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U.S. Economic Outlook

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November 16, 2017

Together we'll go far



Economic Outlook

- After getting off to a slow start, real GDP growth is likely to grow at a 2.5 percent pace or better over the next few quarters. Consumer spending, homebuilding and business fixed investment should all strengthen.

Fiscal Policy

- Tax cuts and infrastructure spending will take longer to be enacted and will likely be smaller than had been initially hoped for. Changes are still likely, however, and the markets may be underestimating the odds of passage.

Monetary Policy

- The Fed is expected to hike rates one more time in 2017. Monetary policy is focusing on normalizing interest rates and offsetting typical late cyclical imbalances. The post-financial crisis period appears to be ending.

Soft Data Strength

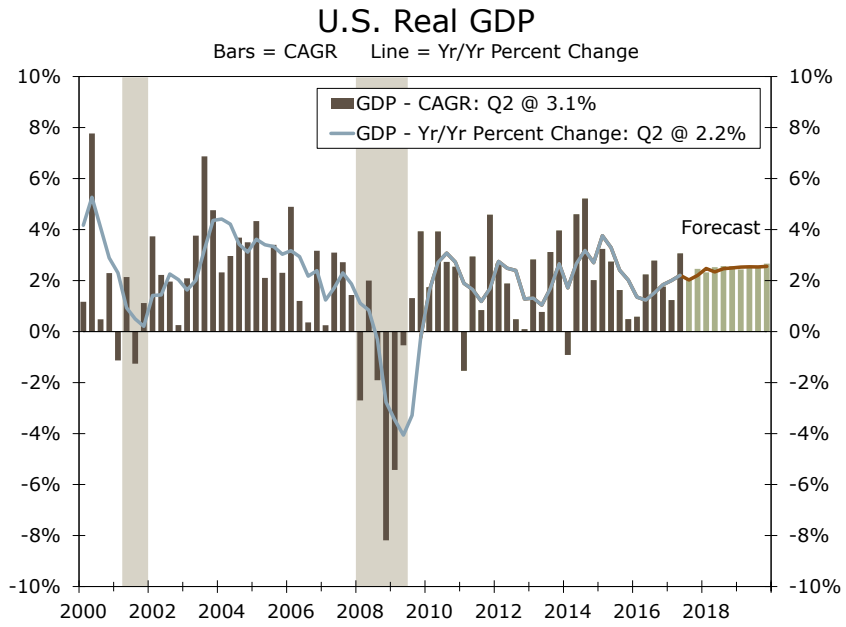
- The persistent strength in the 'soft data' reflects improving job prospects, some lightening of regulations and greater breadth in the manufacturing recovery.

Virginia

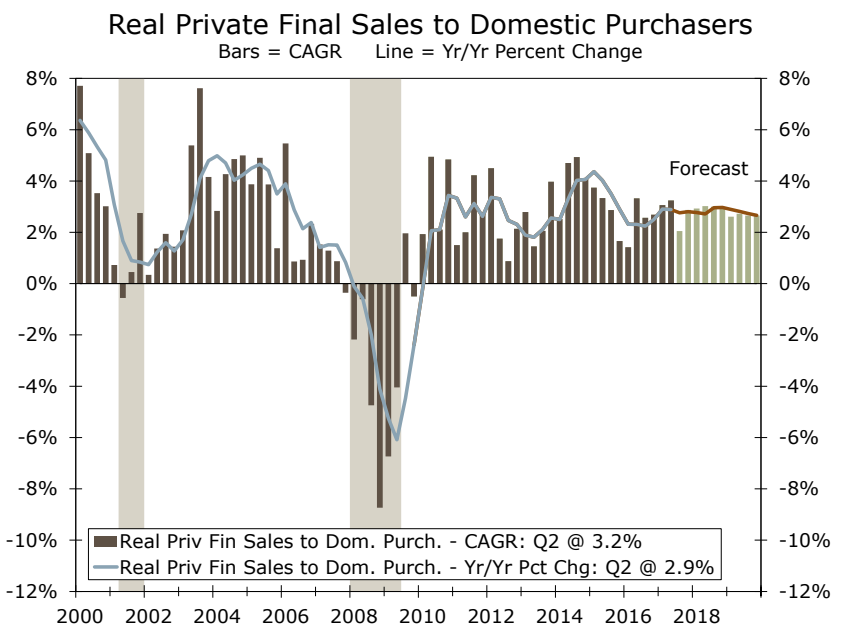
- Virginia's economy has been negatively impacted by sequestration. Richmond and most college-driven markets have tended to hold up relatively well. Economic conditions are improving in some rural areas.

Real GDP growth rebounded broadly in the second quarter, with a big boost from capex. Growth-oriented fiscal policies would boost long-term growth but have little near-term impact.

Real GDP Forecast



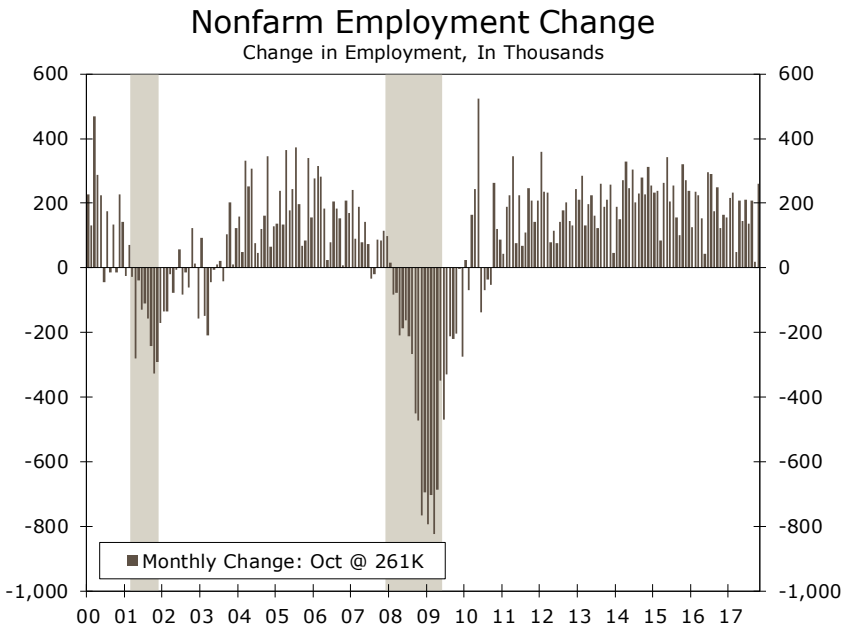
Real Private Final Sales



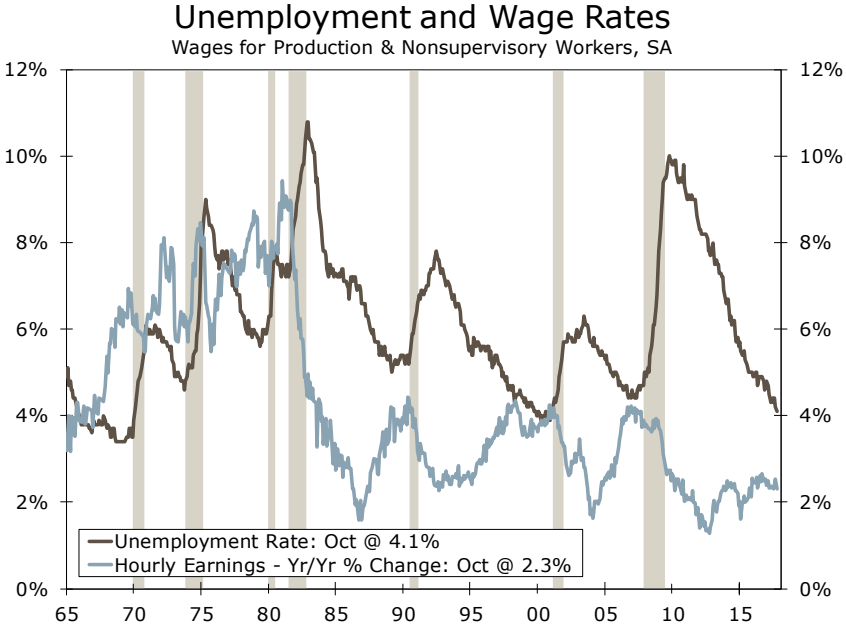
Source: U.S. Department of Commerce and Wells Fargo Securities, LLC

Hurricane Harvey and Hurricane Irma disrupted the employment data but appear to have had little lasting impact on the overall labor market. Hiring is improving across a broadening assortment of industries and the unemployment rate continues to trend lower.

Nonfarm Employment



Unemployment Rate



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

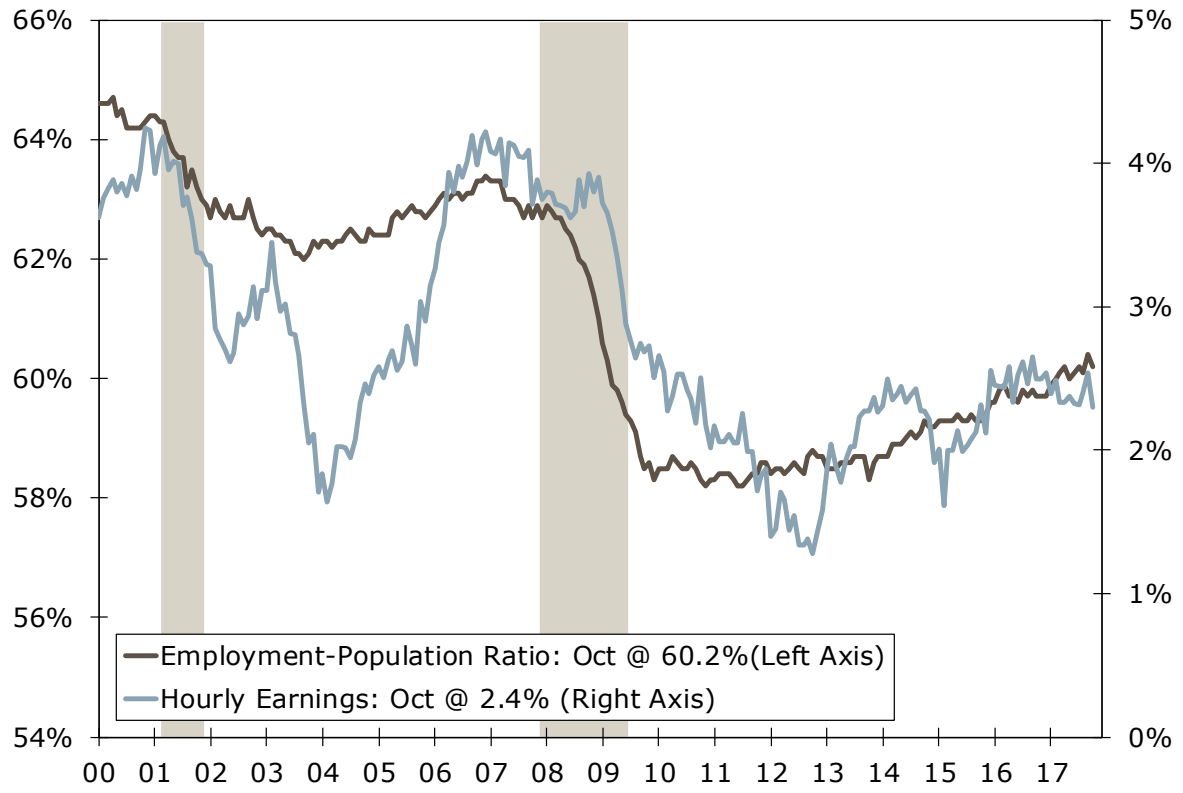
Employment Population Ratio vs. Hourly Earnings

The employment-population ratio has been rebounding in recent years, as the recovery has broadened and brought more workers and jobseekers back into the labor market.

