

WELLS
FARGO

SECURITIES

Economic Outlook

Mark Vitner, Managing Director & Senior Economist

January 23, 2020

Together we'll go far



Economic Outlook

- **Real GDP growth has decelerated from a 3% pace last year to around 2%, due to weakening global growth and its impact on exports, capital spending and inventories. We now expect 2.1% growth in 2020 and 2.3% in 2021.**

Policy Environment

- **Tax reform continues to bolster take-home pay but trade uncertainty has slowed capital spending. Capex should slowly grind higher. Fiscal policy remains expansionary. After cutting rates three times, the Fed is likely on pause.**

Trade Policy

- **Phase 1 of the trade deal with China proved to be more far-reaching than expected. Trade frictions, however, will remain in place for some time. The USMCA is another near-term positive that reduces uncertainty.**

Households

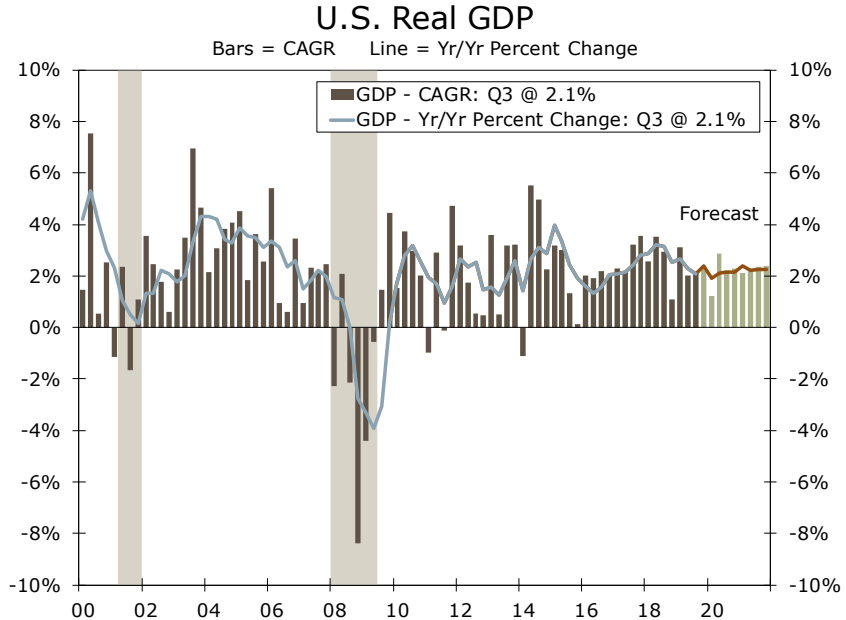
- **Consumers remain optimistic about the economy and their finances. Wages & salaries are rising fastest at the lower end of the pay spectrum, which has boosted spending at discount stores and restaurant chains.**

Recession Risk

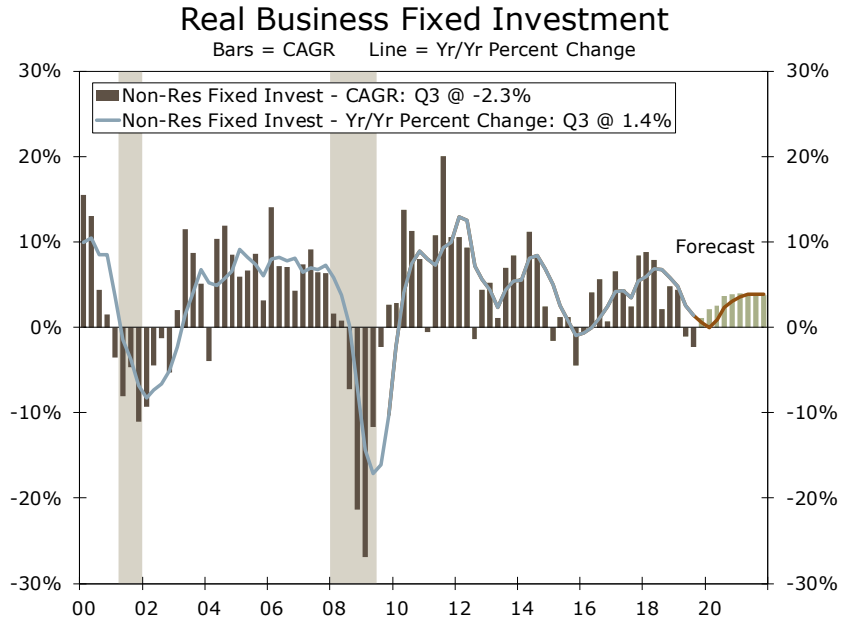
- **Recession concerns have abated significantly as the yield curve has normalized and equity markets have reached new all-time highs. There are few obvious imbalances present in the economy today and growth is broadening.**

Our forecast calls for real GDP growth to moderate to around a 2% pace in 2020. Inventory swings tied to Boeing’s 737 MAX shipments will influence the quarterly data, but consumer spending and homebuilding continue to prove resilient and may surprise to the upside. Growth should pick up a few tenths by 2021.

Real GDP



Business Investment

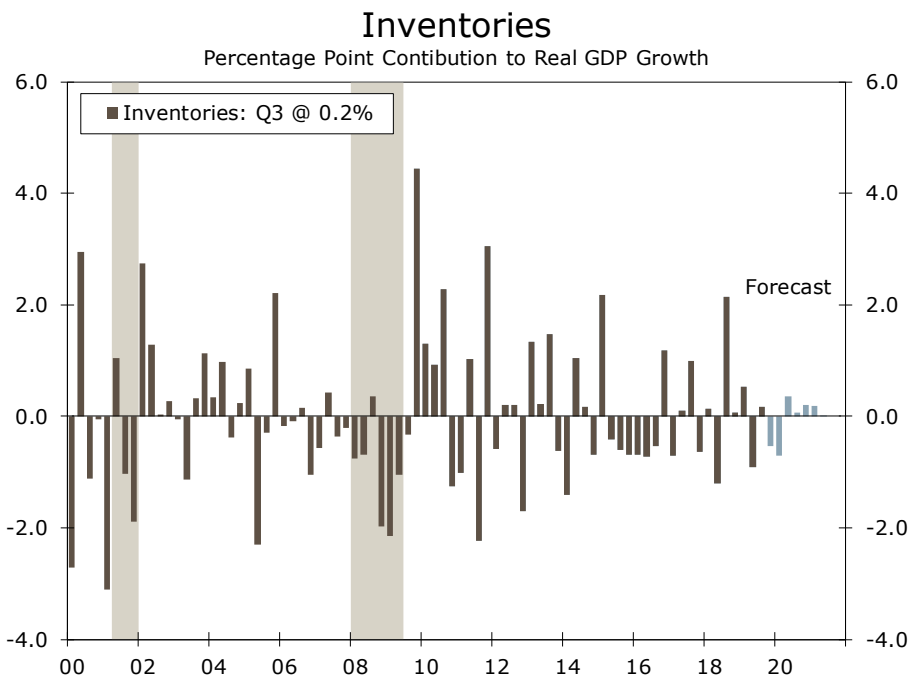
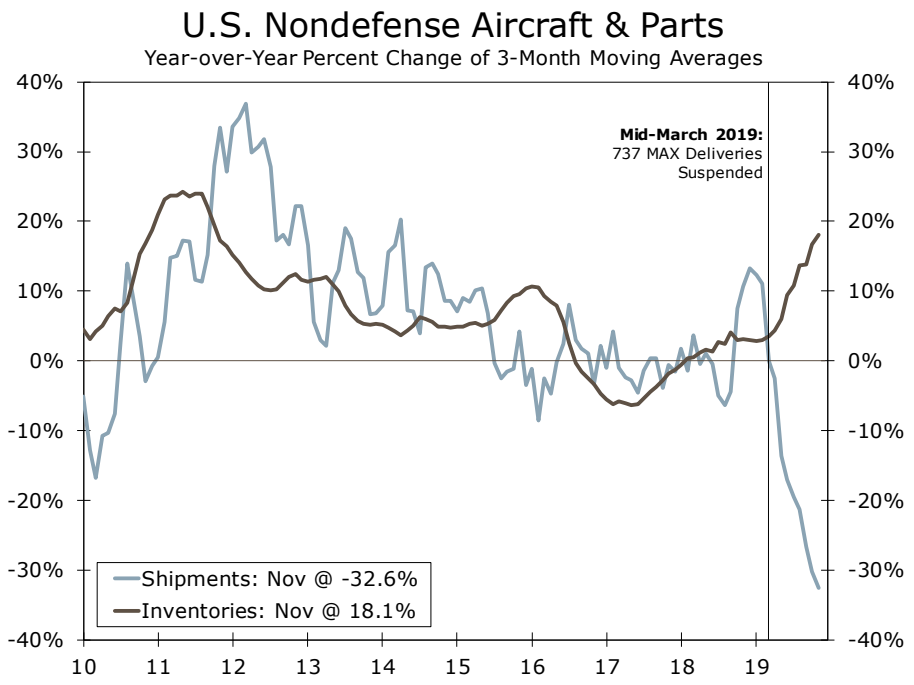


Source: U.S. Department of Commerce and Wells Fargo Securities

The stoppage of 737 MAX shipments has boosted inventories and weighed on equipment spending. With production now stopped, the MAX issues are set to subtract about 0.5 points from GDP growth.

Swapping Equipment Spending for Inventories...

...but Inventory Growth Is Now Set to Slow

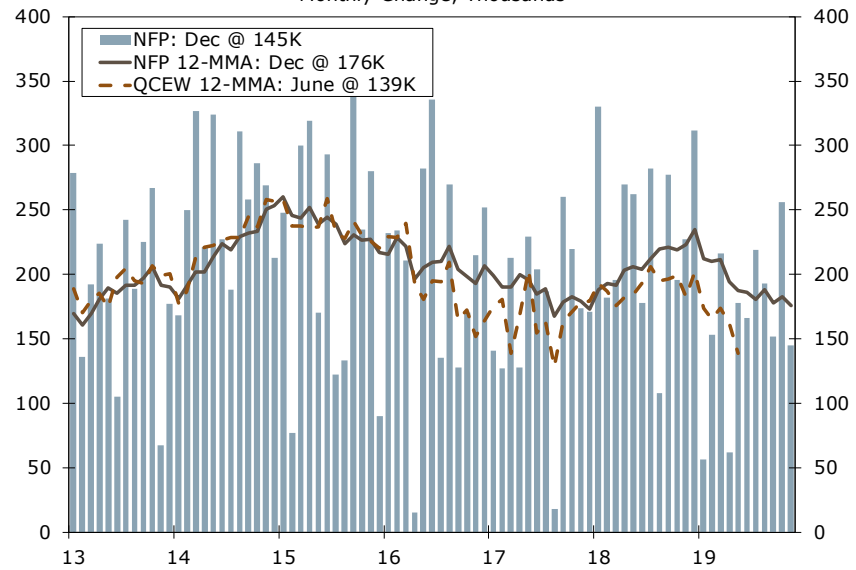


Source: U.S. Department of Commerce and Wells Fargo Securities

Hiring has reportedly picked up but will be revised lower in February. The quality of jobs being added is relatively good. Wage gains remain modest relative to prior periods when the labor market was this tight, but recent evidence suggests wage gains are accelerating for those at the lower end of the income spectrum and among younger workers, giving spending a boost.

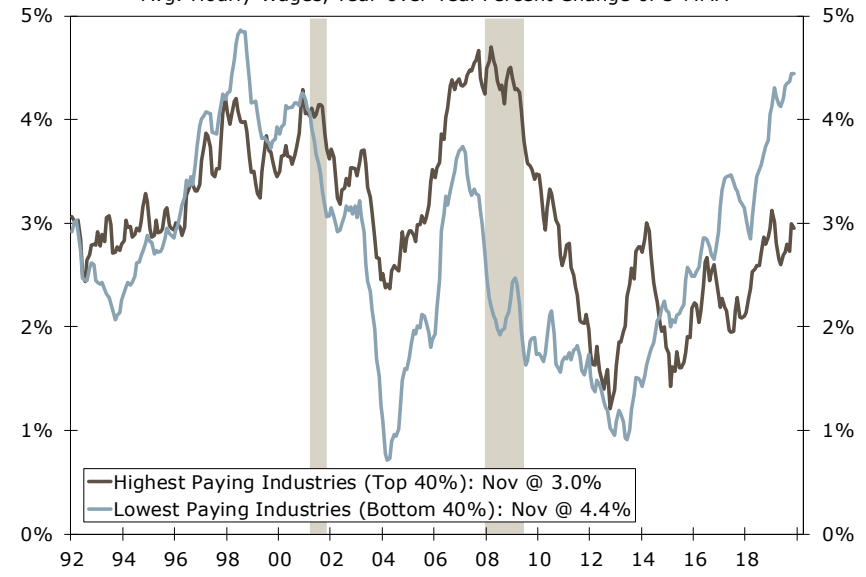
Nonfarm Employment

U.S. Employment Change
Monthly Change, Thousands



Wages

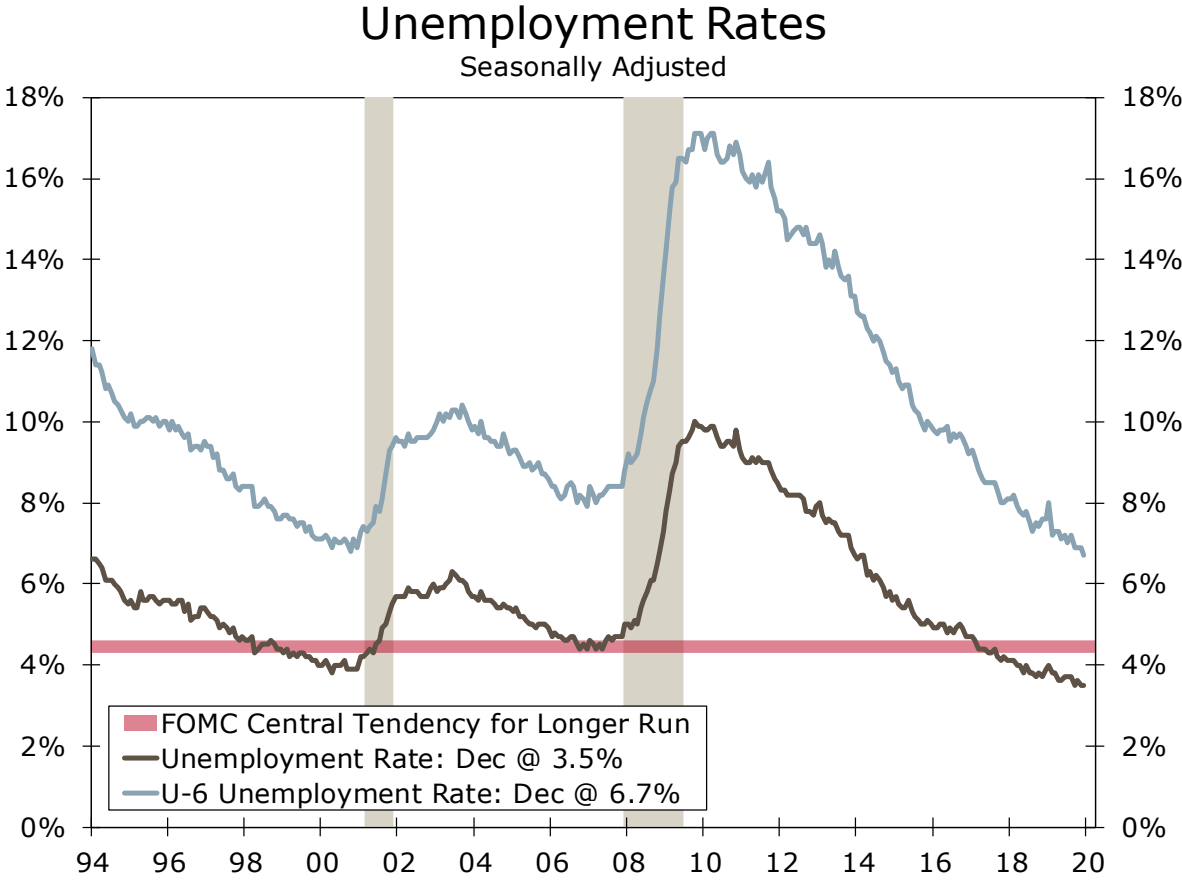
Wage Growth in High & Low Pay Industries
Avg. Hourly Wages, Year-over-Year Percent Change of 3-MMA



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

The labor market has tightened substantially, with the unemployment rate at 3.5%.

Jay Powell continues to say that the lack of stronger wage growth indicates the Fed has not yet met its full employment mandate, which means it is in no hurry to raise short-term interest rates.



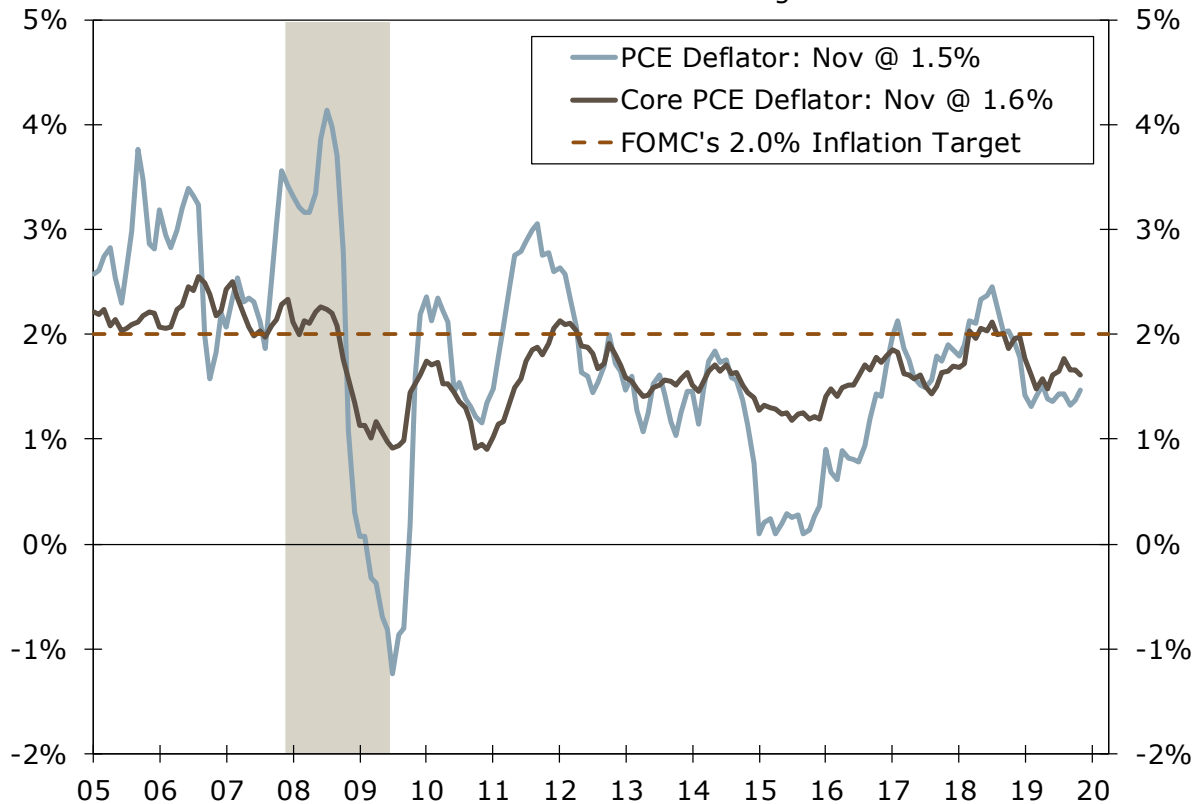
Source: U.S. Department of Labor and Wells Fargo Securities

After briefly rising above the Fed's 2% target, core inflation appears to have decelerated once again, amid weakening final demand. Inflation expectations have also fallen over the past few months.

We see the Fed as being opportunistic in this environment, hoping to spur a broader and more durable economic expansion.

