

**WELLS
FARGO**

SECURITIES

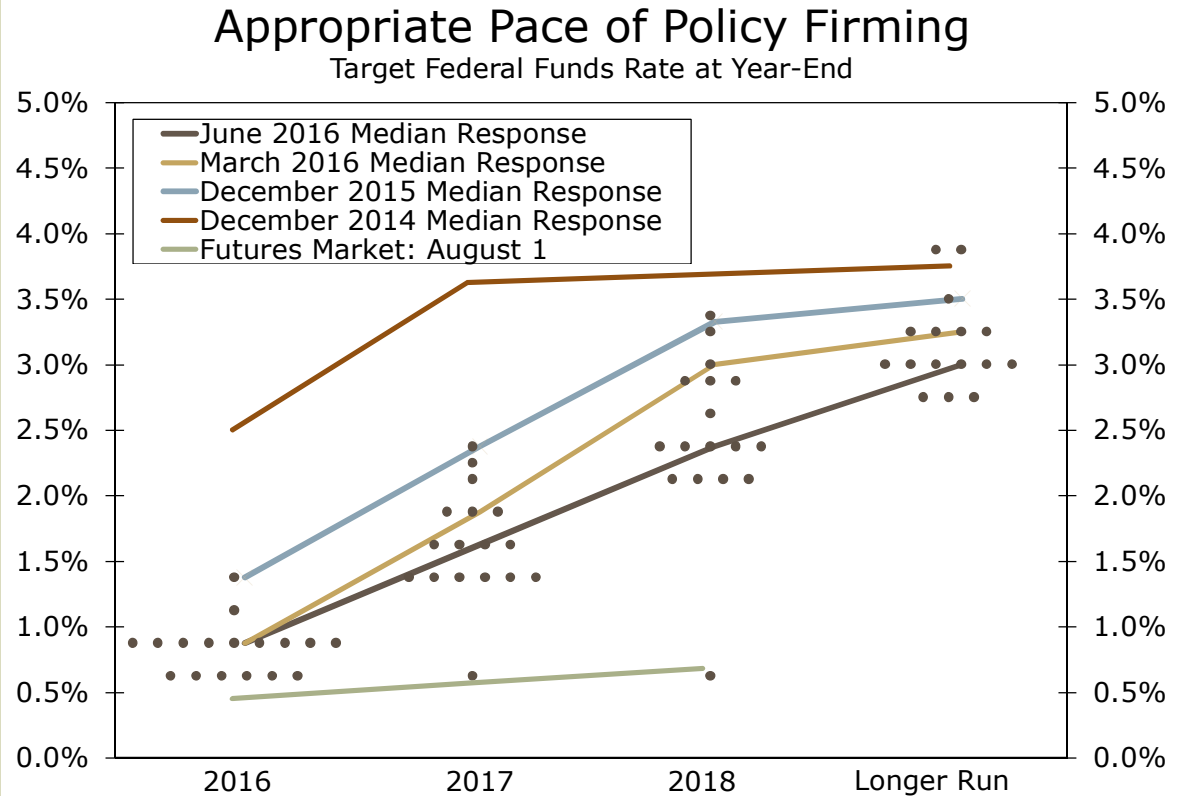
Global Economic Outlook

Tim Quinlan, Senior Economist
September 2016

Together we'll go far



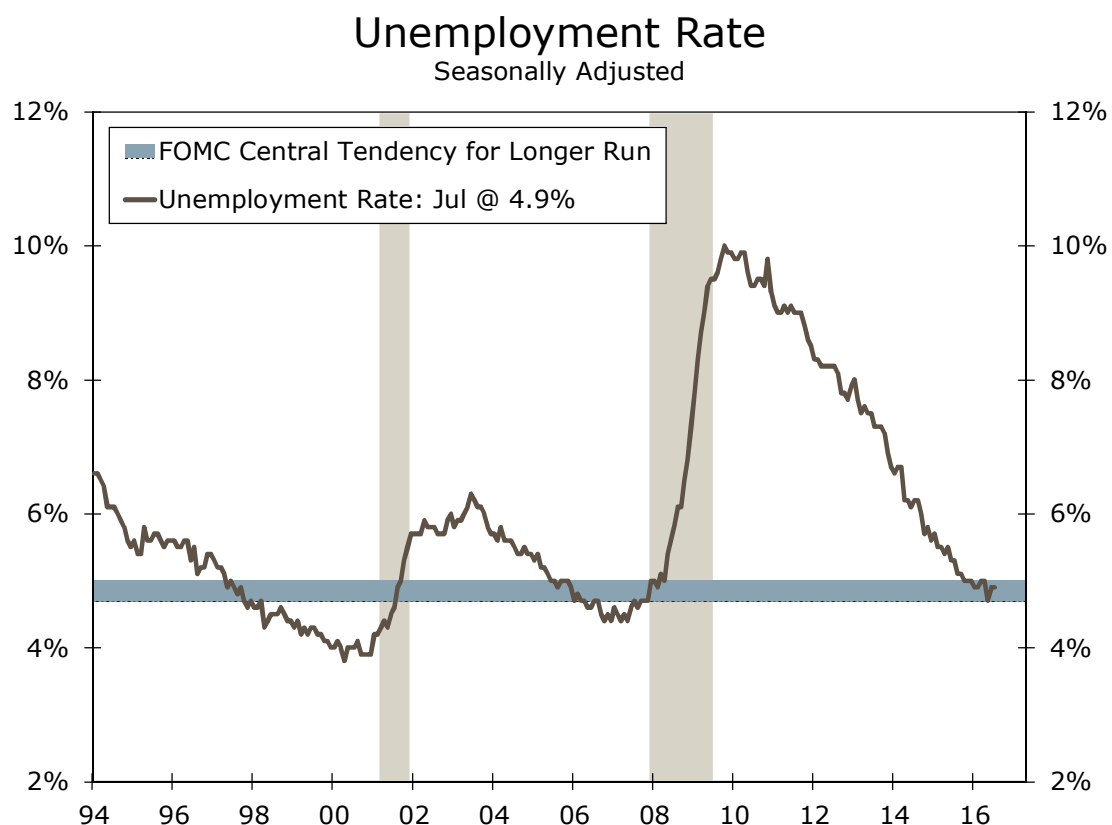
Normalization is underway, but there remains wide variation between the market and Fed officials themselves about the appropriate path of the fed funds rate



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

Unemployment

The labor market is steadily firming, the unemployment rate is in line with the FOMC's central tendency target

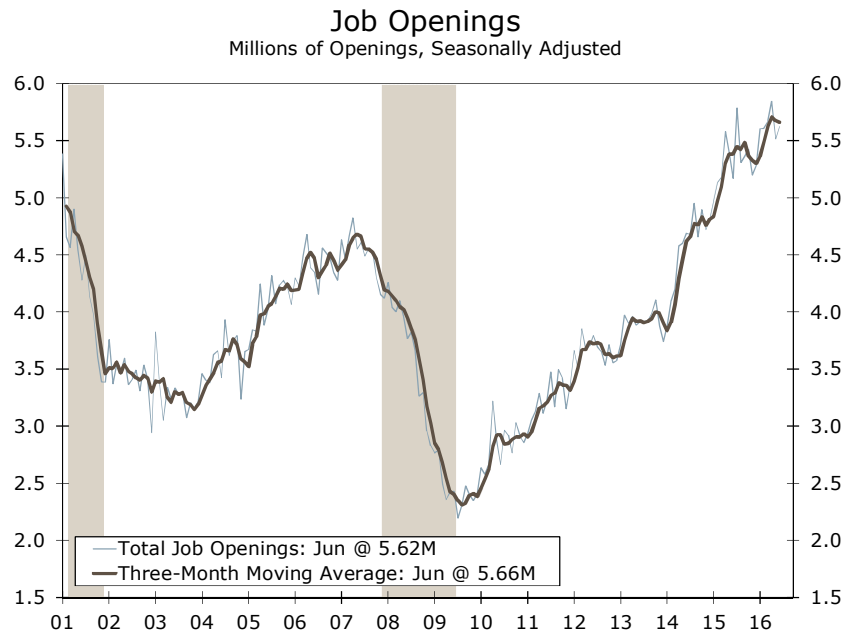


Source: U.S. Department of Labor, Federal Reserve Board and Wells Fargo Securities

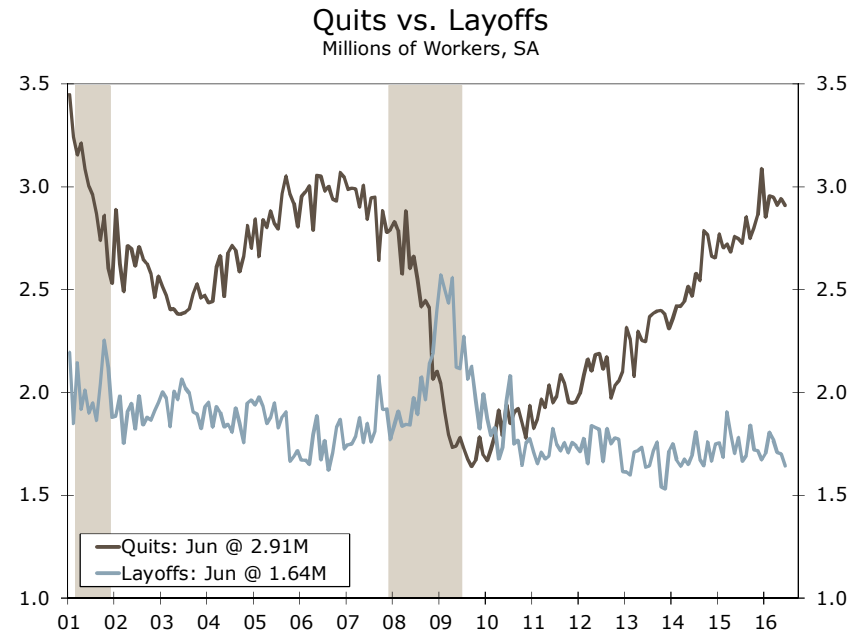
Labor Turnover

Job openings appear to be leveling off, while the mix of turnover in the labor market remains healthy

Openings



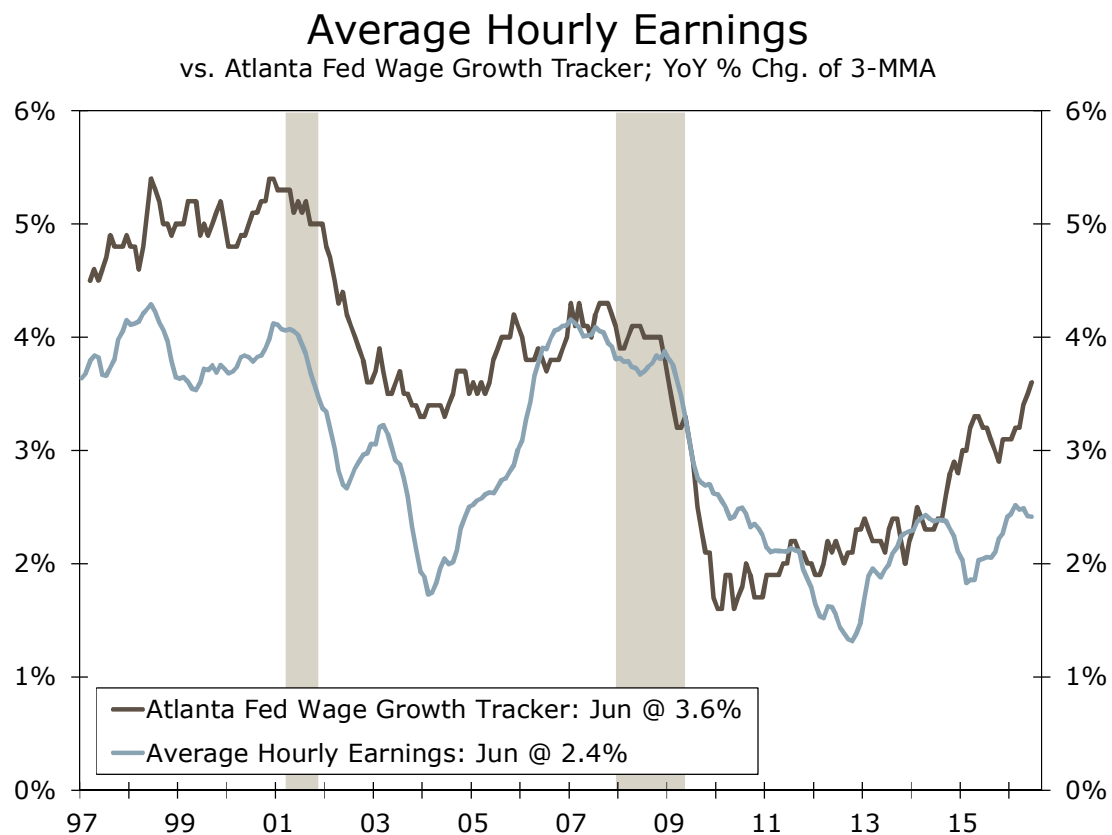
Separations



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

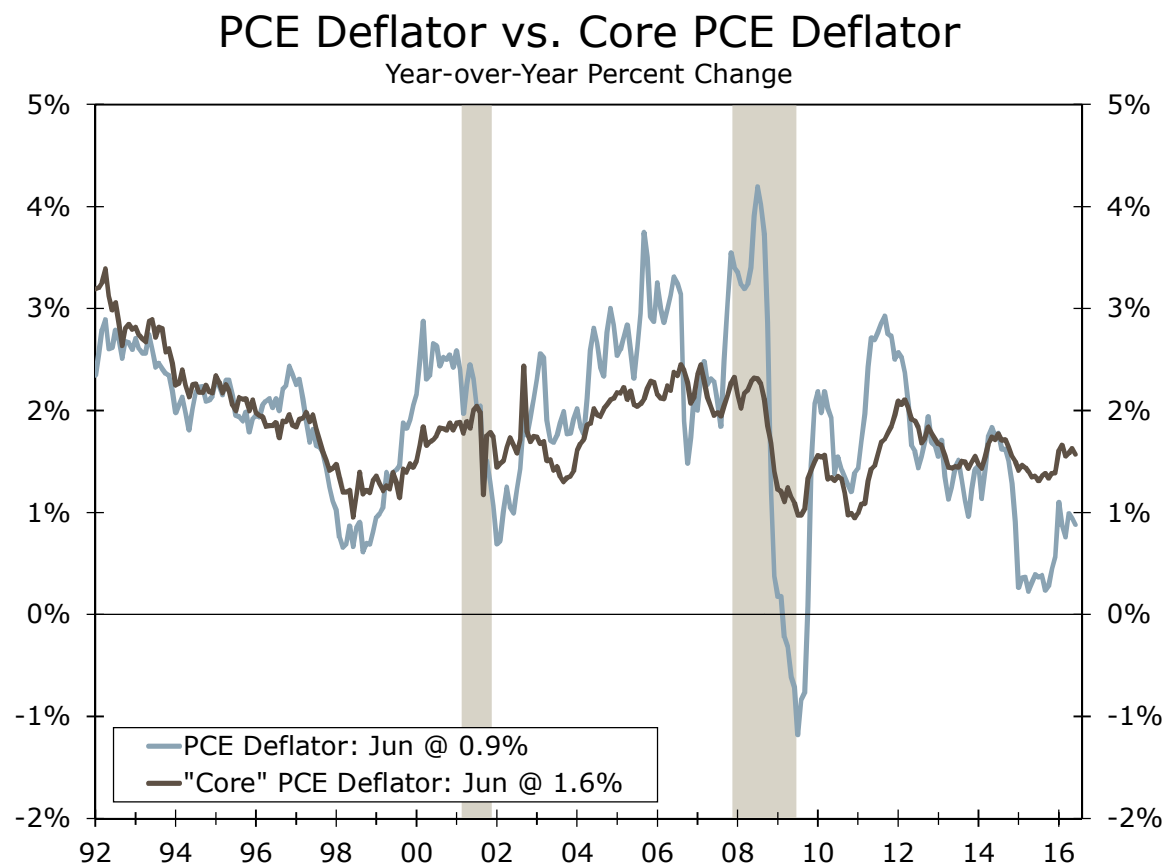
Average Hourly Earnings

Wage growth has picked up modestly but remains limited by lower-skilled workers entering the workforce and Baby Boomers beginning to retire



