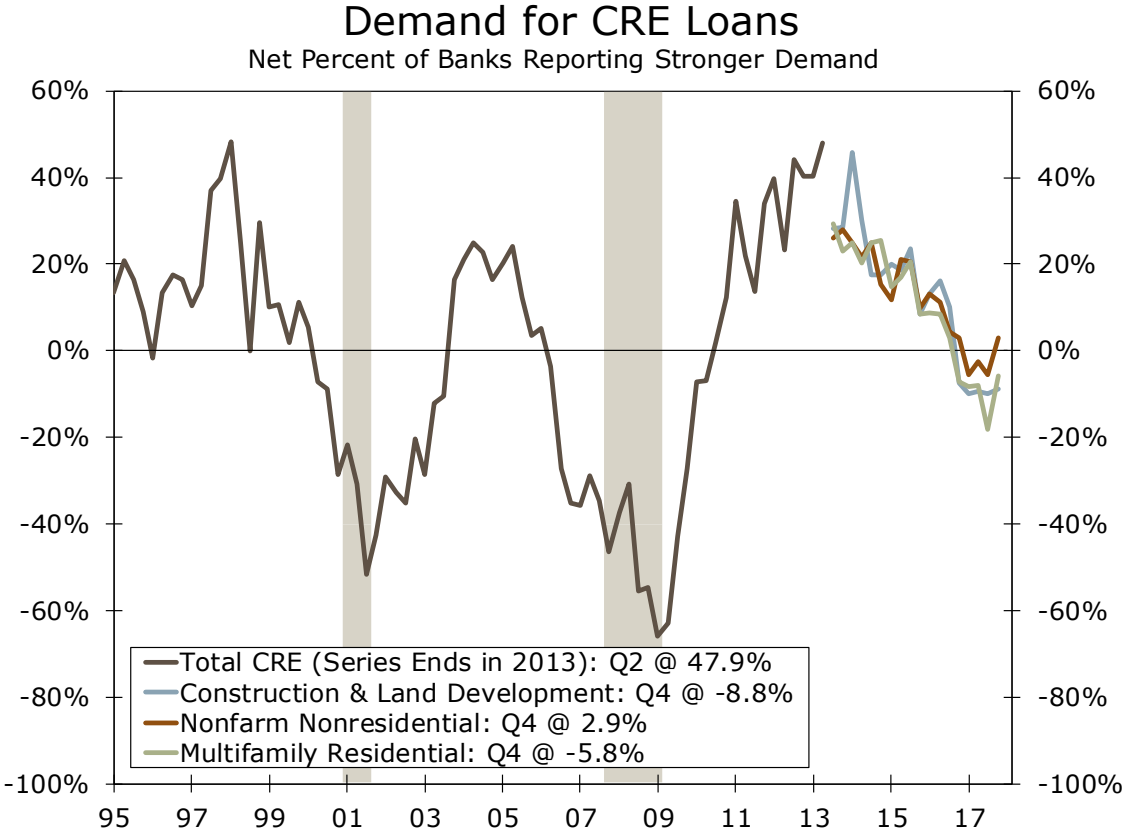
Foreign Private Purchases of U.S. Securities
12-Month Moving Sum, Billions of Dollars



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

Business Lending

Demand for commercial real estate loans has eased from its peak

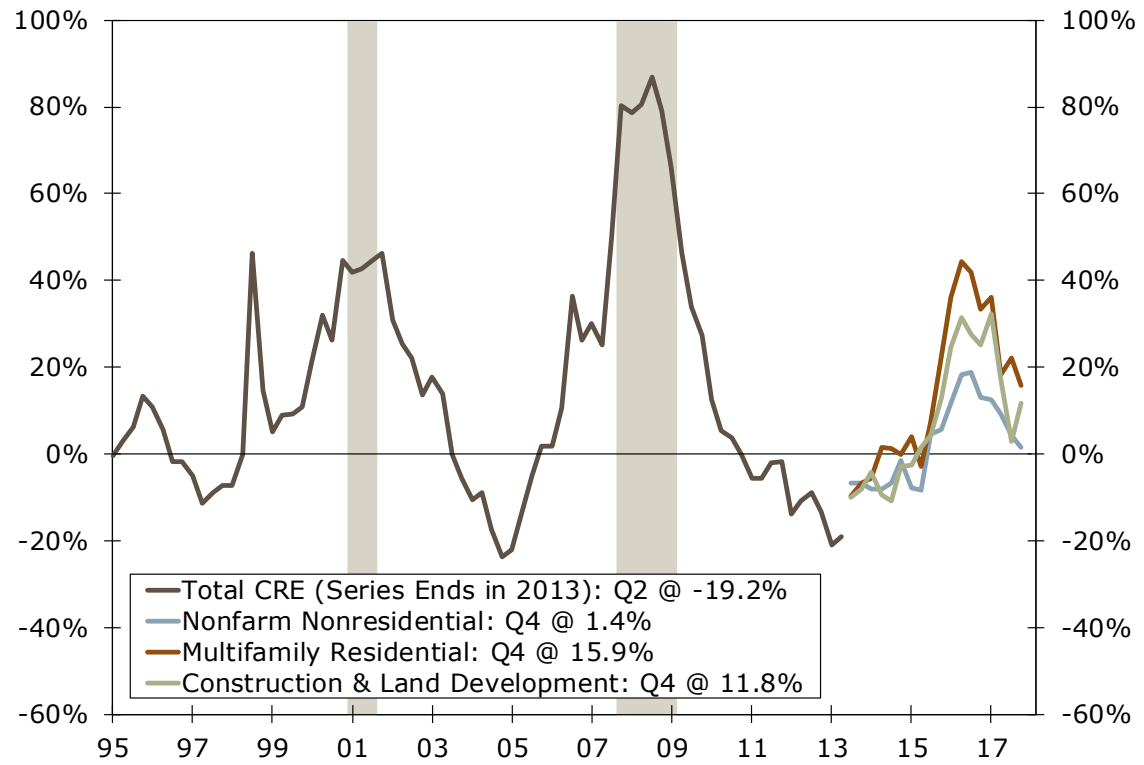


Source: Federal Reserve Board and Wells Fargo Securities

Lending standards for these types of loans have eased in recent months.