The existence of so many workers just outside the traditional labor force has been one of the factors depressing wage and salary growth.

Employment-Population Ratio vs. Hourly Earnings

Ratio and Year-over-Year Percent Change



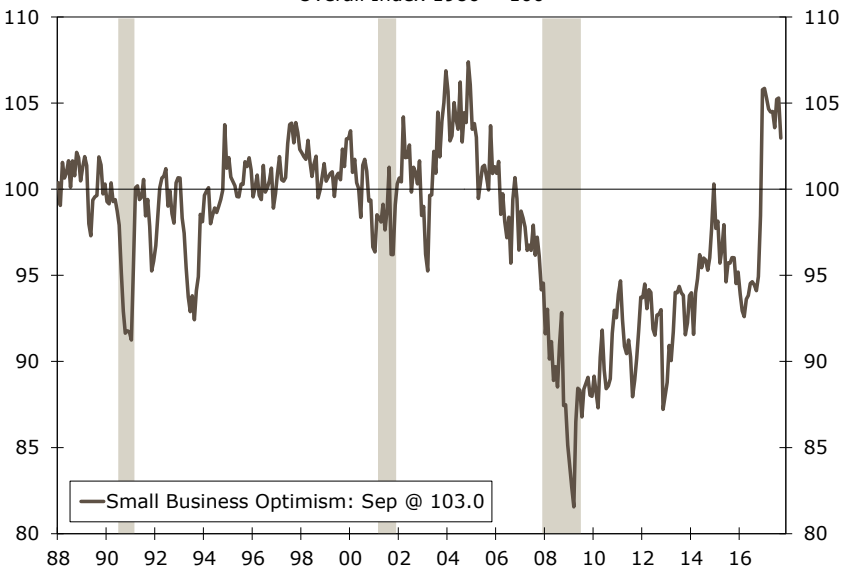
Source: U.S. Department of Labor and Wells Fargo Securities

Small business optimism spiked following the presidential election. While hopes for tax relief were a big driver behind the initial spike, business owners have become much less worried about the regulatory environment. Sales and earnings trends also look more positive.

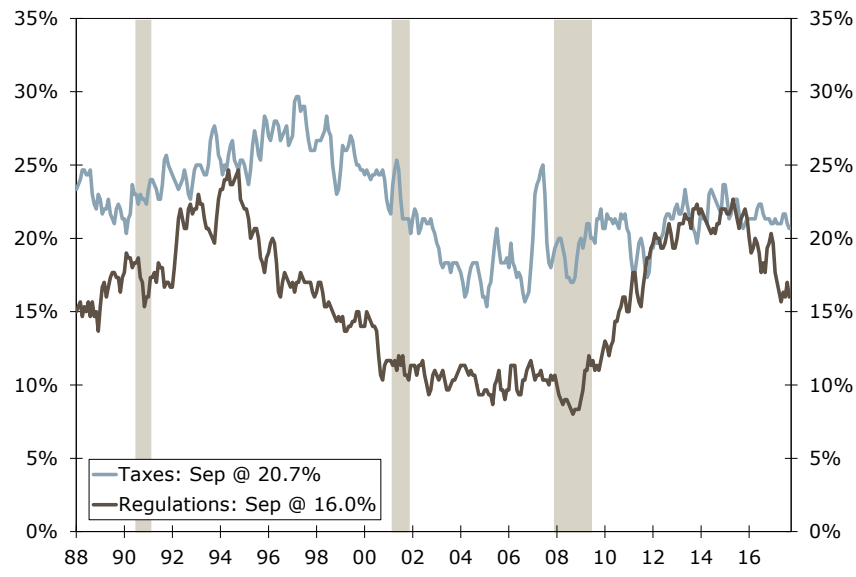
Small Business Optimism

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

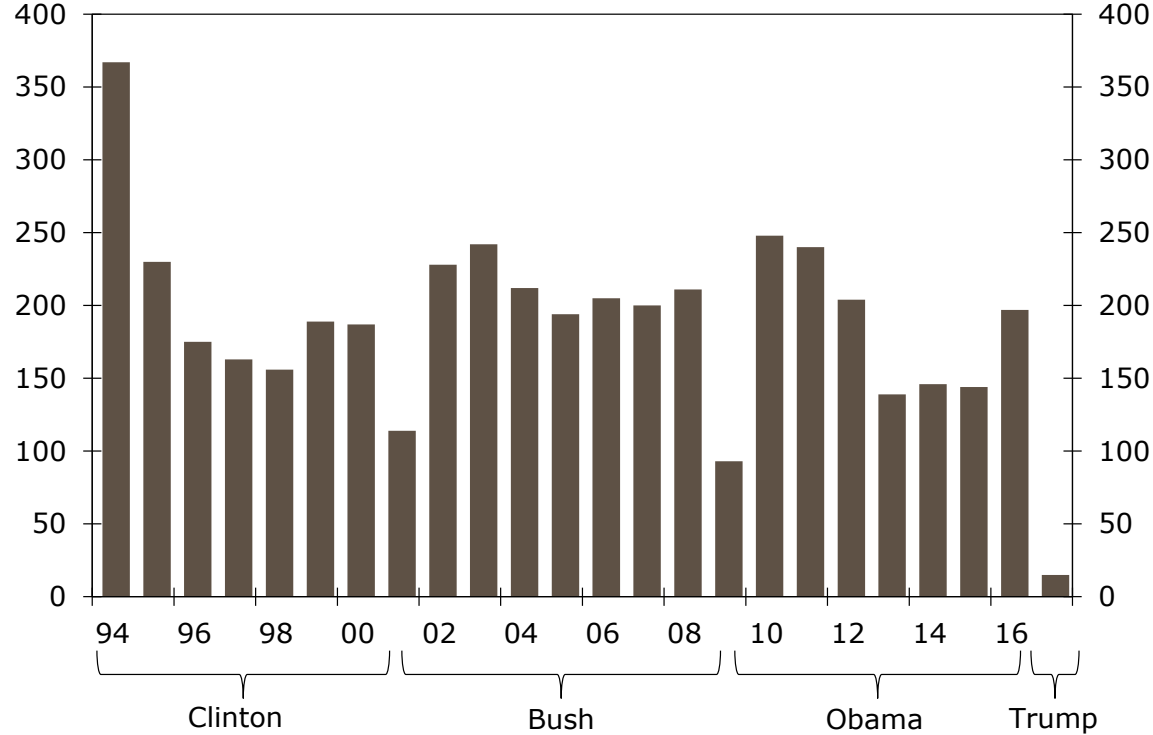


Source: National Federation of Independent Business (NFIB) and Wells Fargo Securities

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

Major New Regulatory Changes

By the OIRA, President's First Five Months of the Year



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

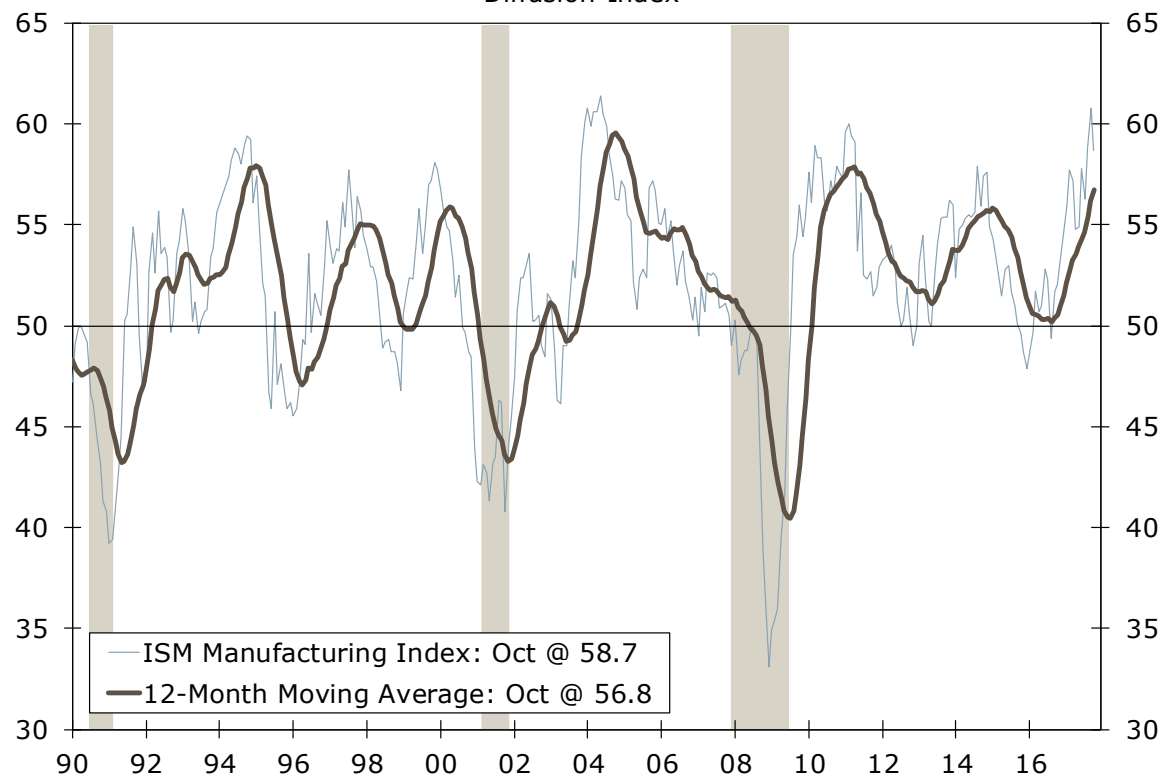
The ISM Manufacturing index has risen sharply in 2017.

Most forward-looking components have accelerated, such as new orders and the orders backlog, indicating that the improvement in manufacturing activity should be long lasting.

September's spike is a bit of an anomaly, however, driven primarily by supply shortages related to Hurricane Harvey.