PCE Deflator vs. Core PCE Deflator

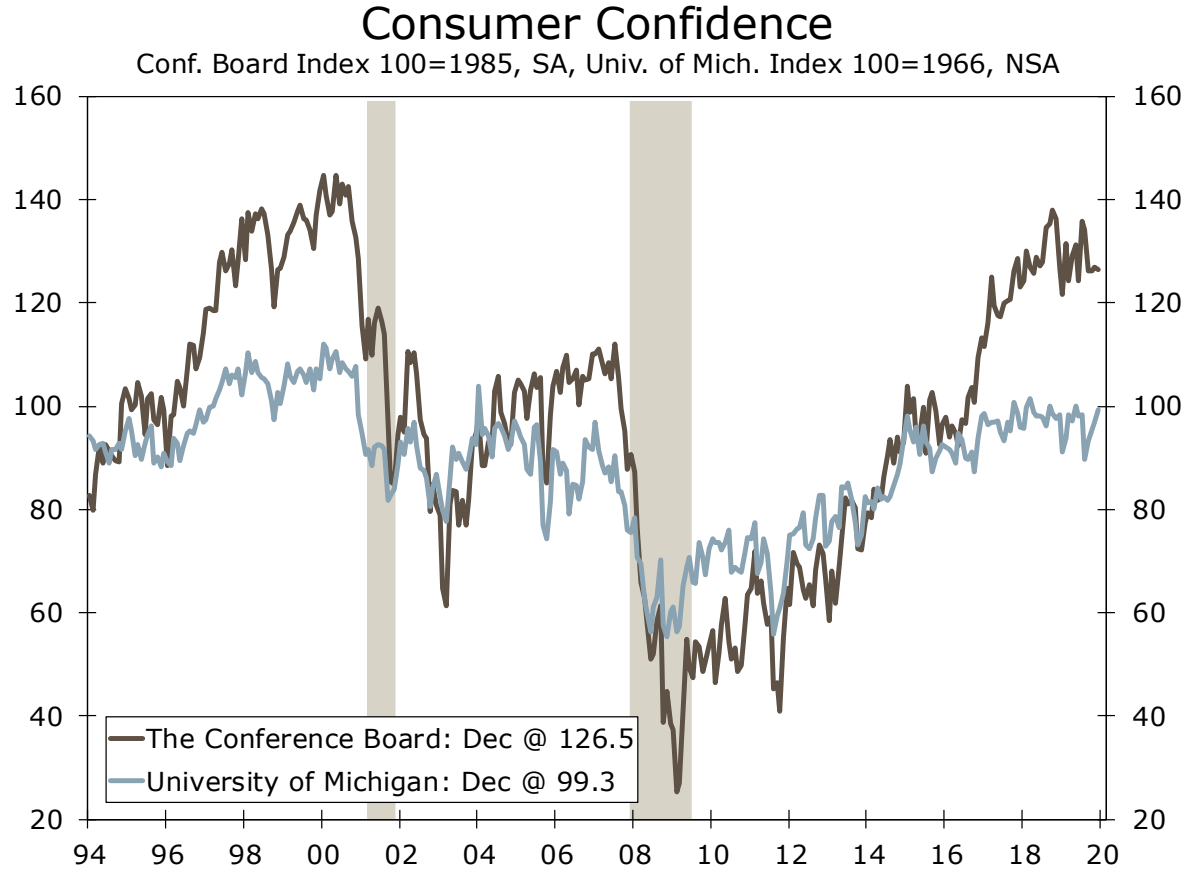
Year-over-Year Percent Change



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

The Conference Board's survey closely tracks labor market conditions, which are the strongest they have been in decades.

The Michigan survey is more closely tied to the stock market.

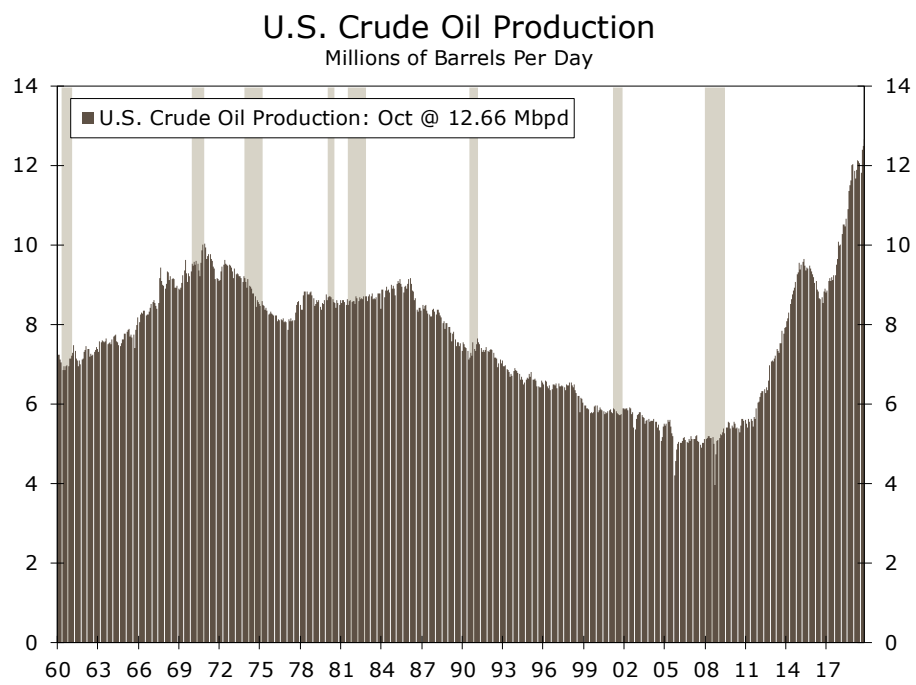
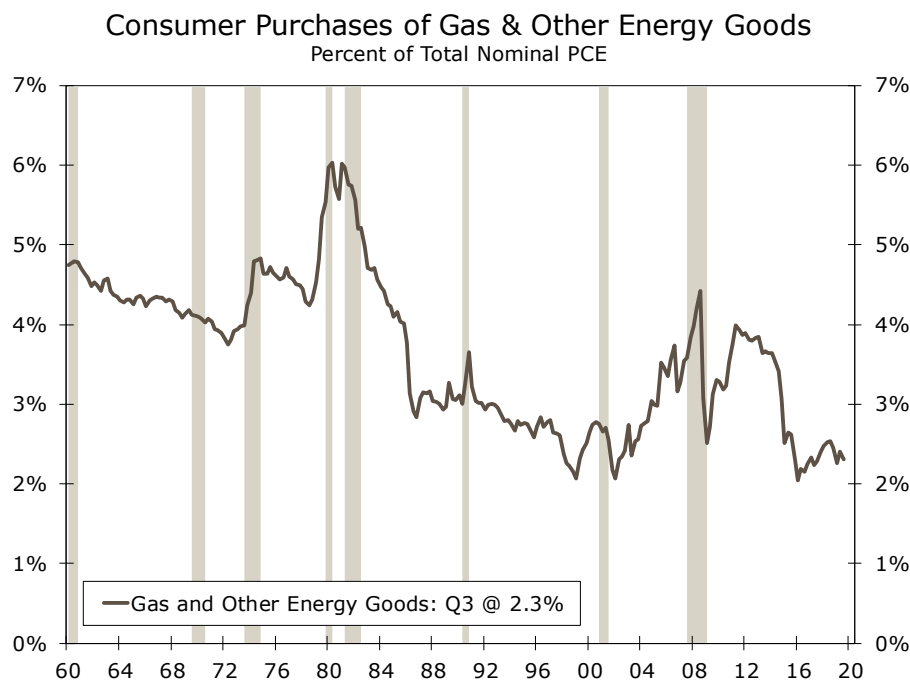


Source: The Conference Board, University of Michigan and Wells Fargo Securities

Consumers spend relatively less on gasoline than they did 40 years ago, and the United States is a major producer of crude oil.

Less Consumption...

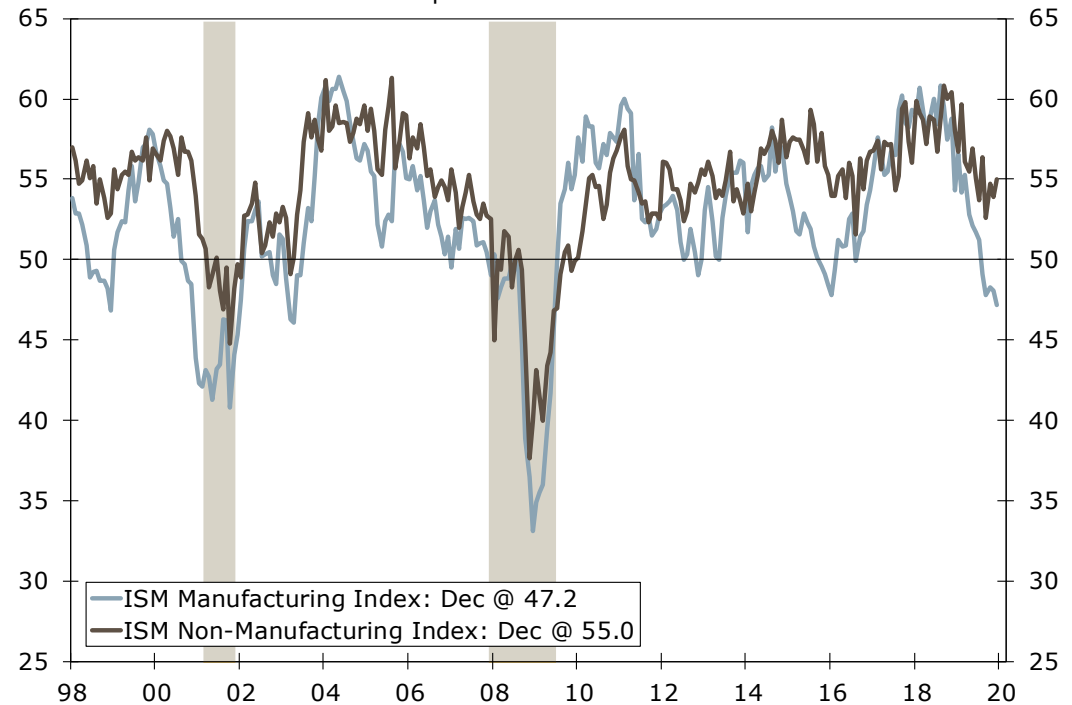
...Greater Production



Source: U.S. Department of Commerce, Energy Information Administration and Wells Fargo Securities

A rebound in the ISM is likely in store now that more firms believe they have too little inventory than believe they have too much. Orders are likely to surprise to the upside in coming months.

ISM Manufacturing & Non-Manufacturing Composite Diffusion Index

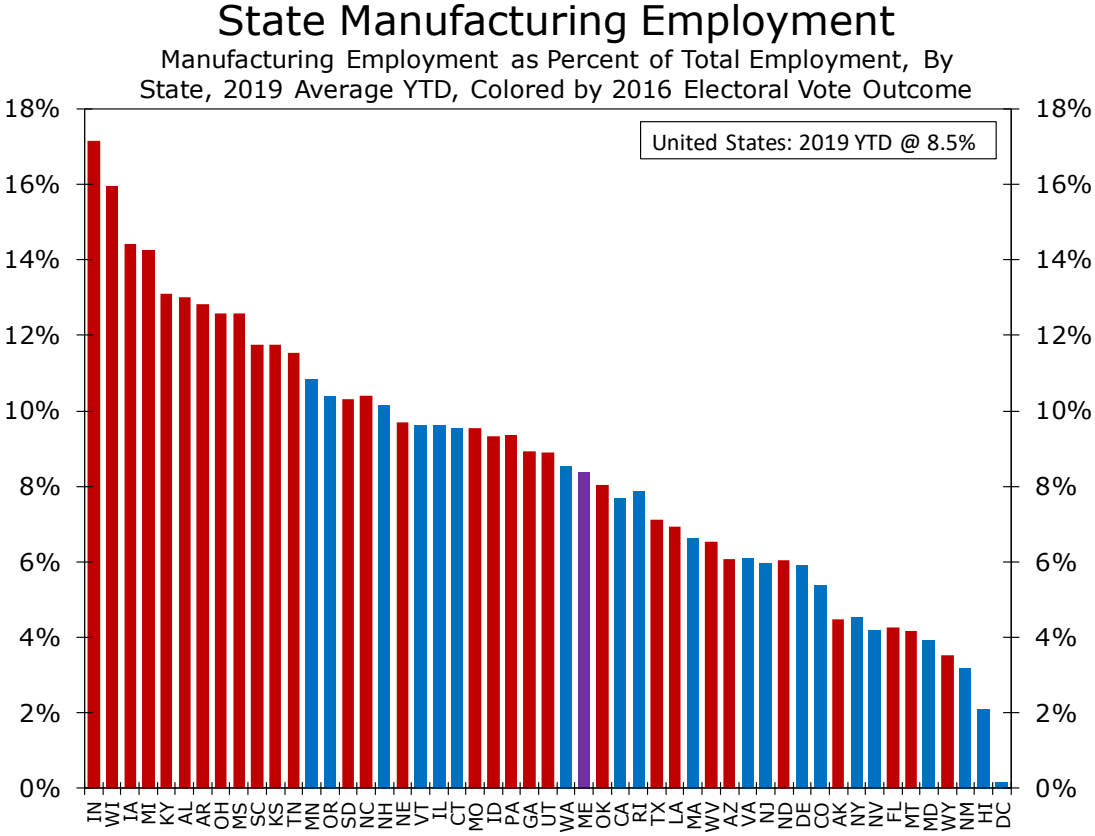


Source: Institute for Supply Management and Wells Fargo Securities

States that voted Republican in 2016 are generally more exposed to manufacturing.

Manufacturers are having a tough time finding workers, however, so the recent trade spat has not yet impacted staffing all that much.

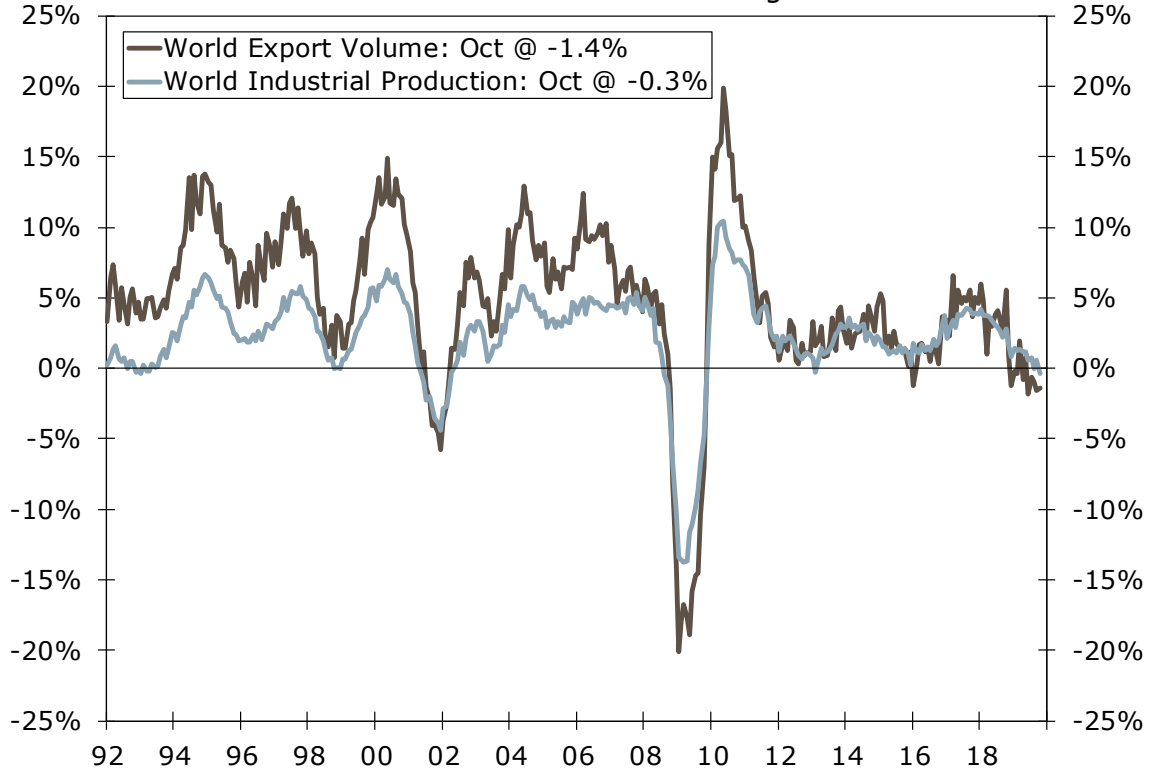
Many firms are reluctant to let any workers go for fear they will not be able to hire them back when demand revives.



Source: Federal Election Commission, U.S. Department of Labor and Wells Fargo Securities

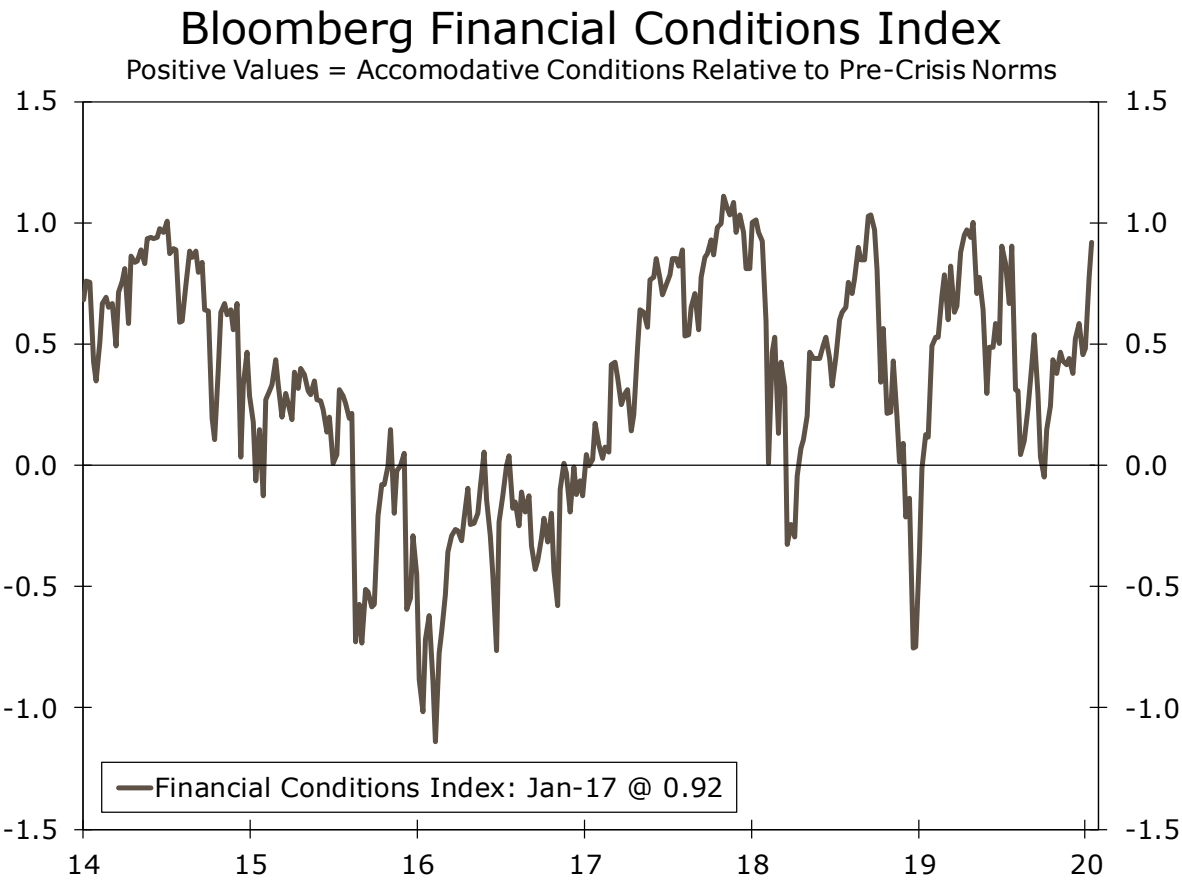
Global trade is contracting while industrial production has stalled

World Export & IP Volume
Year-over-Year Percent Change



Source: IHS Markit and Wells Fargo Securities

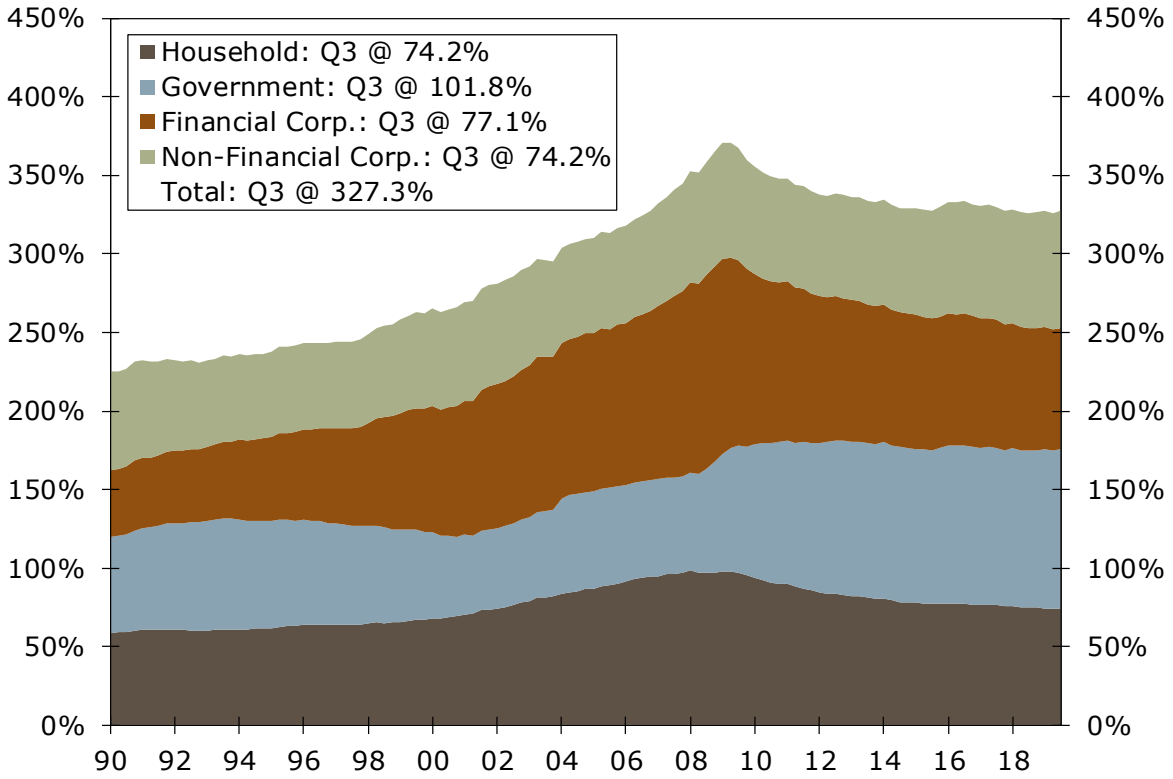
Financial conditions remain accommodative following Fed easing.