Banks Tightening Standards for CRE Loans

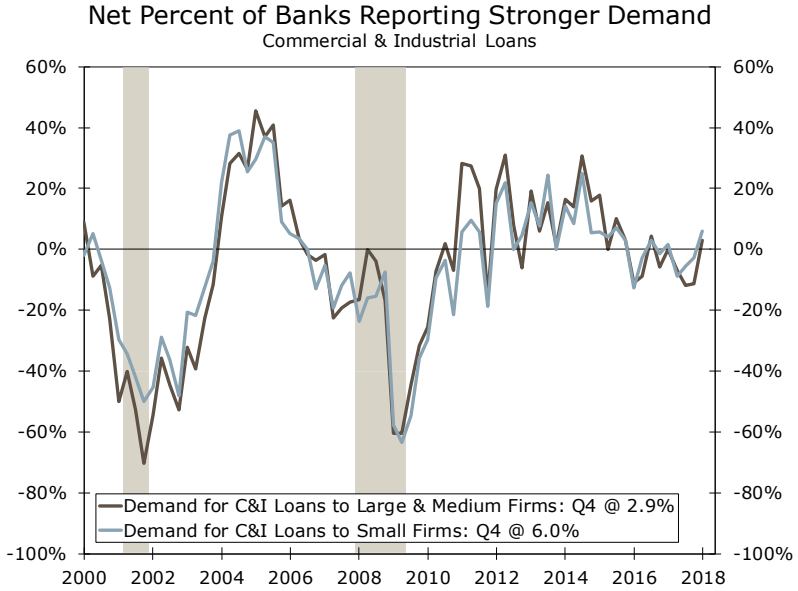
Net Percent of Banks



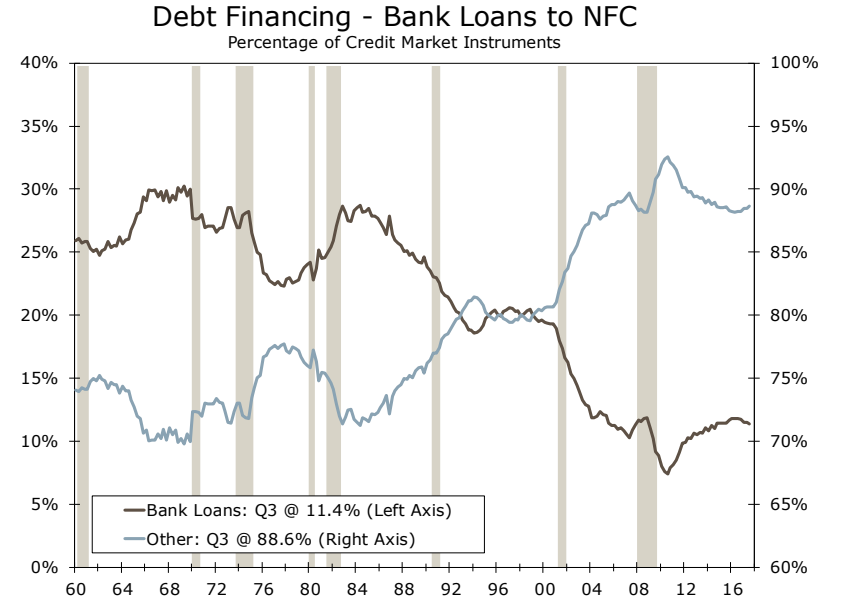
Source: Federal Reserve Board and Wells Fargo Securities

As a slowdown in loan demand occurs for businesses and consumers, it is no surprise that bank loans as a share of credit market financing has declined.

Weakening Demand



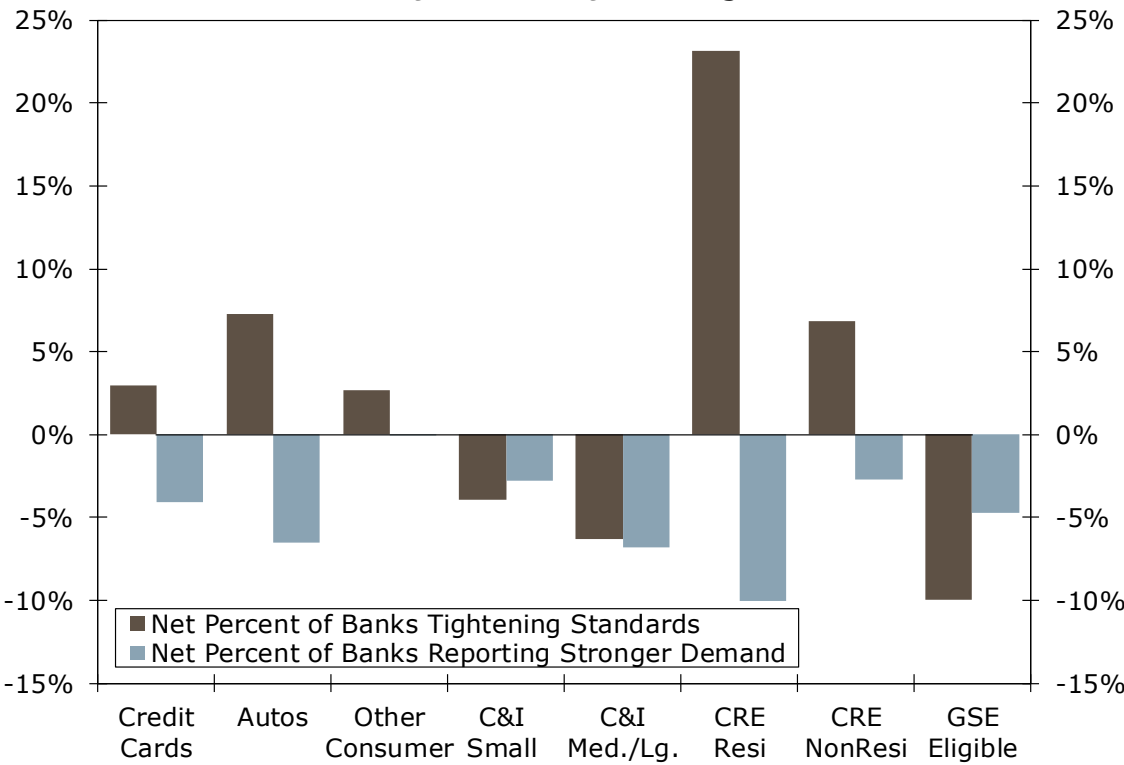
Declining Share



Source: Federal Reserve Board and Wells Fargo Securities

Tighter standards against a backdrop of weaker demand across loan products

Loan Supply and Demand
Q4 2017, 4-Q Mov. Avg



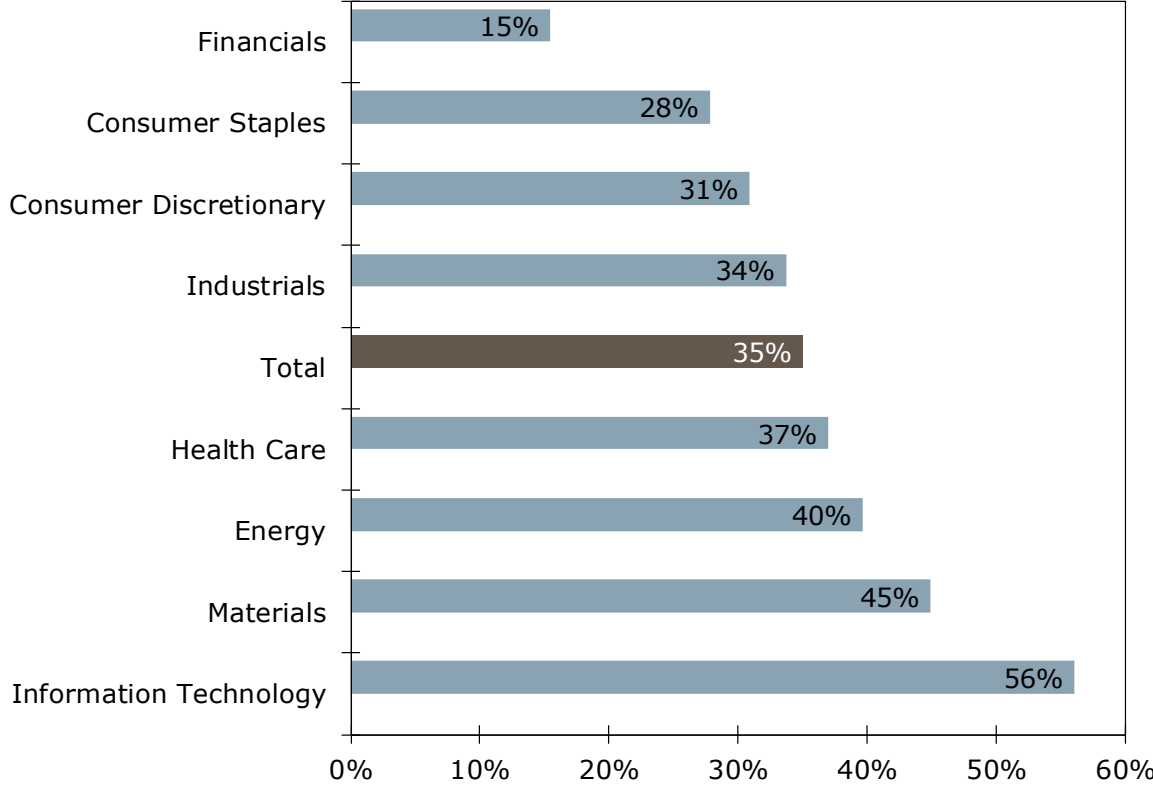
Source: Federal Reserve Board and Wells Fargo Securities

Global Profits and Shrinking Profit Margins

IT and Materials earn the highest share of their revenues abroad, making those industries positioned to benefit the most from a weaker dollar