ISM Manufacturing Composite Index

Diffusion Index



Source: ISM and Wells Fargo Securities

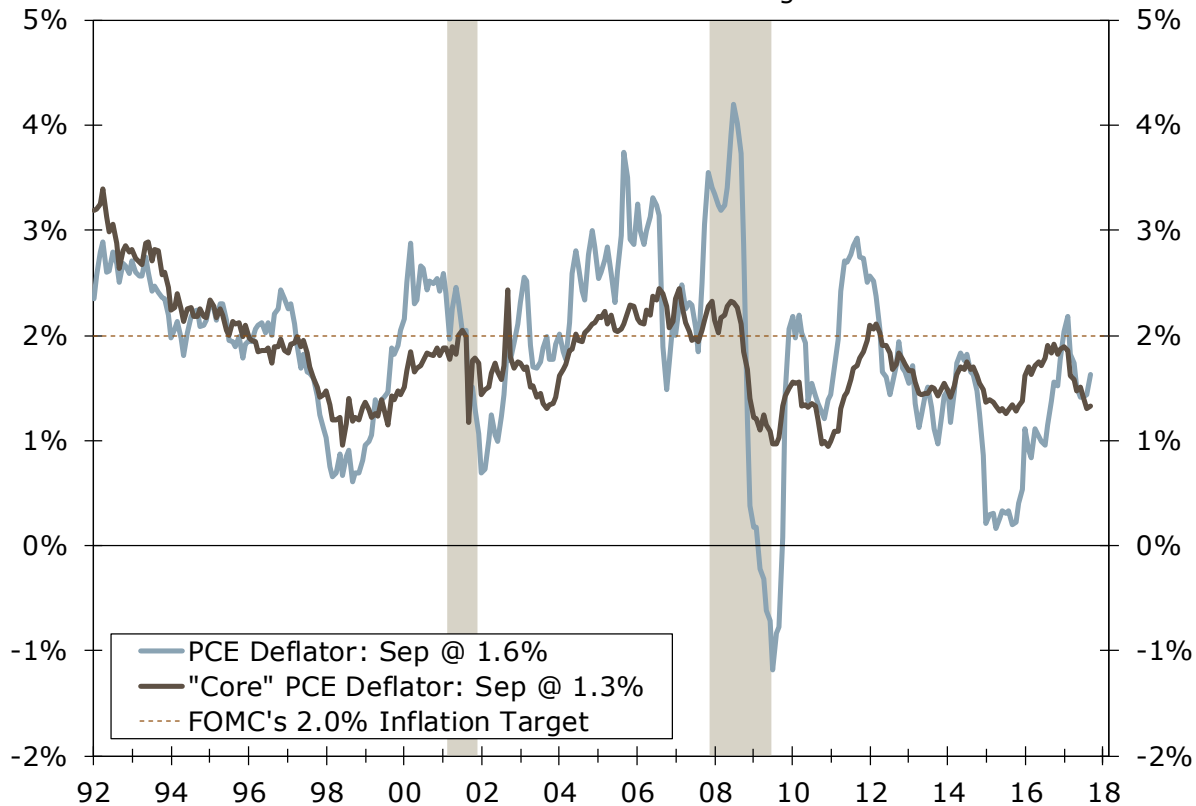
After making steady progress toward the Fed's 2 percent inflation objective, most broad inflation measures have remained below 2 percent since the last recession ended.

The recent moderation in core inflation is unnerving some members of the FOMC, suggesting the Fed may be even more cautious about raising short-term rates.

We believe there are a mix of structural and cyclical forces restraining inflation that may prove to be long lasting.

PCE Deflator vs. Core PCE Deflator

Year-over-Year Percent Change



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

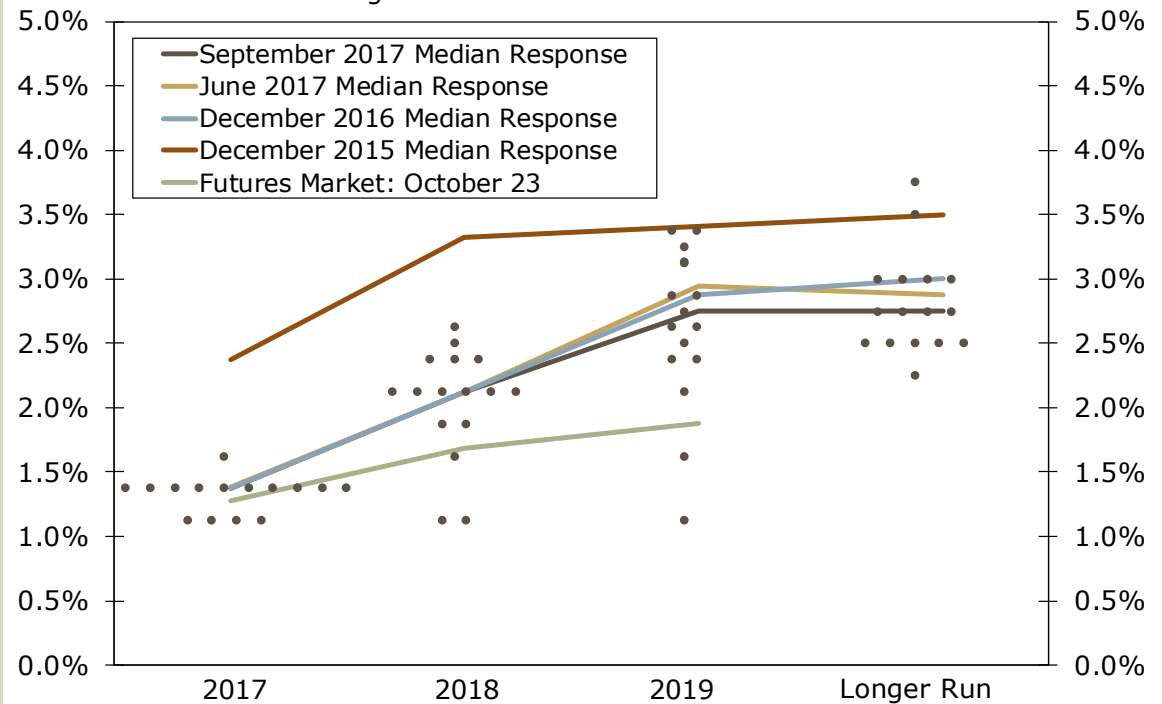
While the era of ultra-low interest rates has ended, the FOMC plans to be judicious in normalizing monetary policy, utilizing a mix of language and policy actions.

The pace and magnitude of interest rate increases are two important variables to watch.

With the post-Financial Crisis period ending, the next Fed chair and Fed board will determine what the new normal for interest rates and the inflation-unemployment relationship will be.

Appropriate Pace of Policy Firming

Target Federal Funds Rate at Year-End



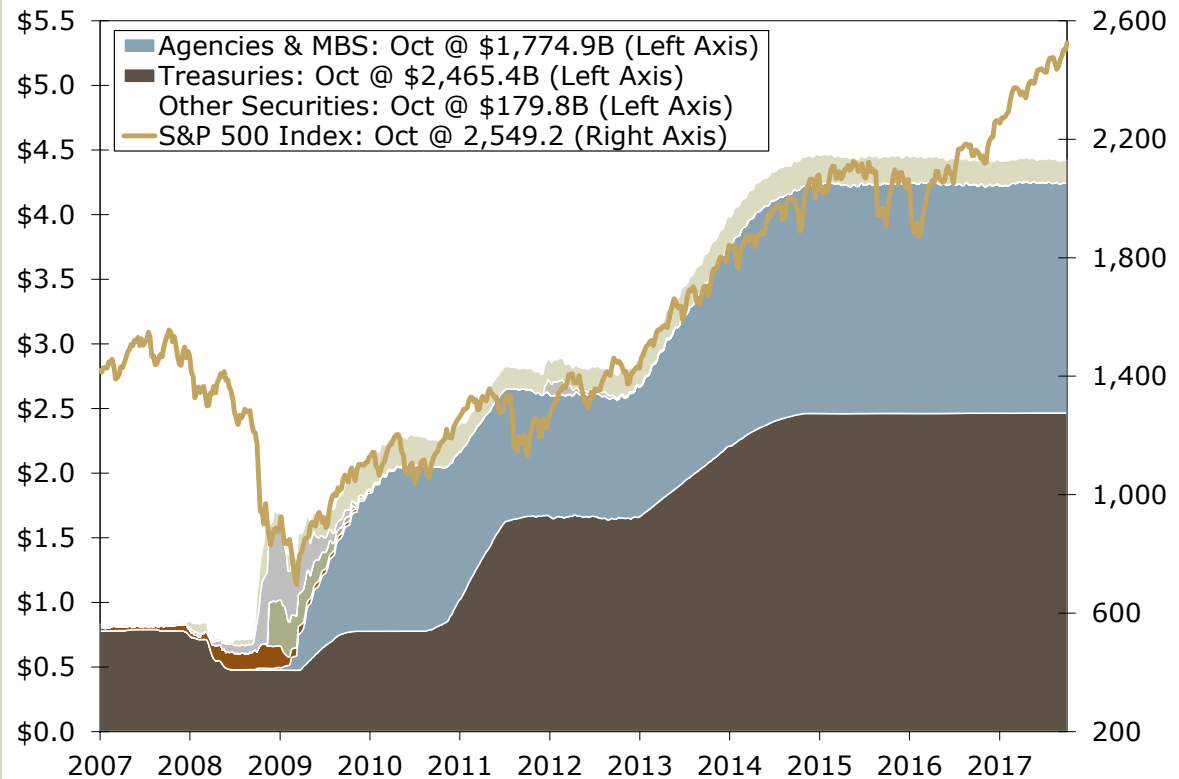
Source: Federal Reserve Board, Bloomberg LP and Wells Fargo Securities

Unwinding the balance sheet will have consequences.

While correlation is certainly not the same thing as causation, the stock market has largely run up in line with the expansion of the Fed's balance sheet.

Federal Reserve Balance Sheet vs. S&P 500 Index

Trillions, Index



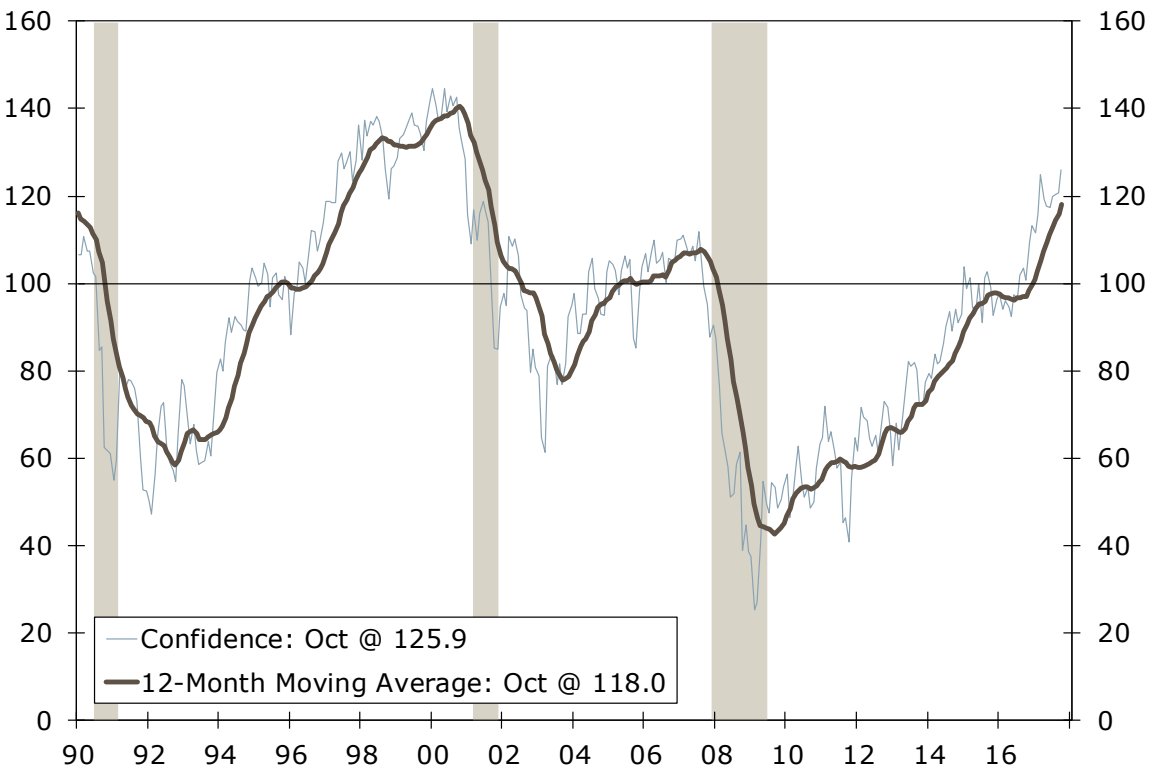
Source: Federal Reserve Board and Wells Fargo Securities

Consumer confidence is at post-recession highs on a 12-month moving average basis.