Source: Bloomberg LP and Wells Fargo Securities

The debt-to-GDP ratio of the U.S. economy has receded somewhat in recent years.

U.S. Debt by Sector Percent of GDP



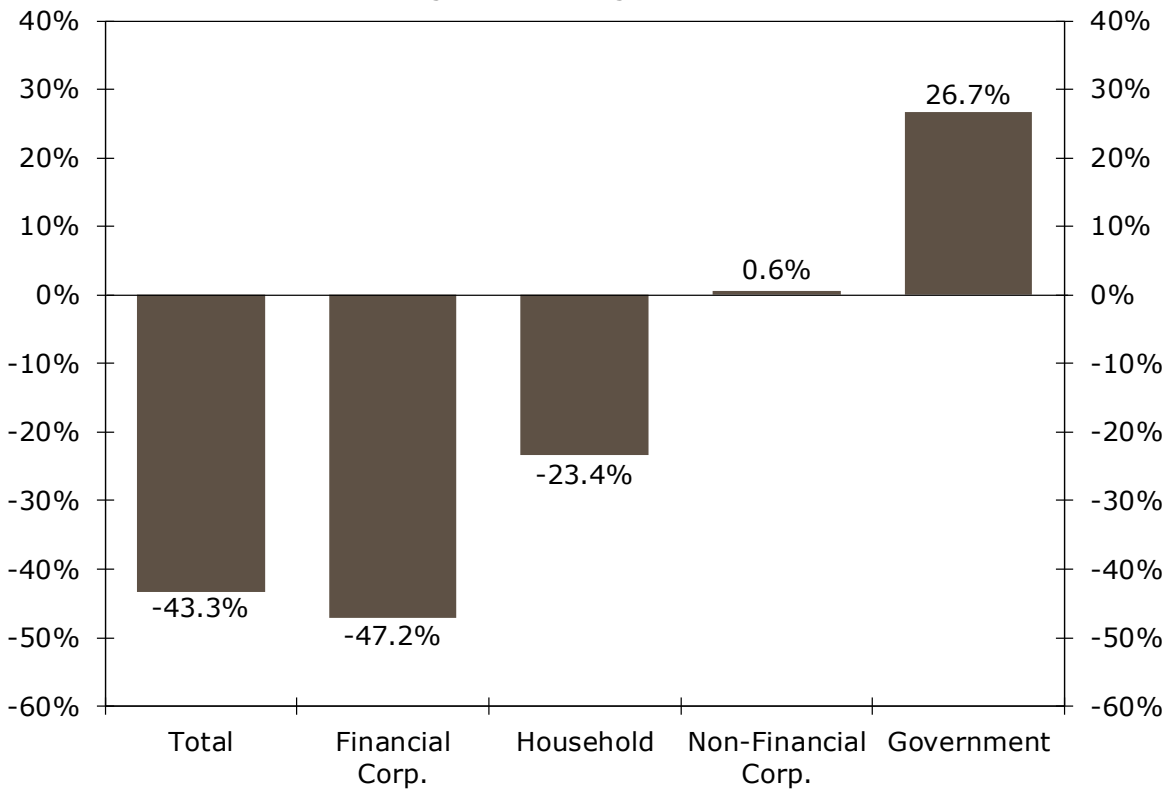
Source: U.S. Department of Commerce, Federal Reserve Board and Wells Fargo Securities

The financial and household sectors have de-levered while leverage in the government sector has risen.

Servicing costs remain manageable.

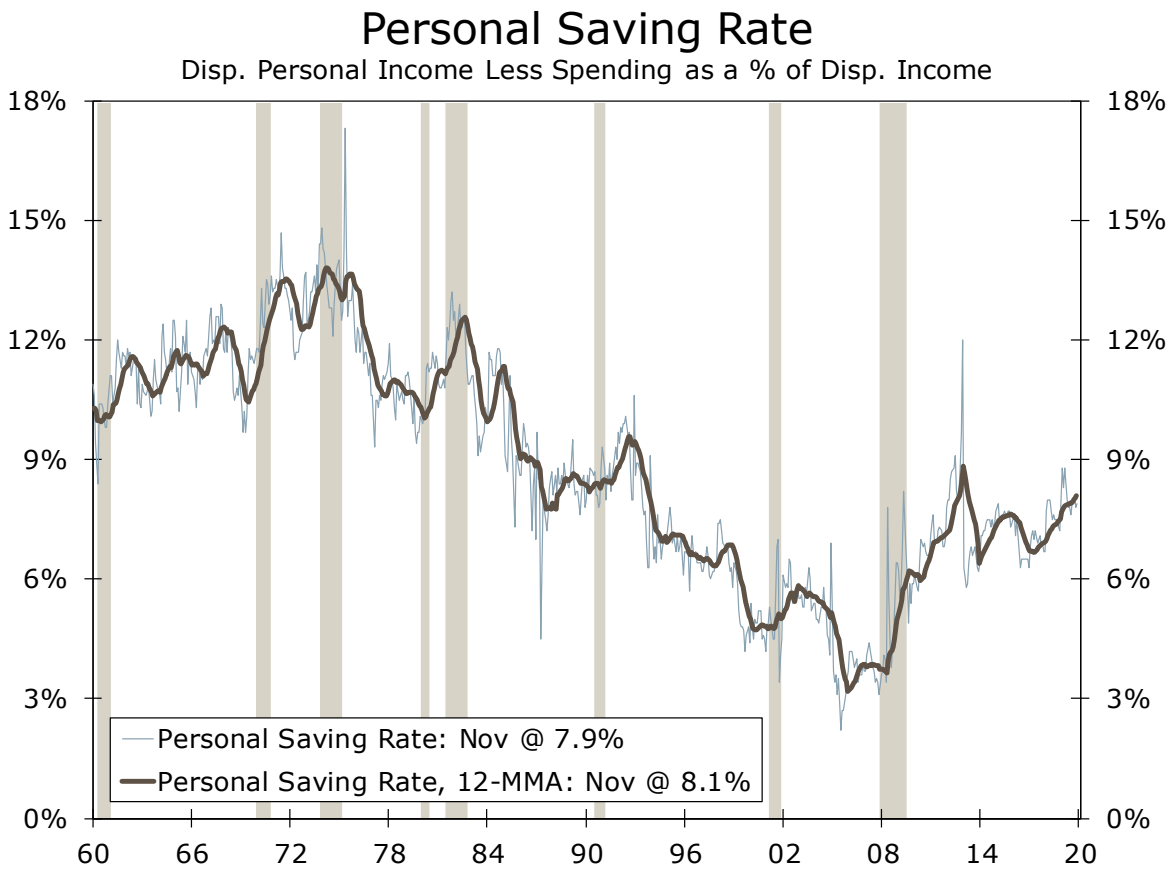
Change in Debt-to-GDP Ratios

Percentage Point Change Since Q1-2009



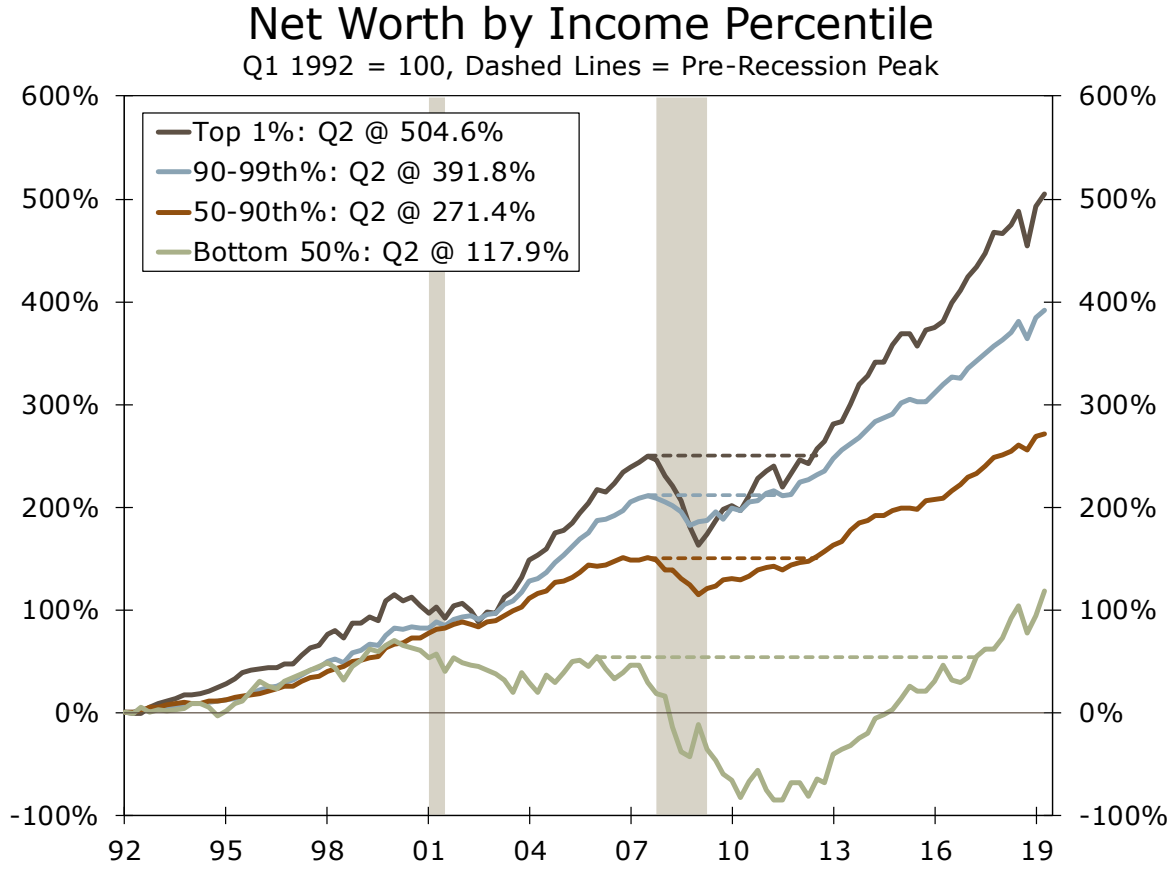
Source: U.S. Department of Commerce, Federal Reserve Board and Wells Fargo Securities,

And the saving rate remains elevated, especially at this point in the cycle.



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

Upper-income households have seen the most significant improvement in wealth the past few years, but net worth has recovered for lower-earning groups as well

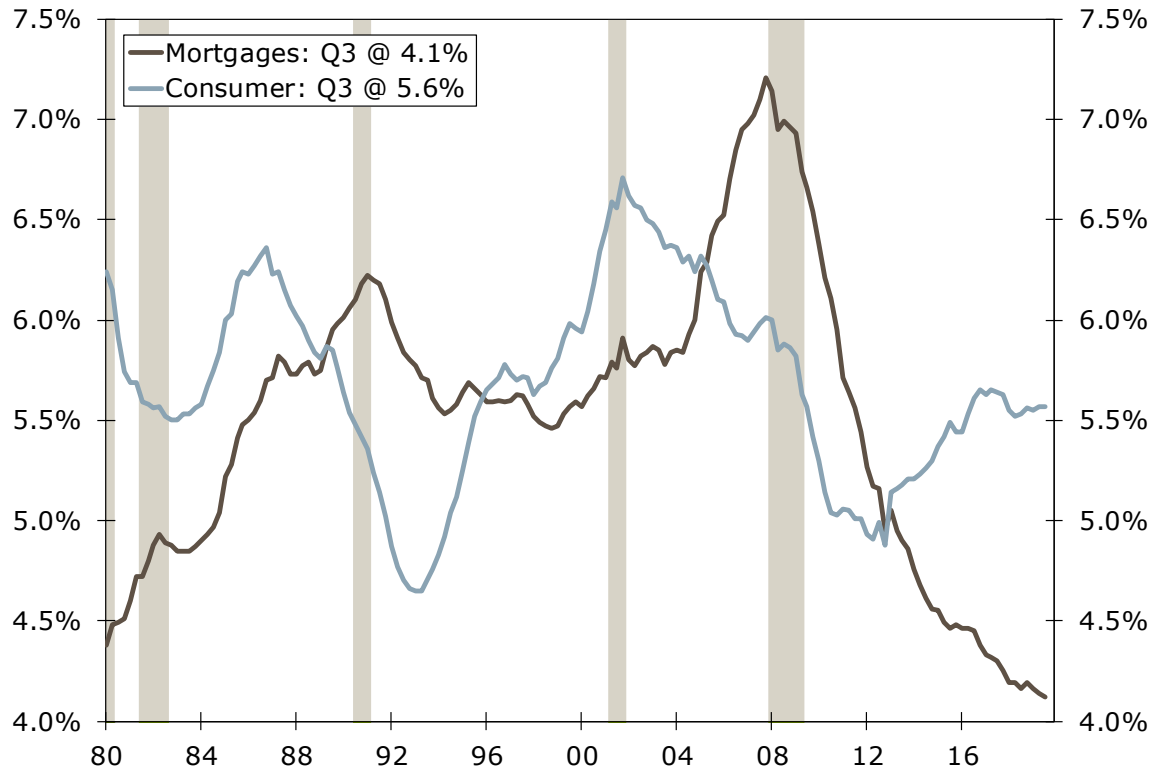


Source: Federal Reserve Board and Wells Fargo Securities

Monthly debt service remains fairly low. The rise in non-mortgage debt has almost entirely been driven by student and auto loans, where debt service burdens have been flattered by longer repayment terms.

Debt Service Ratios: Mortgages vs. Consumer

As a Percent of Disposable Personal Income



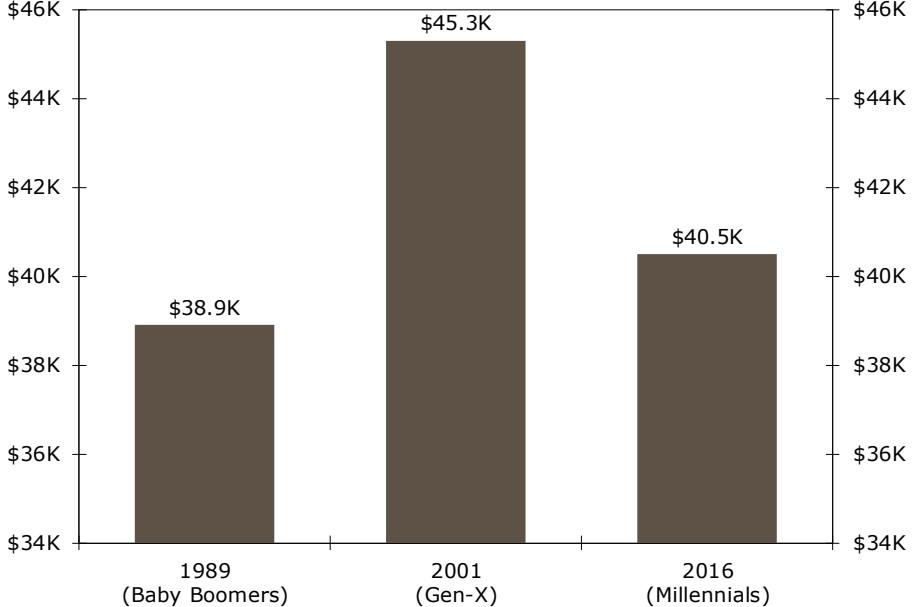
Source: Federal Reserve Board and Wells Fargo Securities

Today's young households remain in a more precarious financial position than previous generations

Income

Median Before Tax Income

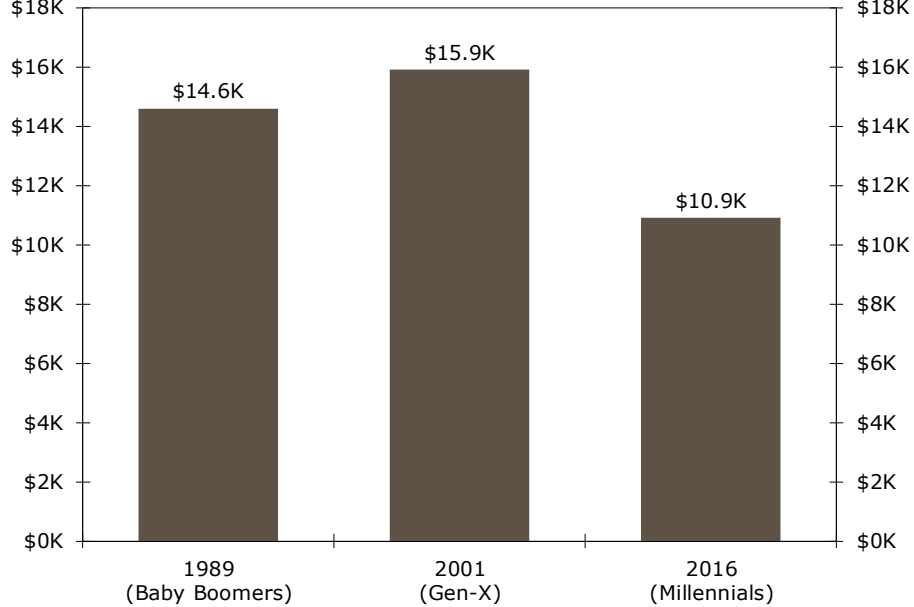
Households Under 35, Thousands of 2016 Dollars



Net Worth

Median Net Worth

Households Under 35, Thousands of 2016 Dollars



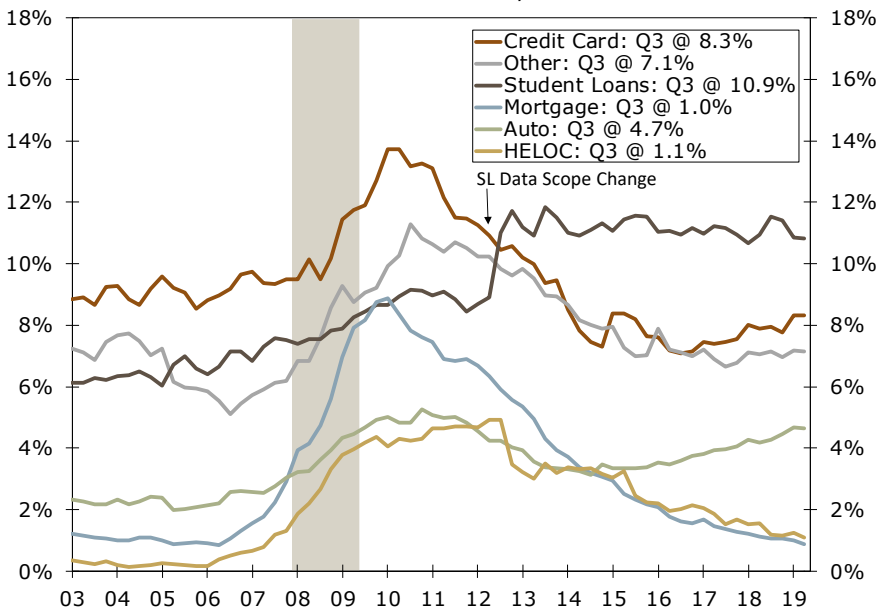
Source: Federal Reserve Board and Wells Fargo Securities

Consumer loan growth has been fairly steady despite rising delinquencies for credit cards and autos. Tightening credit standards and weaker demand point to only modest credit growth ahead in most categories.