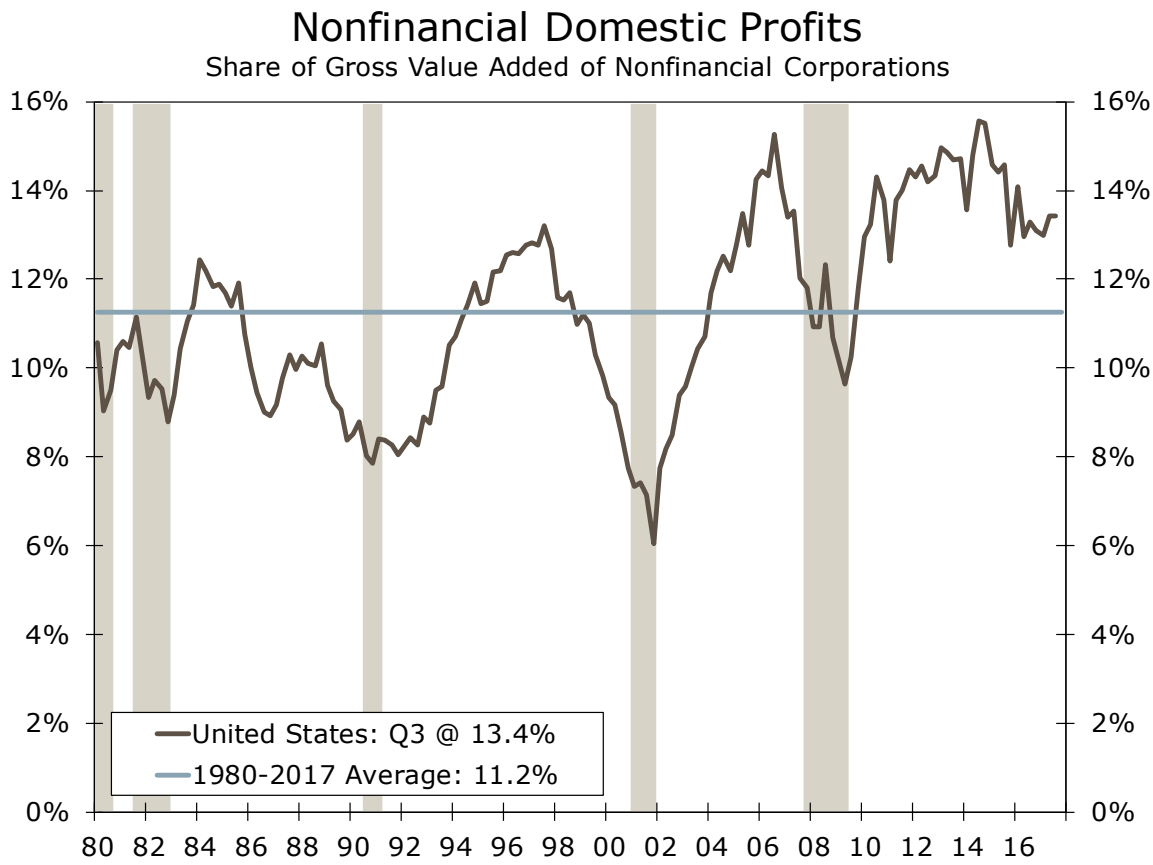
Percent of S&P Revenues Earned Abroad

Average Share for Each Sector, Q2 2017



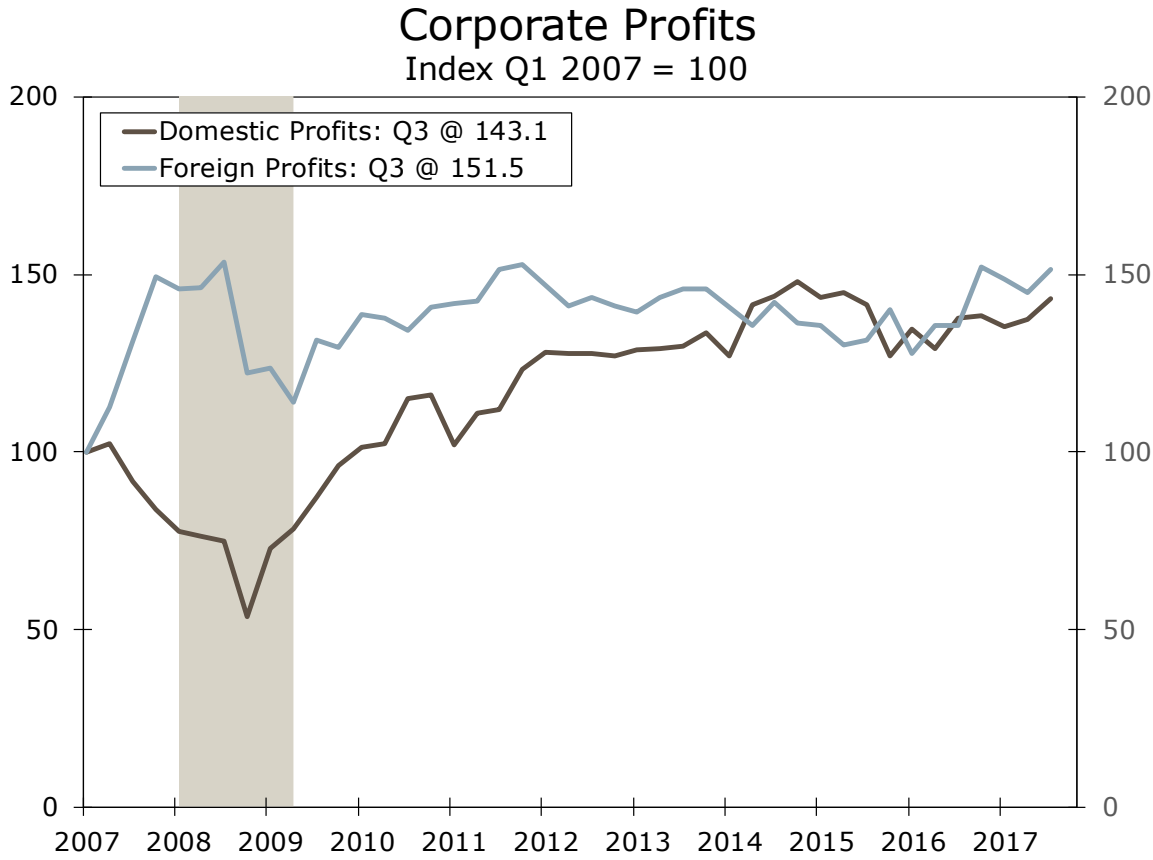
Source: Bloomberg LP and Wells Fargo Securities

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



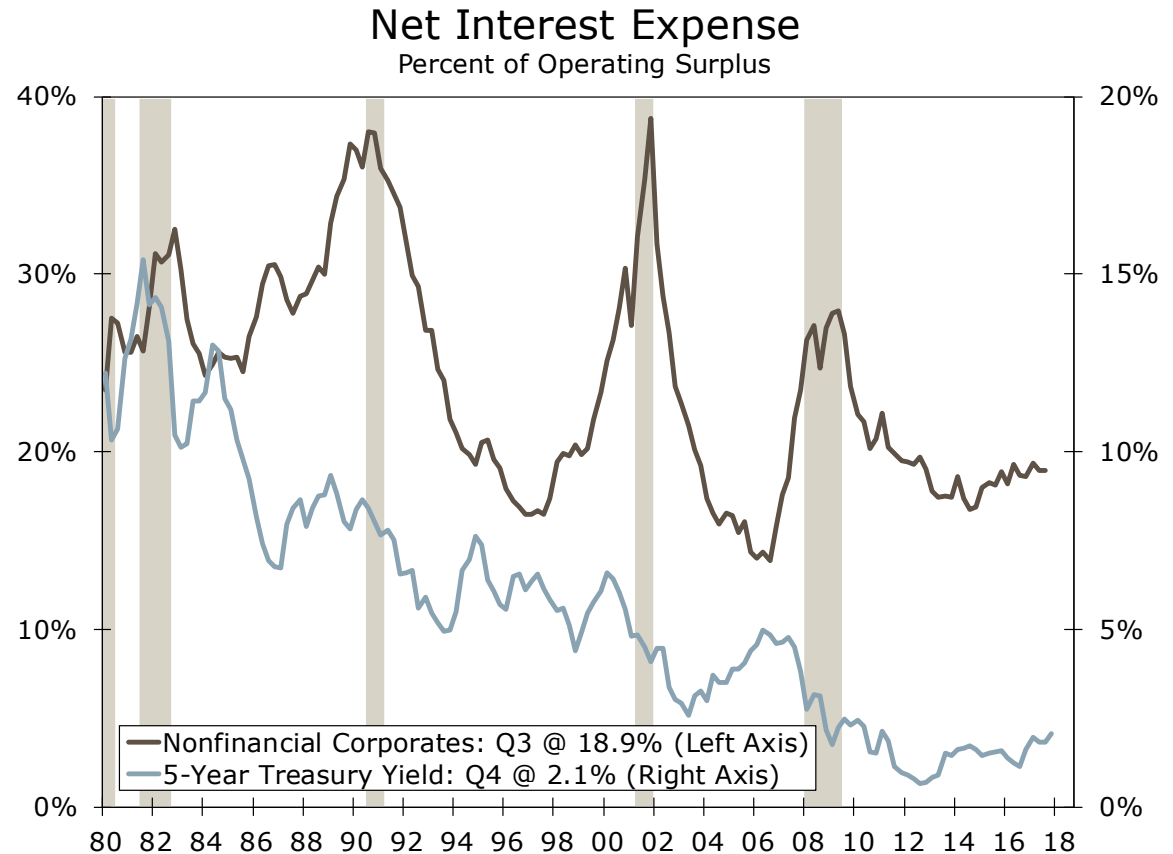
Source: U.S. Department of Commerce and Wells Fargo Securities