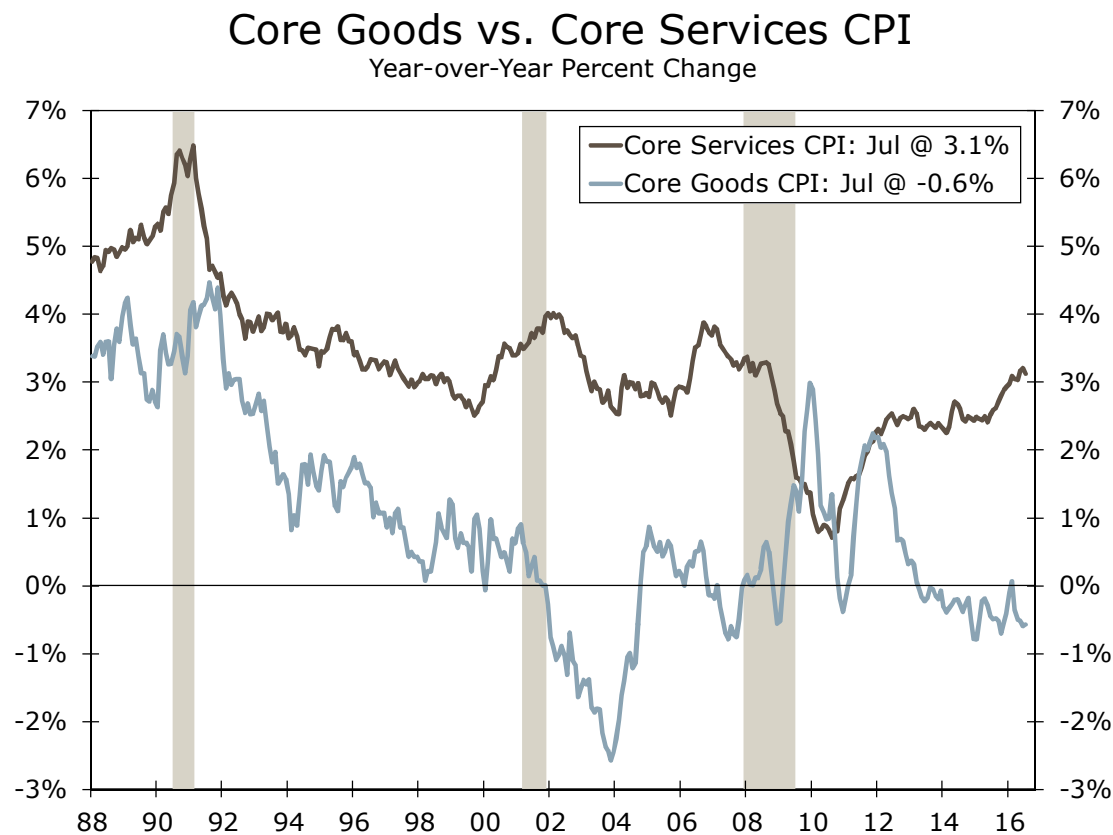
Source: Federal Reserve Bank of Atlanta, U.S. Department of Labor and Wells Fargo Securities

Inflation has moved higher but remains below the Fed's 2 percent target



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

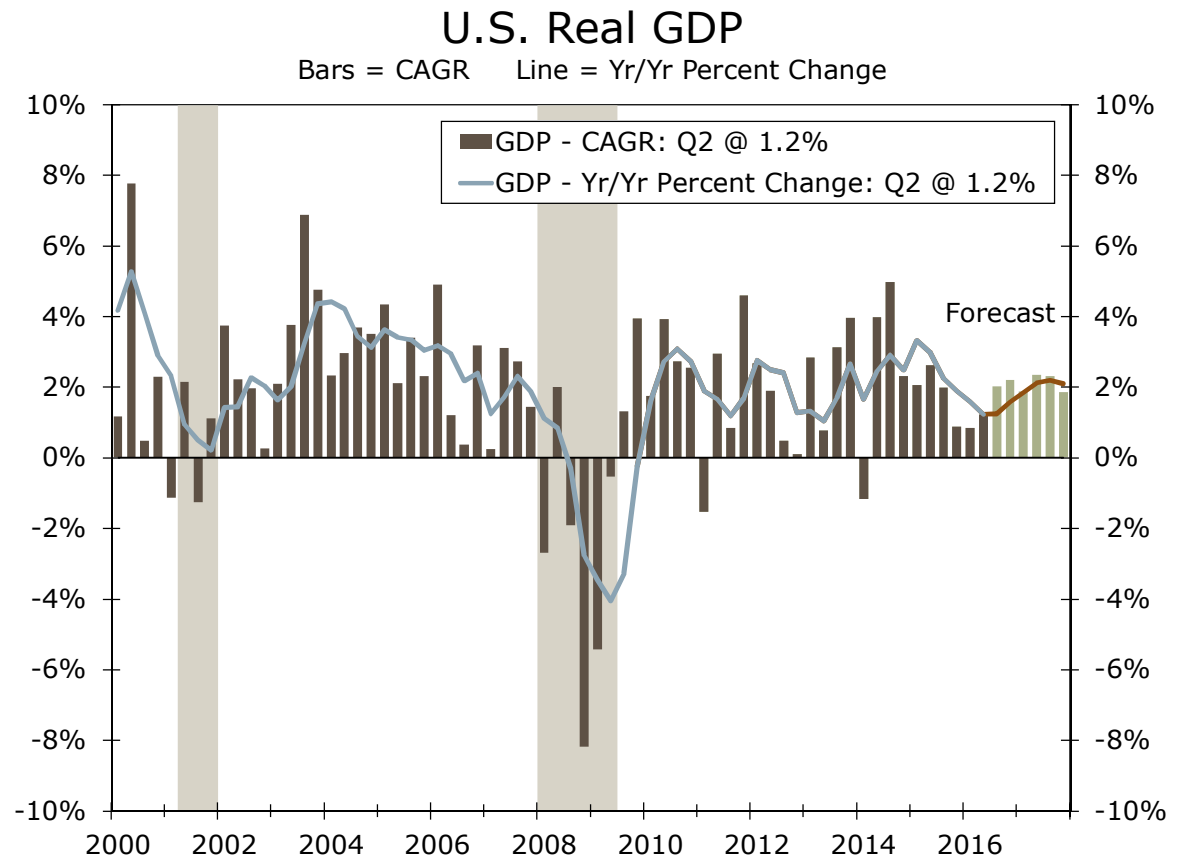
The services sector has pricing power, while goods prices are declining



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

Real GDP Forecast

Outlook is for below-trend
growth to continue

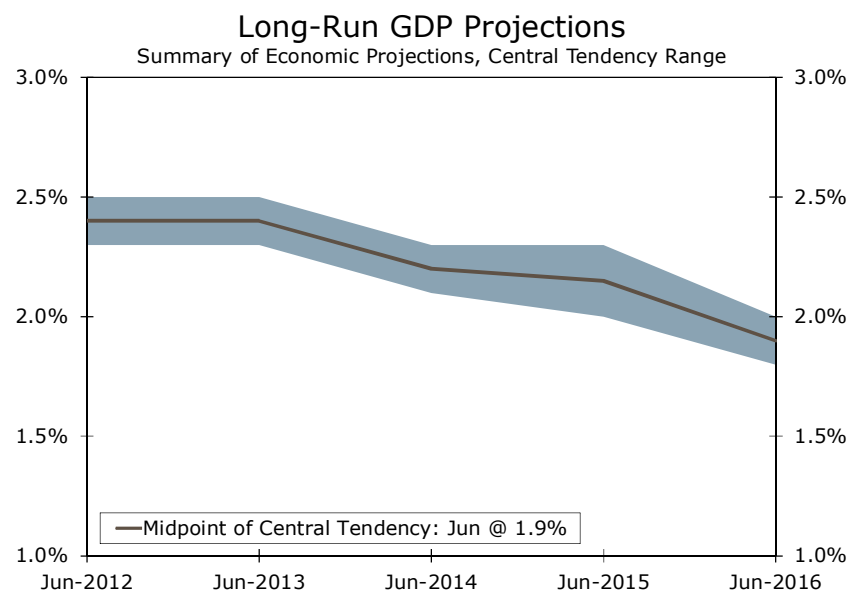


Source: U.S. Department of Commerce and Wells Fargo Securities

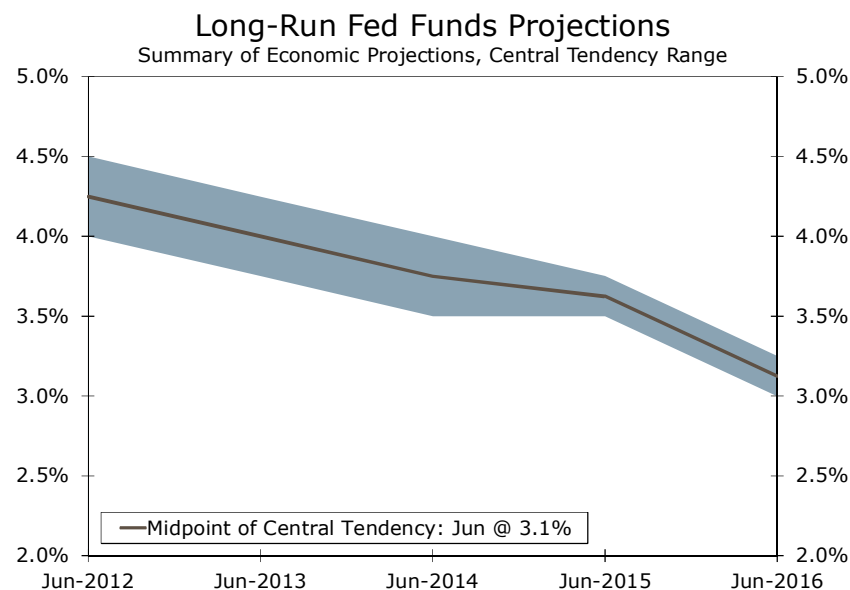
GDP and Fed Funds “Long-Run” Expectations from the Fed

“Generally, the unemployment rate tends to fall when output is growing faster than its potential—a basic macroeconomic relationship known as Okun’s Law. The observed combination of slow output growth and rapid unemployment declines can be consistent with Okun’s Law only if growth in potential output has been lower than thought.”