Consumer Debt

Household Debt Delinquencies

Percent of Balance 90+ Days Past Due

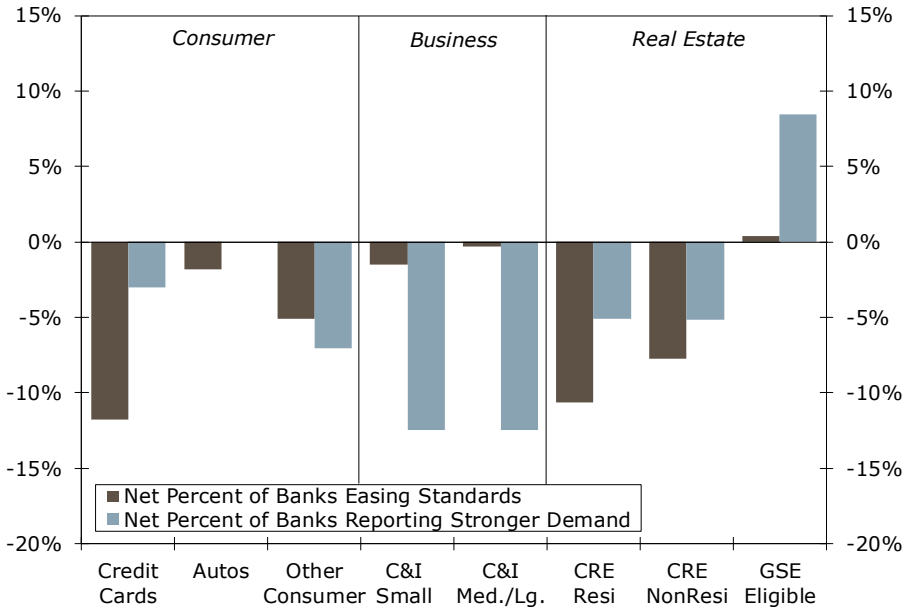


Source: Federal Reserve System and Wells Fargo Securities

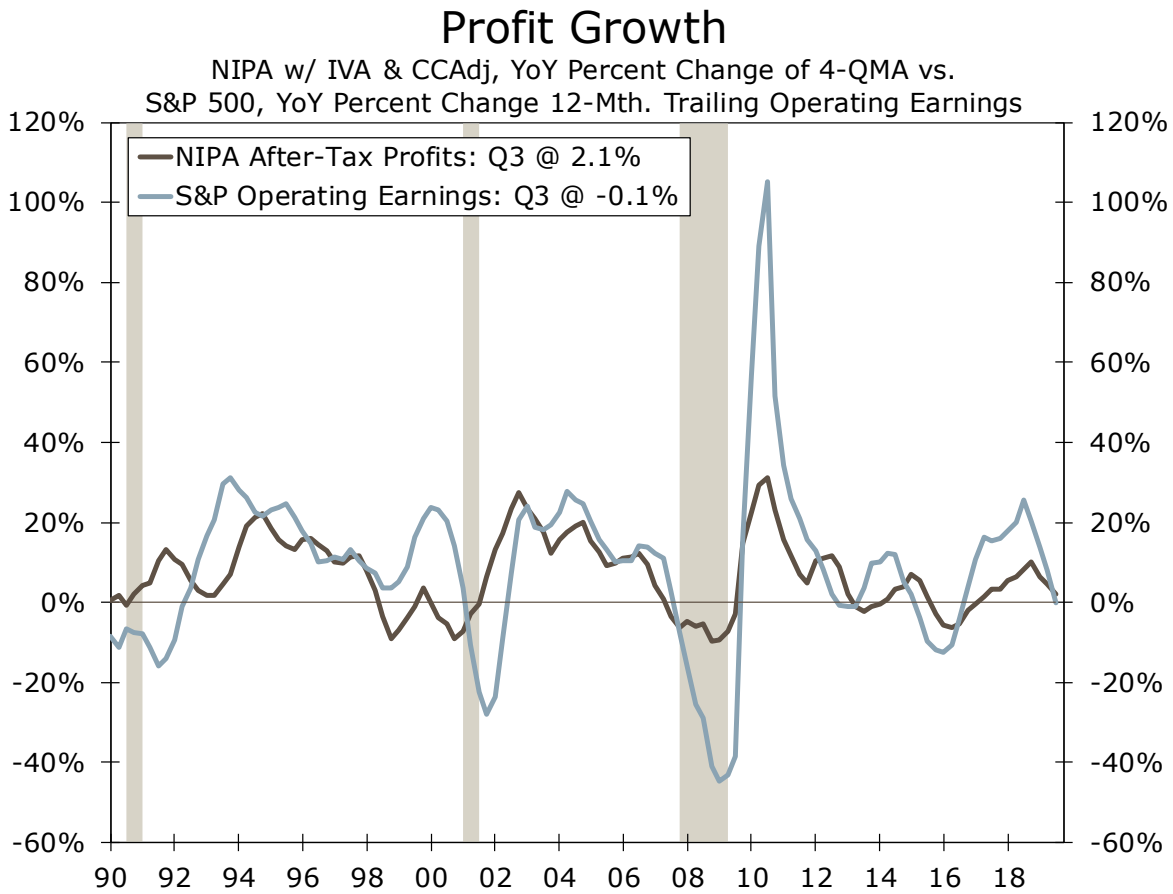
Loan Standards & Demand

Loan Supply and Demand

Q3-2019, 4-Quarter Moving Average



Profit growth has moderated.



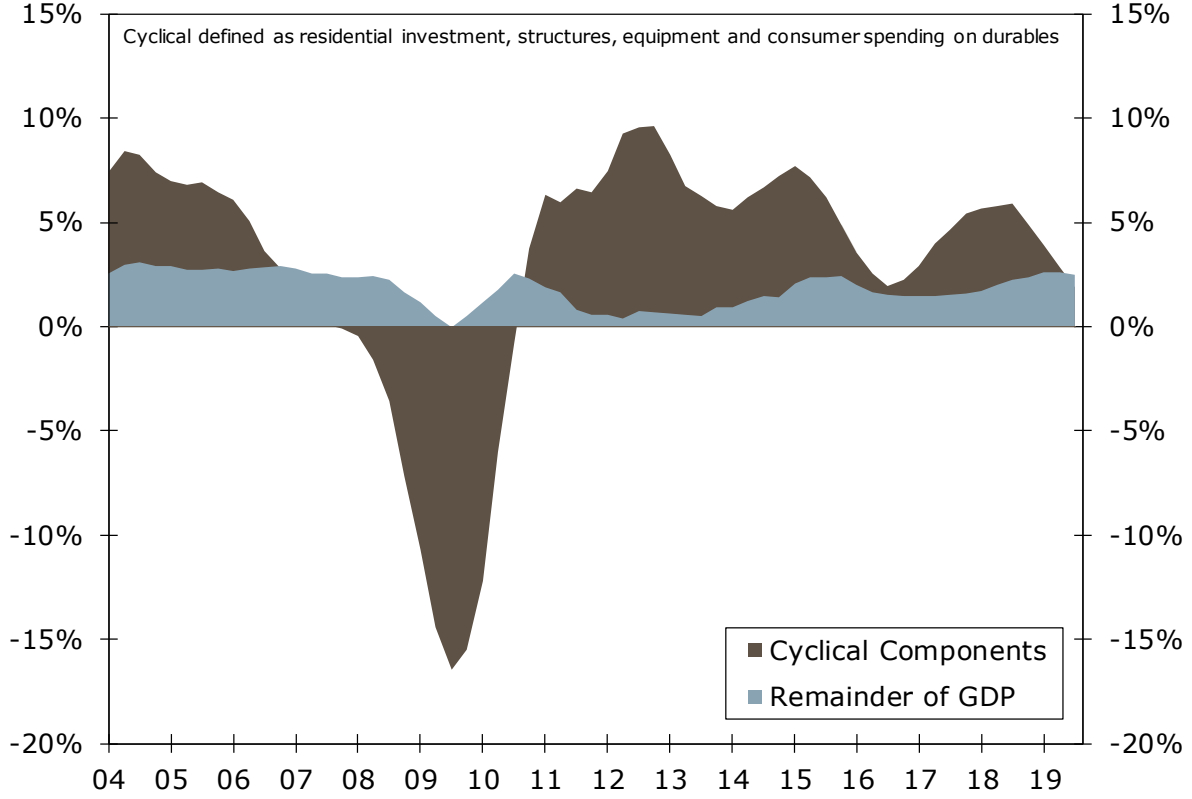
Source: U.S. Department of Commerce, S&P Dow Jones Indices and Wells Fargo Securities

Consumer spending on durable goods, housing, capital spending and nonresidential structures collectively account for 20% of GDP but over 100% of the decline in GDP during recessions.

We have seen less of a boom in the most cyclical parts of the economy during this cycle, which may push a correction further out and ultimately make that correction less severe.

Cyclical Components vs. Rest of GDP

Year-over-Year Change of 4-Qtr Moving Average of Real GDP



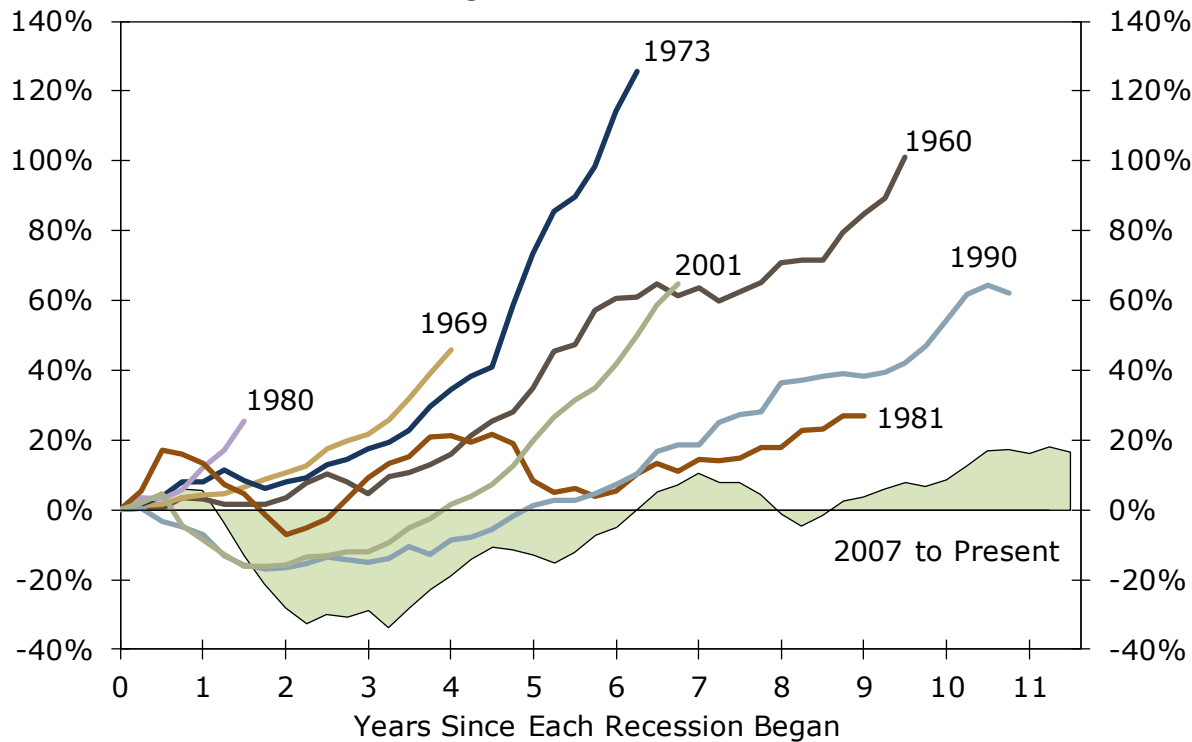
Source: U.S. Department of Commerce and Wells Fargo Securities

Overall building has remained relatively subdued this cycle.

Much of the activity has been concentrated in several large markets, which may present some risks of a sharp or prolonged pullback in the tech and energy sectors.

Nonresidential Structures Investment

Percent Change Since Start of Each Recession



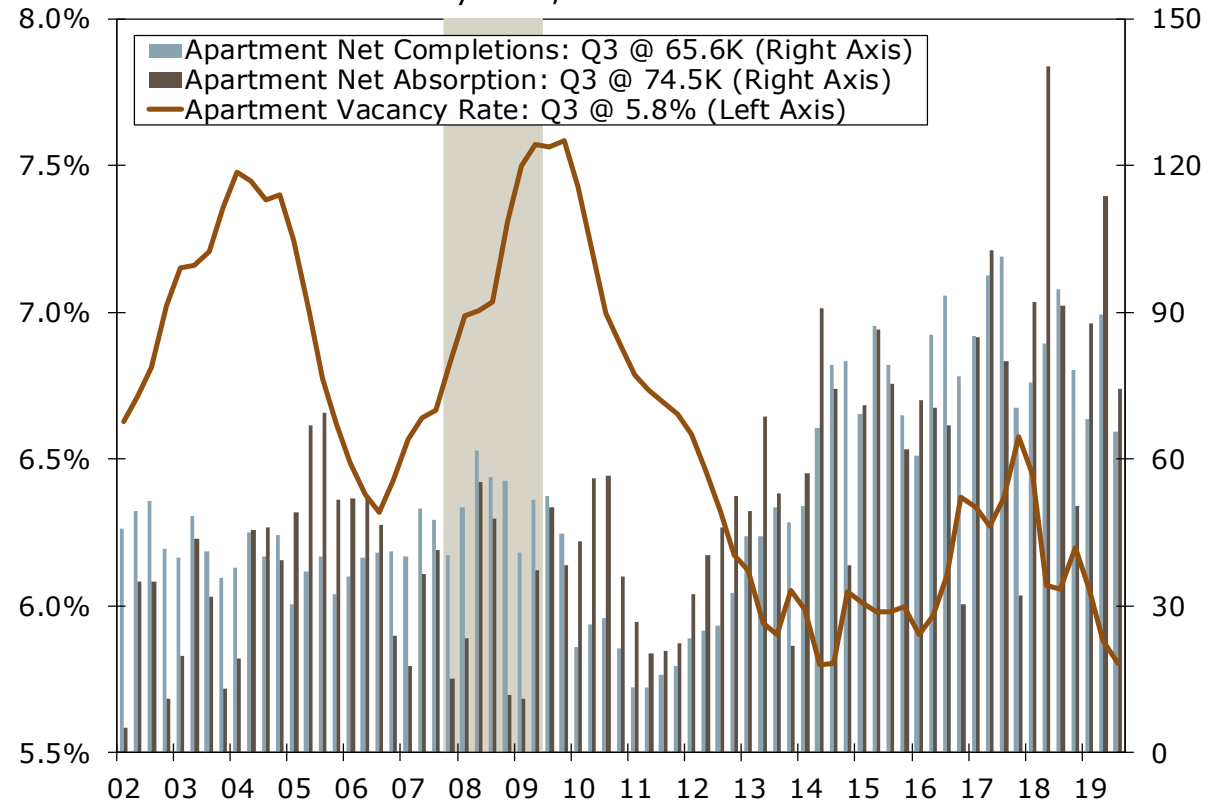
Source: U.S. Department of Commerce and Wells Fargo Securities

Apartment development has been fairly strong the past few years, with a disproportionate share of activity devoted to luxury and lifestyle units in a handful of rapidly growing metropolitan areas.

Development is now shifting to more affordable projects in suburban areas and in lower cost parts of the country.

Apartment Supply & Demand

Vacancy Rate, Thousands of Units

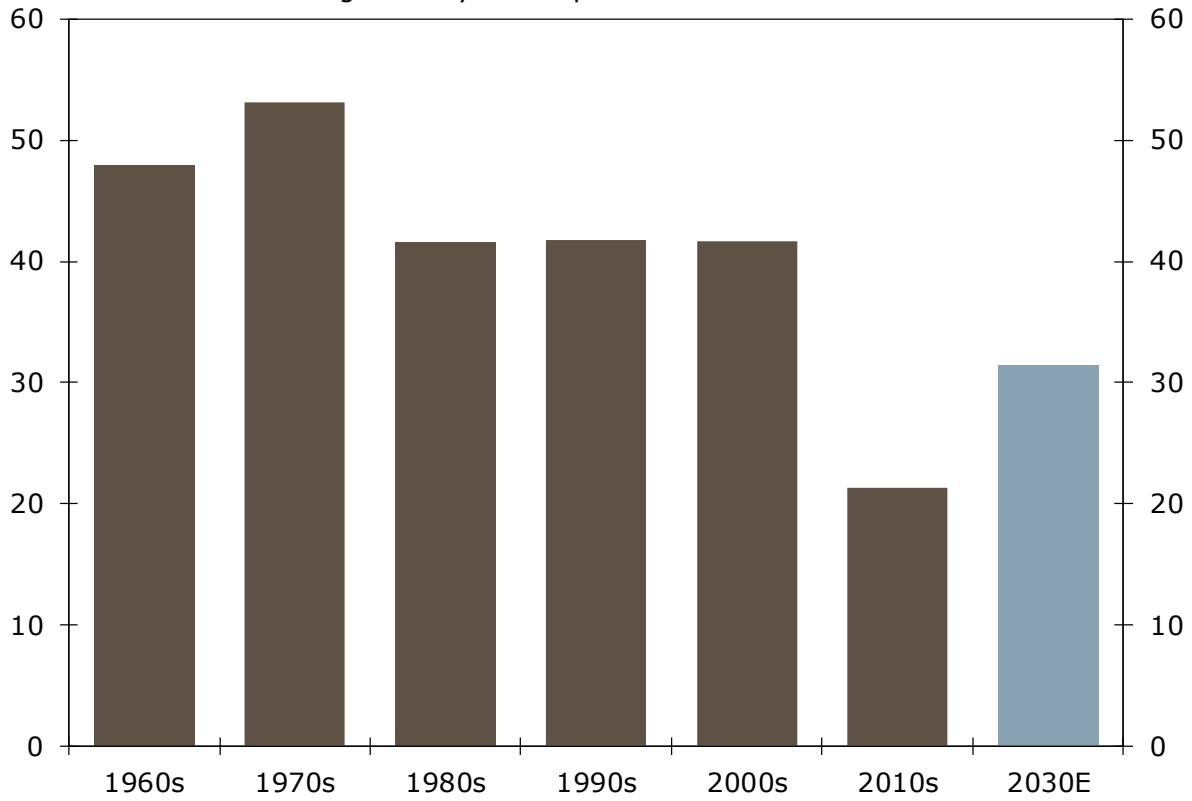


Source: CoStar, Inc. and Wells Fargo Securities

Housing construction should gradually approach prior levels relative to population and household growth.