Corporate balance sheets are in good shape and profits are improving



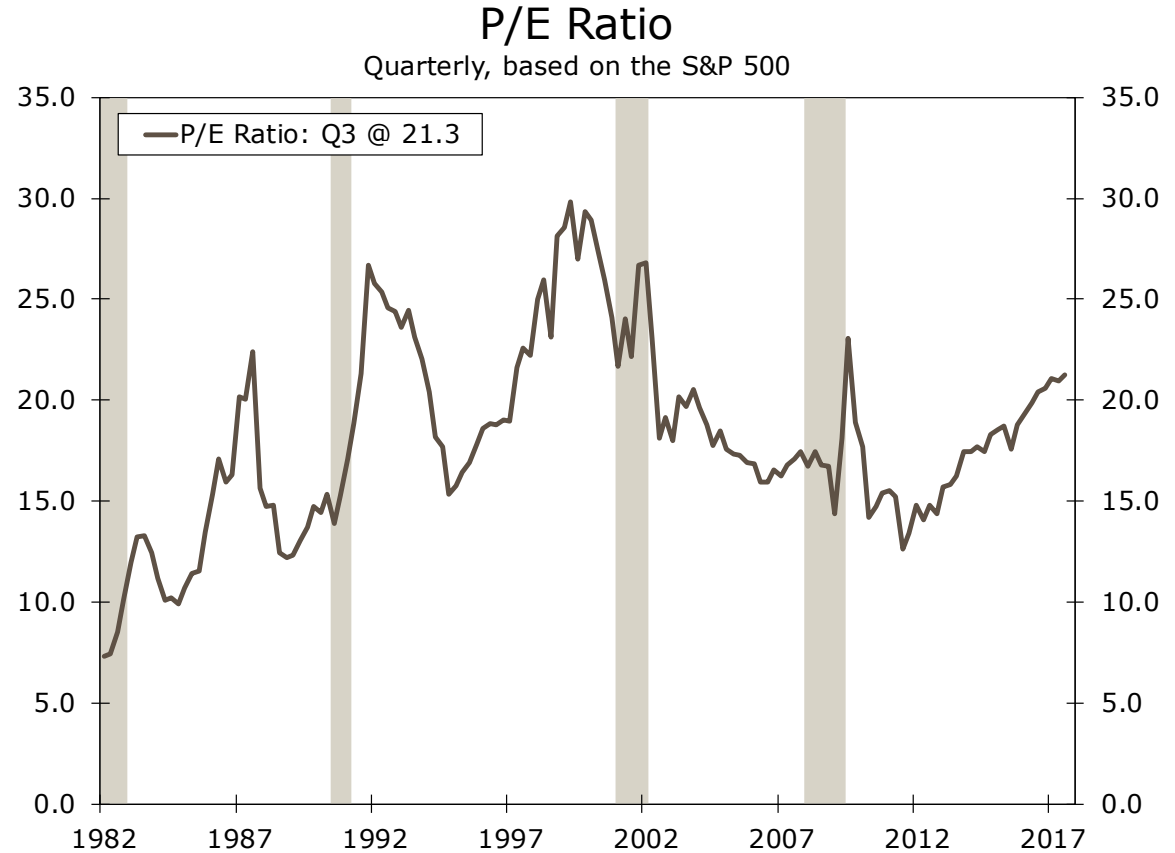
Source: U.S. Department of Commerce and Wells Fargo Securities

Net interest expense as a percentage of operating surplus has steadily declined as is typical as the economic expansion ages. However, interest expense has risen over the last year.



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

The P/E ratio is not independent of the economic cycle. Instead it is a product of the many forces of the economic cycle.



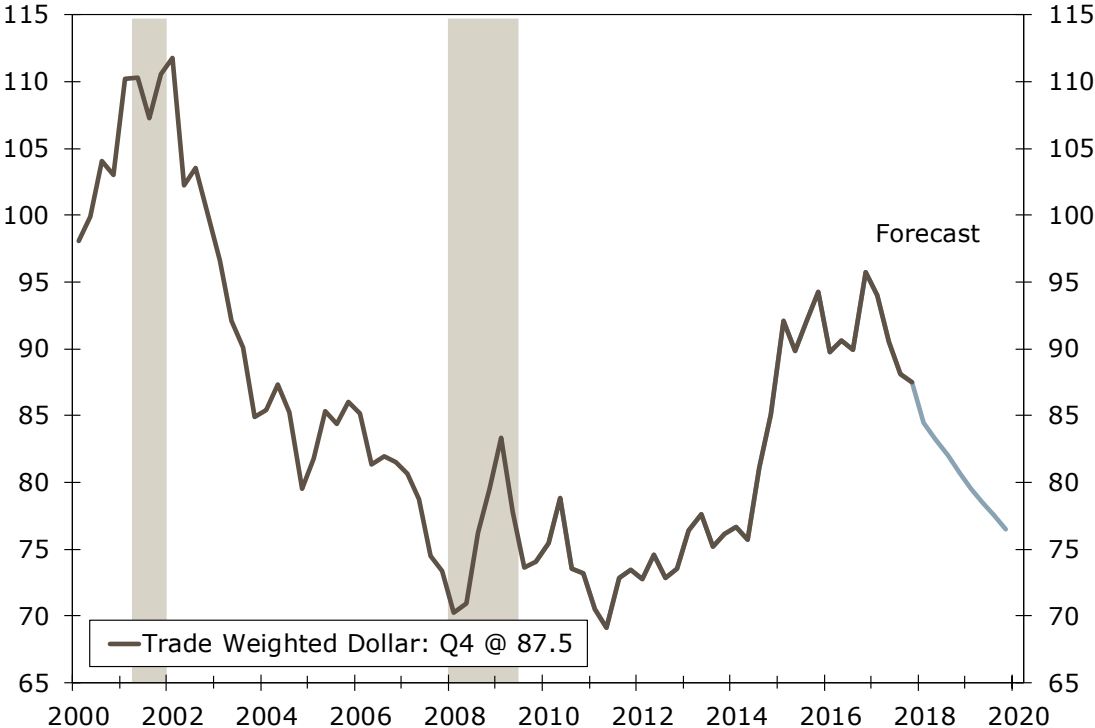
Source: Bloomberg LP and Wells Fargo Securities

Dollar Appreciation and Trade Deficit

We expect the dollar to depreciate as central bank policy convergence replaces policy divergence