The recent acceleration in consumer confidence has largely been driven by a growing share of consumers expressing more optimism about employment and income prospects

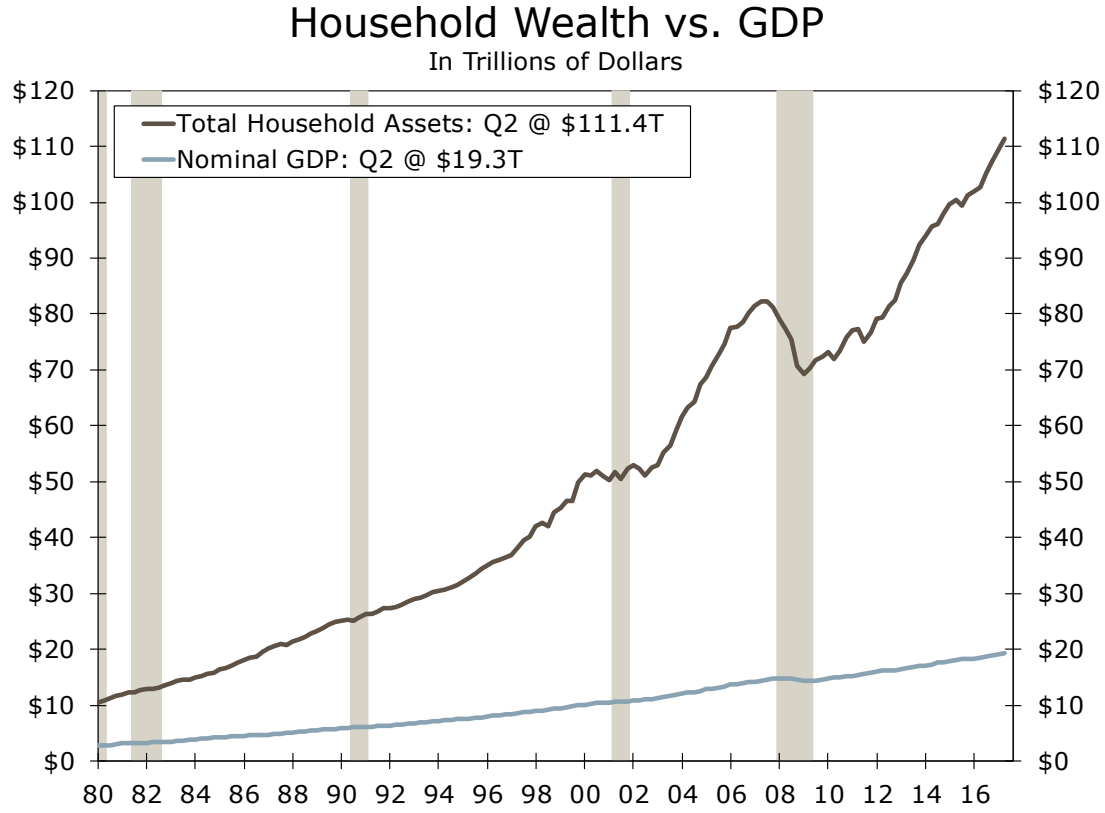
Consumer Confidence Index

Conference Board



Source: Conference Board and Wells Fargo Securities

Household wealth is at an all time high. Higher income households have benefitted the most from the extraordinary gains in wealth, which is reflected in consumption.

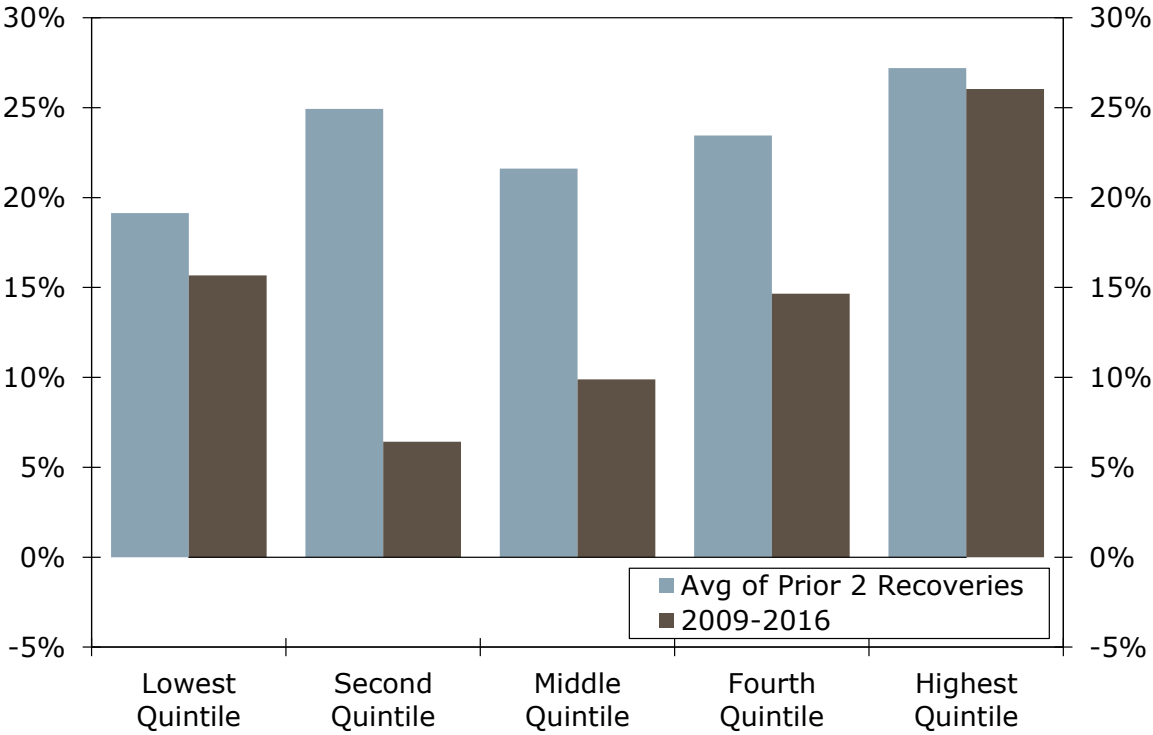


Source: Federal Reserve Bank of New York and Wells Fargo Securities

Income growth has been slower for all income cohorts during this expansion. Gains have been strongest at the upper and lower ends, reflecting rising wealth, an aging population and expanded public assistance programs during the Great Recession.

Income Growth During Economic Recoveries

Percent Change 7 Years After Recession End, Before-Tax Income

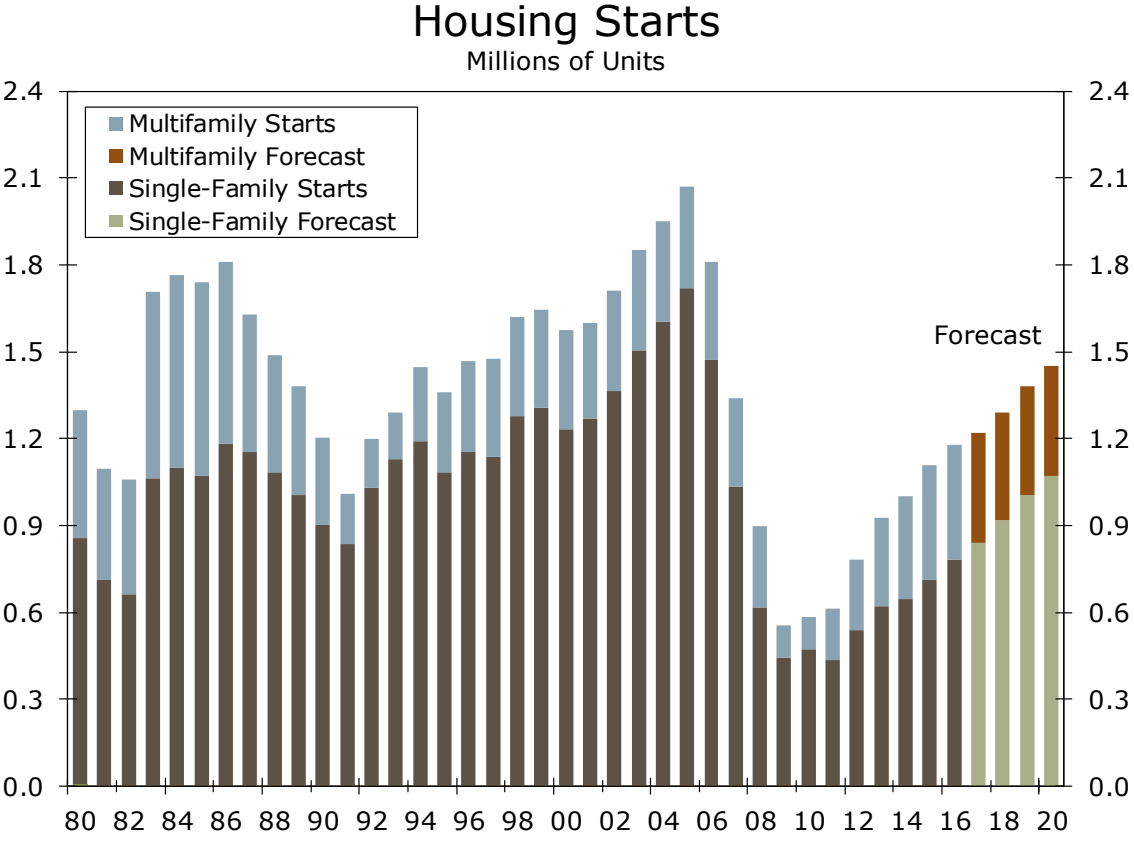


Source: U.S. Department of Labor and Wells Fargo Securities

Single-Family Starts Are Gaining Momentum, as Apartments Begin to Moderate

After a very slow start, we see single-family homebuilding steadily gaining momentum over the next few years.

Apartment construction is topping out but should remain near recent levels, as activity shifts to lower areas passed over during the recent boom and lower cost suburban areas.