Population-Adjusted Housing Starts

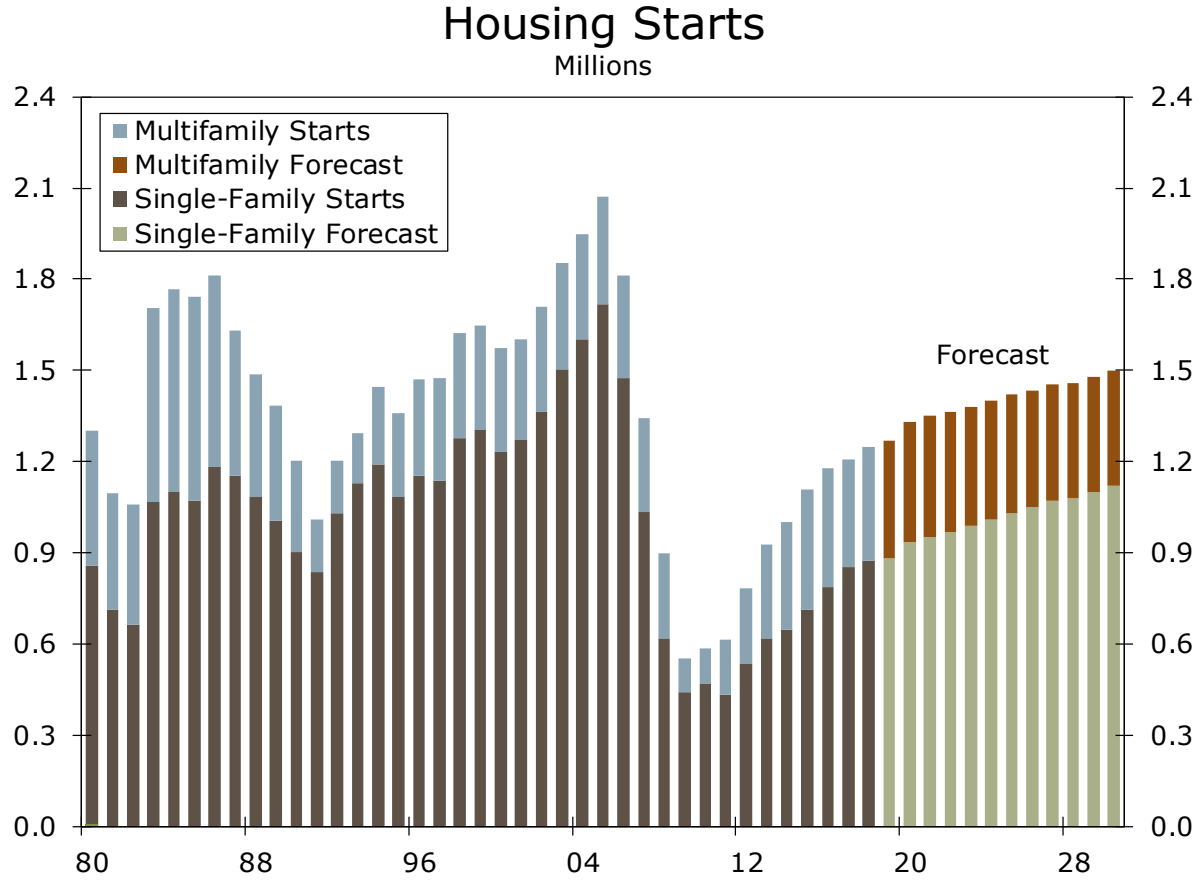
Single-family Starts per One Million Persons



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

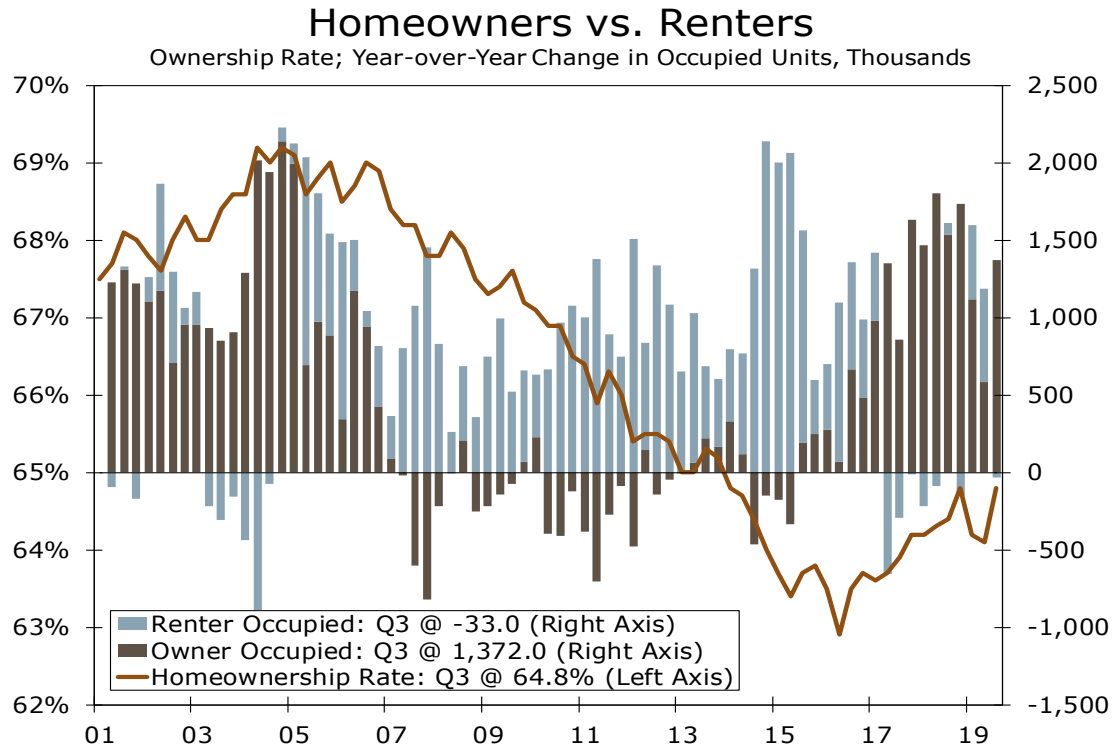
Single-family homebuilding has strengthened in recent months. Still, affordability concerns and development constraints will continue to limit new development.

Overall homebuilding is still lagging household formation and there are too few homes available in markets where population and employment are growing rapidly. Apartment construction is pivoting toward more affordable units.



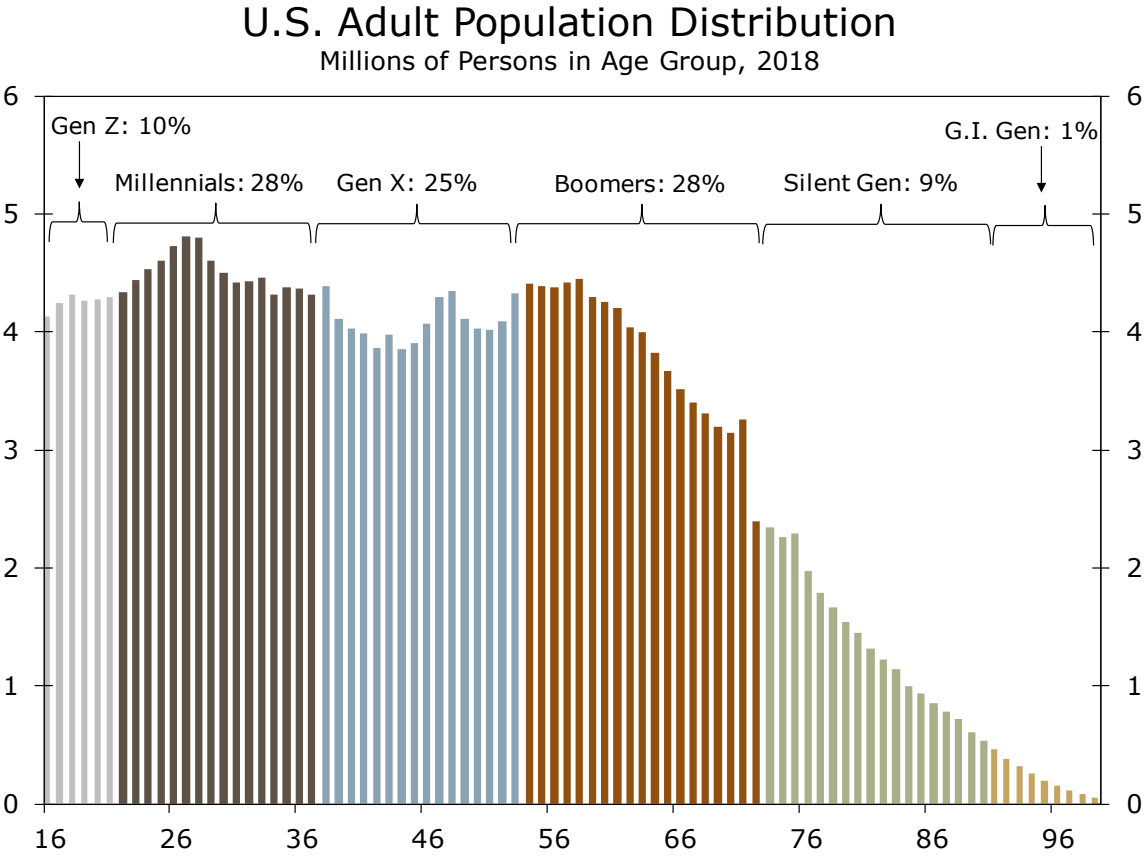
Source: U.S. Department of Commerce and Wells Fargo Securities

Homeownership is gradually on the rise.



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

Demographics should be supportive of housing activity over the long-term, as Millennials form families and increasingly look to relocate to the suburbs.

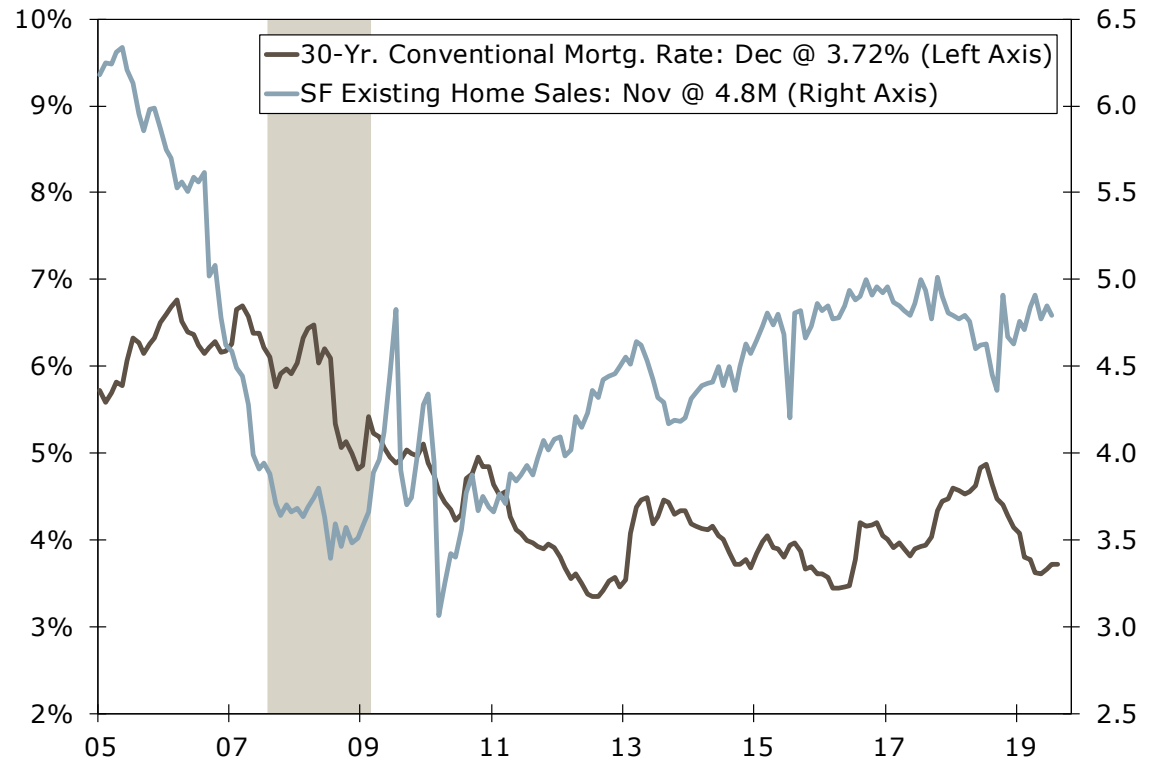


Source: U.S. Department of Commerce and Wells Fargo Securities

Housing activity has picked up as mortgage rates have fallen.

Existing Single-Family Home Sales vs. Mortgage Rate

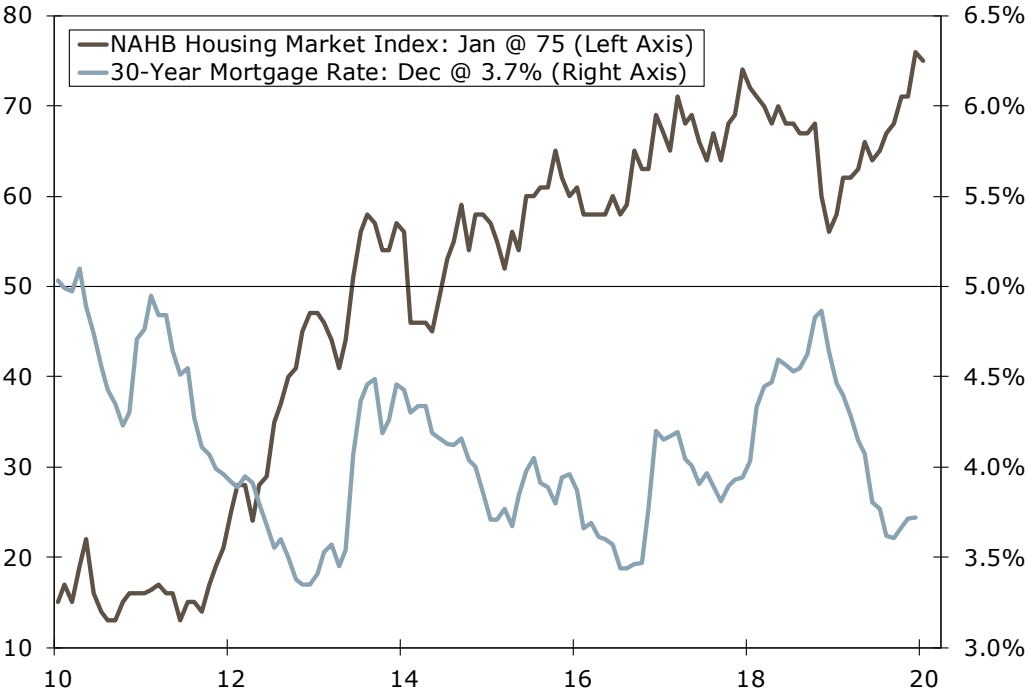
Seasonally Adjusted Annual Rate In Millions



Source: National Association of Realtors, Freddie Mac and Wells Fargo Securities

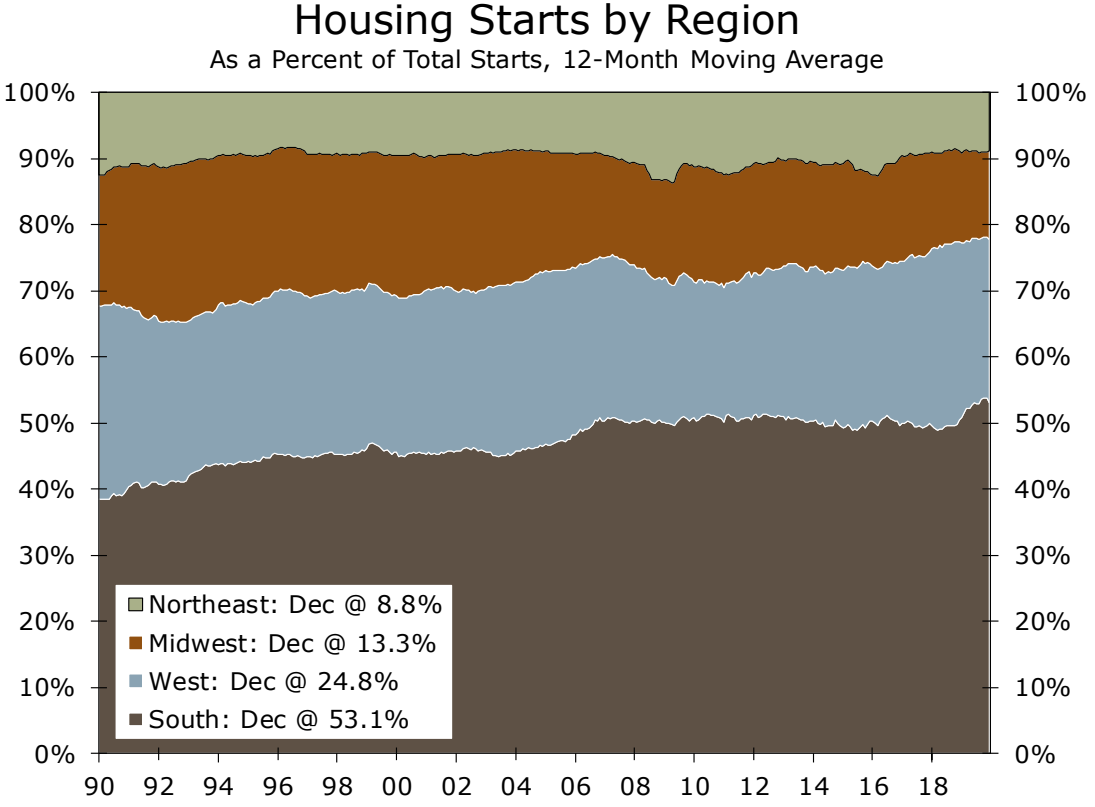
Builder optimism is surging.

NAHB/Wells Fargo Housing Market Index vs. Mortgage Rate



Source: NAHB, Freddie Mac and Wells Fargo Securities

A growing share of new homes are being built in the South.



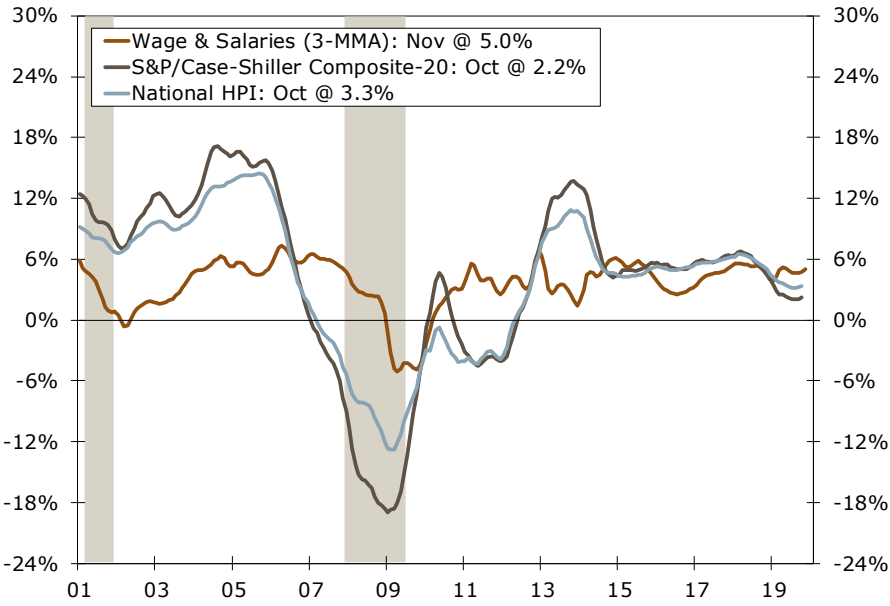
Source: U.S. Department of Commerce and Wells Fargo Securities

Affordability has improved over the past year as rates have come down and income is now rising faster than home prices, but it remains a challenge.

