

The U.S. & Austin Economic Outlook

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December 5, 2019

Together we'll go far



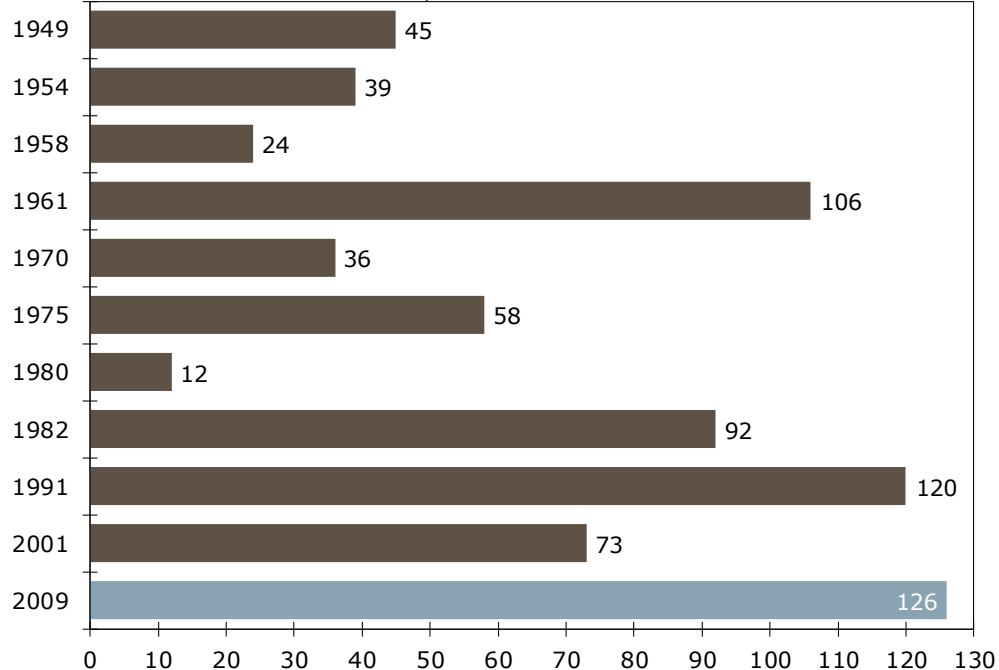
The current expansion is now the longest on record, but has also been the weakest of the post-WWII era, making the economy more vulnerable to a shock

The Longest Expansion

...But the Weakest

Length of U.S. Expansion

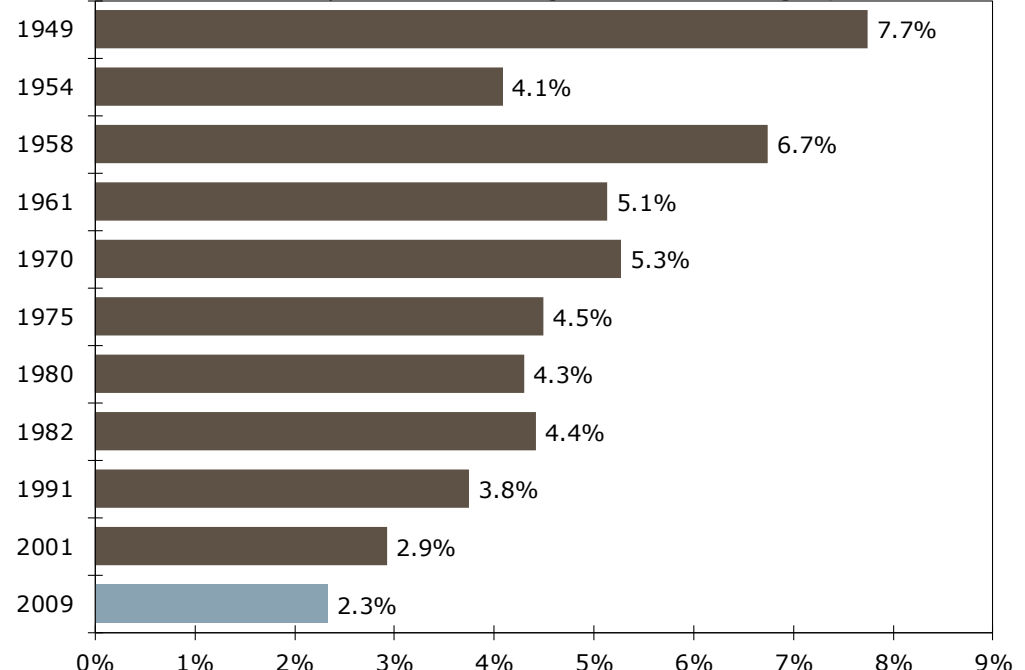
Y-axis=End of Recession, X-axis=Months as of December 2019