Trade Weighted Dollar

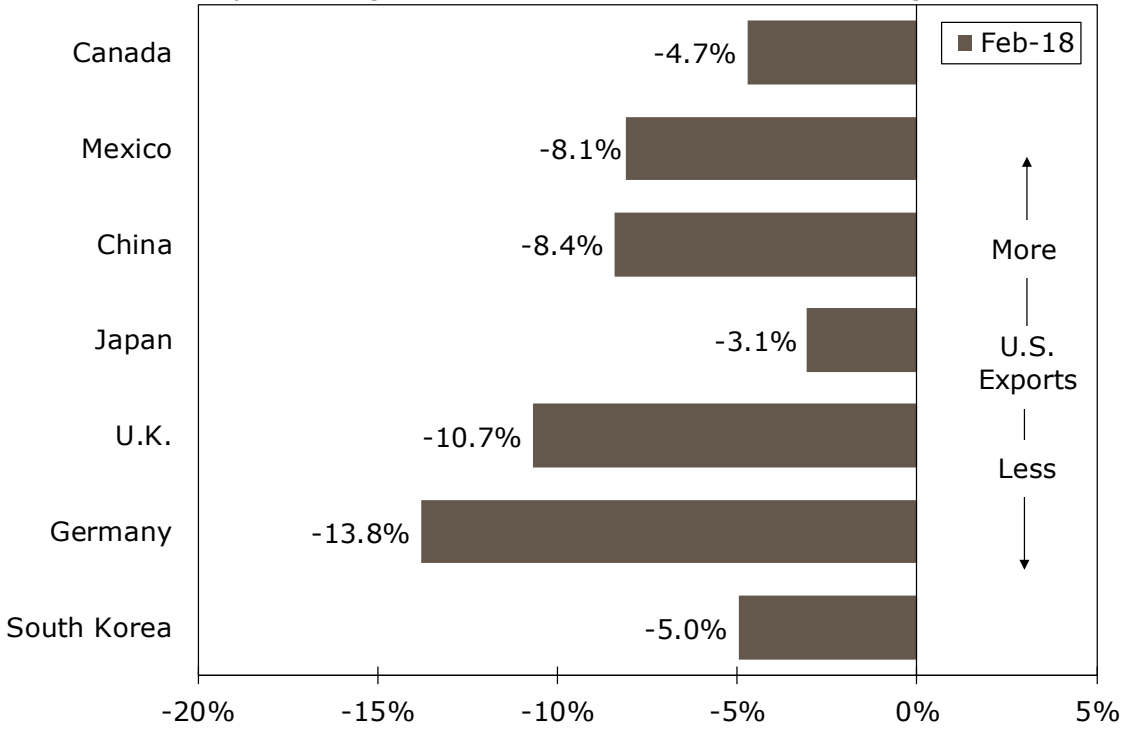
Major Currency Index, 1973 = 100



Source: Federal Reserve Board and Wells Fargo Securities

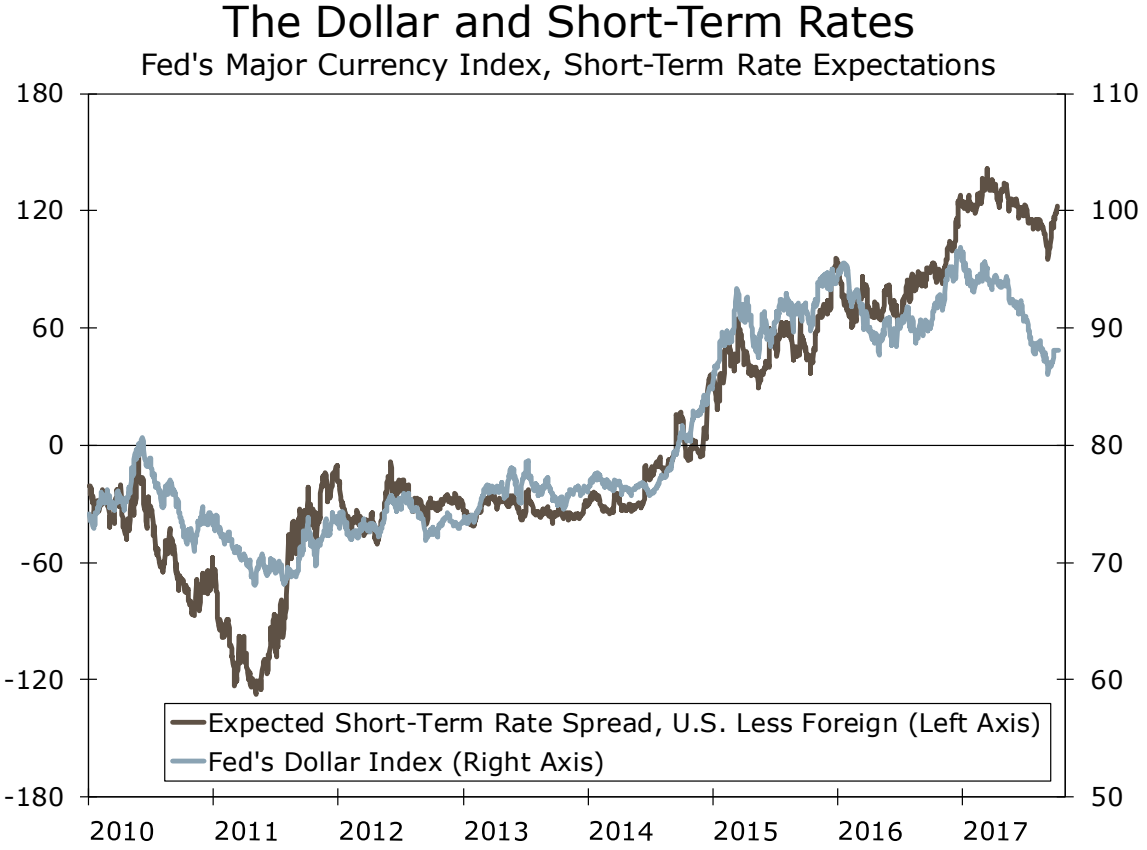
The dollar has depreciated against all of our large trading partners over the past year, but movements have varied significantly

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

We expect the divergence between expected short-term rates and the Fed's dollar index to continue



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

Global central banks appear to be on a gradual path toward monetary policy convergence

Wells Fargo Central Bank Policy Forecasts

Central Bank	Current Target Rate	Last Major Policy Change	WF Next Forecasted Policy Change
United States (FOMC)	1.50	December 2017 <i>25 bps hike</i>	Next Rate Hike-Q1 2018
Eurozone (ECB)	0.00	October 2017 <i>Announced taper of asset purchases to €30 billion/month in Jan. 2018</i>	End bond purchases in late 2018 Next Rate Hike-Q2 2019
United Kingdom (BOE)	0.50	November 2017 <i>25 bps hike</i>	Maintain size of balance sheet through Q4 2018 Next Rate Hike-Q3 2018
Japan (BOJ)	-0.10	September 2016 <i>Introduced monetary easing program (QQE) with yield curve control</i>	Maintain annual asset purchases of ¥80 trillion Maintain current target rate
Canada (BOC)	1.25	January 2018 <i>25 bps hike</i>	Next Rate Hike-Q3 2018