Home Prices

Home Prices vs. Wages and Salaries

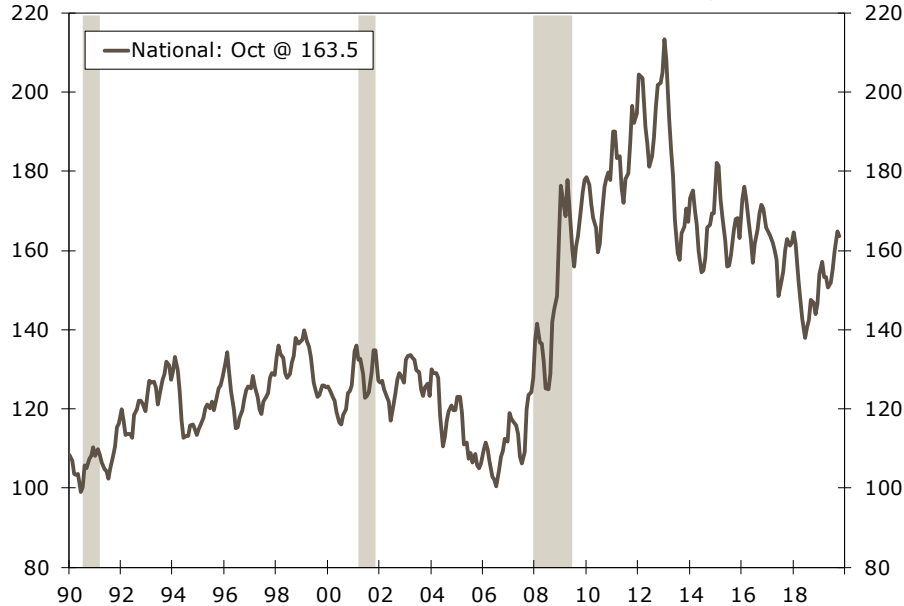
Year-over-Year Percent Change



Affordability

Housing Affordability

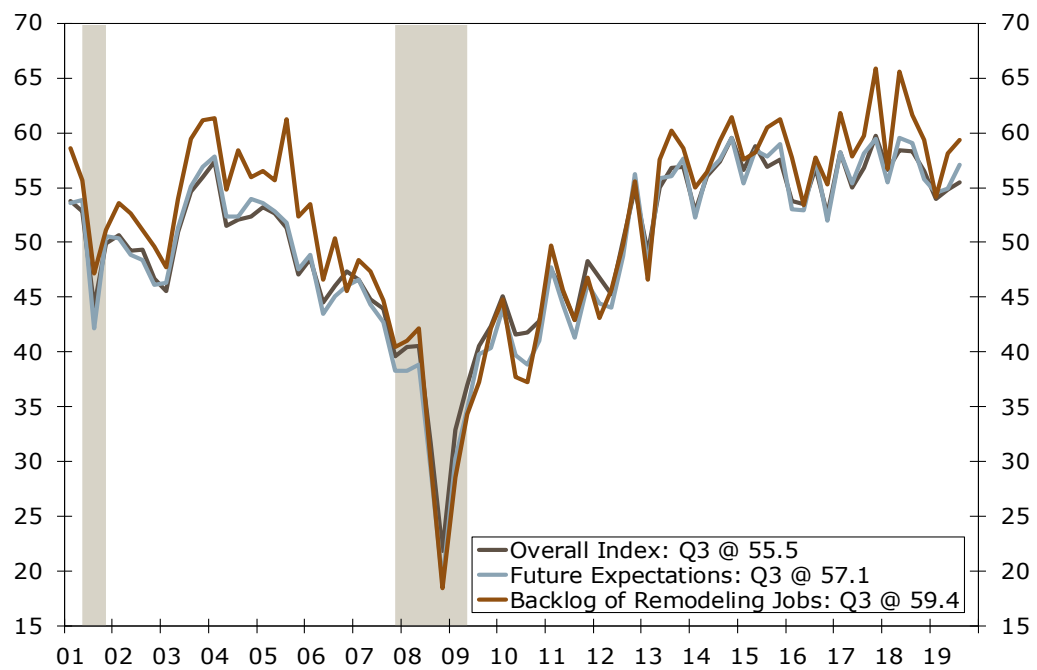
Index, Based on NAR Median Price and a 20% Down Payment



Source: CoreLogic, Inc., S&P/Case-Shiller, National Association of Realtors and Wells Fargo Securities

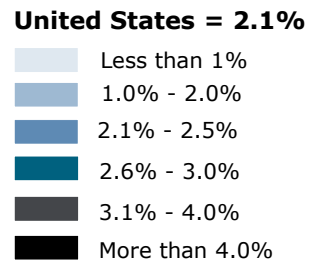
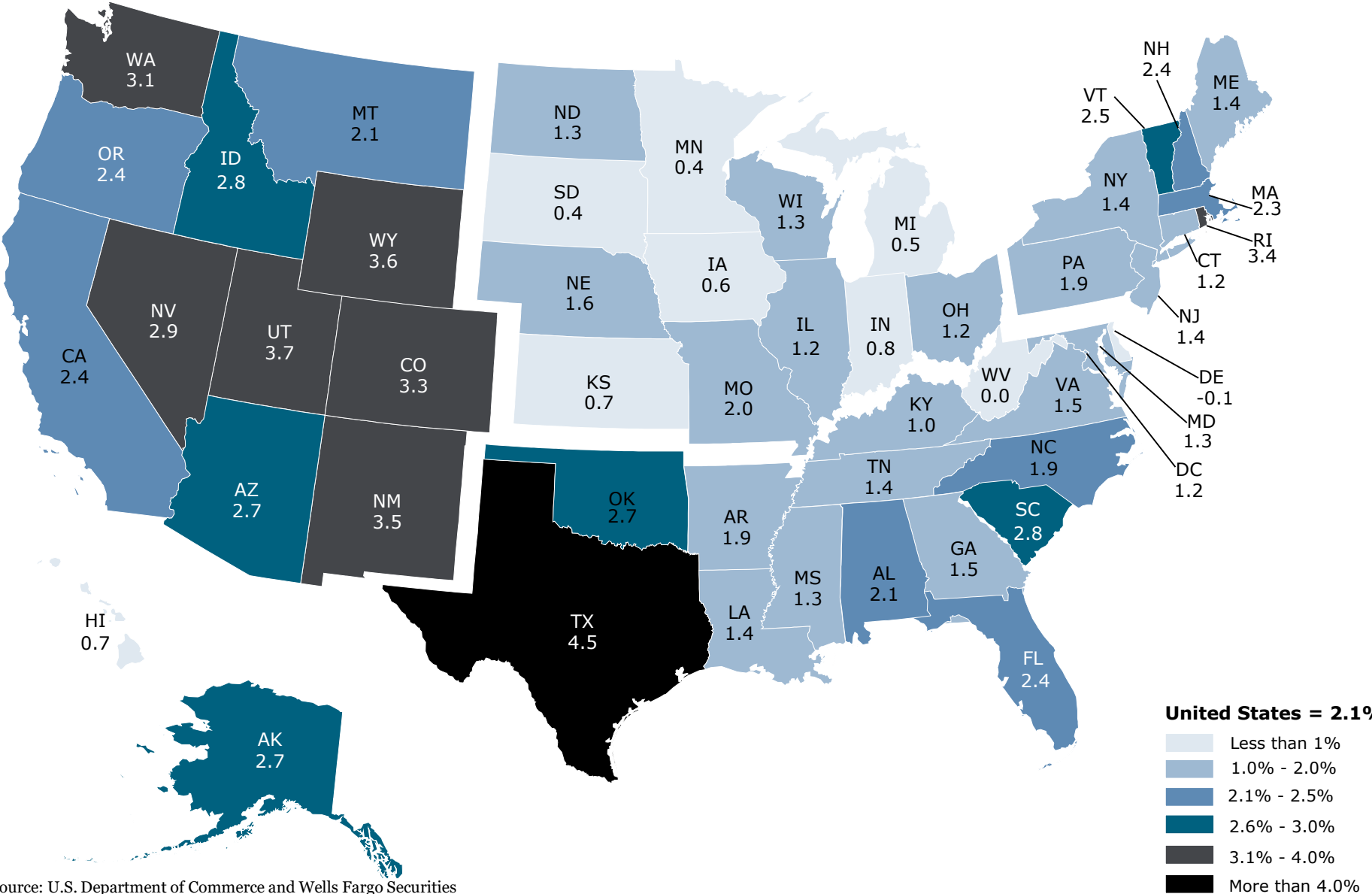
Growth in remodeling expenditures should be modest.

NAHB Remodeling Market Index



Source: NAHB and Wells Fargo Securities

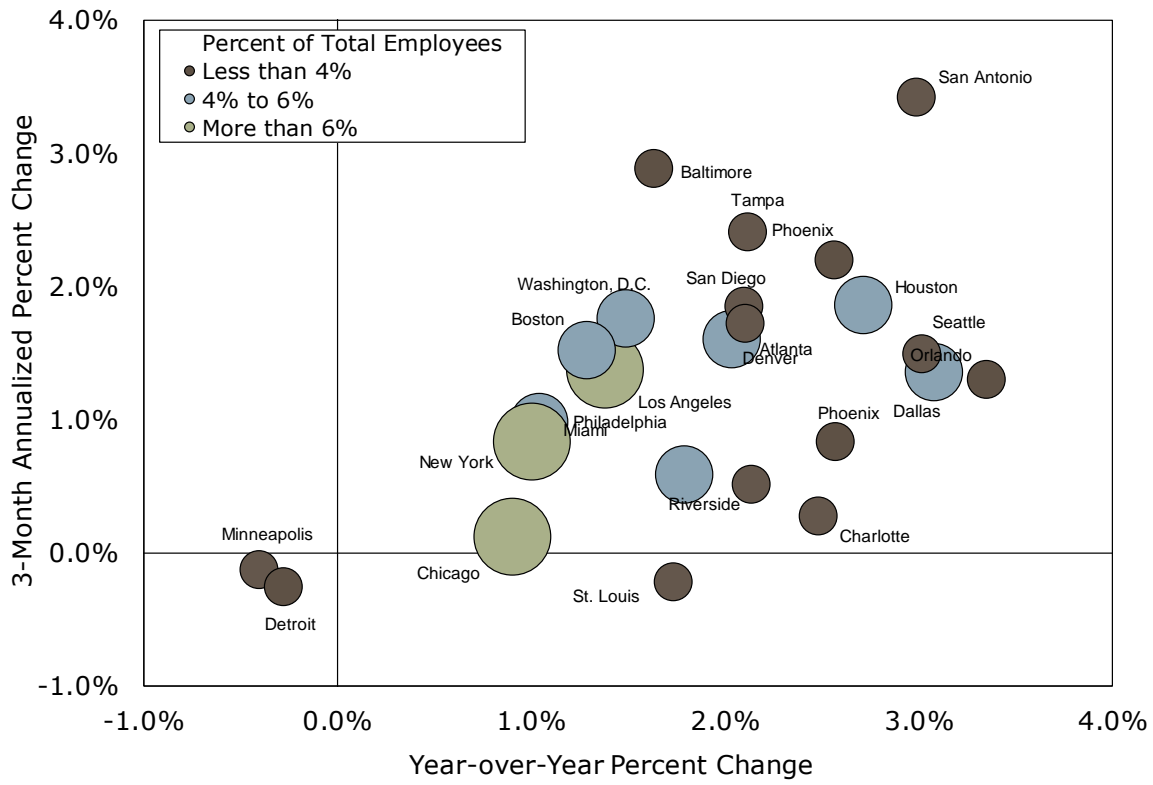
Year-over-Year Percent Change in Real GDP by State (Q3-2019)



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

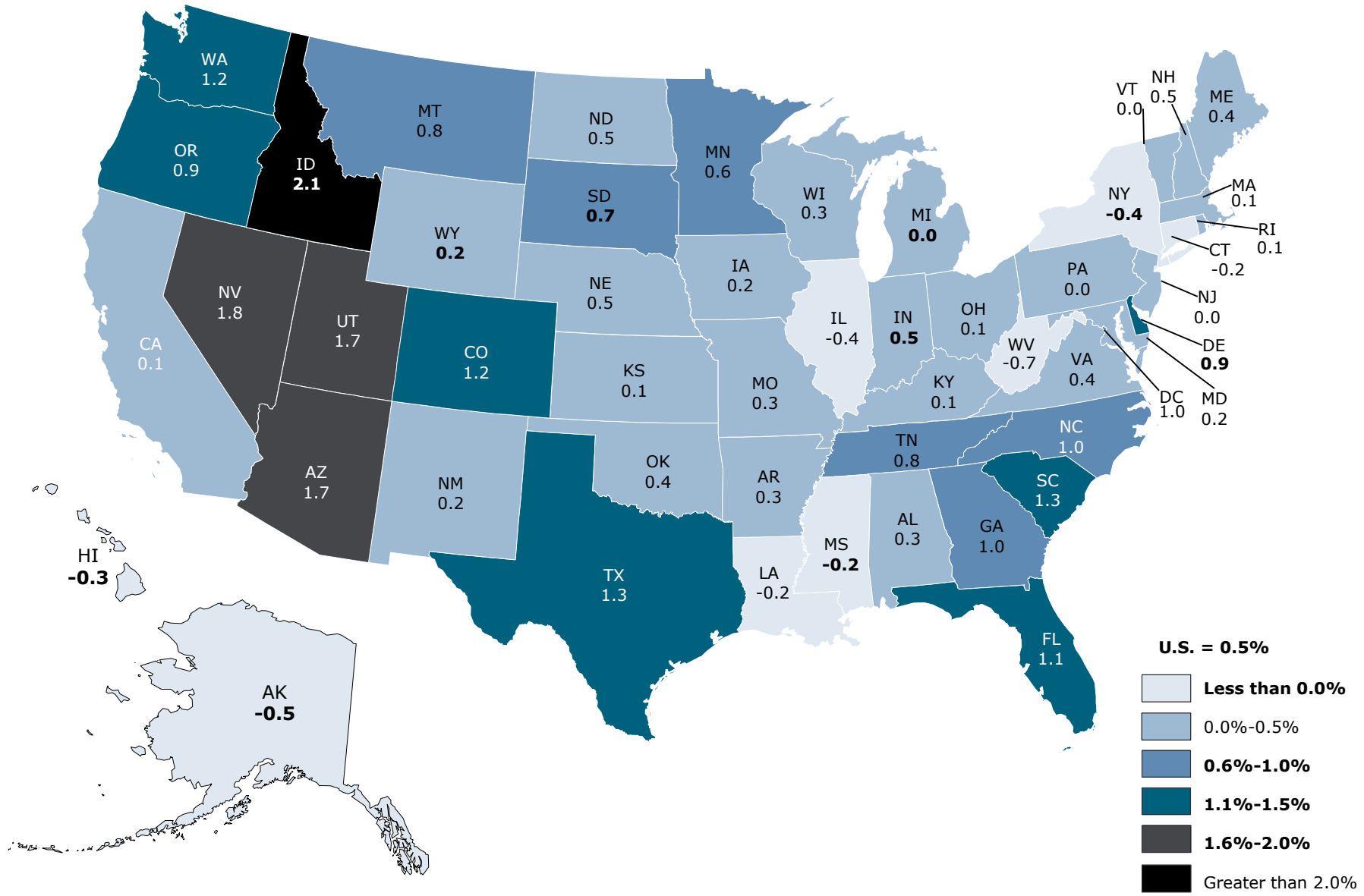
Employment growth is strongest in the South and West.

U.S. Employment Growth by MSA
November 2019



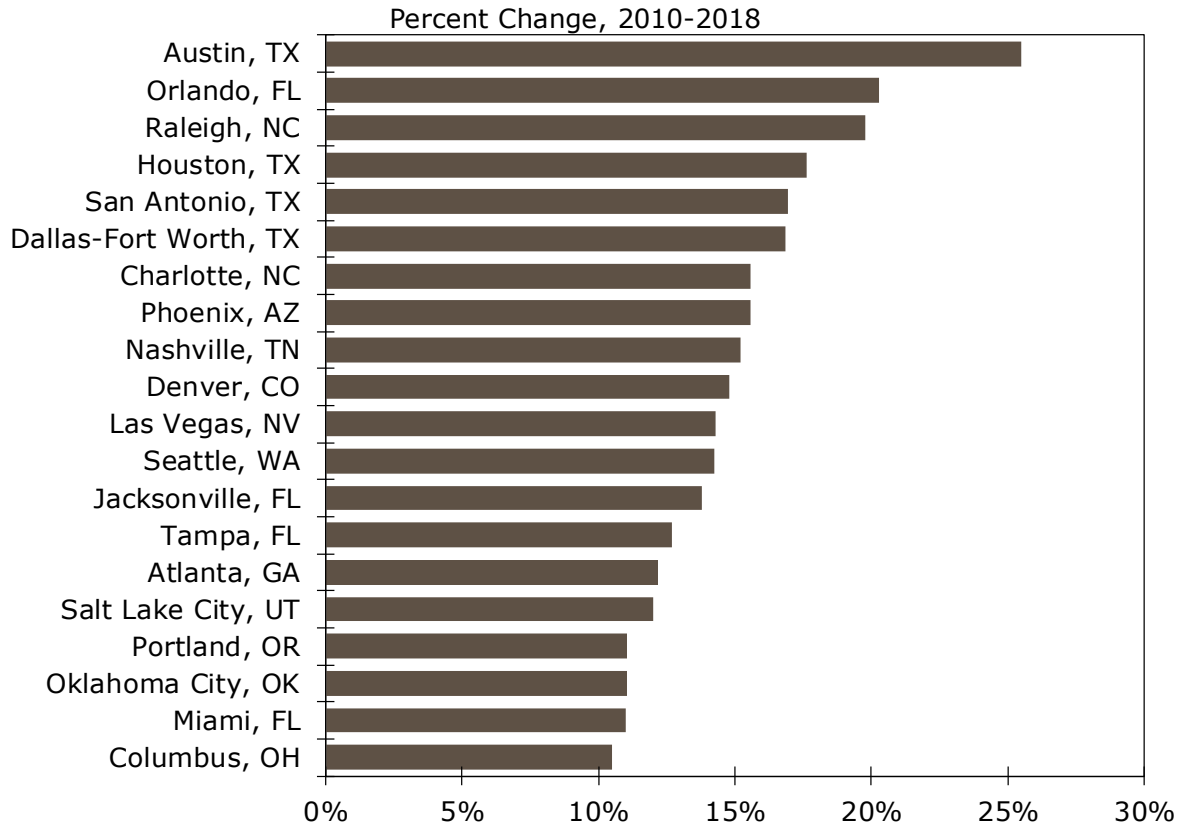
Source: U.S. Department of Labor and Wells Fargo Securities

Population Growth by State – 2019



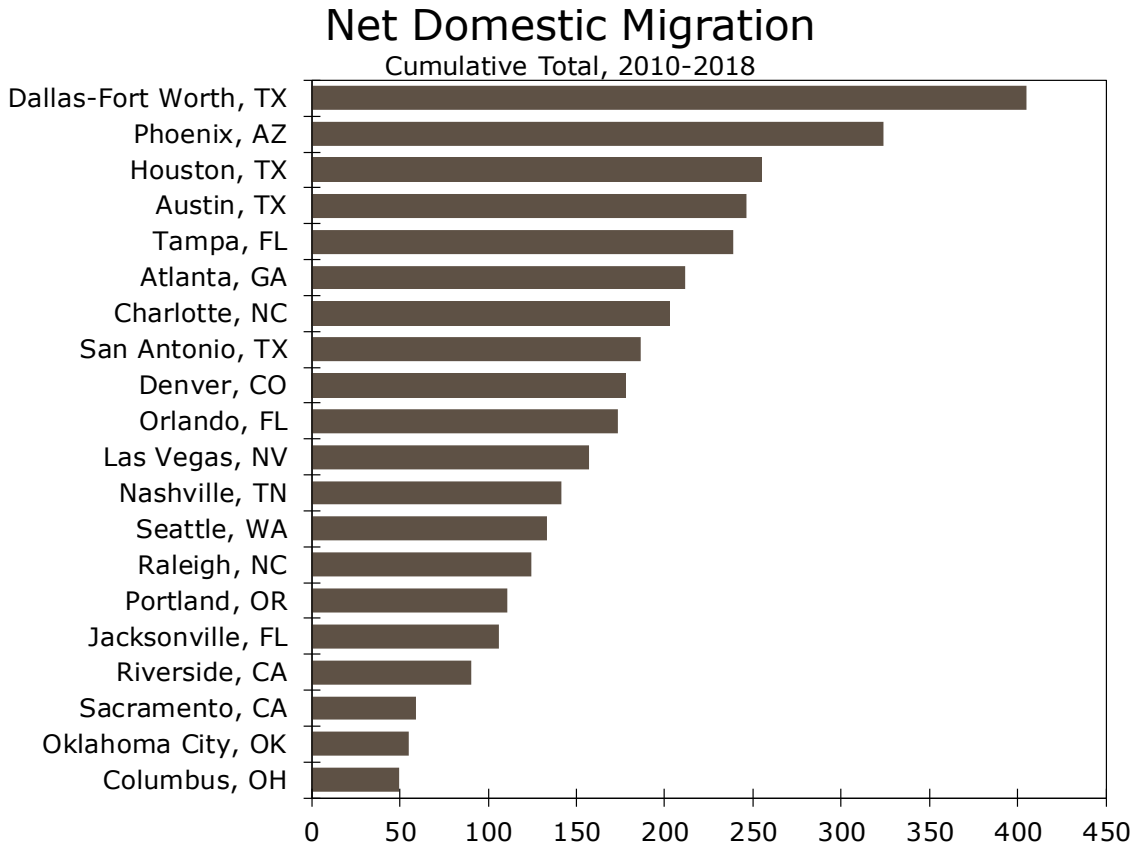
Affordability has been a major driver of migration flows.