Openings

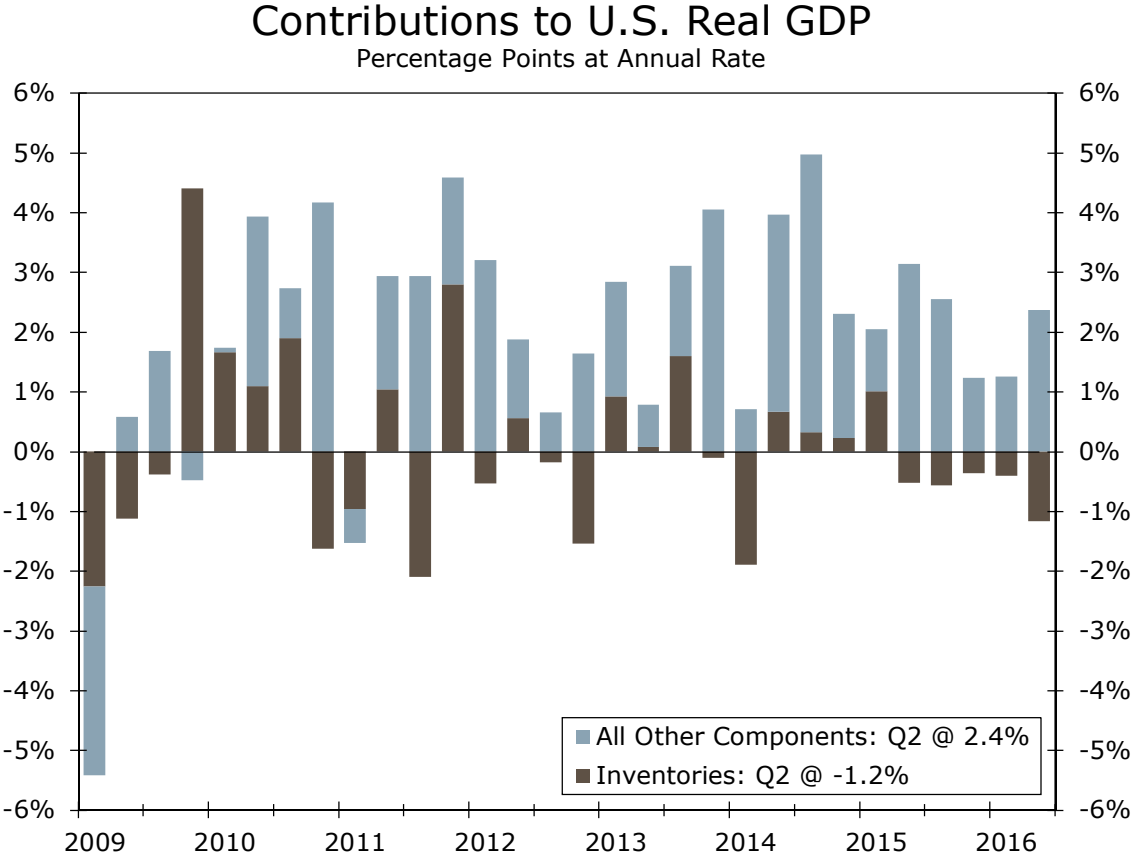


Separations



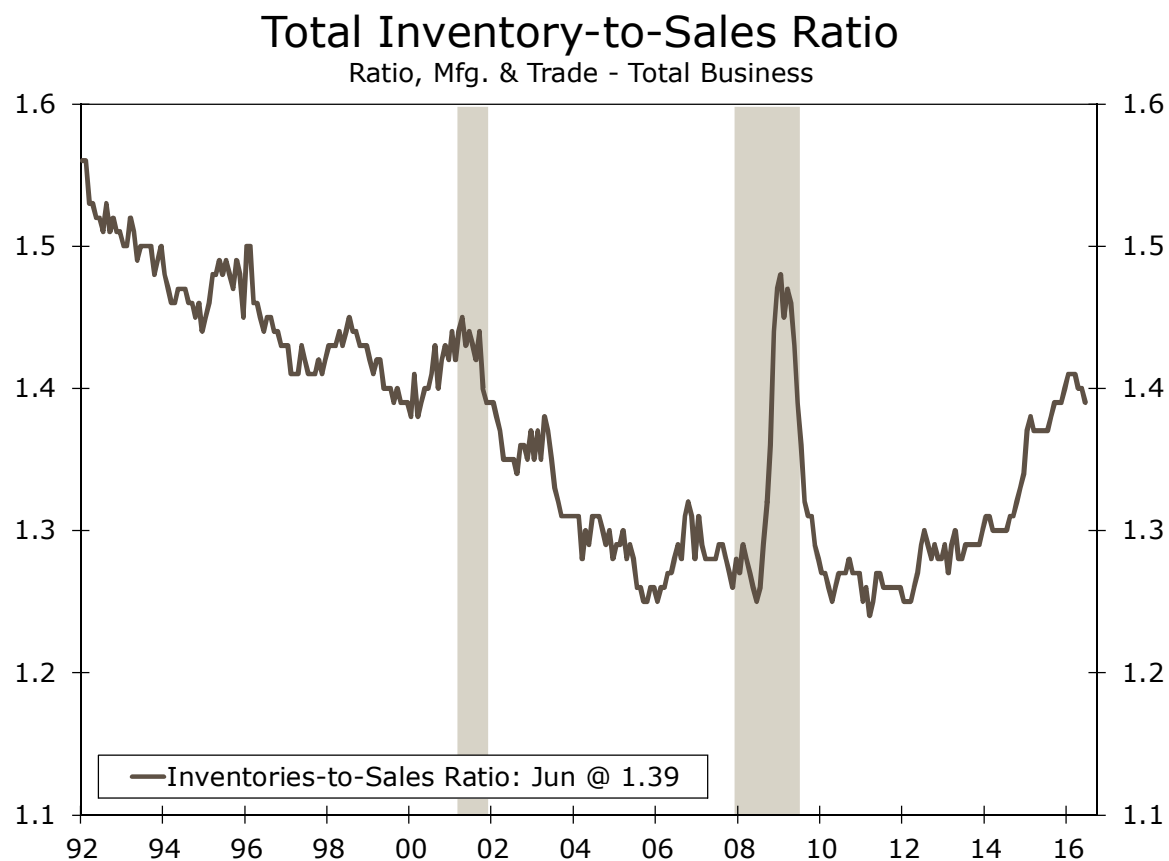
Source: Federal Reserve and Wells Fargo Securities

Inventories have been a drag on GDP for 5 consecutive quarters



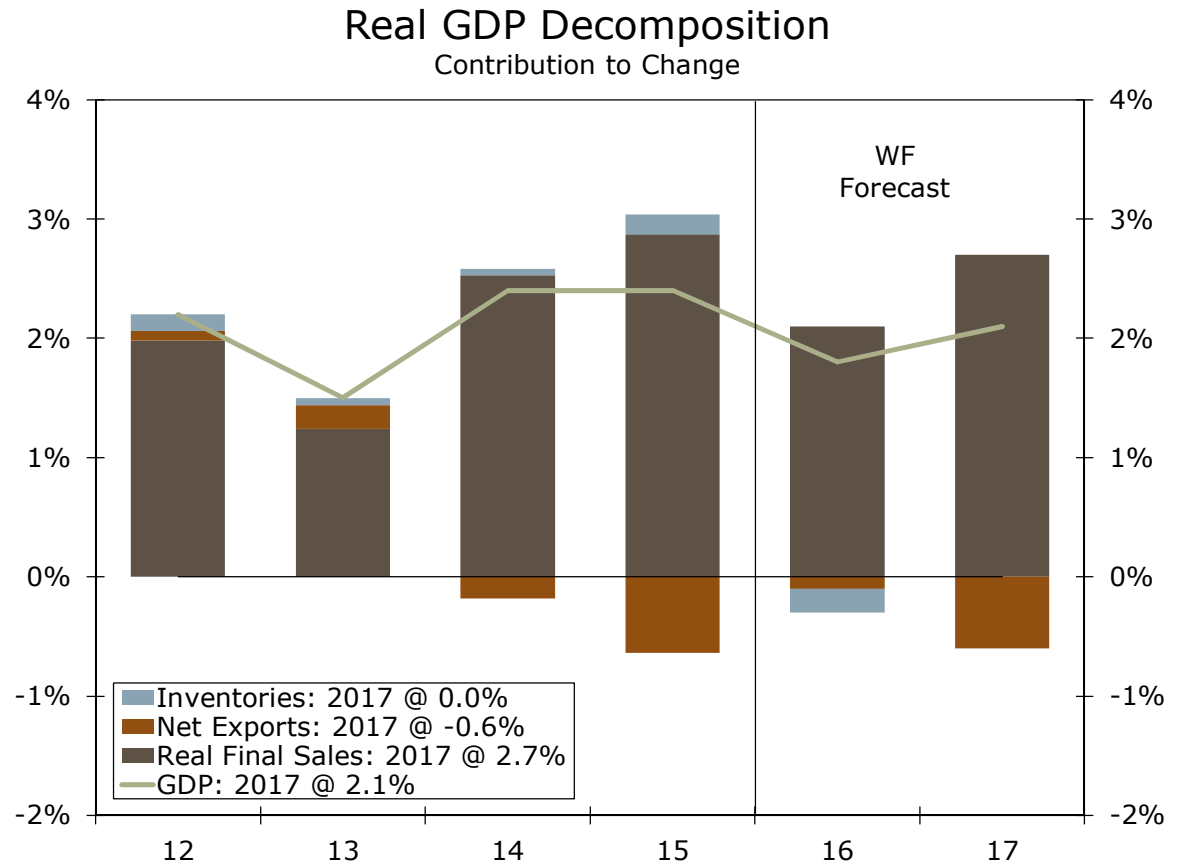
Source: U.S. Department of Commerce and Wells Fargo Securities

Yet the I/S ratio is still elevated



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

Domestic growth has held up relatively well, trade has been a drag over past two years and again in 2016

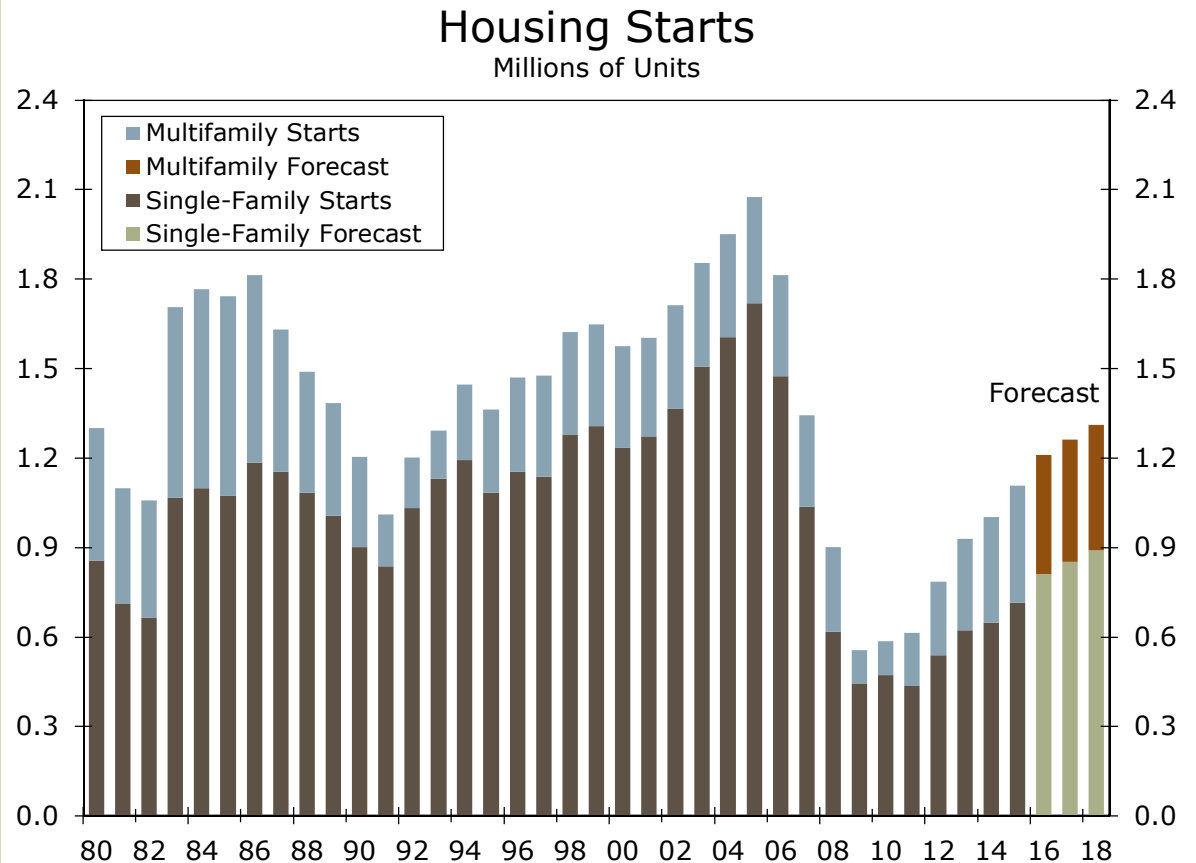


Source: U.S. Department of Commerce and Wells Fargo Securities

We continue to look for a gradual recovery in homebuilding.

Apartment demand remains exceptionally strong but supply is catching up with demand.

Single-family housing starts are beginning to ramp back up. Gains will be more modest than in past building cycles.

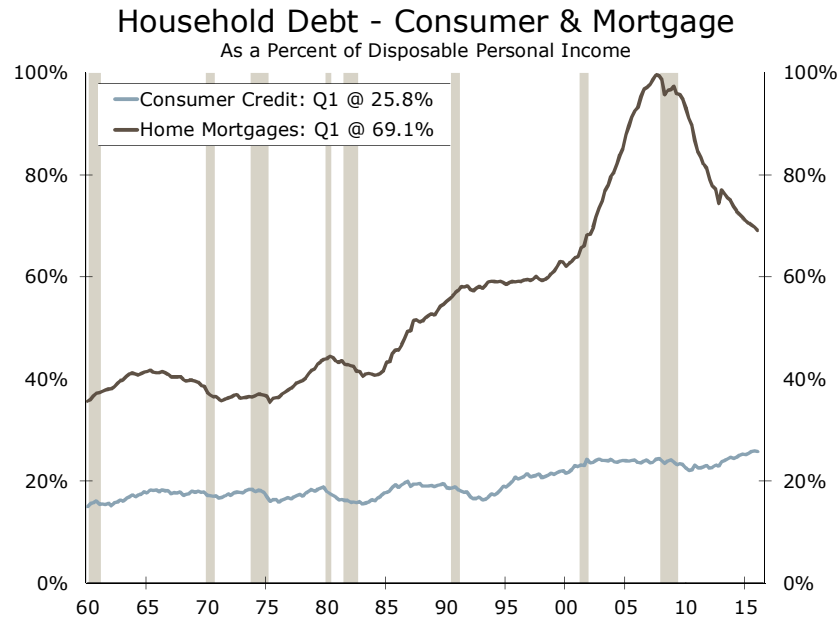


Source: U.S. Department of Commerce and Wells Fargo Securities

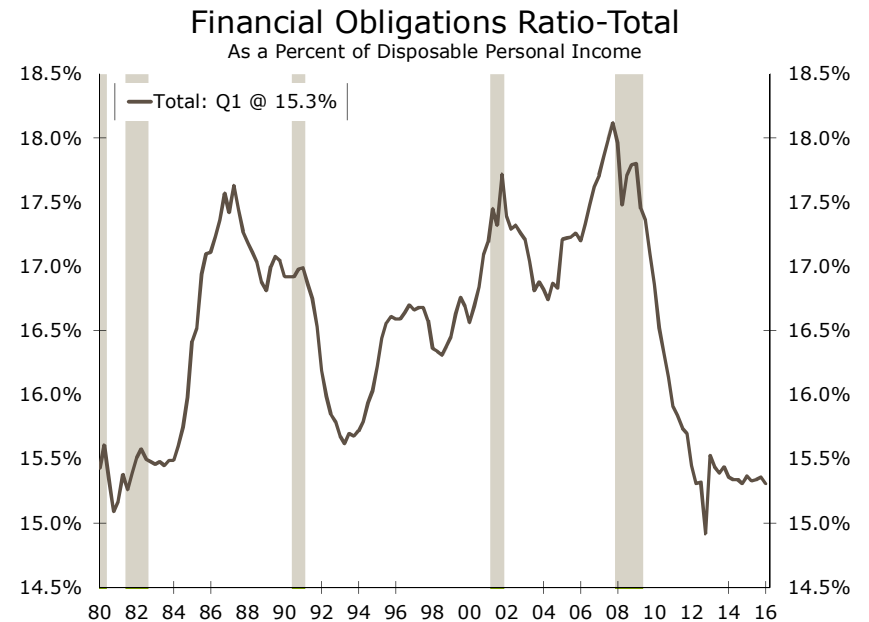
Household Balance Sheets

Consumer deleveraging may be nearing an end, but monthly debt and other financial obligation payments remain near historic lows