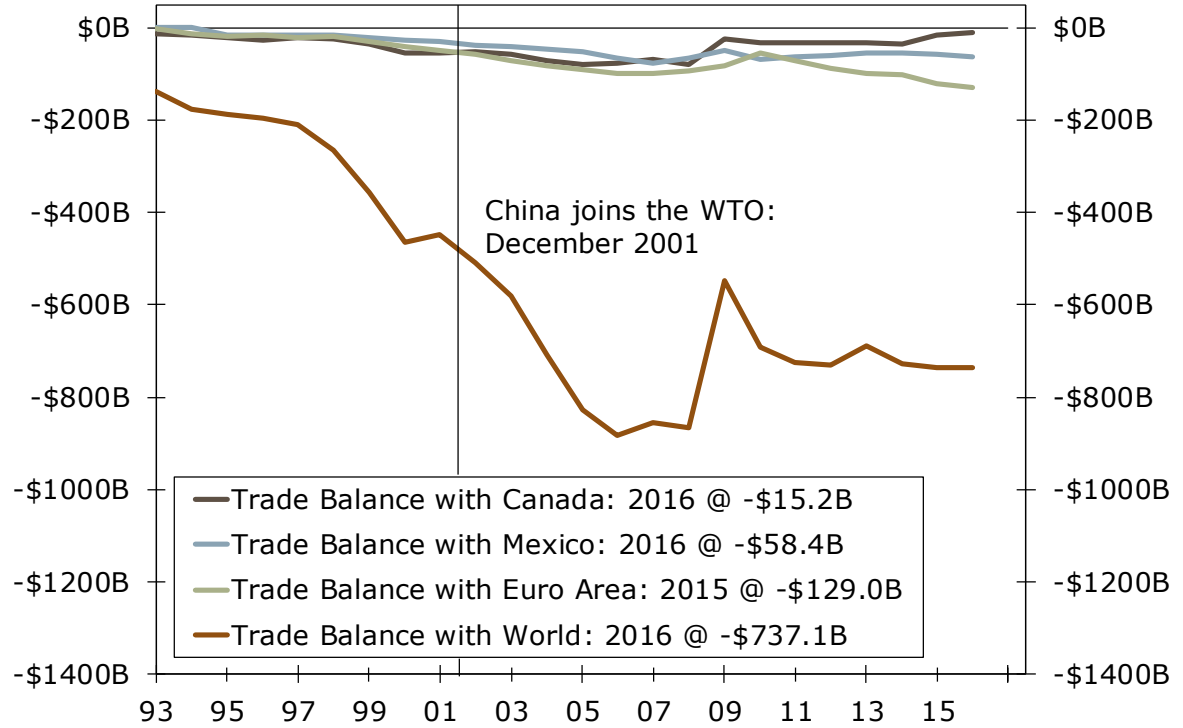
Forecast as of: February 9, 2018

Source: Bloomberg LP and Wells Fargo Securities

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

U.S. Trade Balances

In Billions of Dollars



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

Possible trade policy changes could pose downside risks to export growth

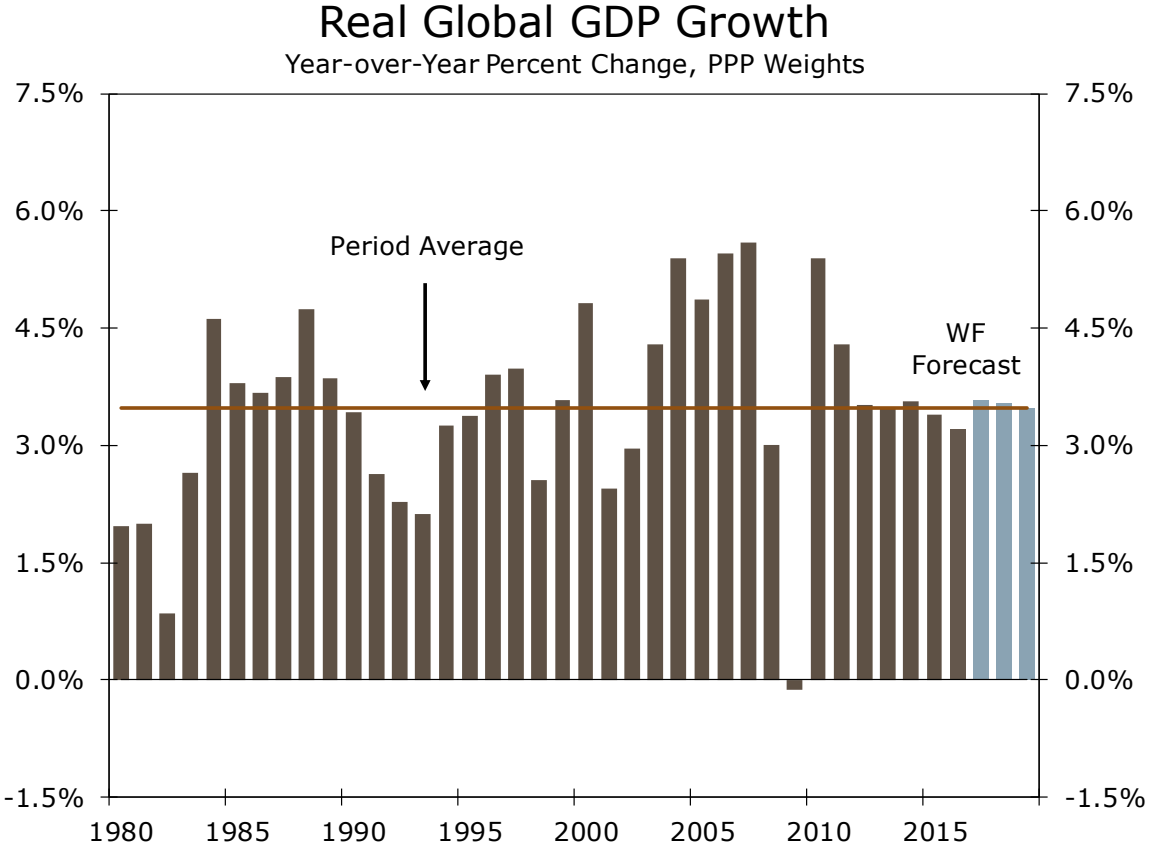
Country Exports as Percent of Total Exports: 2016

Export Destination	Exporting Nation			
	United States	China	Japan	Korea
United States	8.0%	18.2%	20.2%	13.5%
China	4.4%	8.0%	17.7%	25.1%
Japan	2.9%	4.4%	6.1%	4.9%
Korea	15.2%	2.9%	4.5%	7.2%
Sample Total	15.2%	28.8%	45.1%	43.5%

Source: IHS Global Insight and Wells Fargo Securities

International Outlook: Improving Global Growth?

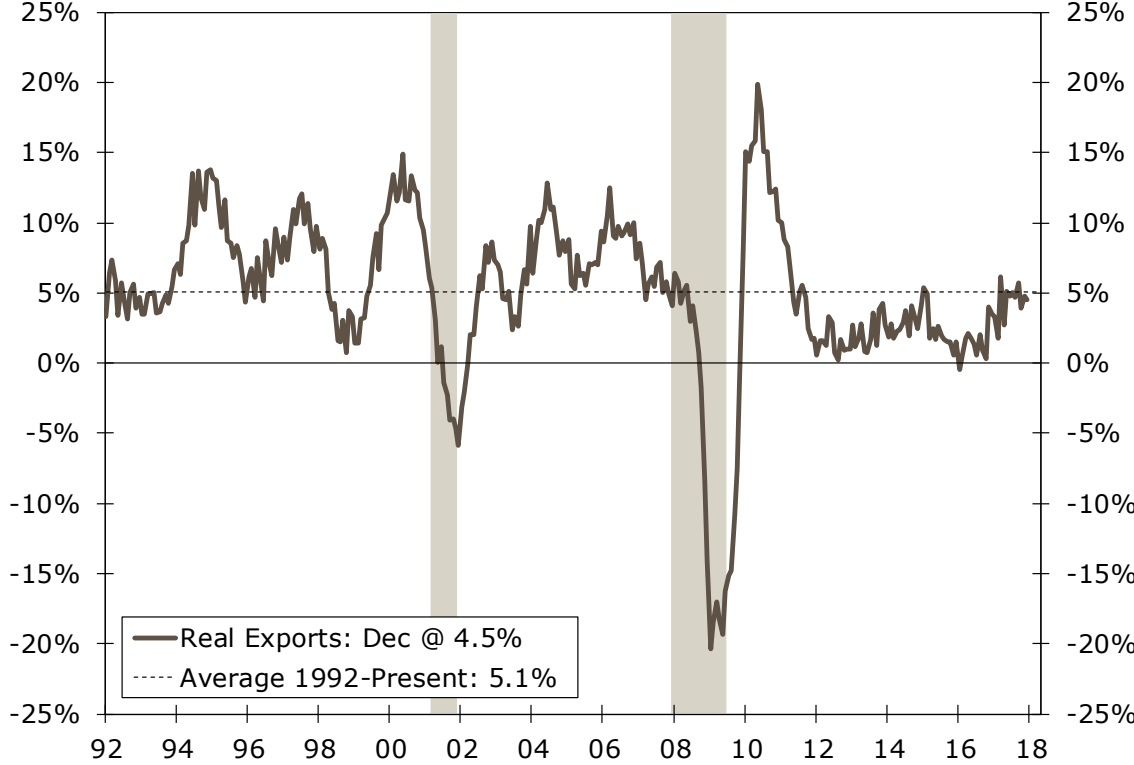
We expect global economic growth will remain near its long-run trend