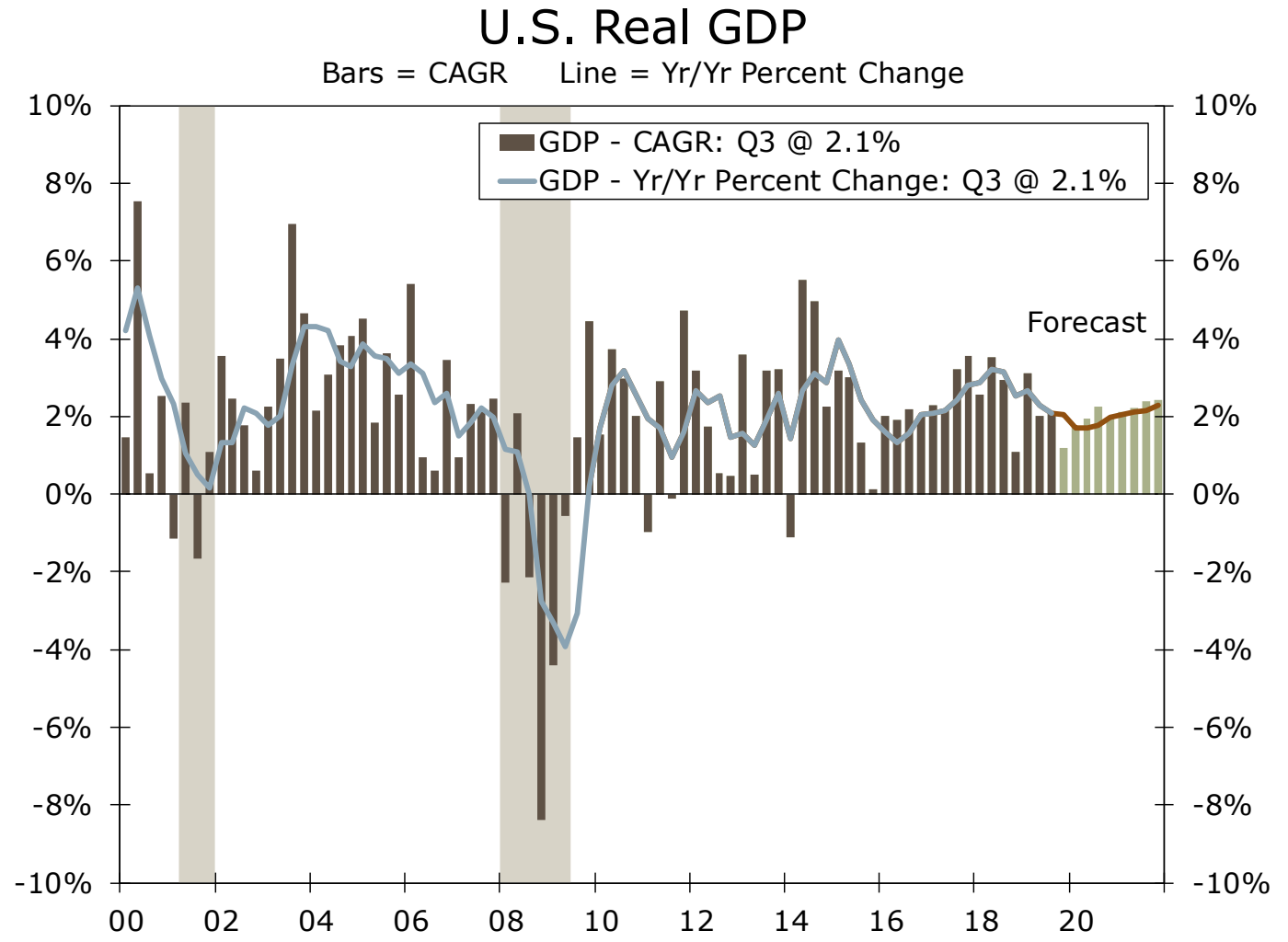
Source: U.S. Department of Labor and Wells Fargo Securities