Household Debt



Financial Obligations Ratio

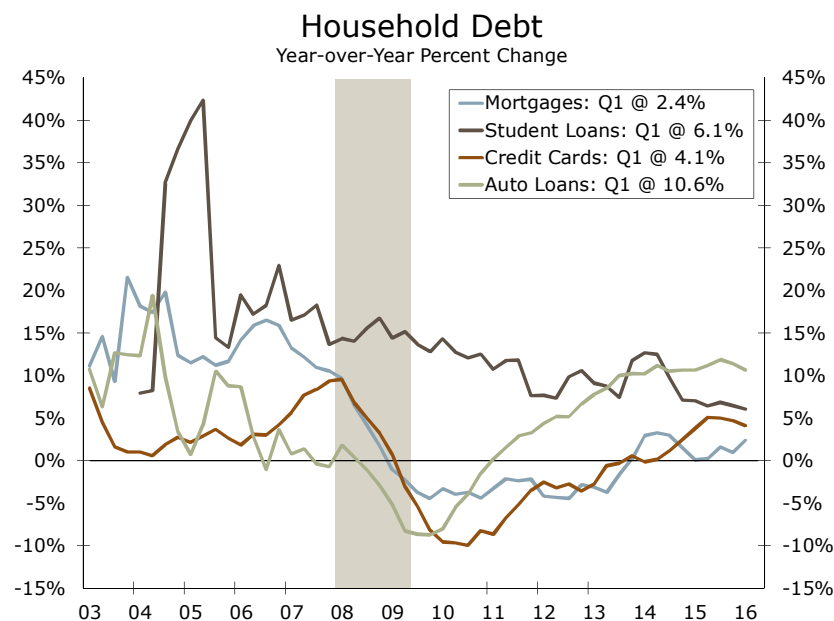


Source: Federal Reserve Board and Wells Fargo Securities

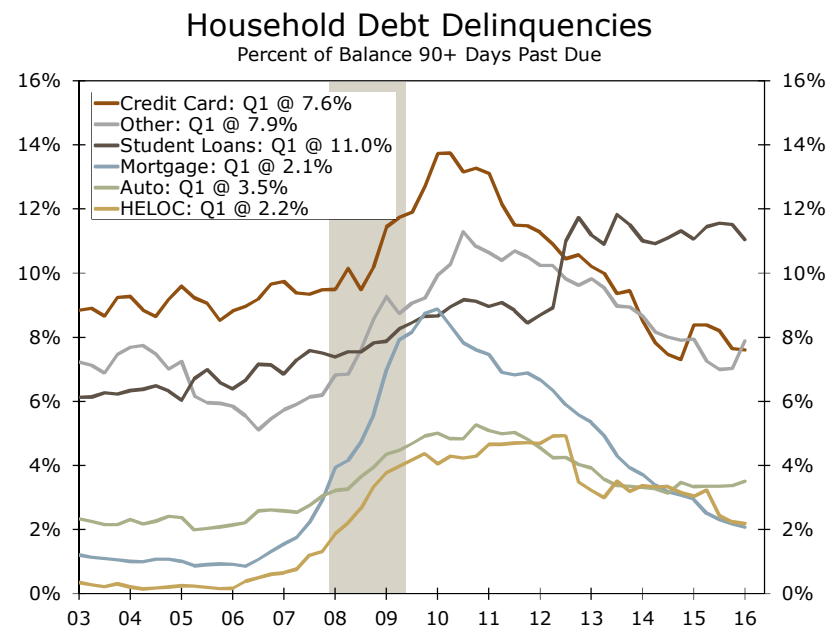
Household Credit

Household credit continues to be led by non-mortgage debt. Most categories continue to see cyclical improvement, but progress for autos and student loans has stalled

Credit Growth



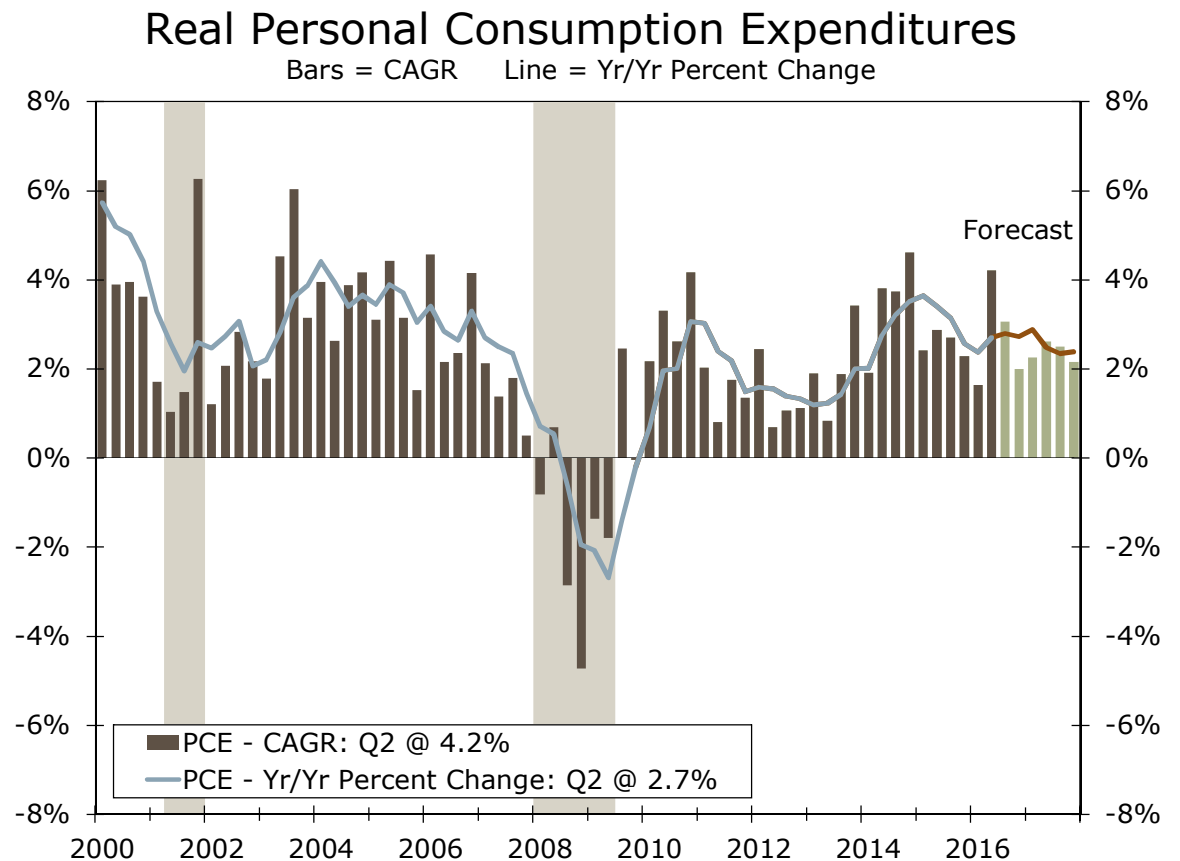
Credit Quality



Source: Federal Reserve Bank of New York and Wells Fargo Securities

Real PCE Forecast

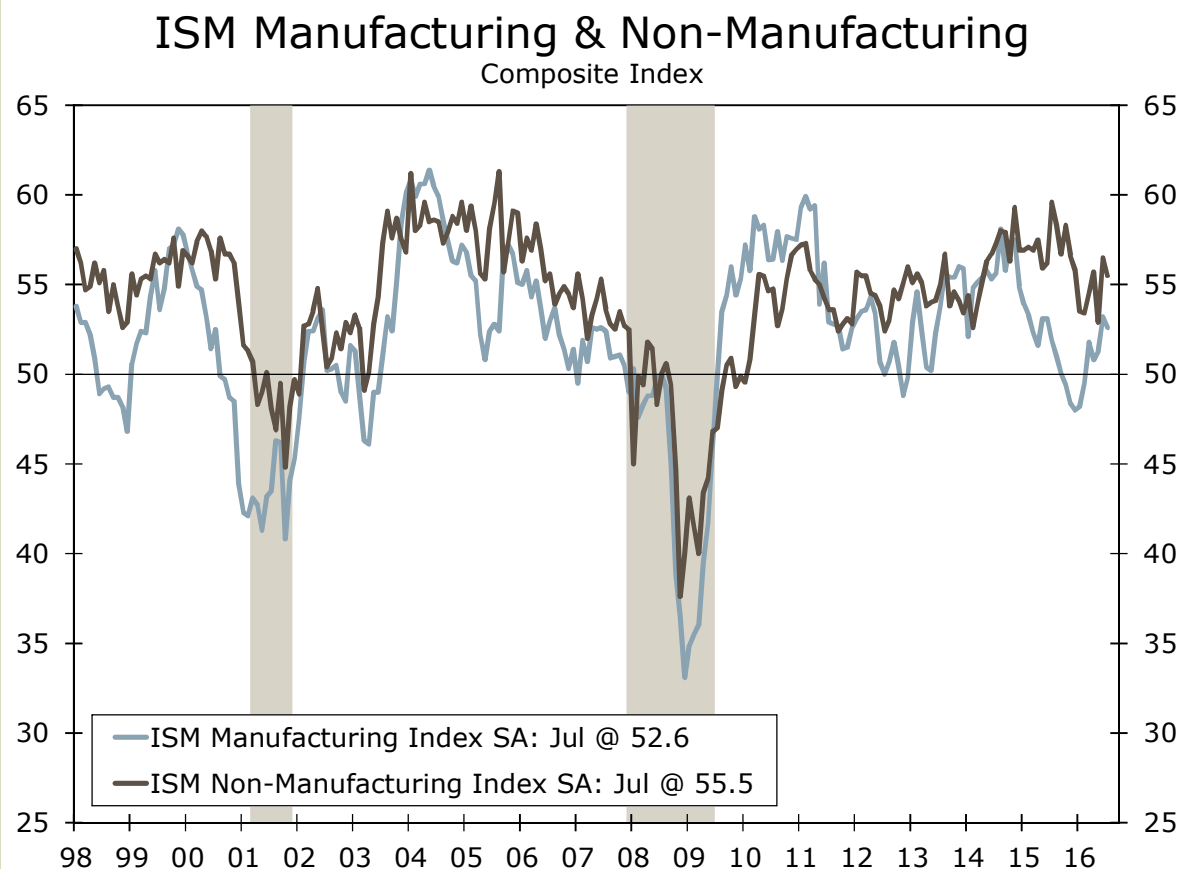
Consumer spending growth is set to moderate but remain positive throughout the forecast horizon



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

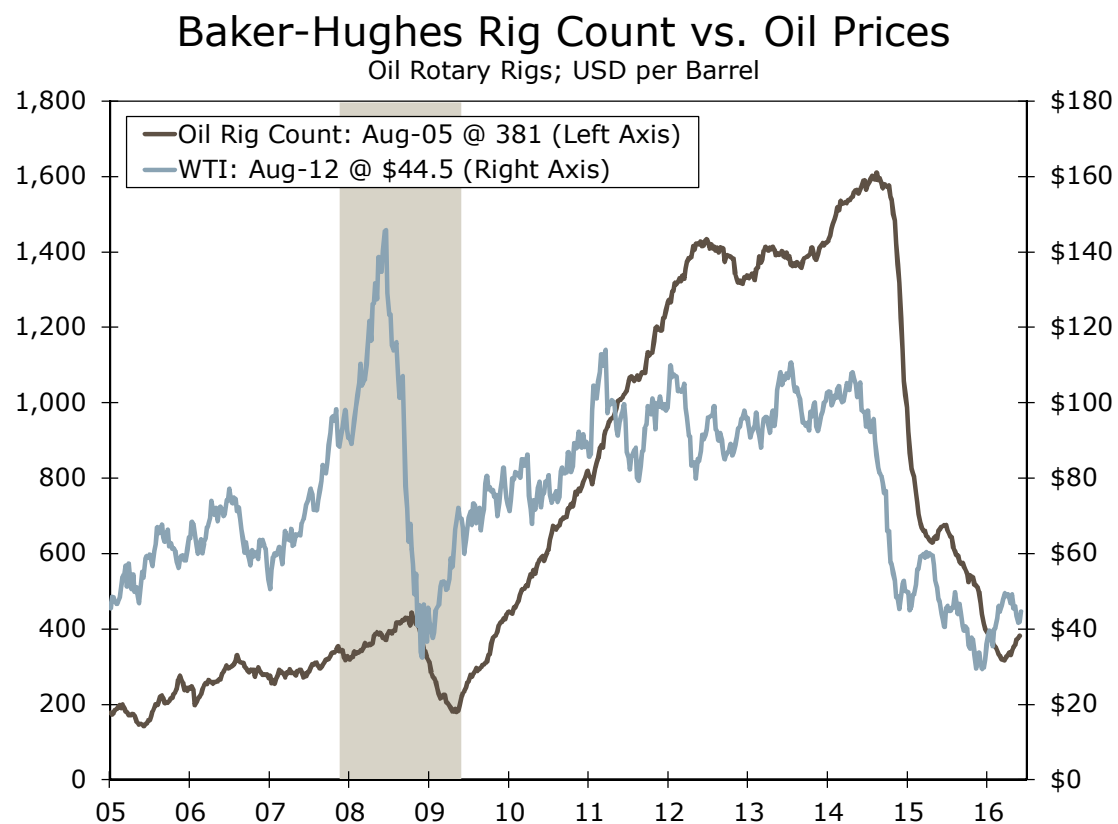
Manufacturing & Services: A Divide

Indexes on business activity suggest continued growth for 2016. Services have been a bulwark, while manufacturing has been impacted by the dollar and collapse in commodities