Source: International Monetary Fund and Wells Fargo Securities

Global trade has clearly downshifted compared to past expansions, however the recent trend is encouraging

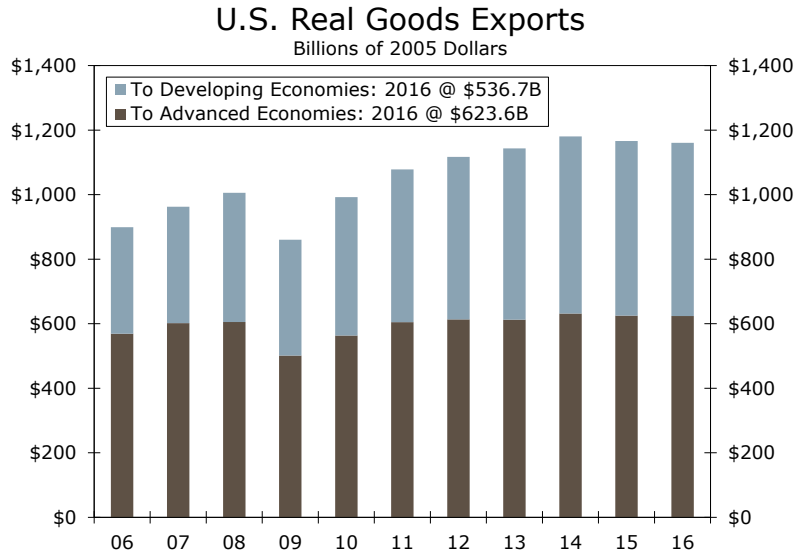
Global Export Volumes Year-over-Year Percent Change



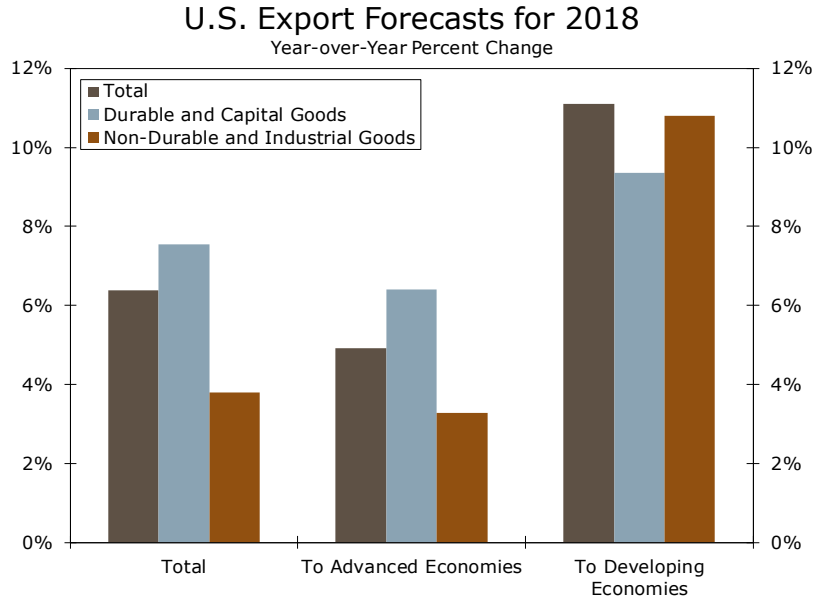
Source: IHS Global Insight and Wells Fargo Securities

Developing markets have become increasingly important for U.S. exporters

Developing Markets Gaining Share



Trend Likely to Continue

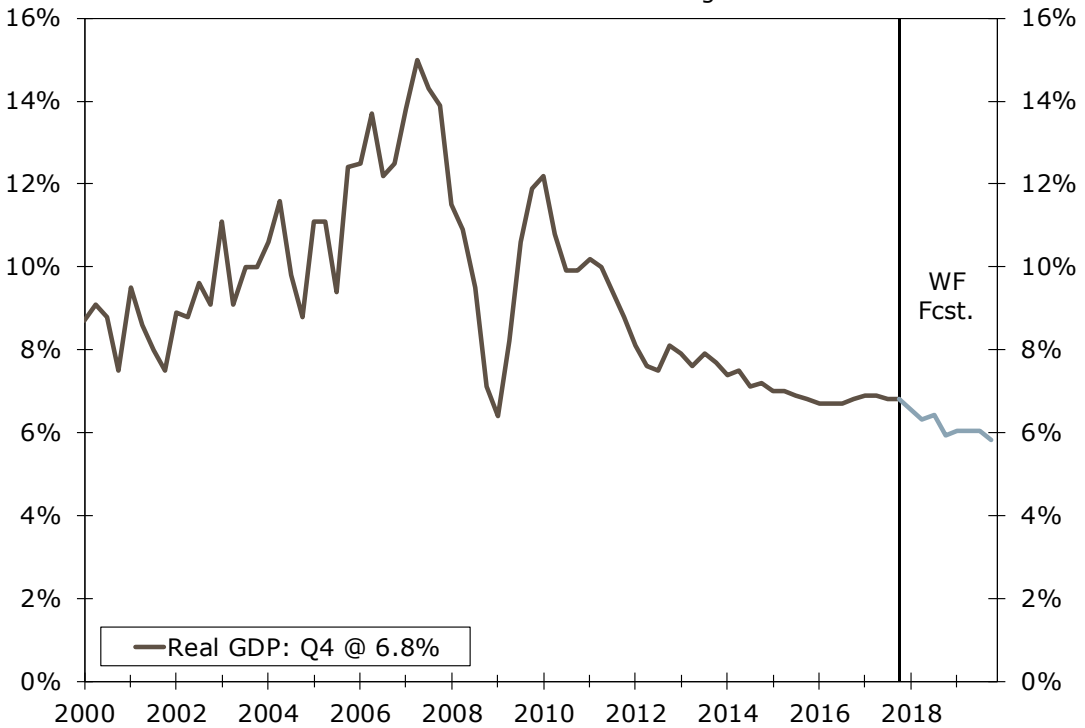


Source: IHS Global Insight and Wells Fargo Securities

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

Chinese Real GDP Forecast

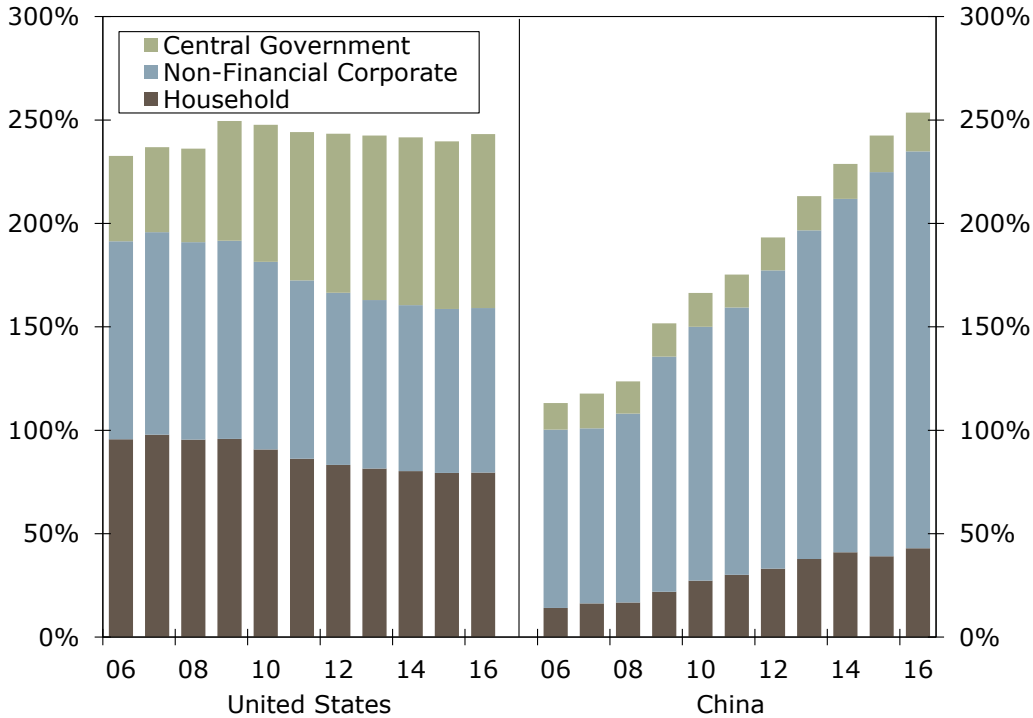
Year-over-Year Percent Change



Source: Bloomberg LP and Wells Fargo Securities

Debt problems in China are concentrated in the business sector

U.S. vs. China Debt Outstanding by Sector
Percent of GDP



Source: Bloomberg LP and Wells Fargo Securities

Growth

- Continued moderate growth led by domestic consumer
-

Inflation

- Moving upwards. Will this influence the Fed's policy path?
-

Interest Rates

- Rising short and long rates as Treasury finance meets reduced Fed balance sheet
-