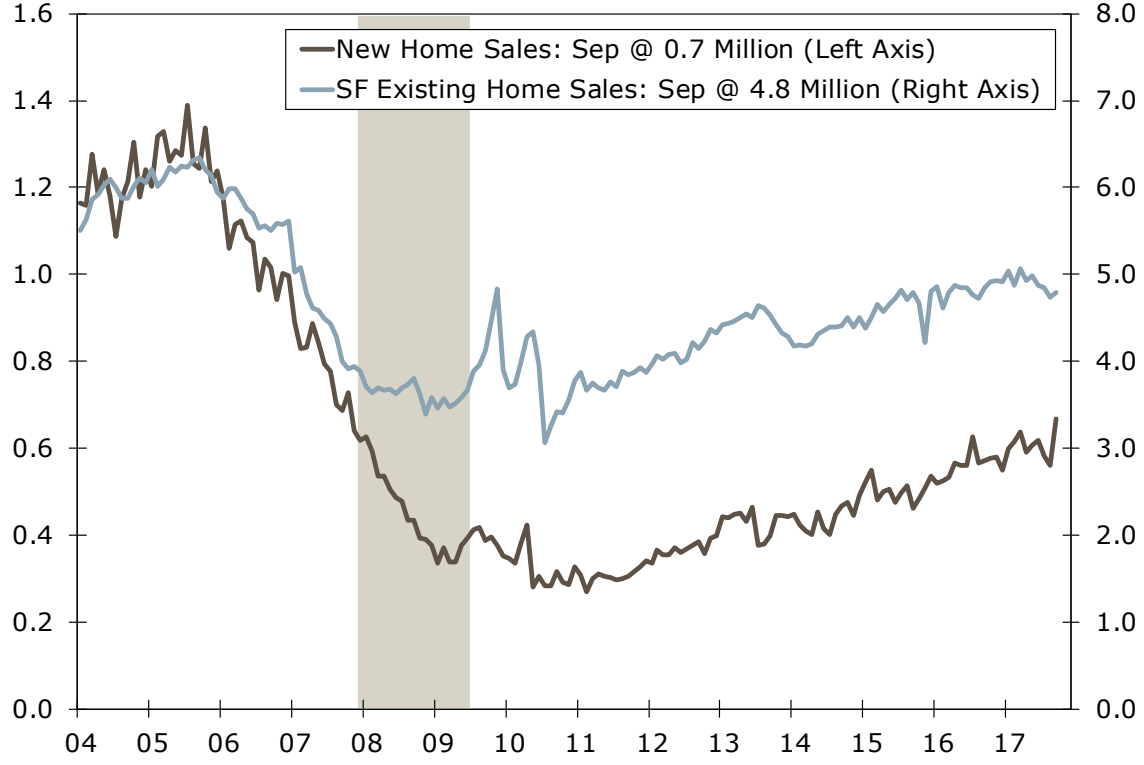


Source: U.S. Department of Commerce and Wells Fargo Securities

Supply constraints and impact of hurricanes held back August sales a bit, and will continue to do so through the rest of the year.

Existing & New Single-Family Home Sales

Both Series In Millions of Units, Seasonally Adjusted Annual Rate

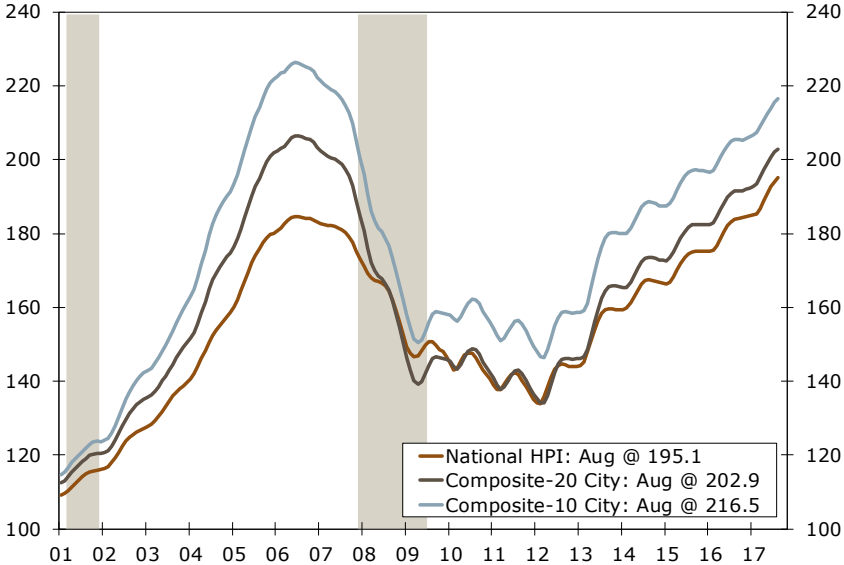


Source: National Association of Realtors, U.S. Department of Commerce and Wells Fargo Securities

National home prices have just recently made full recovery following the crash, primarily led by huge gains in Western, tech centric markets.

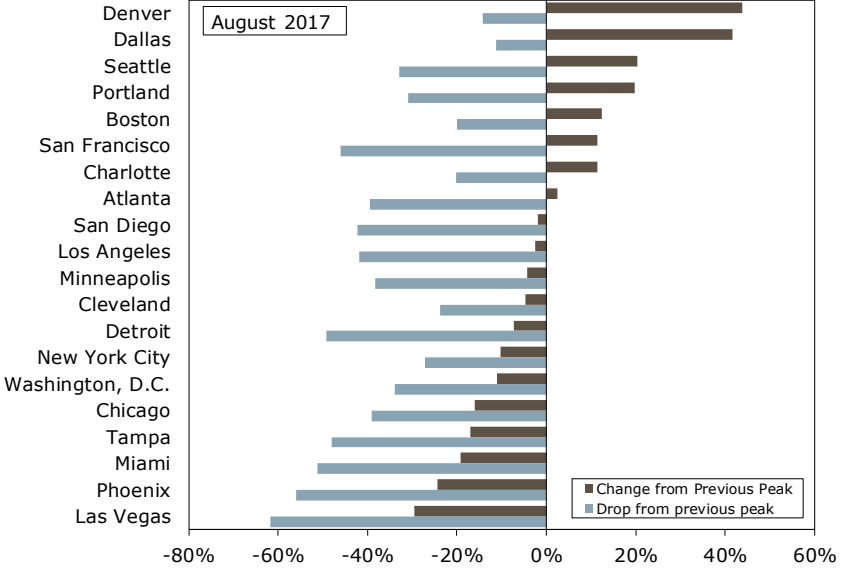
Home Prices

S&P CoreLogic CS Home Price Index
Index, January 2000=100



Regional

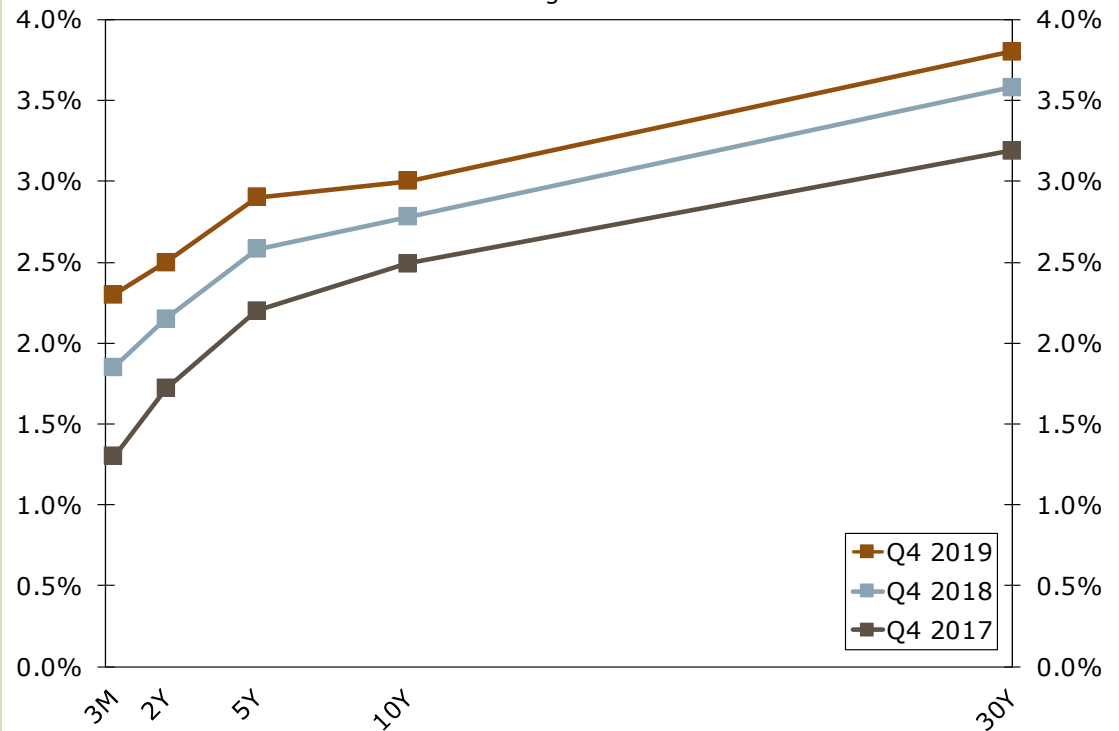
S&P CoreLogic Case-Shiller Home Prices
Percent Change from Previous Peak, NSA



Source: S&P Case-Shiller, CoreLogic and Wells Fargo Securities

We project a flattening yield curve as we move towards 2019, with the expectation of the FOMC continuing to raise short-term rates as capital flows keep down the long end.

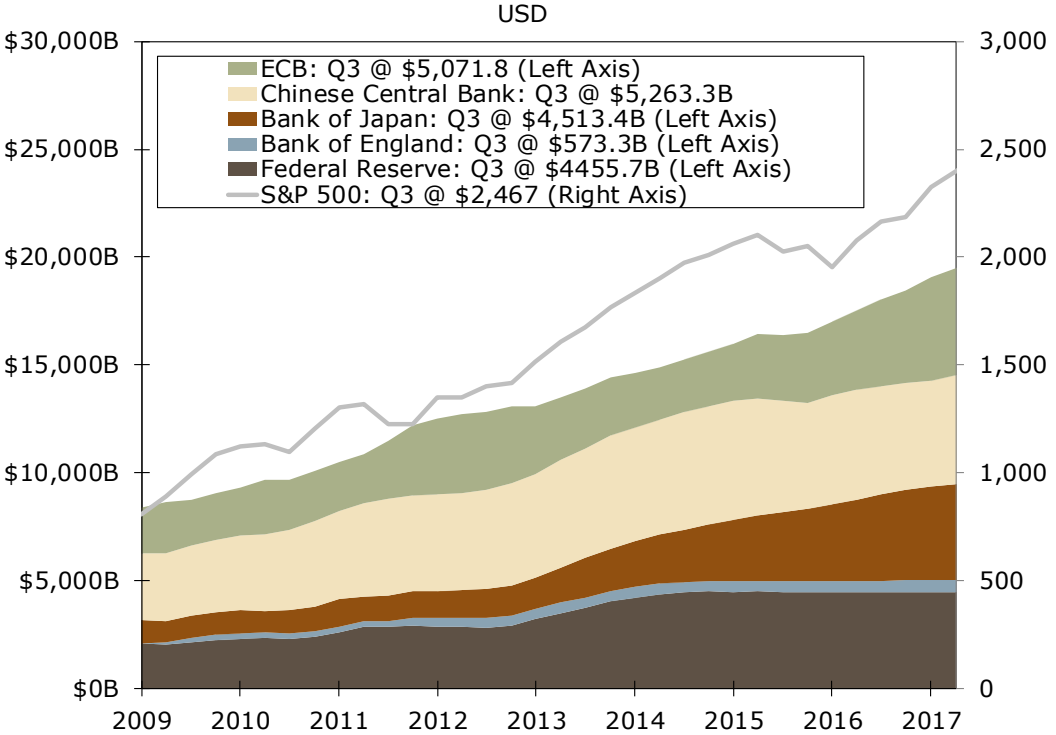
Wells Fargo Rates Forecast Through 2019



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

As the global economy expands at a healthy pace, central banks around the world have begun to shrink their balance sheets.