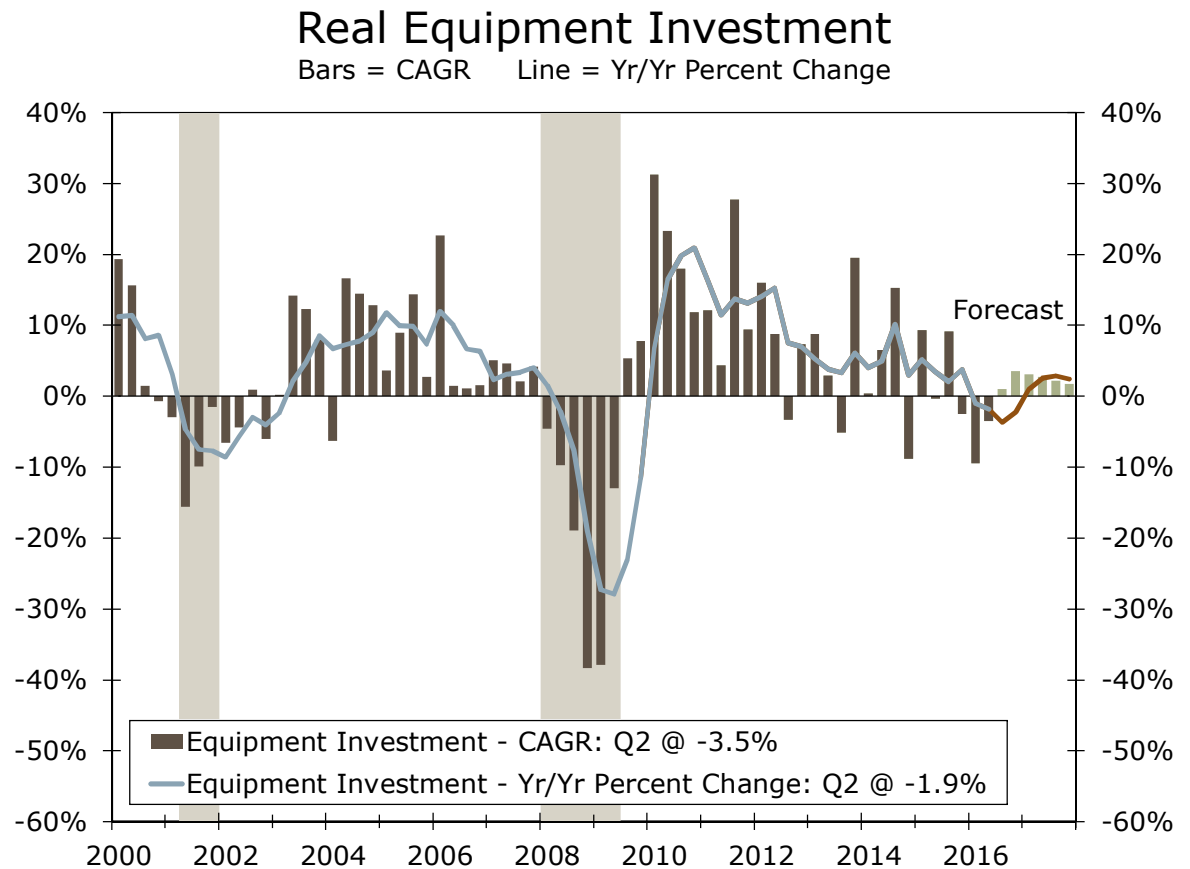
Source: Institute for Supply Management and Wells Fargo Securities

Oil prices are expected to stay low until production is scaled back in meaningful way. Look for the market to show signs of rebalancing in the second half of 2016



Source: Bloomberg LP and Wells Fargo Securities

Tough to find reasons to get excited about prospects for capital outlays



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

U.S. Forecast

Wells Fargo U.S. Economic Forecast

	Actual				Forecast				Actual			Forecast	
	2015				2016				2013	2014	2015	2016	2017
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q					
Real Gross Domestic Product ¹	2.0	2.6	2.0	0.9	0.8	1.2	2.0	2.1	1.7	2.4	2.6	1.4	1.9
Personal Consumption	2.4	2.9	2.7	2.3	1.6	4.2	3.1	2.0	1.5	2.9	3.2	2.6	2.5
Inflation Indicators ²													
PCE Deflator	0.3	0.3	0.3	0.4	0.9	0.9	1.0	1.4	1.3	1.5	0.3	1.1	1.9
Consumer Price Index	-0.1	0.0	0.1	0.4	1.1	1.1	1.2	1.6	1.5	1.6	0.1	1.2	2.2
Industrial Production ¹	-1.9	-2.7	1.5	-3.3	-1.8	-1.0	2.8	2.9	1.9	2.9	0.3	-0.7	2.3
Corporate Profits Before Taxes ²	7.5	-2.8	-4.5	-11.2	-6.6	-0.9	1.8	1.8	1.7	5.9	-3.0	-1.1	1.7
Trade Weighted Dollar Index ³	92.1	90.0	92.3	94.5	89.8	90.6	91.5	93.3	75.9	78.4	91.1	91.3	96.5
Unemployment Rate	5.6	5.4	5.2	5.0	4.9	4.9	4.8	4.7	7.4	6.2	5.3	4.8	4.6
Housing Starts ⁴	0.99	1.16	1.16	1.13	1.15	1.16	1.23	1.24	0.92	1.00	1.11	1.21	1.26
Quarter-End Interest Rates ⁵													
Federal Funds Target Rate	0.25	0.25	0.25	0.50	0.50	0.50	0.50	0.75	0.25	0.25	0.27	0.56	1.00
Conventional Mortgage Rate	3.77	3.98	3.89	3.96	3.69	3.57	3.54	3.56	3.98	4.17	3.85	3.59	3.64
10 Year Note	1.94	2.35	2.06	2.27	1.78	1.49	1.49	1.53	2.35	2.54	2.14	1.57	1.65

Forecast as of: August 10, 2016

¹ Compound Annual Growth Rate Quarter-over-Quarter

² Year-over-Year Percentage Change

³ Federal Reserve Major Currency Index, 1973=100 - Quarter End

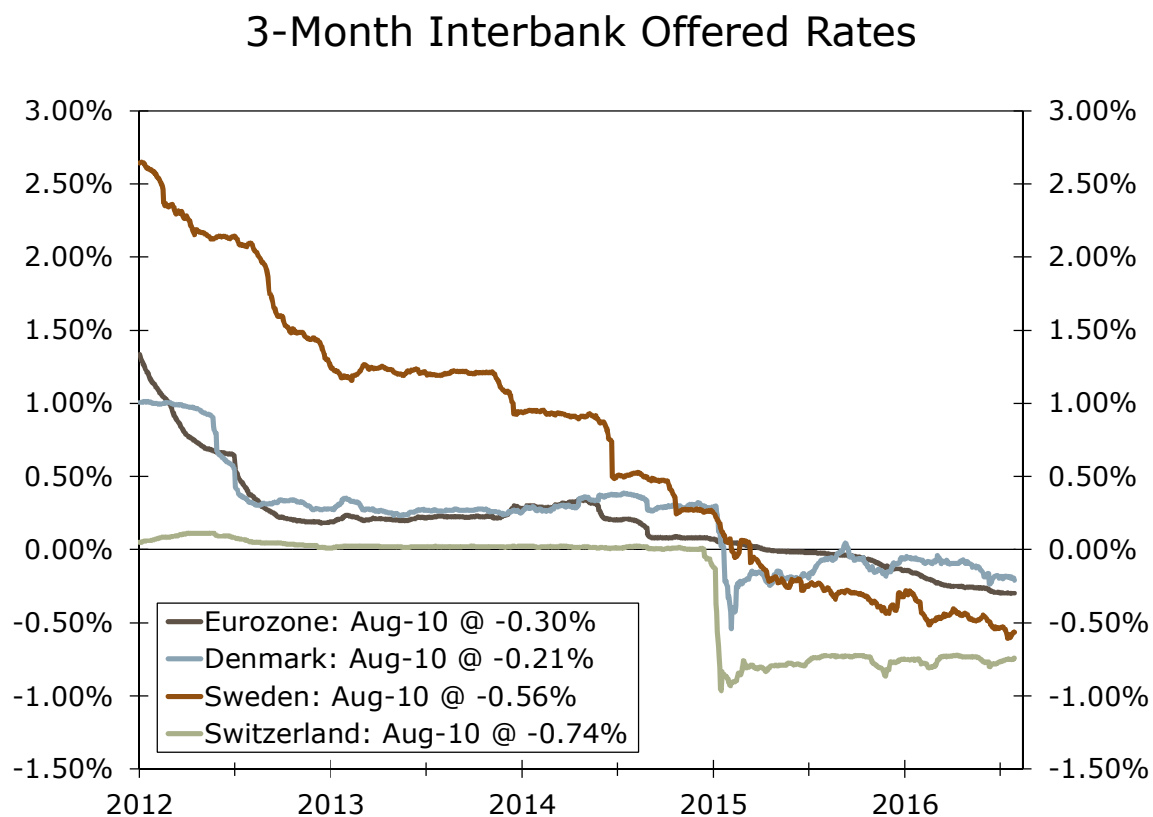
⁴ Millions of Units

⁵ Annual Numbers Represent Averages

International Developments

Negative Rates

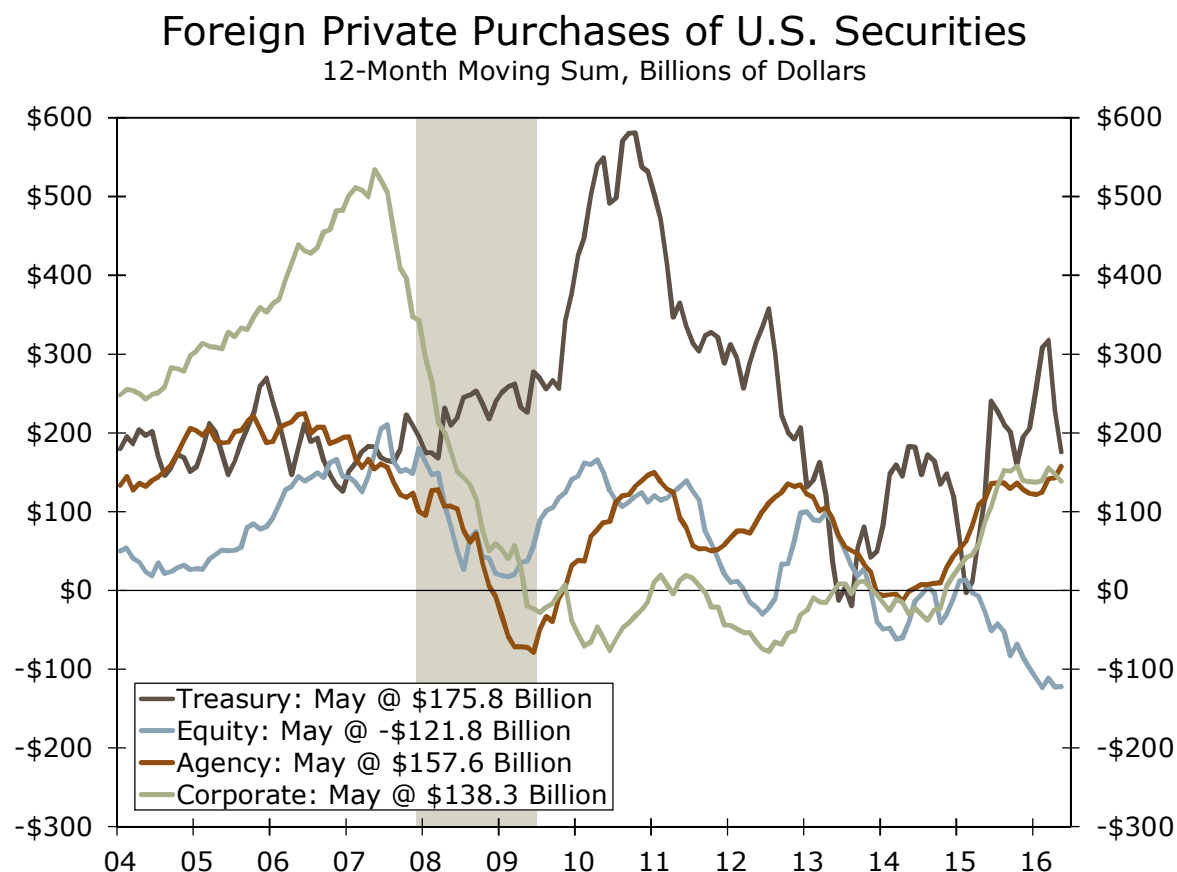
Negative rates have become more prevalent over the past year