Dollar

- Central bank policy convergence will drive dollar lower
-

Profits

- Renewed Strength this late in the cycle

Wells Fargo U.S. Economic Forecast

	Actual				Forecast								Actual			Forecast		
	2017				2018				2019				2015	2016	2017	2018	2019	
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q						
Real Gross Domestic Product ¹	1.2	3.1	3.2	2.5	1.8	2.7	3.0	2.9	2.8	2.9	2.8	2.8	2.9	1.5	2.3		2.6	2.8
Personal Consumption	1.9	3.3	2.2	3.8	2.0	2.5	2.5	2.5	2.7	2.6	2.5	2.5	3.6	2.7	2.7		2.6	2.6
Business Fixed Investment	7.2	6.7	4.7	6.6	5.7	5.9	5.4	4.7	4.2	4.6	4.5	4.1	2.3	-0.6	4.7		5.7	4.6
Equipment	4.4	8.8	10.8	11.8	7.0	6.9	6.0	4.7	4.0	4.6	4.4	3.8	3.5	-3.4	4.8		8.2	4.7
Intellectual Property Products	5.7	3.7	5.2	2.4	4.9	6.5	6.4	6.2	5.4	6.0	5.9	5.6	3.8	6.3	4.0		5.0	5.9
Structures	14.8	7.0	-7.0	2.5	2.0	2.4	2.4	2.2	2.5	2.4	2.4	2.4	-1.8	-4.1	5.4		1.4	2.4
Residential Construction	11.1	-7.3	-4.7	13.0	-4.5	8.5	8.0	7.5	6.5	7.0	7.0	5.5	10.2	5.5	1.8		3.1	7.1
Government Purchases	-0.6	-0.2	0.7	2.9	1.2	1.6	1.6	2.0	1.1	1.1	1.0	1.0	1.4	0.8	0.1		1.5	1.3
Net Exports ²	0.2	0.2	0.4	-1.1	-0.6	-0.3	-0.2	-0.2	-0.1	-0.1	0.0	0.1	-0.7	-0.2	-0.2		-0.4	-0.1
Inventories ²	-1.5	0.1	0.8	-0.7	0.8	-0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.2	-0.4	-0.1		0.2	0.1
Nonfarm Payroll Change ³	177	190	142	221	234	175	170	160	155	155	150	150	226	195	182		185	153
Unemployment Rate	4.7	4.3	4.3	4.1	4.1	4.0	3.9	3.8	3.8	3.7	3.8	3.7	5.3	4.9	4.4		3.9	3.8
Consumer Price Index ⁴	2.6	1.9	2.0	2.1	2.3	2.7	2.7	2.3	2.1	2.3	2.5	2.5	0.1	1.3	2.1		2.5	2.3
Quarter-End Interest Rates ⁵																		
Federal Funds Target Rate	1.00	1.25	1.25	1.50	1.75	2.00	2.25	2.50	2.50	2.75	2.75	3.00	0.27	0.52	1.13		2.13	2.75
Conventional Mortgage Rate	4.20	3.90	3.81	3.94	4.35	4.37	4.45	4.60	4.72	4.77	4.82	4.87	3.85	3.65	3.99		4.44	4.80
2 Year Note	1.27	1.38	1.47	1.89	2.32	2.50	2.70	2.92	3.05	3.12	3.19	3.26	0.69	0.83	1.40		2.61	3.16
10 Year Note	2.40	2.31	2.33	2.40	2.90	2.95	3.05	3.20	3.32	3.37	3.42	3.47	2.14	1.84	2.33		3.03	3.40

Forecast as of: March 14, 2018

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		
	2017	2018	2019	2017	2018	2019
Global (PPP Weights)	3.6%	3.5%	3.5%	3.1%	3.5%	3.5%
Global (Market Exchange Rates)	3.4%	3.3%	3.4%	3.1%	3.5%	3.5%
Advanced Economies ¹	2.4%	2.4%	2.4%	1.8%	2.0%	2.0%
United States	2.3%	2.6%	2.8%	2.1%	2.5%	2.3%
Eurozone	2.5%	2.3%	2.1%	1.5%	1.4%	1.8%
United Kingdom	1.7%	1.6%	1.8%	2.7%	2.5%	2.0%
Japan	1.7%	1.5%	0.9%	0.5%	1.1%	0.8%
Korea	3.1%	2.9%	2.8%	1.9%	2.2%	2.1%
Canada	3.0%	1.9%	1.8%	1.6%	1.8%	1.9%
Developing Economies ¹	4.7%	4.5%	4.6%	4.4%	5.0%	5.0%
China	6.9%	6.3%	6.0%	1.6%	2.1%	2.0%
India ²	7.1%	6.7%	7.4%	3.3%	5.1%	4.8%
Mexico	2.0%	1.8%	2.1%	6.0%	5.8%	5.9%
Brazil	1.0%	2.8%	3.3%	3.4%	3.6%	4.2%
Russia	1.7%	2.0%	2.2%	3.7%	2.7%	3.9%

Forecast as of: March 14, 2018

¹Aggregated Using PPP Weights

²Forecast Refers to Fiscal Year

Source: International Monetary Fund and Wells Fargo Securities

Appendix

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Recent Special Commentary

Date	Title	Authors
U.S. Macro		
March-07	Steel Your Nerves: Effects of Tariffs on U.S. Inflation	Bryson, House & Vaisey
March-05	Structural Unemployment: Causes and Consequences	Brown
March-01	Inflation Outlook: Green Shoots or a False Spring?	House & Vaisey
February-26	Homeownership According to the 2016 SCF	Alemán & Seery
February-13	The Weight of the World (Wide Web) on Inflation	House & Vaisey
U.S. Regional		
March-09	Texas Employers Add 16,000 Jobs in January	Vitner, Feik & Carmichael
March-09	California Gets a Jump on 2018	Vitner, Feik & Carmichael
March-08	Minnesota Job Growth Moderated in Recent Months	Vitner, Feik & Carmichael
March-08	Georgia Employment Falters to Begin the Year	Vitner, Feik & Carmichael
January-23	North Carolina Payrolls End 2017 on a Solid Note	Vitner, Feik & Carmichael
Global Economy		
March-08	After Soft Q4 GDP in Australia, Wage Growth Is Key for RBA	Quinan & Seery
March-02	After Quick Start, Canadian GDP Growth Ends 2017 Slower	Quinlan & Vaisey
March-01	Brazilian Economy Grows 1.0 Percent in 2017	Alemán
March-01	Swiss GDP Accelerates in Q4	Bryson & Pugliese
March-01	Argentina's Economy Expanded in 2017	Alemán
Interest Rates/Credit Market		
March-07	Interest Rates as the Price of Credit: Altered Fundamentals	Silvia & Iqbal
February-28	The Evolution of Irrationality	Silvia & Pershing
February-28	Seasonality in 10-Year Treasury Yield?	Silvia, Iqbal & Pershing
February-26	Supply Side Credit: U.S. Banks Report Stable Conditions	Silvia, Pershing & Seery
February-21	Multiple Markets, Multiple Surprises: A Bumpy Ride Ahead?	Silvia & Iqbal
Real Estate & Housing		
March-01	Tax Reform Effect on CRE: Q4 Chartbook	Vitner, Carmichael & Vaisey
January-17	Housing Chartbook: February 2018	Vitner & Carmichael
January-17	Tax Reform and Housing	Vitner
December-14	Housing Chartbook: December 2017	Vitner & Carmichael
December-12	Construction Costs Continue to Increase	Vitner

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