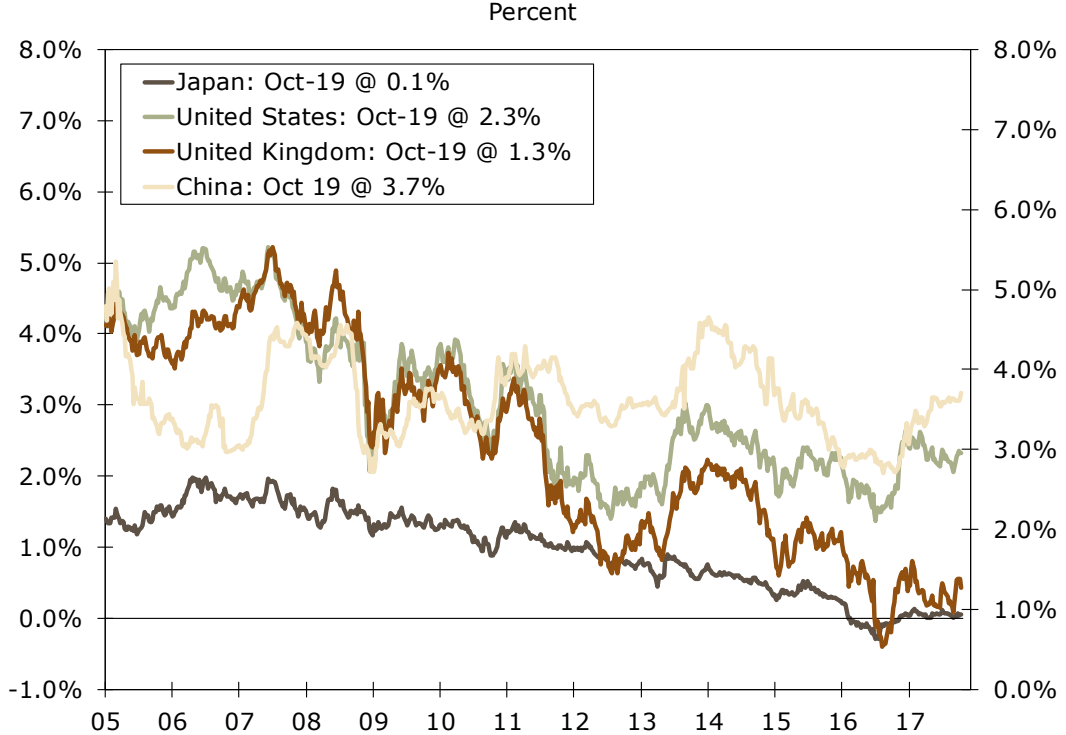
Central Bank Asset Holdings vs. S&P 500



Source: Bloomberg LP and Wells Fargo Securities

Global yields remain low from a historical perspective. With all 45 of the economies that the OECD regularly tracks expected to grow over the next year, there is some risk that interest rates will surprise us to the upside.

10-Year Government Bond Yields

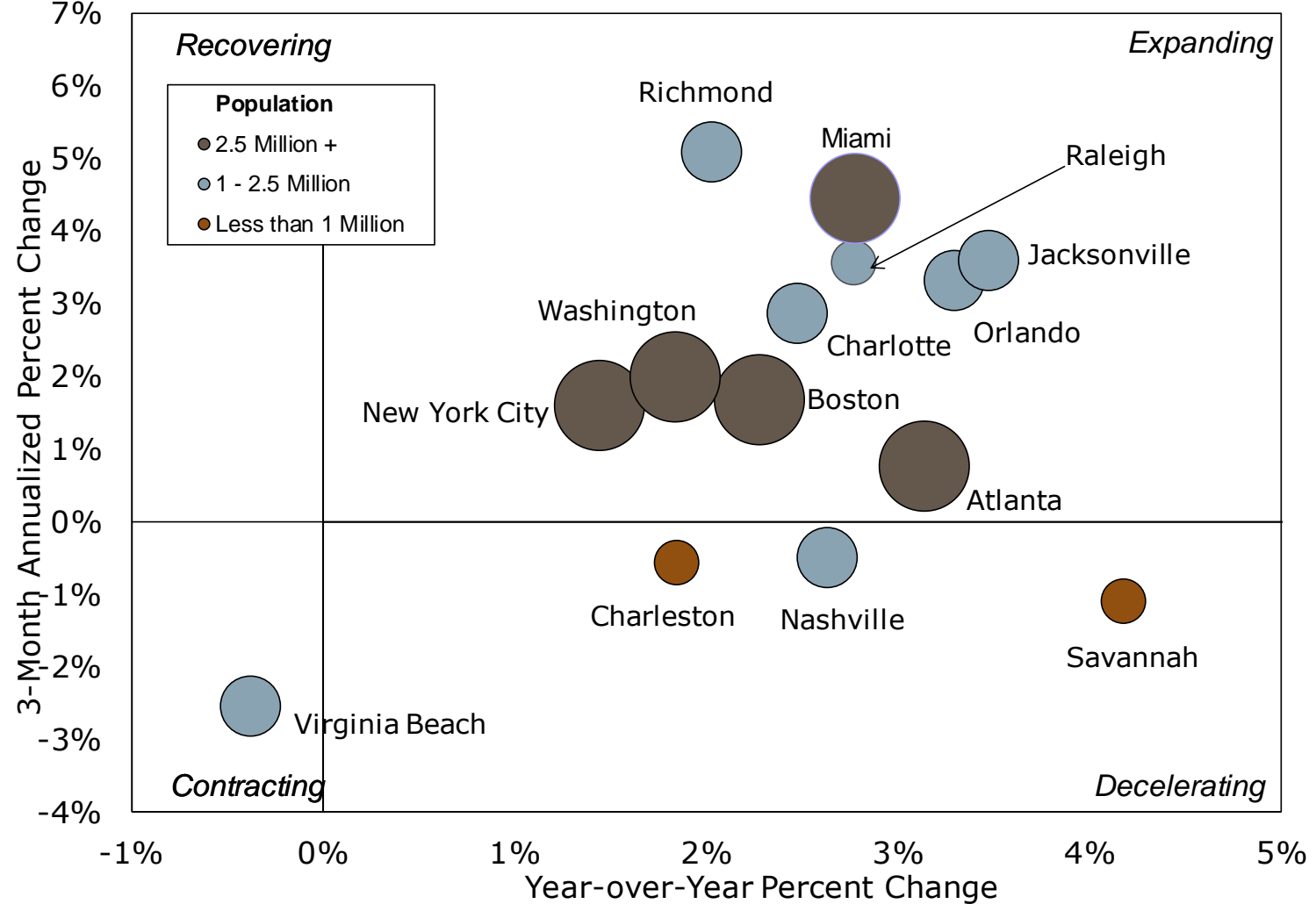


Source: Bloomberg LP and Wells Fargo Securities

Regional Commentary

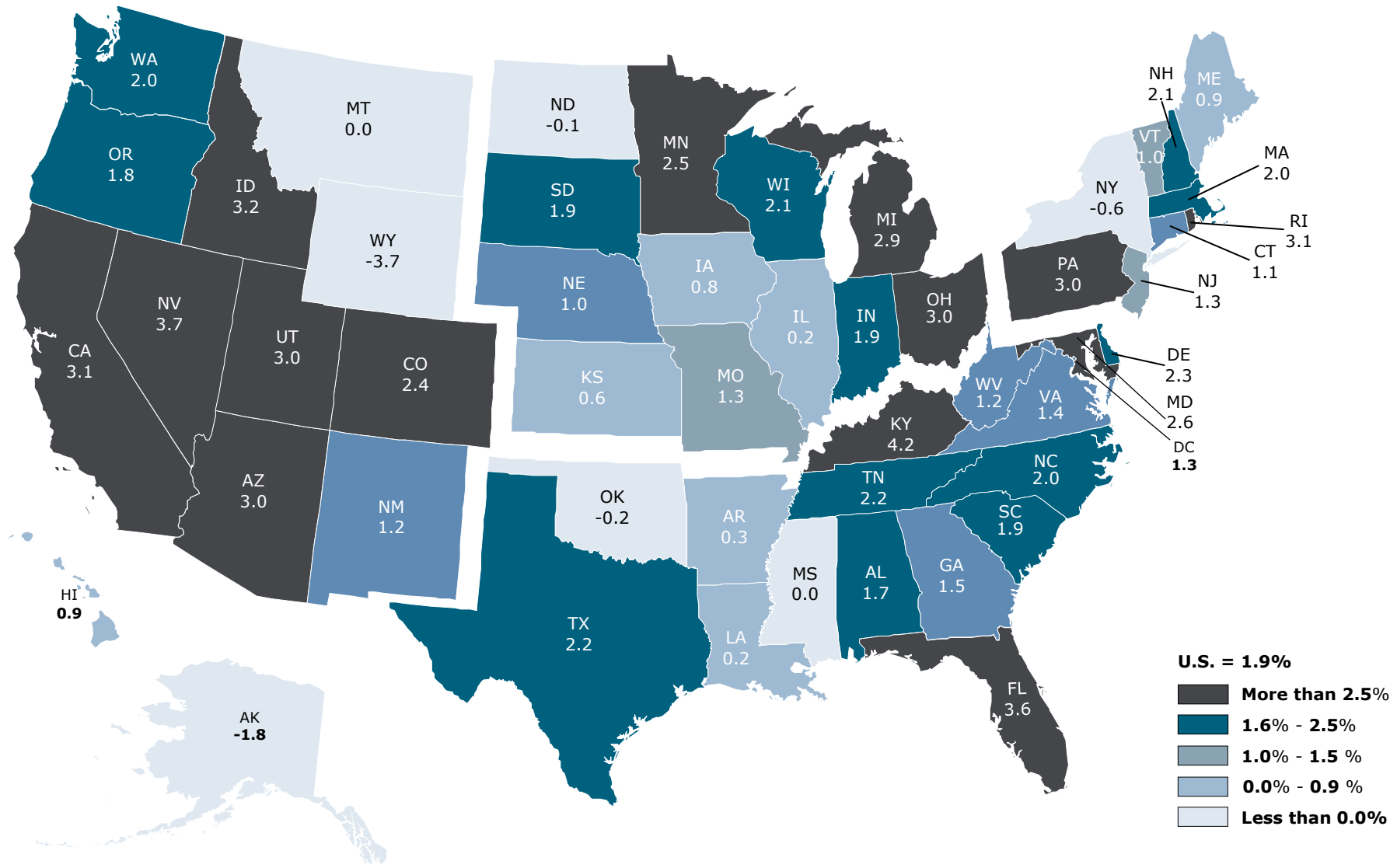
Eastern Seaboard Employment Growth

3-Month Moving Averages, September 2017



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

Year-over-Year Percent Change in Real GDP by State (1Q 2017)

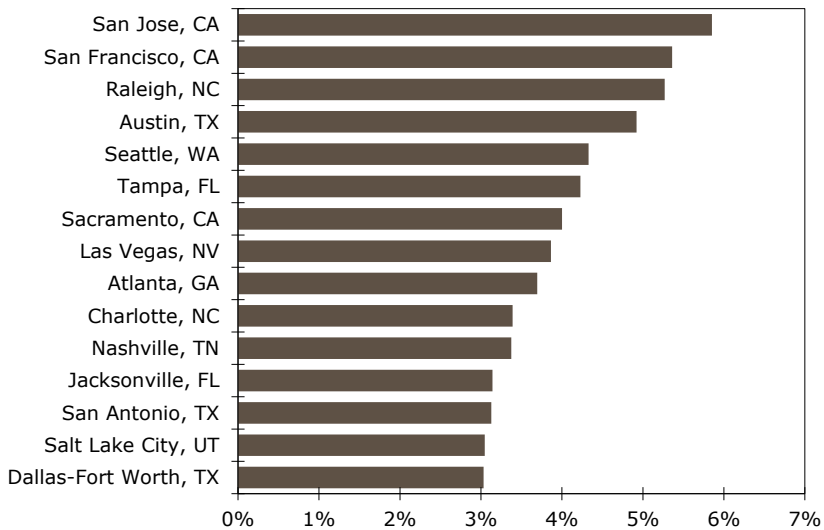


Economic growth has been concentrated in tech-driven metro areas.