Metro Area Population Growth: Top 20



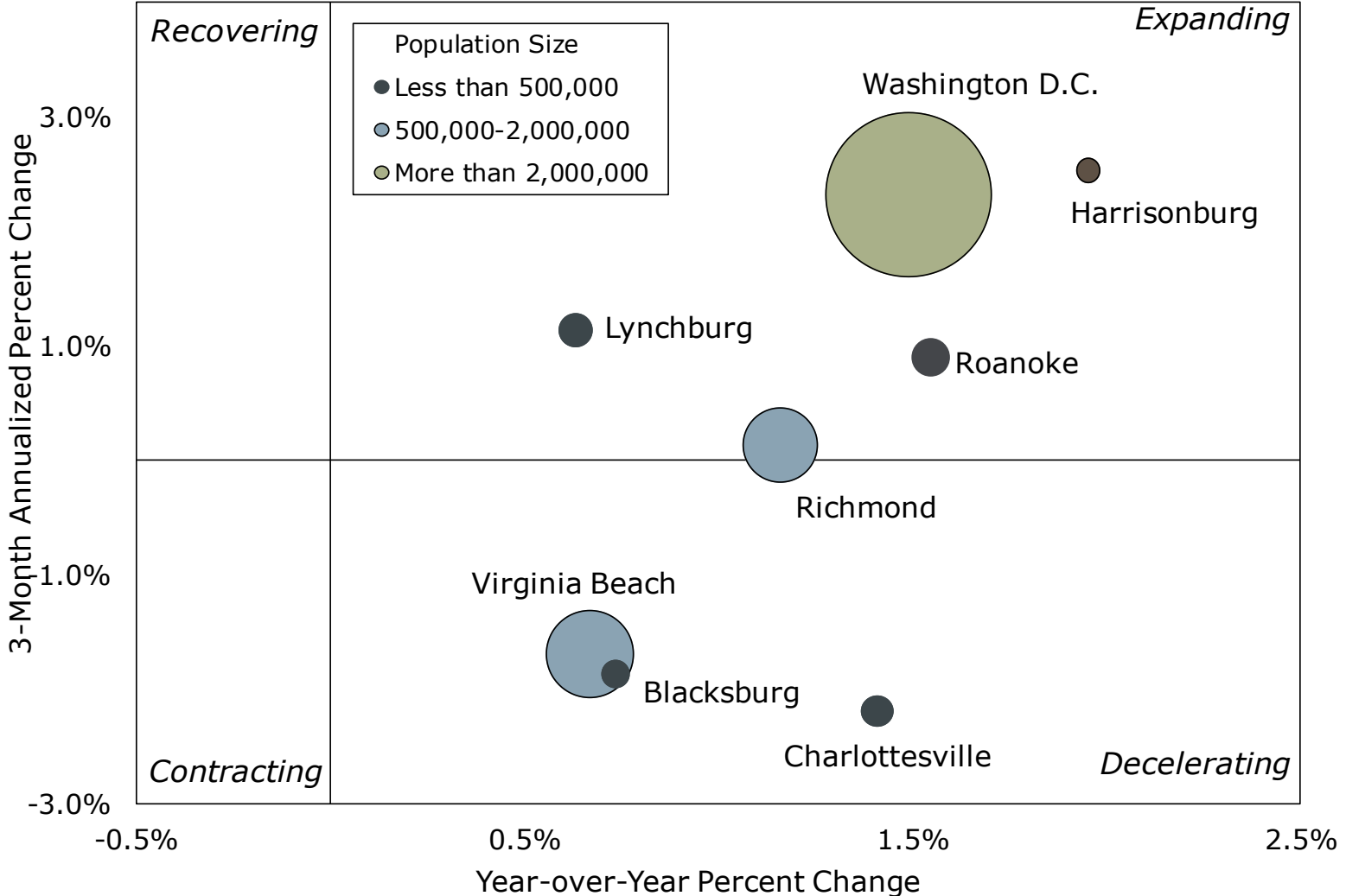
Source: U.S. Department of Commerce and Wells Fargo Securities

Affordability and job growth are major drivers of migration flows.



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

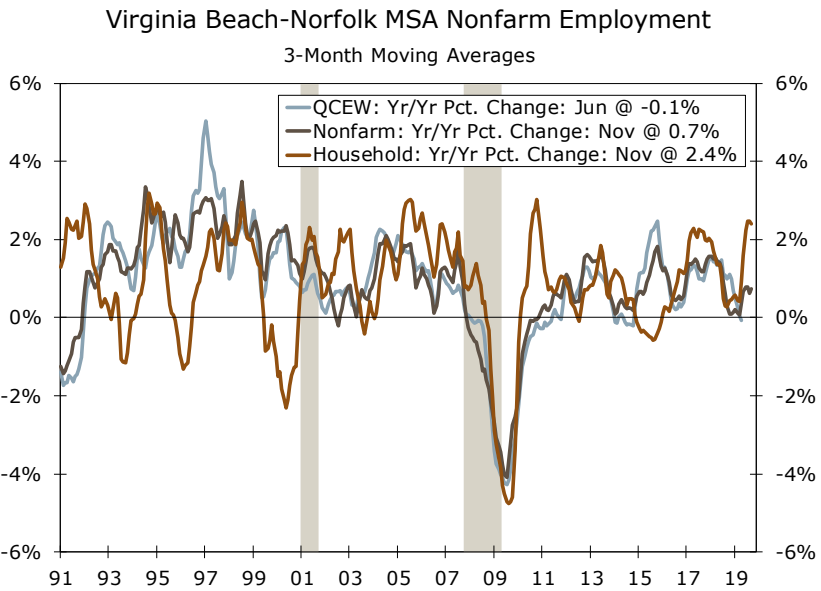
Virginia Employment Growth: November 2019



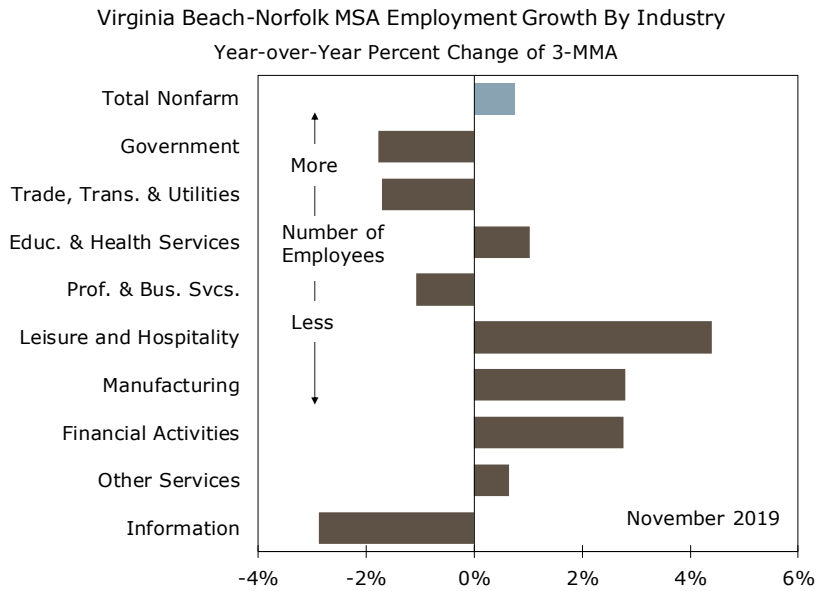
Source: U.S. Department of Labor and Wells Fargo Securities

Virginia Beach payroll growth trails the nation and the state as government employment continues to shrink. Leisure & hospitality has been strong, however.

Employment Growth



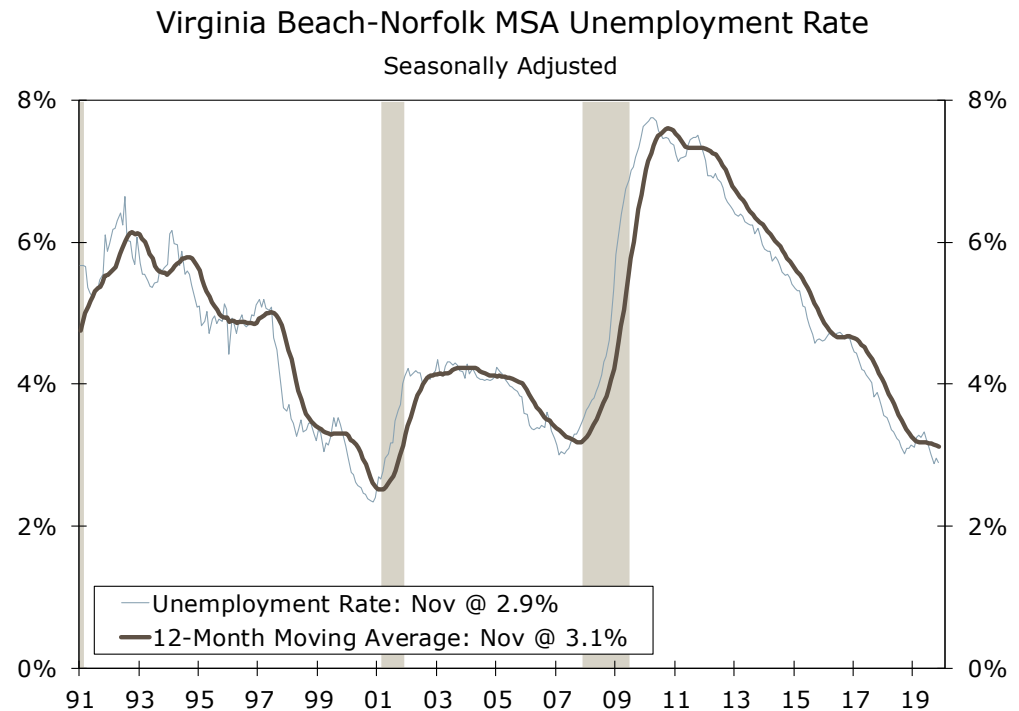
Employment by Industry



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

Labor markets are tight across Virginia.

For comparison, the national unemployment rate is 3.5%.



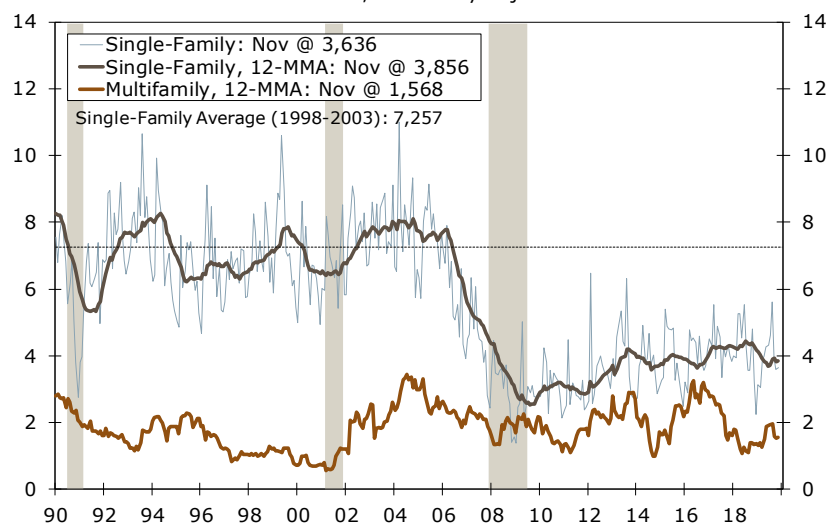
Source: U.S. Department of Labor and Wells Fargo Securities

Virginia Beach home price appreciation has trailed the national rate. Single-family construction has been mostly flat.

Home Permits

Virginia Beach-Norfolk MSA Housing Permits

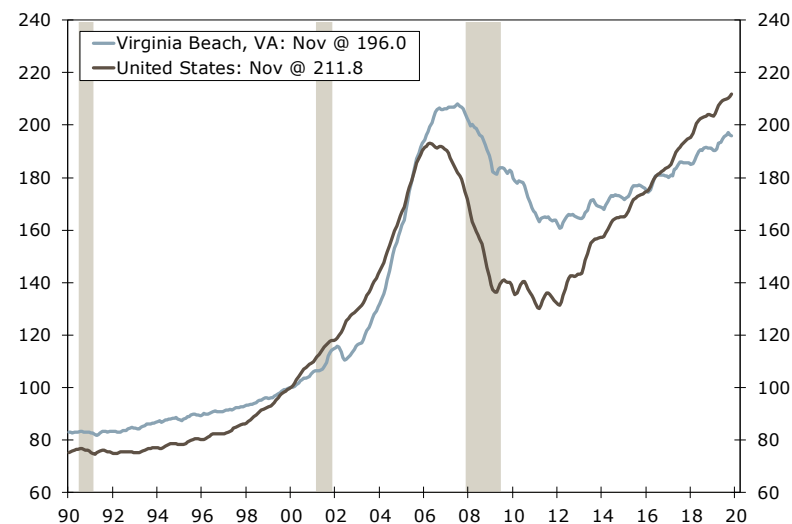
Thousands of Permits, Seasonally Adjusted Annual Rate



Home Prices

CoreLogic Home Price Index: Virginia Beach, VA

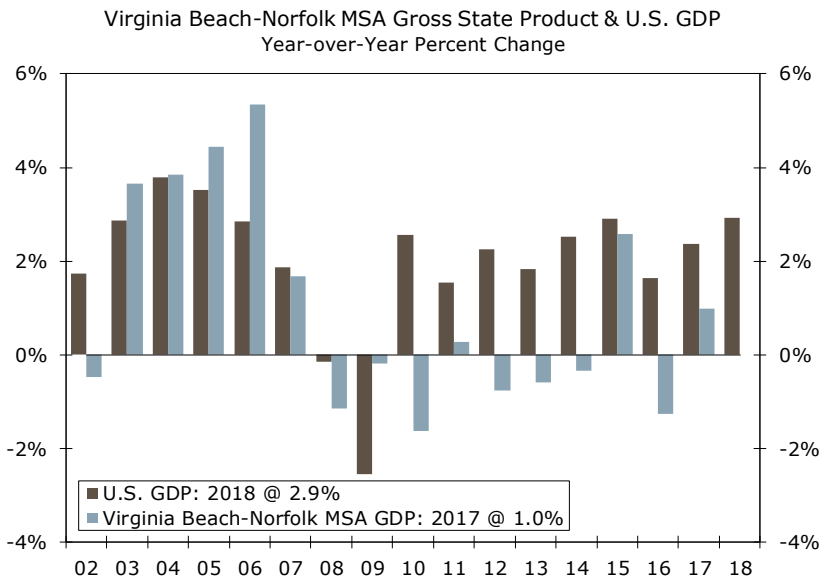
Index, 2000=100, Not Seasonally Adjusted



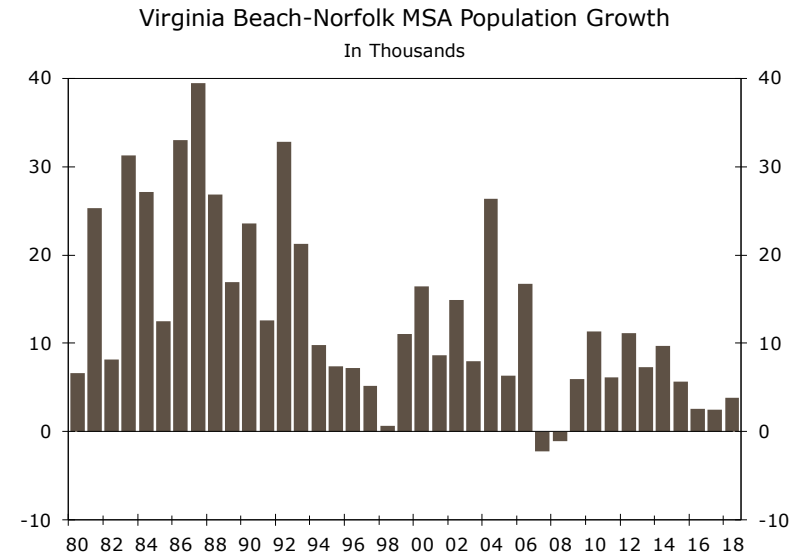
Source: U.S. Department of Commerce, CoreLogic, Inc. and Wells Fargo Securities

Economic growth in the region has trailed the nation for eight consecutive years. Population growth has trended down.

GDP



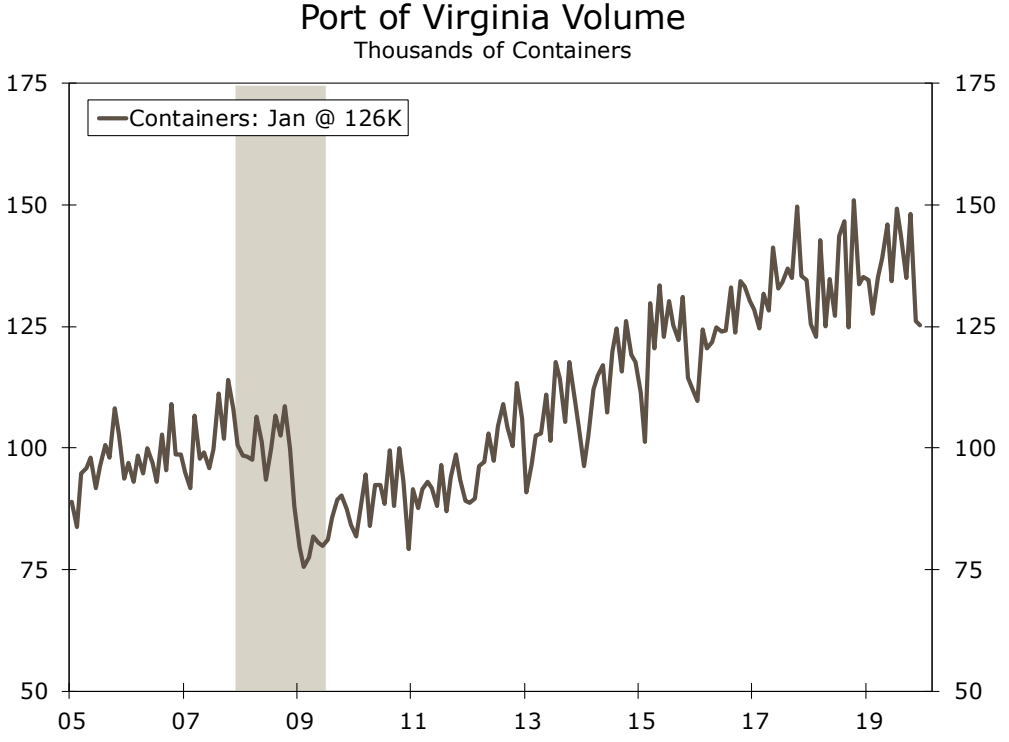
Population



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

Container traffic through the Port of Virginia has largely stagnated over the past few years.

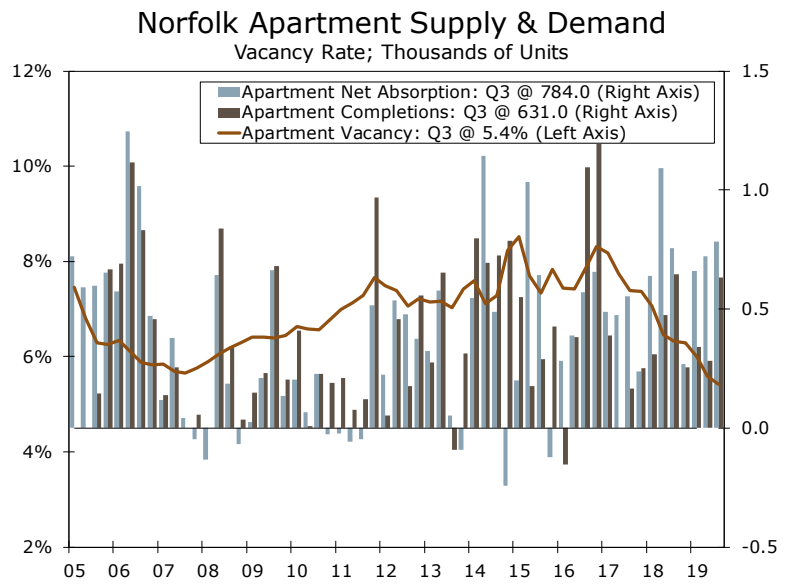
Volumes shipped through the inland port continue to grow, reflecting increased efficiencies and supply constraints in the trucking sector.



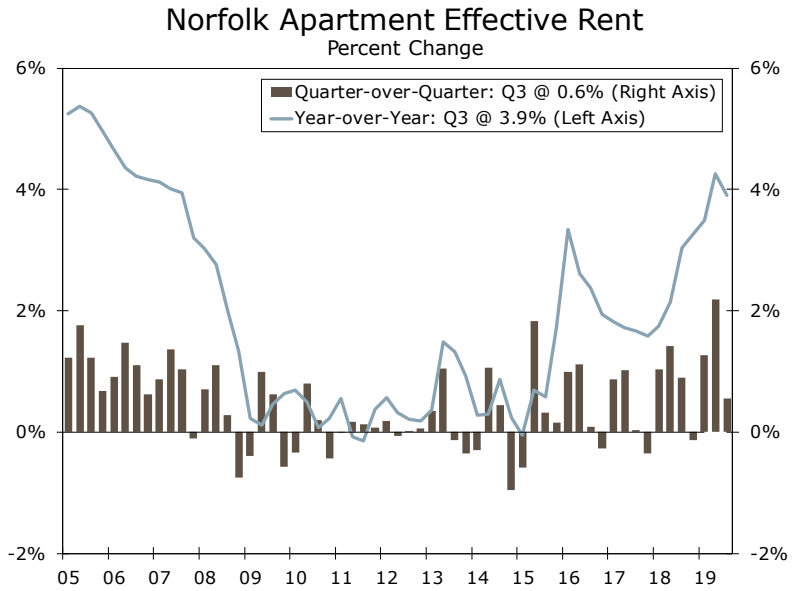
Source: Virginia Port Authority and Wells Fargo Securities

The vacancy rate has persistently headed lower. The large renter pool of military employees provides some stability.