Source: Bloomberg LP and Wells Fargo Securities

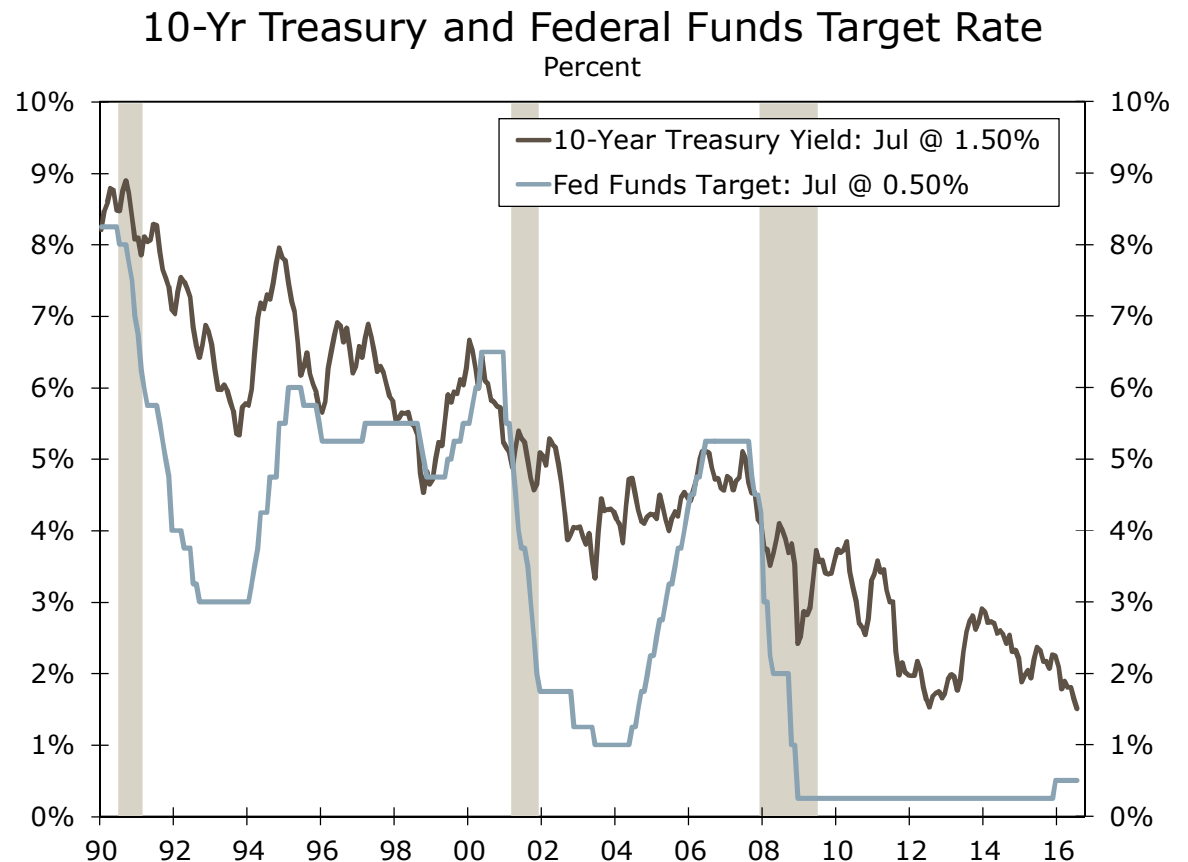
Foreign Purchases of U.S. Securities: Still Solid

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



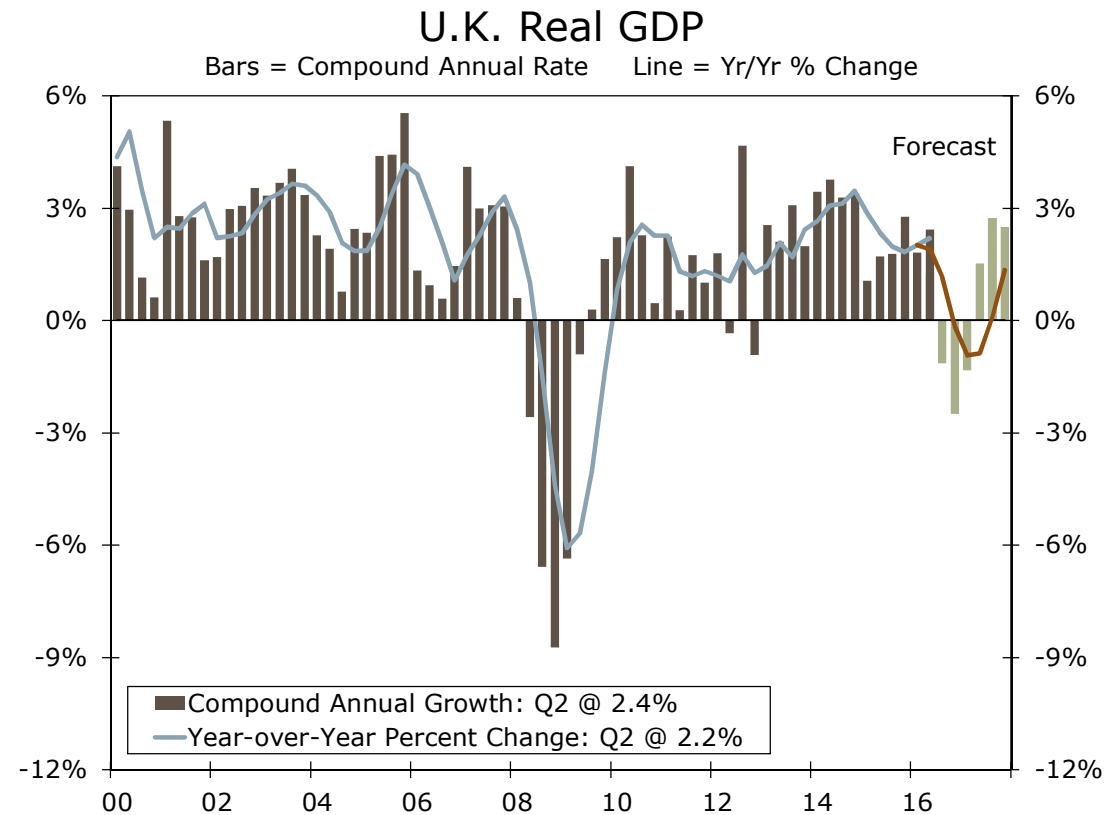
Source: U.S. Department of the Treasury and Wells Fargo Securities

How high can short rates go when the trend has been toward lower longer-dated interest rates?



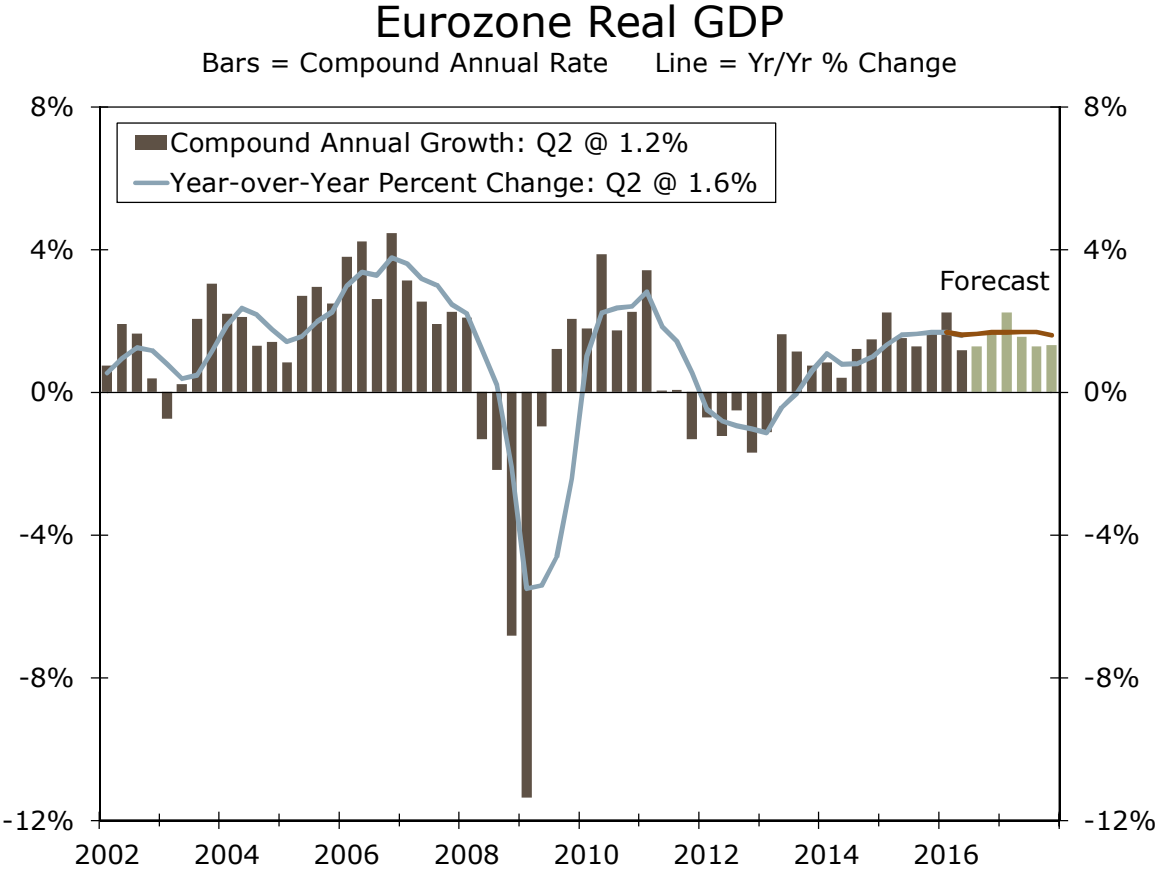
Source: IHS Global Insight and Wells Fargo Securities

What are the implications of Brexit?



Source: IHS Global Insight and Wells Fargo Securities

2 Years of
Uninterrupted Growth



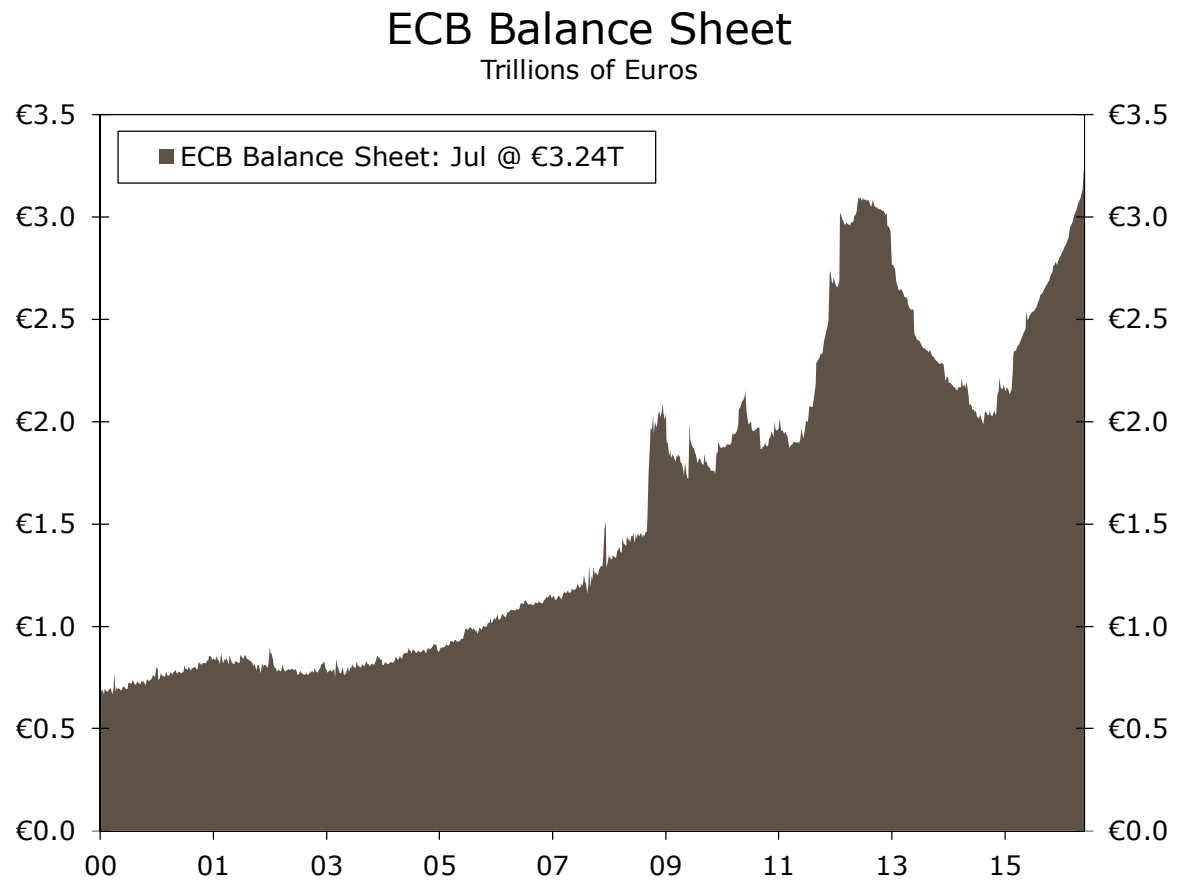
Source: IHS Global Insight and Wells Fargo Securities

The Eurozone purchasing managers' indices are pointing to continued recovery



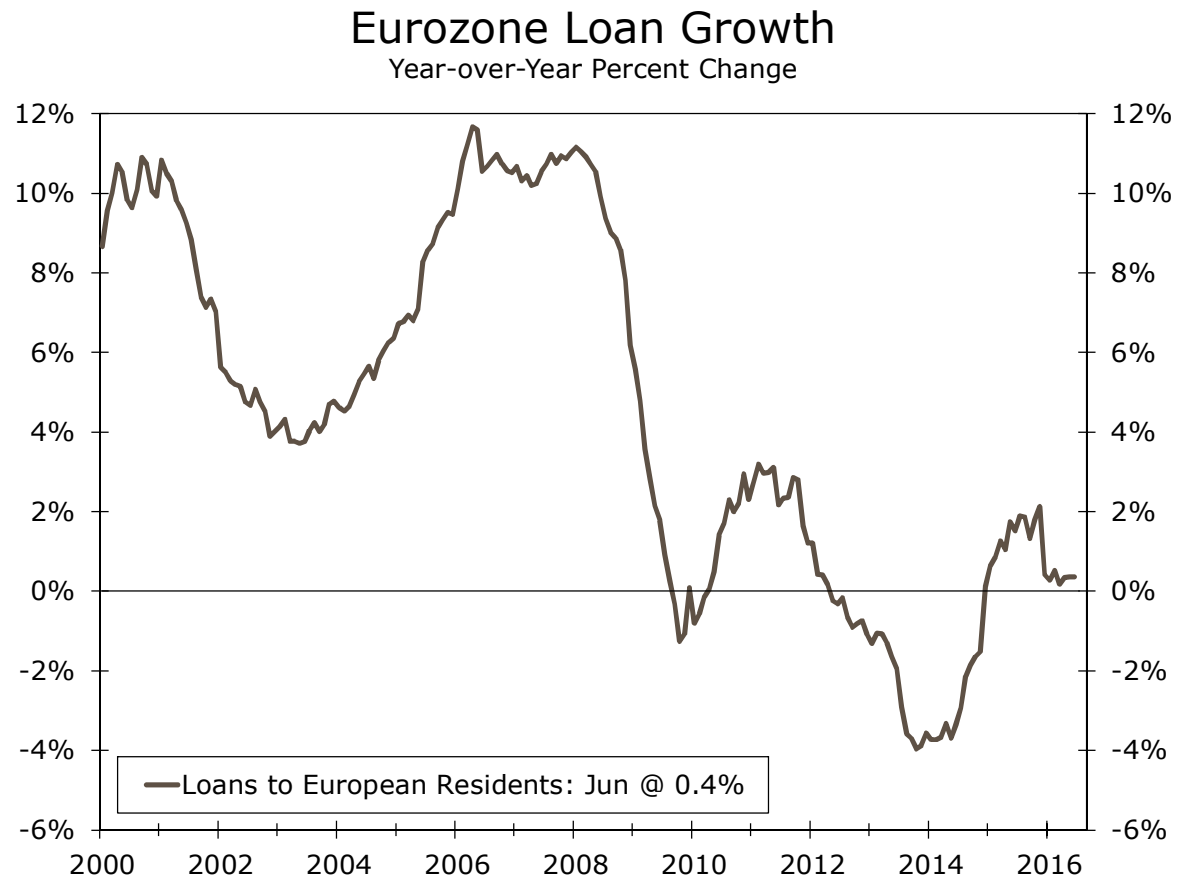
Source: Bloomberg LP and Wells Fargo Securities