Fastest Growing

Metro Area GDP Growth: Top 15

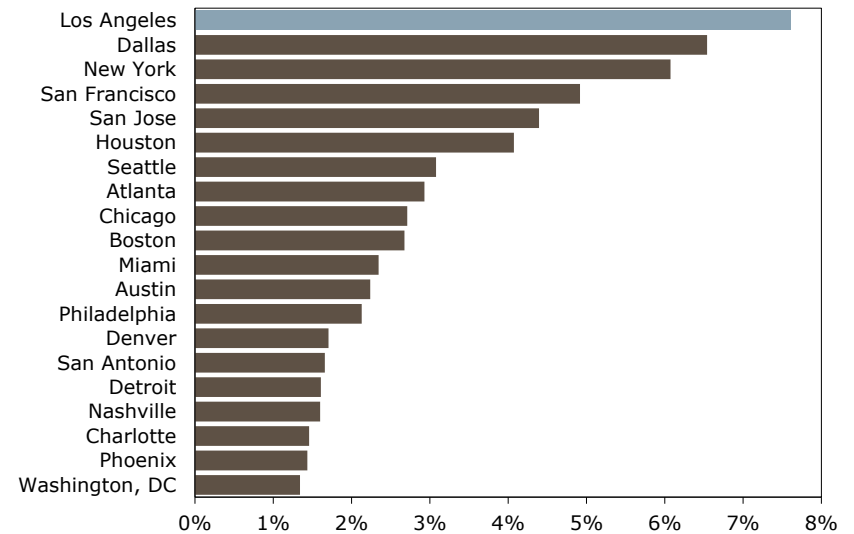
Year-over-Year Percent Change in Real GDP, 2016



Largest Contributions

Contribution to U.S. Real GDP Growth by MSA

Top 20 Metro Areas, Contribution to Growth From 2010 to 2016

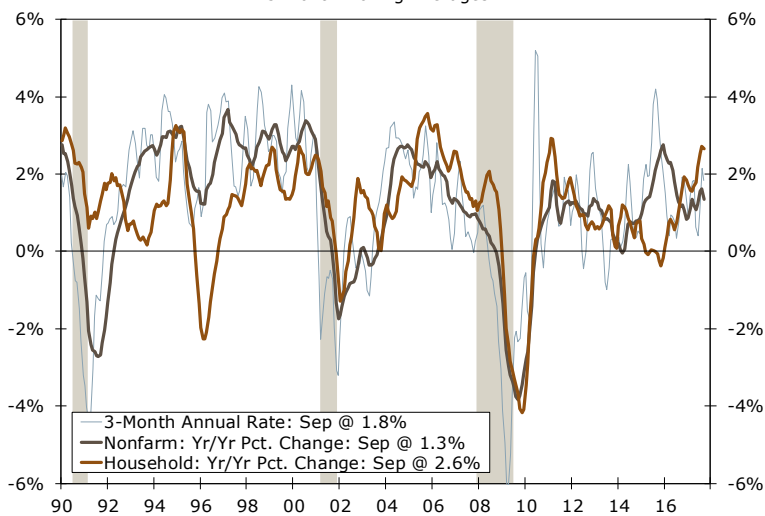


Source: U.S. Department of Commerce and Wells Fargo Securities

Virginia has seen job growth improve in 2017 after ending 2016 on a lackluster note. Professional & business services as well as education & health services have experienced the strongest gains by industry. The large drop in information jobs is due to fewer federal contracts.

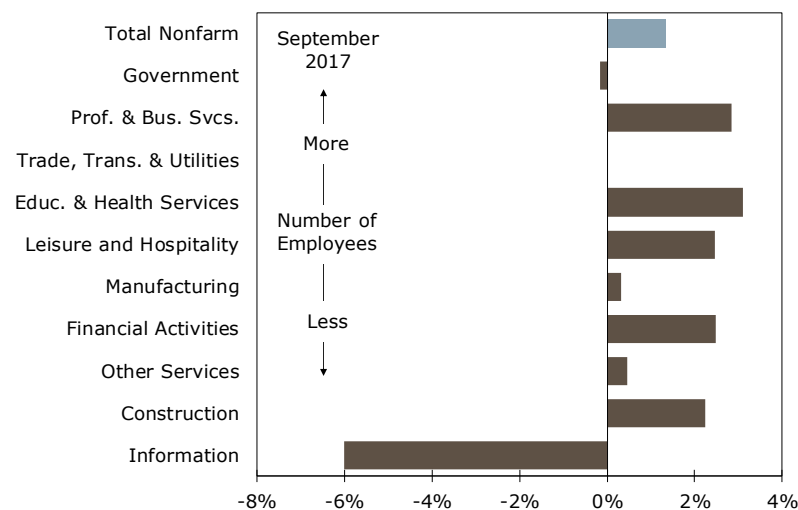
Nonfarm Employment

Virginia Nonfarm Employment
3-Month Moving Averages



Employment by Industry

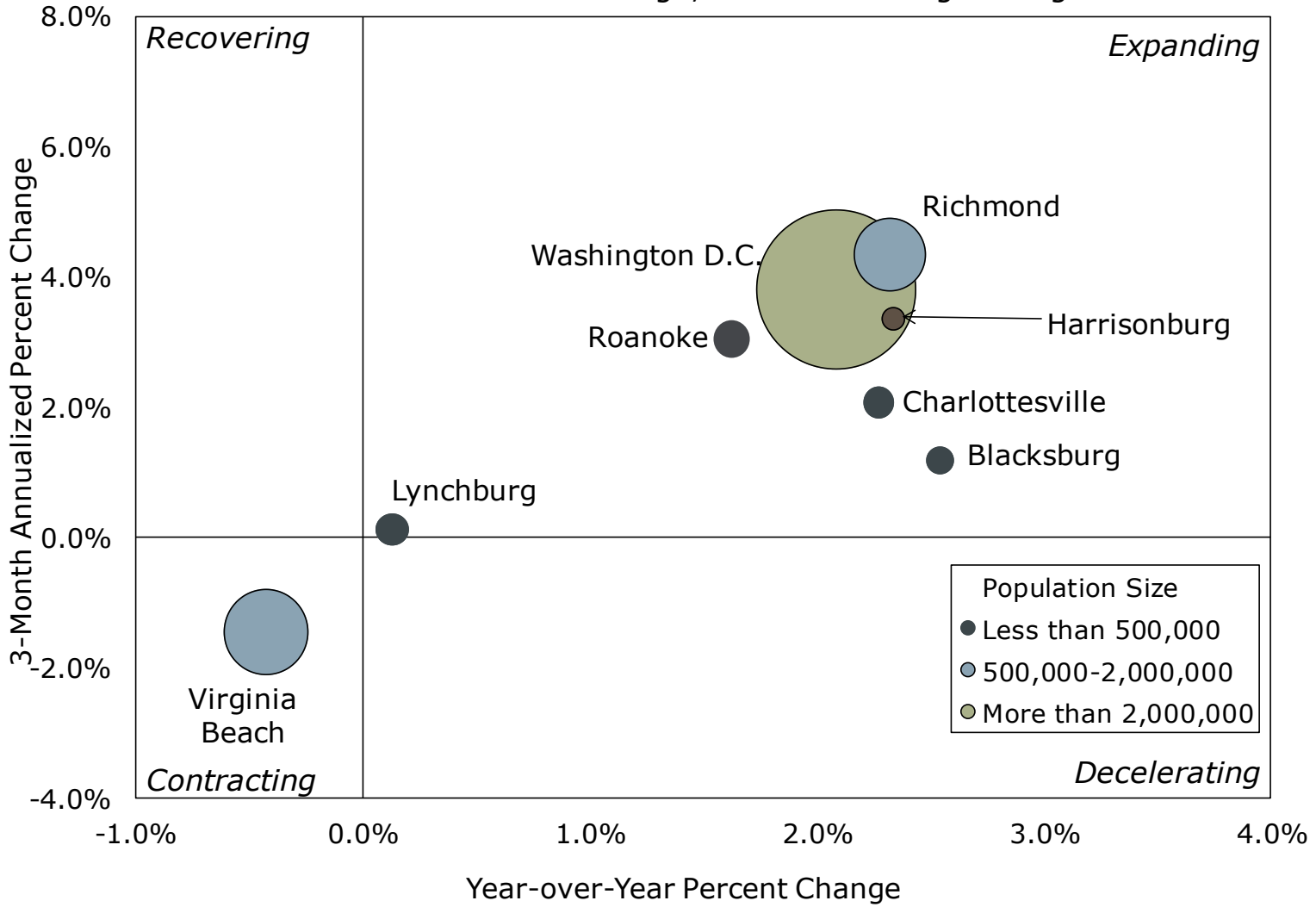
Virginia Employment Growth By Industry
Year-over-Year Percent Change, 3-MMA



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

Virginia Employment Growth: September 2017

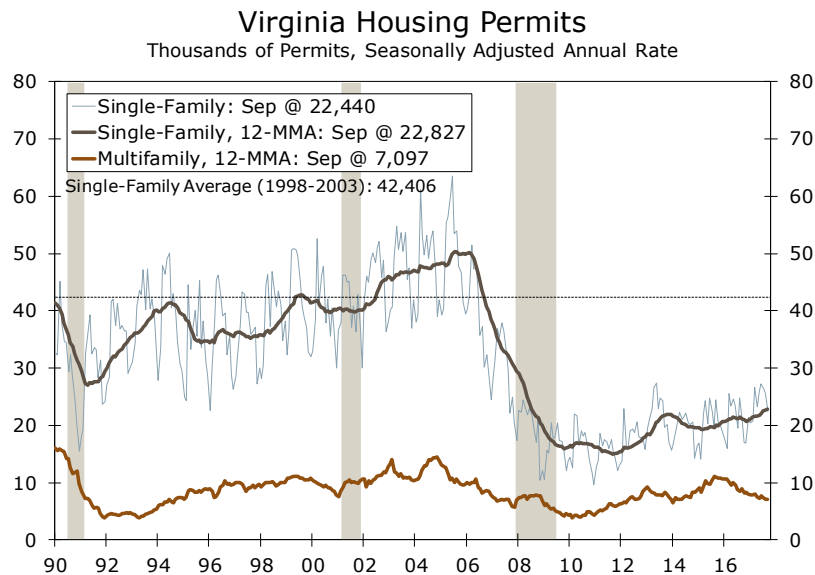
Year-over-Year Percent Change, 3-Month Moving Average