Supply & Demand



Rent Growth

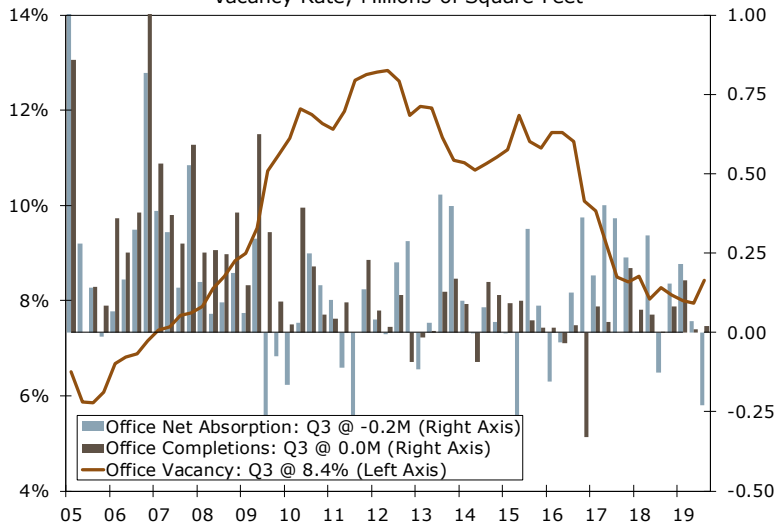


Source: CoStar, Inc. and Wells Fargo Securities

Rent growth has been very moderate, and the vacancy rate has begun to tick up.

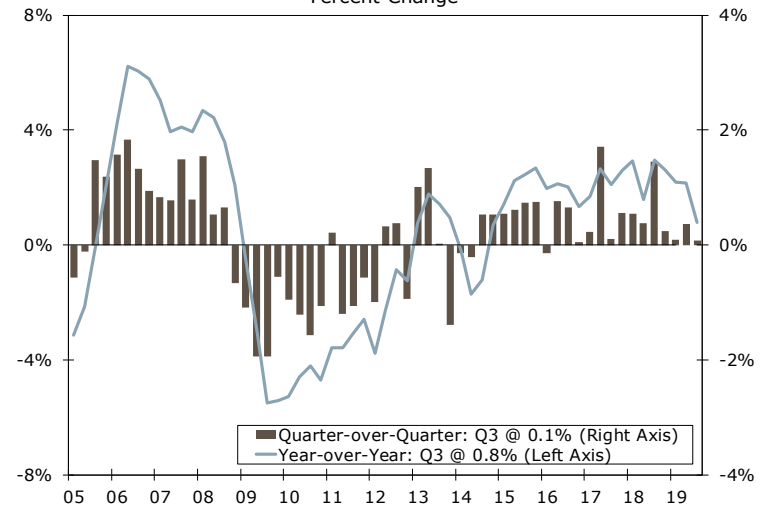
Supply & Demand

Norfolk Office Supply & Demand
Vacancy Rate; Millions of Square Feet



Rent Growth

Norfolk Office Asking Rent
Percent Change

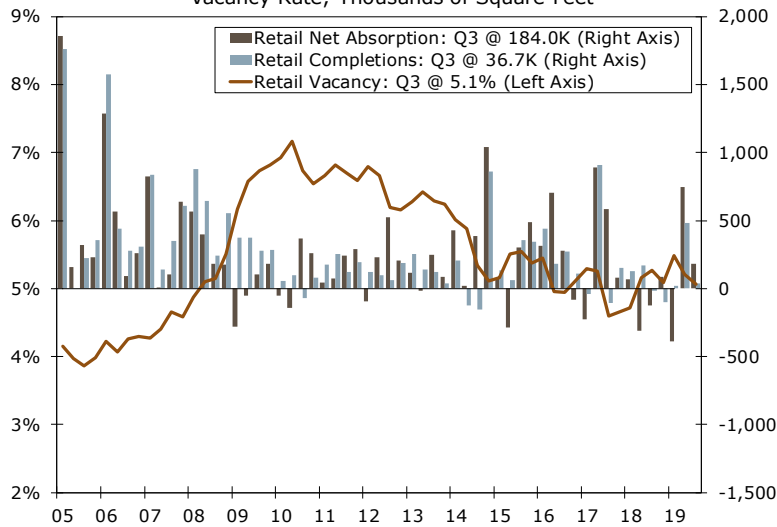


Source: CoStar, Inc. and Wells Fargo Securities

The retail vacancy rate remains roughly in-line with the historical average.

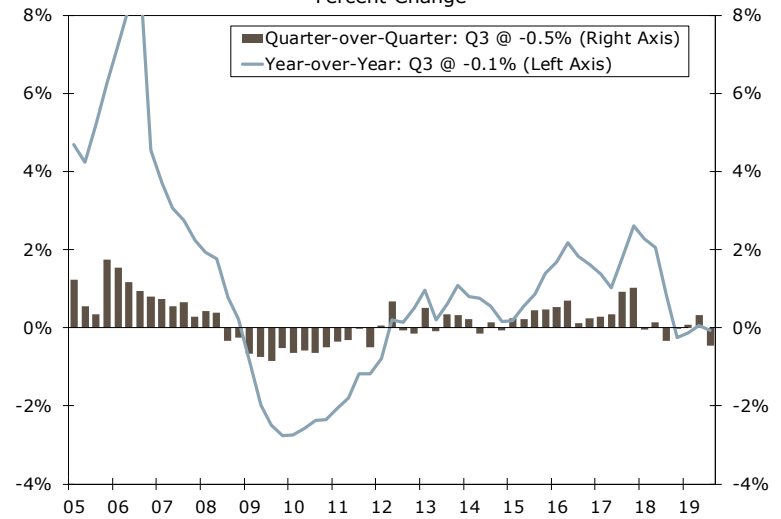
Supply & Demand

Norfolk Retail Supply & Demand
Vacancy Rate; Thousands of Square Feet



Rent Growth

Norfolk Retail Asking Rent
Percent Change

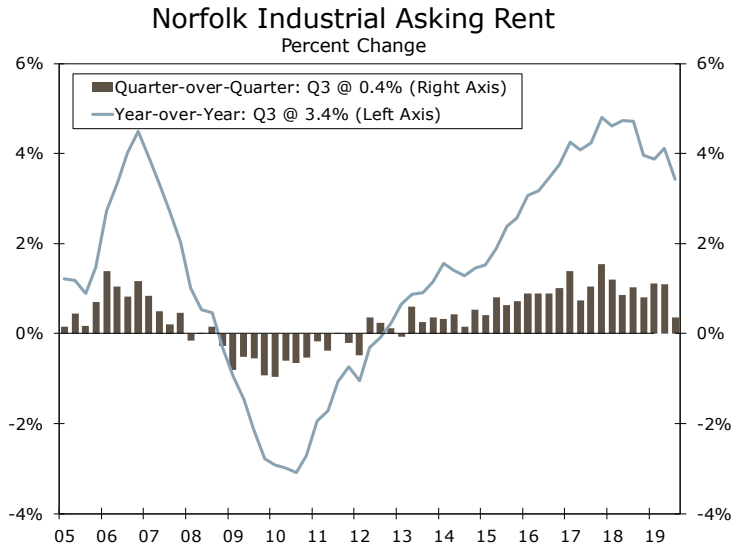
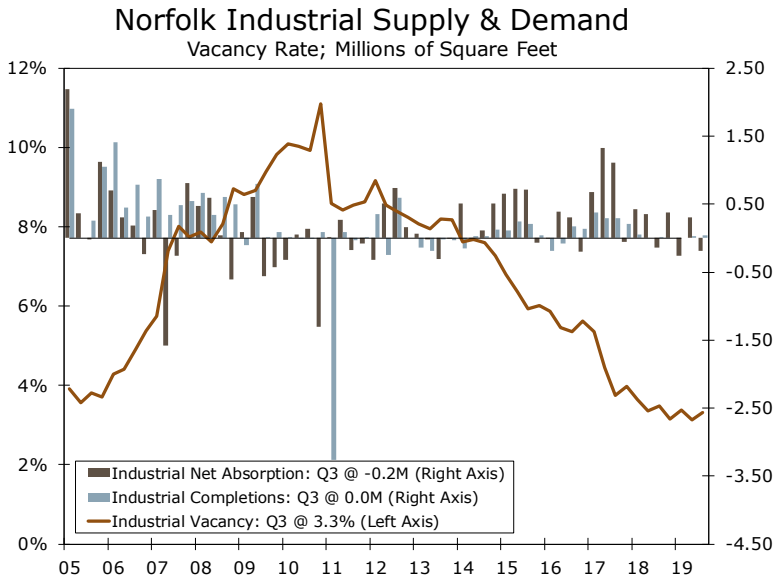


Source: CoStar, Inc. and Wells Fargo Securities

The industrial market has improved, and logistics and distribution properties are performing relatively well.

Supply & Demand

Rent Growth



Source: CoStar, Inc. and Wells Fargo Securities

National Housing Outlook

	2013	2014	2015	2016	2017	2018	Forecast		
							2019	2020	2021
Real GDP, Percent Change	1.8	2.5	2.9	1.6	2.4	2.9	2.3	1.9	2.2
Residential Investment, Percent Change	12.4	3.8	10.2	6.5	3.5	-1.5	-1.6	4.0	4.1
Nonfarm Payroll Change (Avg. Monthly)	192	251	227	193	179	223	176	123	111
Unemployment Rate	7.4	6.2	5.3	4.9	4.4	3.9	3.7	3.6	3.7
Home Construction									
Total Housing Starts, in Thousands	924.9	1,003.3	1,111.9	1,173.7	1,202.9	1,250.0	1,269.0	1,330.0	1,350.0
Single-Family Starts, in Thousands	617.7	647.8	714.6	781.5	848.9	875.7	879.5	935.0	950.0
Multifamily Starts, in Thousands	307.2	355.5	397.3	392.2	354.0	374.3	389.5	395.0	400.0
Home Sales									
New Home Sales, Single-Family, in Thousands	429.0	439.0	501.0	561.0	613.0	617.0	681.0	730.0	750.0
Total Existing Home Sales, in Thousands	5,090.0	4,940.0	5,250.0	5,450.0	5,510.0	5,340.0	5,360.0	5,435.0	5,490.0
Existing Single-Family Home Sales, in Thousands	4,484.0	4,344.0	4,646.0	4,838.0	4,892.0	4,742.0	4,780.0	4,840.0	4,880.0
Existing Condominium & Co-op, in Thousands	603.0	591.0	608.0	614.0	619.0	601.0	580.0	595.0	610.0
Manufactured Homes									
Total Shipments, in Thousands	60.2	64.3	70.5	81.1	92.9	96.6	92.5	95.3	97.7
Percent Change	9.7	6.8	9.7	15.0	14.5	3.9	-4.2	3.0	2.5
Home Prices									
Median New Home, \$ Thousands	268.9	288.5	294.2	307.8	323.1	326.8	318.4	325.0	331.0
Percent Change	9.7	7.3	2.0	4.6	5.0	1.1	-2.6	2.1	1.8
Median Existing Home, \$ Thousands	197.1	208.3	222.4	233.8	247.2	259.3	272.0	284.3	296.7
Percent Change	11.5	5.7	6.8	5.1	5.7	4.9	4.9	4.5	4.4
FHFA Purchase Only Index, Percent Change	7.1	5.0	5.3	5.9	6.5	6.6	5.2	5.4	5.8
S&P Case-Shiller C-10 Home Price Index, Percent Change	11.7	7.9	4.6	4.5	5.3	5.4	2.3	3.6	4.1
Interest Rates - Annual Averages									
Federal Funds Target Rate	0.25	0.25	0.27	0.52	1.13	1.96	2.19	1.75	1.75
Prime Rate	3.25	3.25	3.27	3.52	4.13	4.96	5.19	4.75	4.75
10-Year Treasury Note	2.35	2.54	2.14	1.84	2.33	2.91	2.00	2.15	2.33
Conventional 30-Year Fixed Rate, Commitment Rate	3.98	4.17	3.85	3.65	3.99	4.54	3.86	3.86	4.03

Forecast as of: January 08, 2020

Source: U.S. Dept. of Commerce, U.S. Dept. of Labor, FRB, FHFA, FHLMC, National Association of Realtors, S&P, Wells Fargo Securities

Source: IHS Global Insight and Wells Fargo Securities

Wells Fargo U.S. Economic Forecast

	Actual																Forecast			
	2018				2019				2020				2021				2018	2019	2020	2021
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q				
Real Gross Domestic Product ¹	2.6	3.5	2.9	1.1	3.1	2.0	2.1	2.3	1.2	2.9	2.2	2.3	2.1	2.2	2.4	2.4	2.9	2.3	2.1	2.3
Personal Consumption	1.7	4.0	3.5	1.4	1.1	4.6	3.1	2.2	2.1	2.0	1.9	1.9	1.8	2.1	2.2	2.2	3.0	2.6	2.3	2.0
Business Fixed Investment	8.8	7.9	2.1	4.8	4.4	-1.0	-2.3	1.1	2.2	2.6	3.7	3.9	4.0	3.9	3.9	3.8	6.4	2.3	1.6	3.8
Equipment	6.6	3.4	2.9	7.4	-0.1	0.8	-3.8	0.0	1.4	1.5	2.6	2.9	3.4	3.4	3.2	3.0	6.8	1.6	0.7	3.0
Intellectual Property Products	9.7	11.9	4.1	11.7	10.8	3.6	4.7	6.3	5.1	4.4	5.7	6.0	5.9	5.5	5.6	5.7	7.4	7.7	5.2	5.7
Structures	12.1	11.0	-2.1	-9.0	4.0	-11.1	-9.9	-10.5	-1.5	1.5	2.5	2.0	1.8	1.9	2.0	2.1	4.1	-4.5	-3.8	2.0
Residential Investment	-5.3	-3.7	-4.0	-4.7	-1.0	-3.0	4.6	4.5	4.3	4.5	4.5	4.3	4.0	4.0	3.8	3.5	-1.5	-1.6	4.0	4.1
Government Purchases	1.9	2.6	2.1	-0.4	2.9	4.8	1.7	0.8	1.1	1.1	1.0	0.8	0.8	0.8	0.8	0.7	1.7	2.2	1.3	0.9
Net Exports ²	0.0	0.7	-2.1	-0.4	0.7	-0.7	-0.1	1.4	-0.2	0.0	-0.1	-0.1	-0.1	-0.1	0.1	0.0	-0.4	-0.2	0.1	-0.1
Inventories ²	0.1	-1.2	2.1	0.1	0.5	-0.9	0.0	-0.9	-0.7	0.7	0.2	0.2	0.2	0.0	0.0	0.0	0.1	0.1	-0.2	0.2
Nonfarm Payroll Change ³	228	243	189	233	174	152	193	184	180	405	-105	10	115	110	110	110	223	176	123	111
Unemployment Rate	4.1	3.9	3.8	3.8	3.9	3.6	3.6	3.5	3.6	3.5	3.6	3.6	3.7	3.7	3.7	3.7	3.9	3.7	3.6	3.7
Consumer Price Index ⁴	2.2	2.7	2.6	2.2	1.6	1.8	1.8	2.0	2.4	2.2	2.2	2.2	2.1	2.2	2.2	2.1	2.4	1.8	2.2	2.1
Quarter-End Interest Rates ⁵																				
Federal Funds Target Rate	1.75	2.00	2.25	2.50	2.50	2.50	2.00	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.96	2.25	1.75	1.75
Conventional Mortgage Rate	4.44	4.57	4.63	4.64	4.28	3.80	3.61	3.72	3.90	3.90	3.90	3.90	3.95	4.00	4.05	4.10	4.54	3.94	3.90	4.03
2 Year Note	2.27	2.52	2.81	2.48	2.27	1.75	1.63	1.58	1.75	1.80	1.80	1.85	1.90	1.90	1.95	2.00	2.53	1.97	1.80	1.94
10 Year Note	2.74	2.85	3.05	2.69	2.41	2.00	1.68	1.92	2.10	2.15	2.15	2.20	2.25	2.30	2.35	2.40	2.91	2.14	2.15	2.33

Forecast as of: January 15, 2020

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

A Sampling of Our Recent Special, Regional & Industry Commentary

Recent Special Commentary		
Date	Title	Authors
U.S. Macro		
January-10	Consumers Are Resilient Even in Challenging Times	Quinlan, Iqbal & Seery
January-06	Potential Economic Implications of the Iranian Crisis	Bryson
December-19	Budget Bill Leaves Little Room Under the Tree for Santa	Pugliese & Mathews
December-18	Forecast Update: When the Facts Change, We Change Our Minds	Bryson
December-17	Boeing Production Halt Is an About Face for Q1 Growth	Quinlan, House & Seery
U.S. Regional		
December-20	Texas Payrolls Soar in November	Vitner & Dougherty
December-20	Florida Posts Modest Payroll Gain in November	Vitner, Dougherty & Honnold
December-20	November Gain for California Payrolls	Vitner & Dougherty
December-20	North Carolina Has Strong Momentum Headed into 2020	Vitner & Dougherty
December-19	Minnesota Payrolls Take a Hit in November	Vitner, Dougherty & Honnold
Global Economy		
January-08	Let's Get Digital: A Briefing on Central Bank Digital Currencies	Nelson & Licis
December-17	China-Dependent Economies Showing Signs of Stabilization	Pugliese & Bennebroek
December-13	The Election is Over, but Brexit is Not	Nelson
December-11	2020 International Economic Outlook	Bennebroek & Licis
December-05	U.K. Election Preview-The Beginning of the End?	Nelson & Licis
Interest Rates/Credit Market		
January-14	The Animal Spirits Index Ends 2019 on a High Note	Iqbal
December-20	Is the Fed on the Right Path?	Bryson, Iqbal & Mathews
December-11	Little Drama in Today's FOMC Decision	Bryson
December-03	December Flashlight for the FOMC Blackout Period	Bryson, Quinlan & House
October-30	FOMC Delivers Third Rate Cut in as Many Meetings	Bryson
October-30	Treasury Refunding Highlights	Bryson & Pugliese
Real Estate & Housing		
January-09	Housing Chartbook: January 2020 & Outlook	Vitner, Dougherty & Honnold
December-18	Commercial Real Estate Chartbook	Vitner, Dougherty & Honnold
December-05	Housing Maintains Solid Momentum Headed into 2020	Vitner, Dougherty & Honnold
November-18	Apartment Market Outlook	Vitner, Dougherty & Honnold
November-07	Housing Chartbook: November 2019	Vitner, Dougherty & Honnold

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Economists & Macro Strategists

Jay H. Bryson, Acting Chief Economist	jay.bryson@wellsfargo.com
Mark Vitner, Senior Economist	mark.vitner@wellsfargo.com
Sam Bullard, Senior Economist	sam.bullard@wellsfargo.com
Nick Bennenbroek, Macro Strategist	nicholas.bennenbroek@wellsfargo.com
Tim Quinlan, Senior Economist	tim.quinlan@wellsfargo.com
Azhar Iqbal, Econometrician	azhar.iqbal@wellsfargo.com
Sarah House, Senior Economist	sarah.house@wellsfargo.com
Charlie Dougherty, Economist	charles.dougherty@wellsfargo.com
Erik Nelson, Macro Strategist	erik.f.nelson@wellsfargo.com
Michael Pugliese, Economist	michael.d.pugliese@wellsfargo.com
Brendan McKenna, Macro Strategist	brendan.mckenna@wellsfargo.com

Economic Analysts

Shannon Seery, Economic Analyst	shannon.seery@wellsfargo.com
Matthew Honnold, Economic Analyst	matthew.honnold@wellsfargo.com
Jen Licis, Economic Analyst	jennifer.licis@wellsfargo.com
Hop Mathews, Economic Analyst	hop.mathews@wellsfargo.com

Administrative Assistants

Coren Burton, Administrative Assistant	coren.burton@wellsfargo.com
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