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



Source: IHS Global Insight and Wells Fargo Securities

Bank lending growth in the euro area has turned positive but remains weak



Source: IHS Global Insight and Wells Fargo Securities

Global trade has slowed over the past year



Source: IHS Global Insight and Wells Fargo Securities

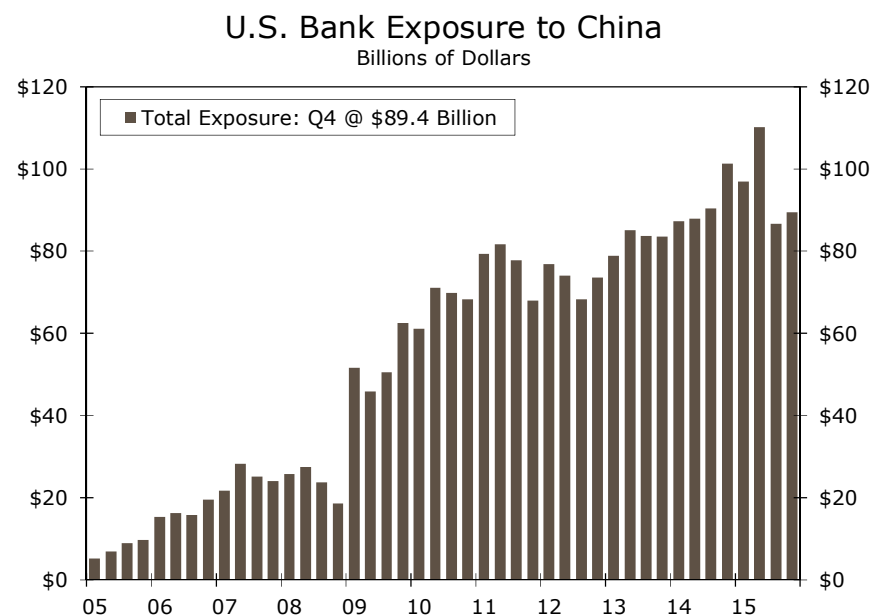
How Exposed is the U.S. Economy to China?

- U.S. exports to China comprise about 7% of all U.S. exports and less than 1% of GDP.
- U.S. imports from China are roughly 4X the size of exports to China.
- American banks have about \$100 billion on the hook to China (less than 1% of loans).
- Total Chinese external debt is roughly \$900 billion – small potatoes compared to Chinese foreign assets of \$6+ trillion.

Lopsided Trade Relationship



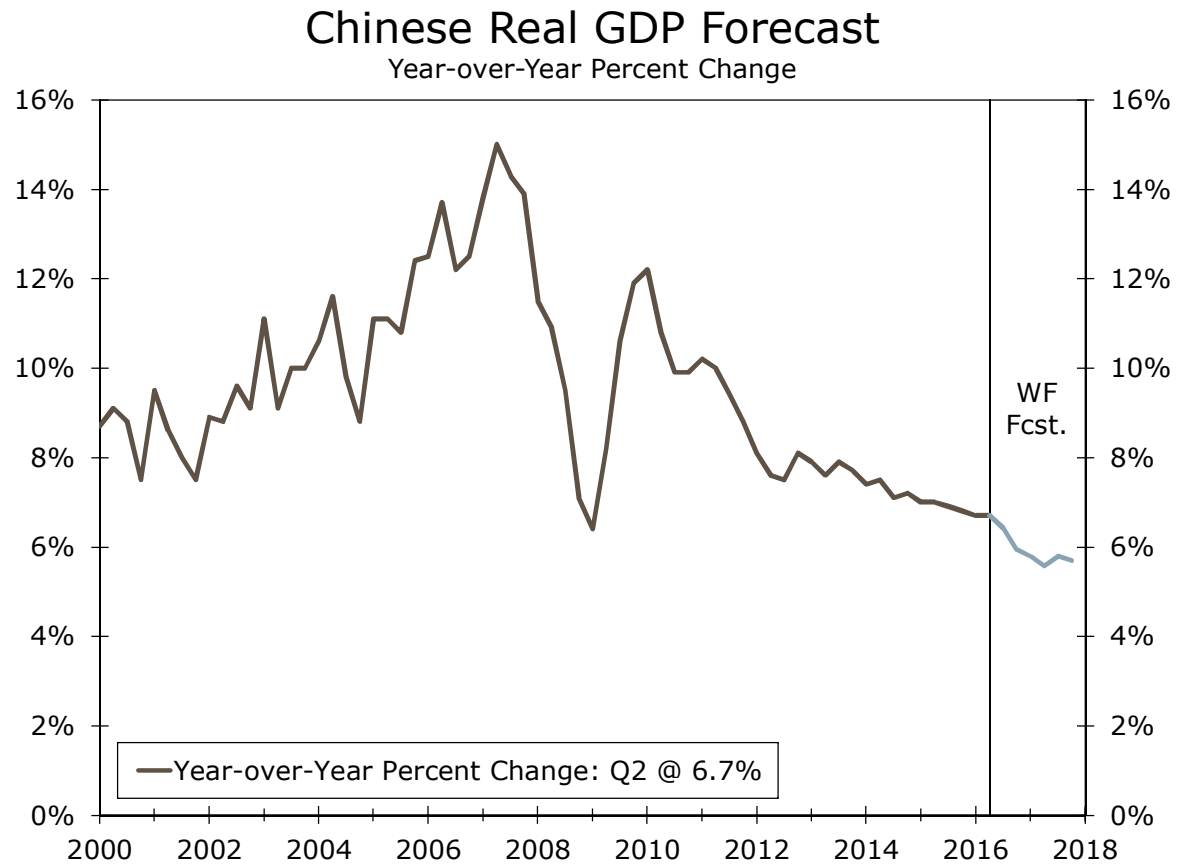
Lending to China



Source: Bank for International Settlements, IHS Global Insight and Wells Fargo Securities

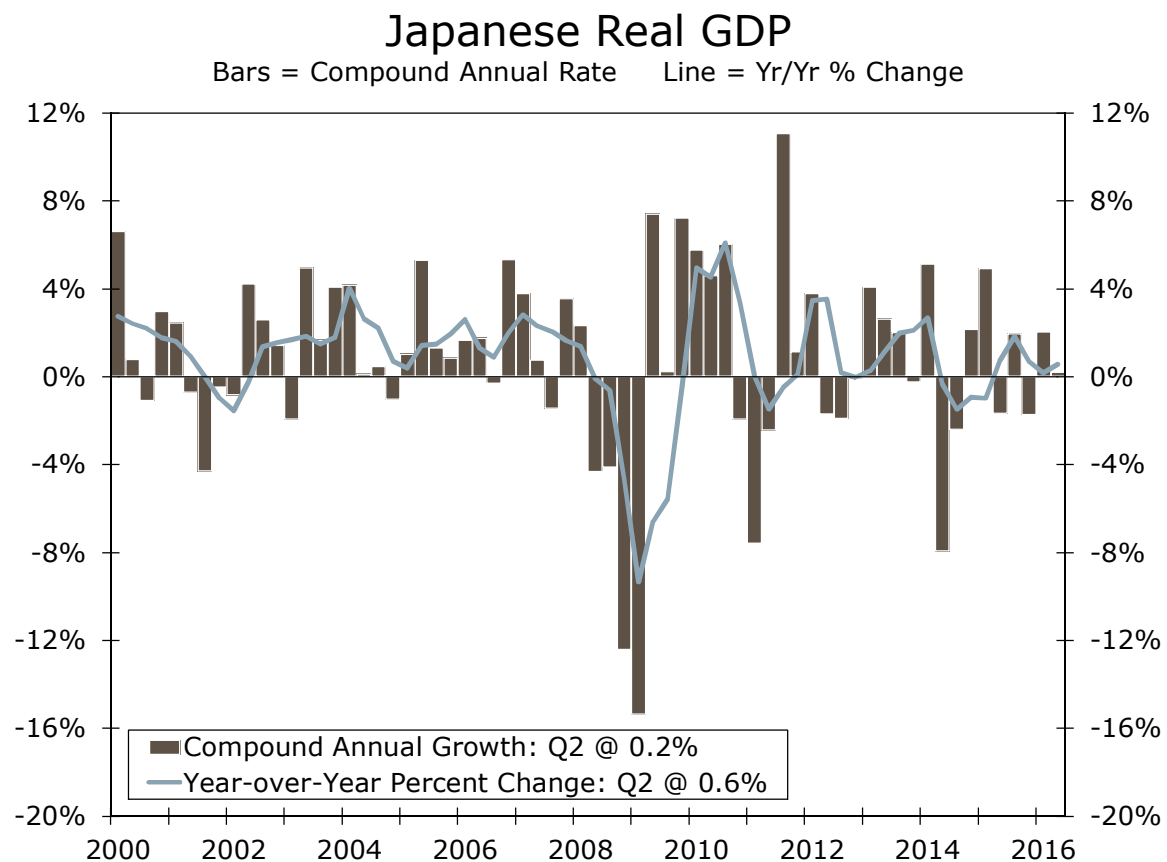
China Real GDP

Growth in China has stabilized, but we do not expect it to return to the double-digit growth rates seen in the past