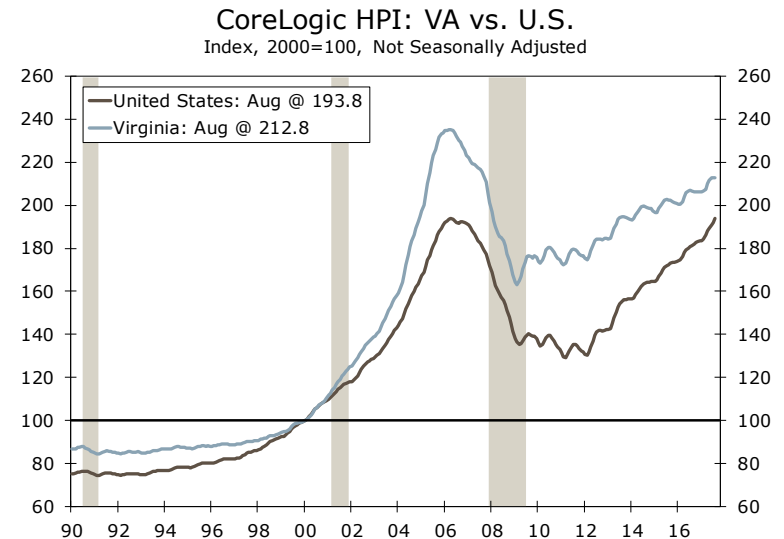
Source: U.S. Department of Labor and Wells Fargo Securities

Home prices in Virginia remain above the national average, largely propped up by the expensive Northern Virginia/Washington D.C. area. Single-family permits have been slow to recover but appear to be reviving. Apartment construction has pulled back.

Housing Permits

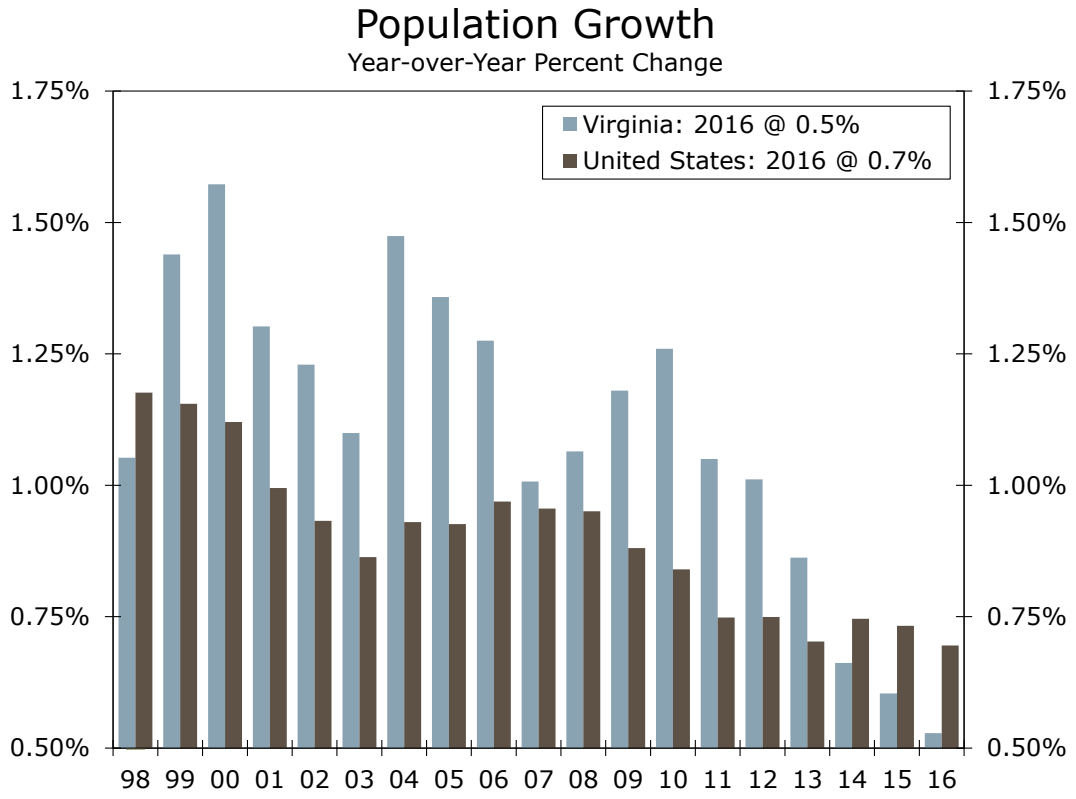


Home Prices



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

Though historically a state that has grown faster than the U.S., Virginia has seen population growth slow relative to the nation and has now posted three years of slower than average population growth.



Source: Census Bureau and Wells Fargo Securities

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	2.1	2.5	2.3	2.5	2.6	2.6	2.4	2.6	2.5	2.7	2.9	1.5	2.1	2.4	2.5
Personal Consumption	1.9	3.3	2.0	2.5	2.5	2.6	2.6	2.6	2.3	2.5	2.4	2.4	3.6	2.7	2.6	2.5	2.5
Business Fixed Investment	7.1	6.7	5.2	6.2	4.8	4.1	4.0	3.7	3.6	3.5	3.5	3.6	2.3	-0.6	4.7	4.9	3.7
Equipment	4.4	8.8	6.9	8.7	5.4	4.3	4.2	3.7	3.7	3.3	3.5	3.7	3.5	-3.4	4.1	5.9	3.7
Intellectual Property Products	5.8	3.7	4.5	5.0	5.2	4.8	4.7	4.5	4.6	4.6	4.6	4.6	3.8	6.3	4.1	4.8	4.6
Structures	14.8	7.0	3.0	2.5	3.0	2.4	2.4	2.2	2.0	1.9	1.9	1.9	-1.8	-4.1	6.7	2.9	2.1
Residential Construction	11.1	-7.3	-6.0	-2.0	5.0	8.0	7.5	7.0	5.0	4.5	4.5	4.0	10.2	5.5	0.7	2.4	5.6
Government Purchases	-0.6	-0.2	-0.8	0.4	0.2	0.8	0.8	0.8	0.7	0.7	0.7	0.7	1.4	0.8	-0.2	0.3	0.7
Net Exports ²	0.2	0.2	0.1	-0.3	-0.2	-0.2	-0.1	0.0	0.1	0.1	0.2	0.2	-0.7	-0.2	-0.2	-0.2	0.0
Inventories ²	-1.5	0.1	0.8	0.2	0.0	0.0	0.0	-0.1	0.0	0.0	-0.1	0.0	0.2	-0.4	-0.1	0.1	0.0
Nonfarm Payroll Change ³	166	187	91	175	170	160	160	155	150	150	145	145	226	187	155	161	148
Unemployment Rate	4.7	4.4	4.3	4.3	4.2	4.1	4.0	4.0	3.9	3.8	3.9	3.8	5.3	4.9	4.4	4.1	3.9
Consumer Price Index ⁴	2.6	1.9	2.0	1.9	1.6	2.2	2.3	1.9	2.0	2.1	2.2	2.2	0.1	1.3	2.1	2.0	2.1
Quarter-End Interest Rates ⁵																	
Federal Funds Target Rate	1.00	1.25	1.25	1.50	1.50	1.75	1.75	2.00	2.00	2.25	2.25	2.50	0.27	0.52	1.25	1.75	2.25
Conventional Mortgage Rate	4.20	3.90	3.81	3.89	3.95	4.02	4.05	4.10	4.12	4.16	4.17	4.24	3.85	3.65	3.95	4.03	4.17
2 Year Note	1.27	1.38	1.47	1.72	1.83	1.93	2.00	2.15	2.23	2.33	2.38	2.50	0.69	0.83	1.46	1.98	2.36
10 Year Note	2.40	2.31	2.33	2.49	2.57	2.66	2.71	2.78	2.82	2.88	2.91	3.00	2.14	1.84	2.38	2.68	2.90

Forecast as of: October 11, 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: IHS Global Insight and Wells Fargo Securities

Appendix

A Sampling of Our Recent Special, Regional & Industry Commentary

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Recent Special Commentary		
Date	Title	Authors
U.S. Macro		
October-24	525,600 Metrics: How Do You Measure a Year in Income Growth	House, Pugliese & Vaisey
October-23	Capitol Hill Update: Estimating the Debt Ceiling "X Date"	Brown, Pugliese & Seery
October-17	Should We Worry About Slow Growth in Capacity Utilization?	Silvia, Quinlan & Kinnaman
October-11	Q4 Treasury Issuance Outlook	Brown & Pugliese
October-03	Labor Force Participation for Men and Women Diverge Again	House & Vaisey
U.S. Regional		
October-20	Irma Hit Florida Nonfarm Employment in September	Vitner, Feik & Carmichael
October-20	California Employment Conditions: September 2017	Vitner, Feik & Carmichael
October-20	Texas Payrolls 'Only' Declined by 7,300 Jobs in September	Vitner, Feik & Carmichael
October-20	Employment Rises Modestly in North Carolina	Vitner, Feik & Carmichael
October-19	New Jersey National Payroll Slip in September	Vitner, Feik & Carmichael
Global Economy		
October-26	Argentina Moves Forward	Alemán
October-25	GDP Growth in the United Kingdom Moves Sideways in Q3	Bryson & Pugliese
October-20	Which Way Will the Global Economy Go in 2018?	Bryson
October-19	Economic Growth in China Remains Largely Unchanged in Q3	Bryson & Pugliese
October-13	Singapore GDP Accelerates in Q3	Bryson & Pugliese
Interest Rates/Credit Market		
October-25	Is Consumer Credit a Concern with Rates on the Rise?	Silvia & Pershing
October-11	Interest Rates, Treasury Finance and the Dollar Crossroads	Silvia & Pugliese
October-04	Capital Flows, Interest Rates and Asset Prices	Silvia & Pugliese
October-03	Is There an "Invisible Hand" Behind the 2 Percent Inflation Target Rate?	Silvia, Iqbal & Pershing
September-20	Profits: Overlooked Contribution to Growth and Lower Rates	Silvia
Real Estate		
October-10	Housing Chartbook: October 2017	Vitner & Carmichael
September-12	A Primer on the NAHB Index	Vitner & Carmichael
August-31	Growing the Gridiron: The Stadium Boom	Khan, Carmichael & Vaisey
August-28	Hotel Revenues: How Much Room to Run?	Khan & Vaisey
August-14	CRE Deal Volume Shows Late-Cycle Behavior: Q2 Chartbook	Khan, Carmichael & Vaisey

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