Source: Bloomberg LP and Wells Fargo Securities, LLC

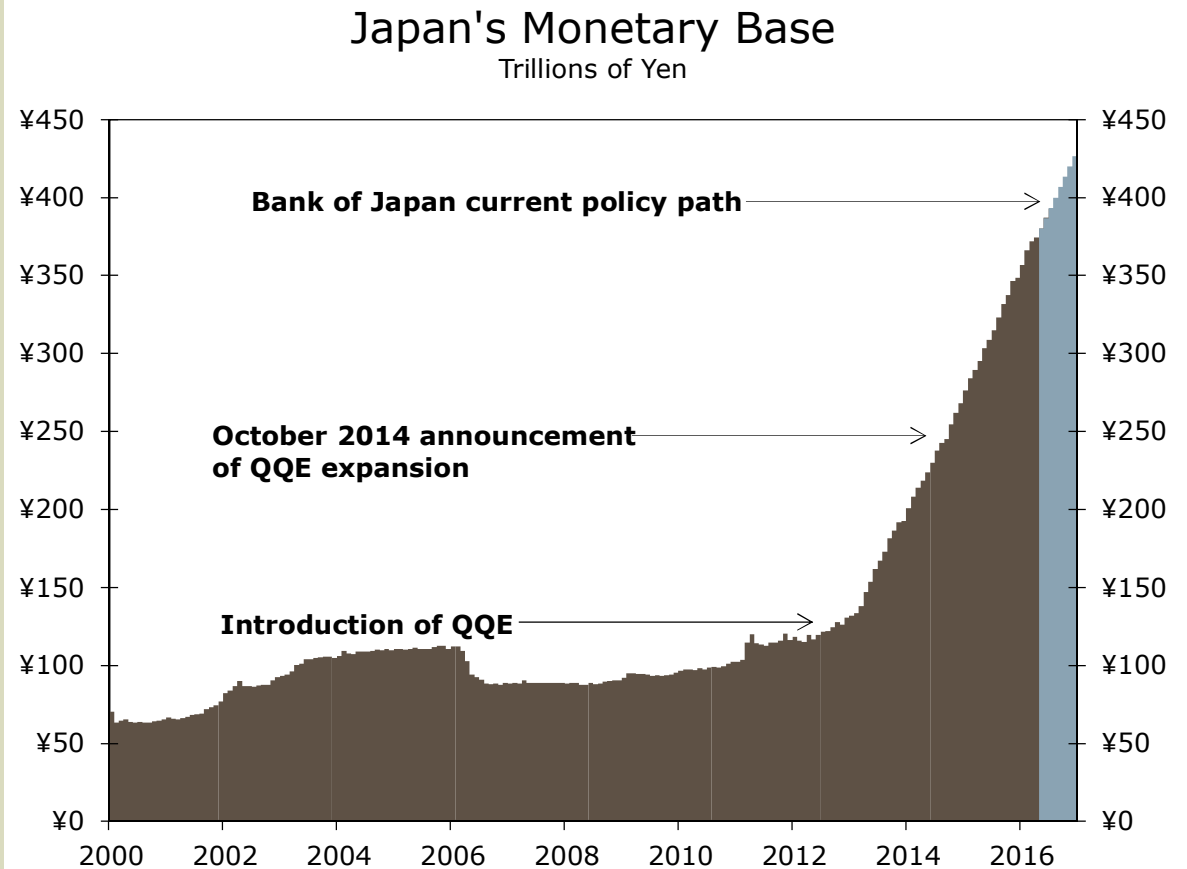
Mixed track record for
Abenomics



Source: Bank of Japan, IHS Global Insight and Wells Fargo Securities

Japanese Monetary Base

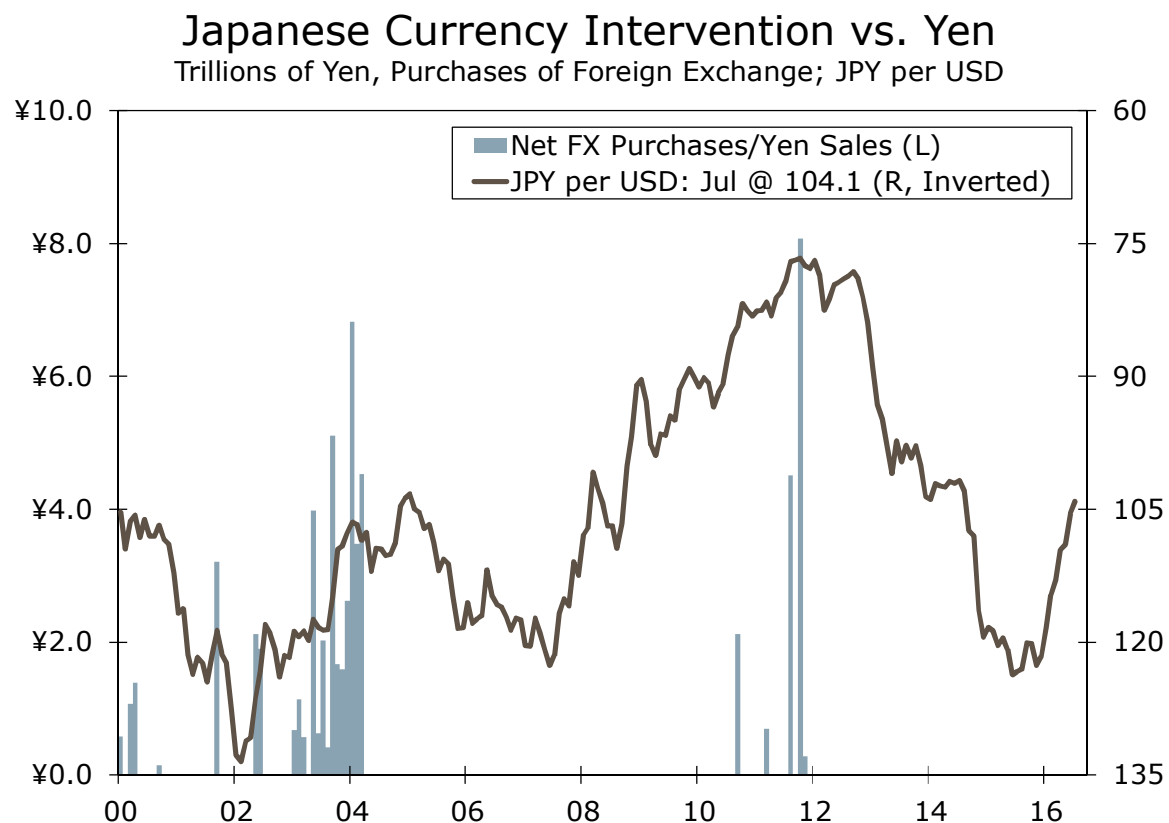
The expansion of the monetary base will continue to expand the size of the BoJ's balance sheet considerably;
The move into negative rates is dangerous and uncharted ground



Source: Bank of Japan, IHS Global Insight and Wells Fargo Securities

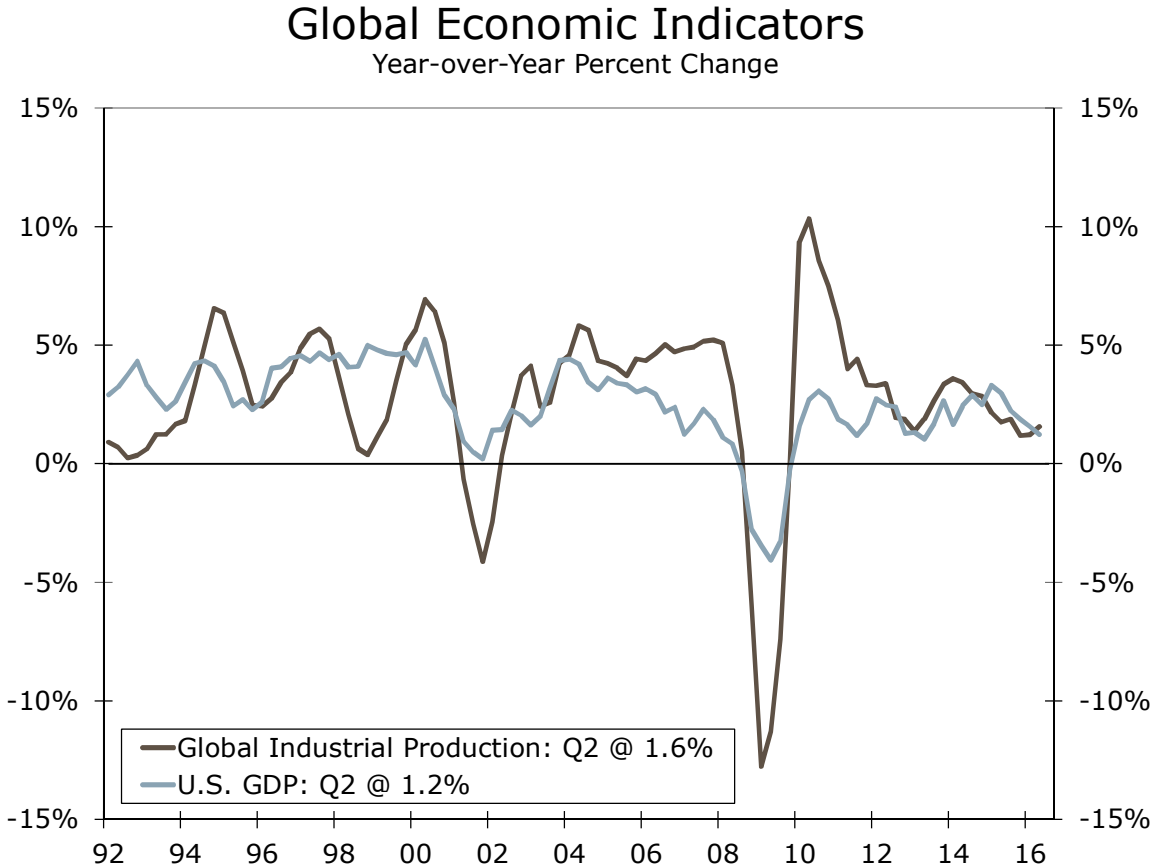
Japanese Currency Intervention?

Talk of currency intervention is misplaced in our view



Source: Bank of Japan, IHS Global Insight and Wells Fargo Securities

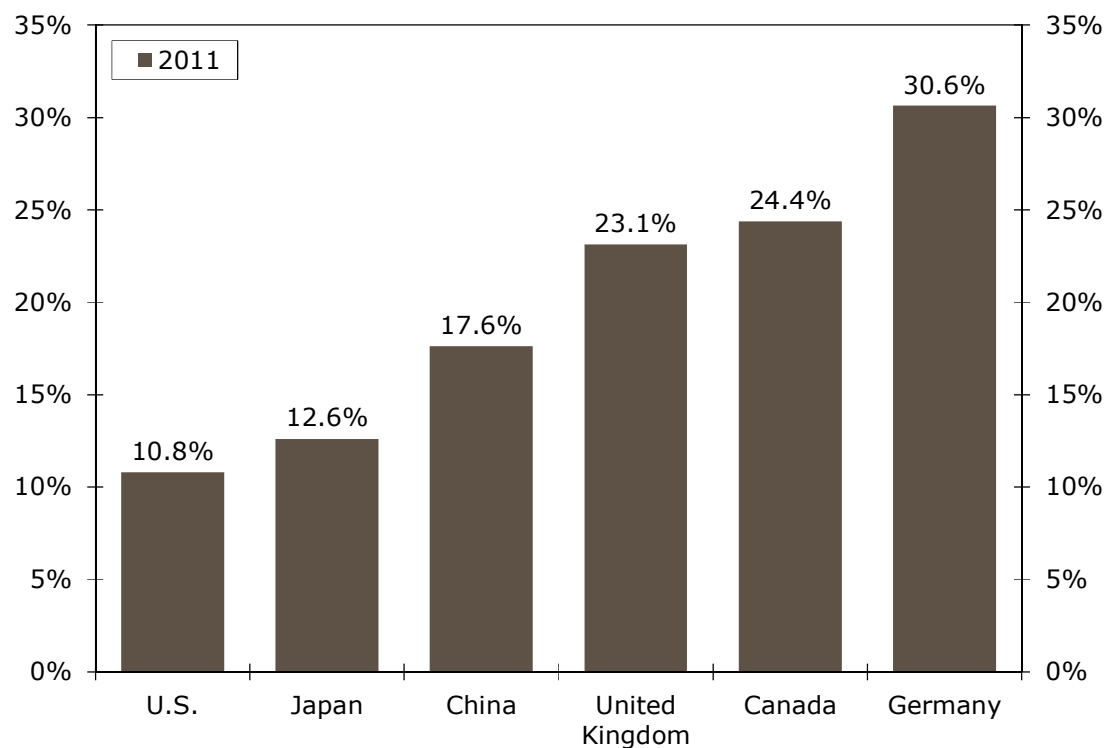
It would take a sharp downturn
in the rest of the world to have a
meaningful effect on U.S.
economic growth



Source: IHS Global Insight and Wells Fargo Securities

The United States derives only 10 percent of its value added from final spending in the rest of the world

Value-Added Embodied in Foreign FDD
Percent of Total Value-Added



Source: Organisation for Economic Cooperation and Development and Wells Fargo Securities

Growth in the global economy
likely will grind closer to long
term trend

Wells Fargo International Economic Forecast						
(Year-over-Year Percent Change)						
	GDP			CPI		
	2015	2016	2017	2015	2016	2017
Global (PPP Weights)	3.0%	2.7%	2.9%	2.6%	3.2%	3.4%
Global (Market Exchange Rates)	2.9%	2.4%	2.6%	n/a	n/a	n/a
Advanced Economies ¹	1.9%	1.5%	1.8%	0.3%	0.7%	1.7%
United States	2.6%	1.4%	1.9%	0.1%	1.2%	2.2%
Eurozone	1.6%	1.4%	1.4%	0.0%	0.1%	1.0%
United Kingdom	2.2%	1.4%	-0.1%	0.0%	0.8%	2.1%
Japan	0.6%	0.2%	0.6%	0.8%	-0.2%	0.5%
Korea	2.6%	2.9%	3.2%	0.7%	0.9%	1.9%
Canada	1.1%	1.0%	1.7%	1.1%	1.6%	1.5%
Developing Economies ¹	4.0%	3.9%	3.9%	4.7%	5.7%	5.2%
China	6.9%	6.4%	5.8%	1.4%	2.1%	1.9%
India ²	7.2%	7.6%	7.4%	4.9%	5.8%	5.6%
Mexico	2.5%	2.4%	2.5%	2.7%	2.7%	3.0%
Brazil	-3.9%	-3.7%	-0.5%	9.0%	9.0%	5.8%
Russia	-3.7%	-0.2%	1.7%	15.6%	7.2%	5.9%

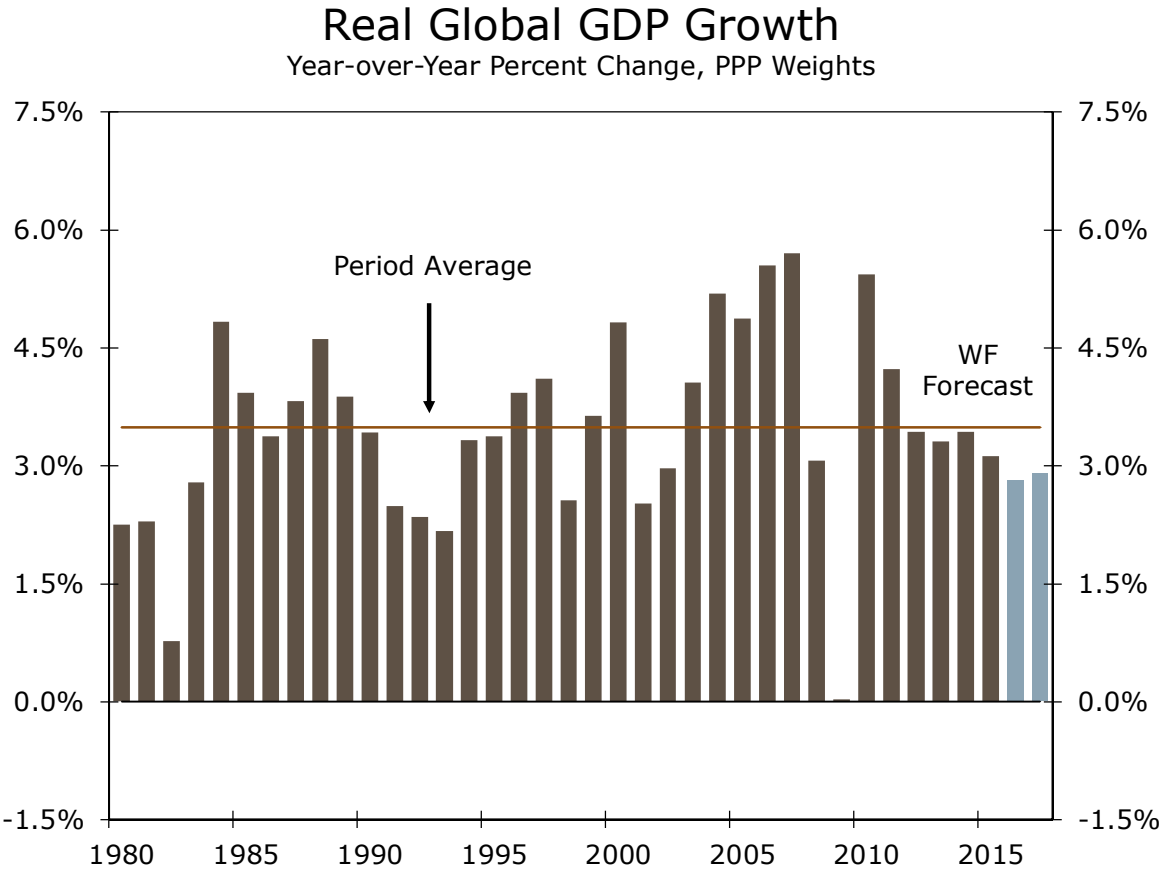
Forecast as of: August 10, 2016

¹Aggregated Using PPP Weights

²Forecasts Refer to Fiscal Year

Source: International Monetary Fund and Wells Fargo Securities

We forecast that global GDP growth will remain below its long-run average in 2016



Source: International Monetary Fund and Wells Fargo Securities

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