Strength of U.S. Expansion

Y-axis=Start of Expansion, X-axis=Avg GDP Growth through Q3-2019



Our baseline forecast is for growth to slow over the coming year, but for the expansion to continue

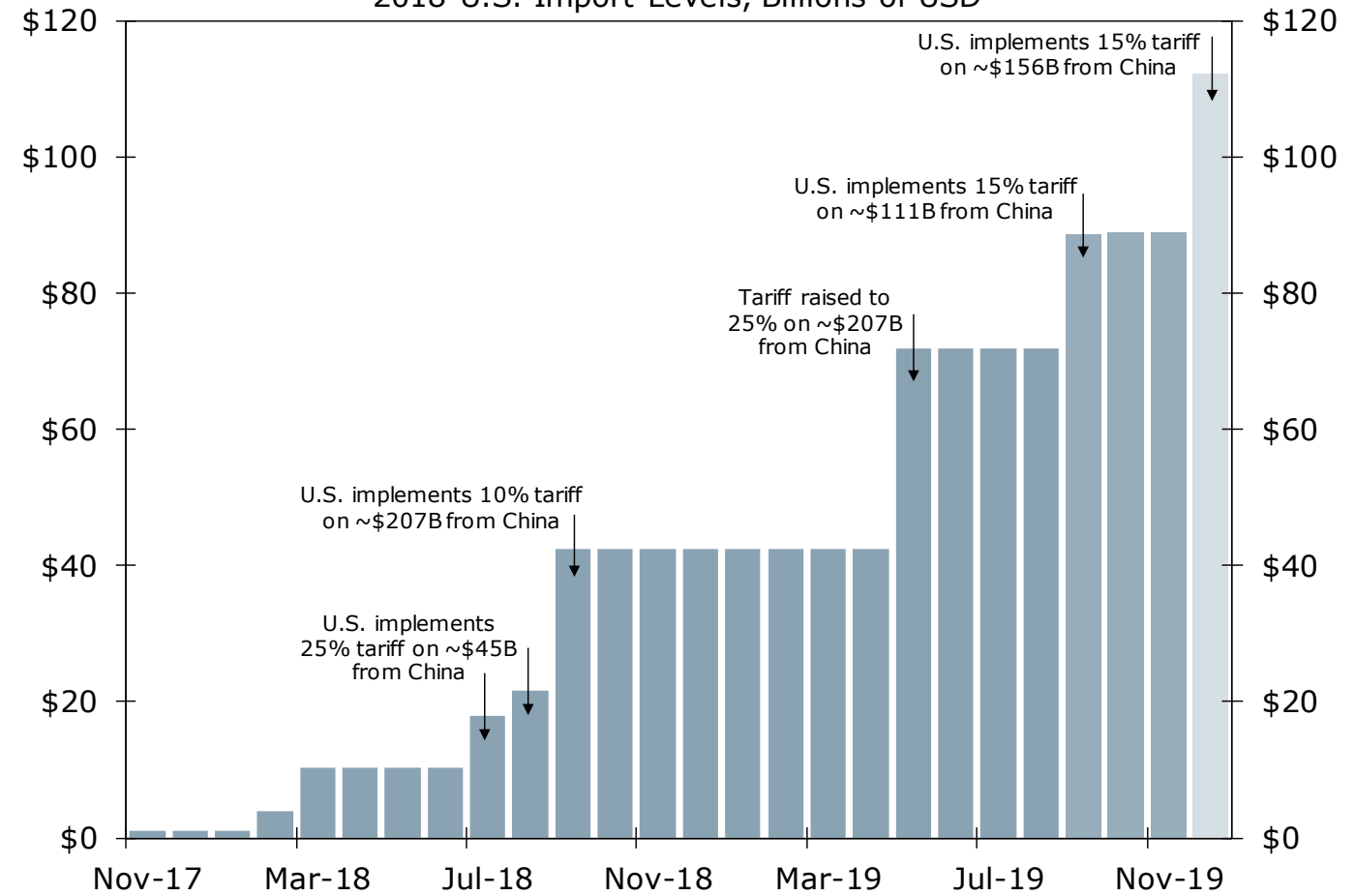


Source: U.S. Department of Commerce and Wells Fargo Securities

The trade war has ramped up, but the direct costs remain small in a \$21 trillion economy

The Rising Cost of the Trade War

Annualized Cost Based on Value of Goods x Tariff Rate
2018 U.S. Import Levels, Billions of USD

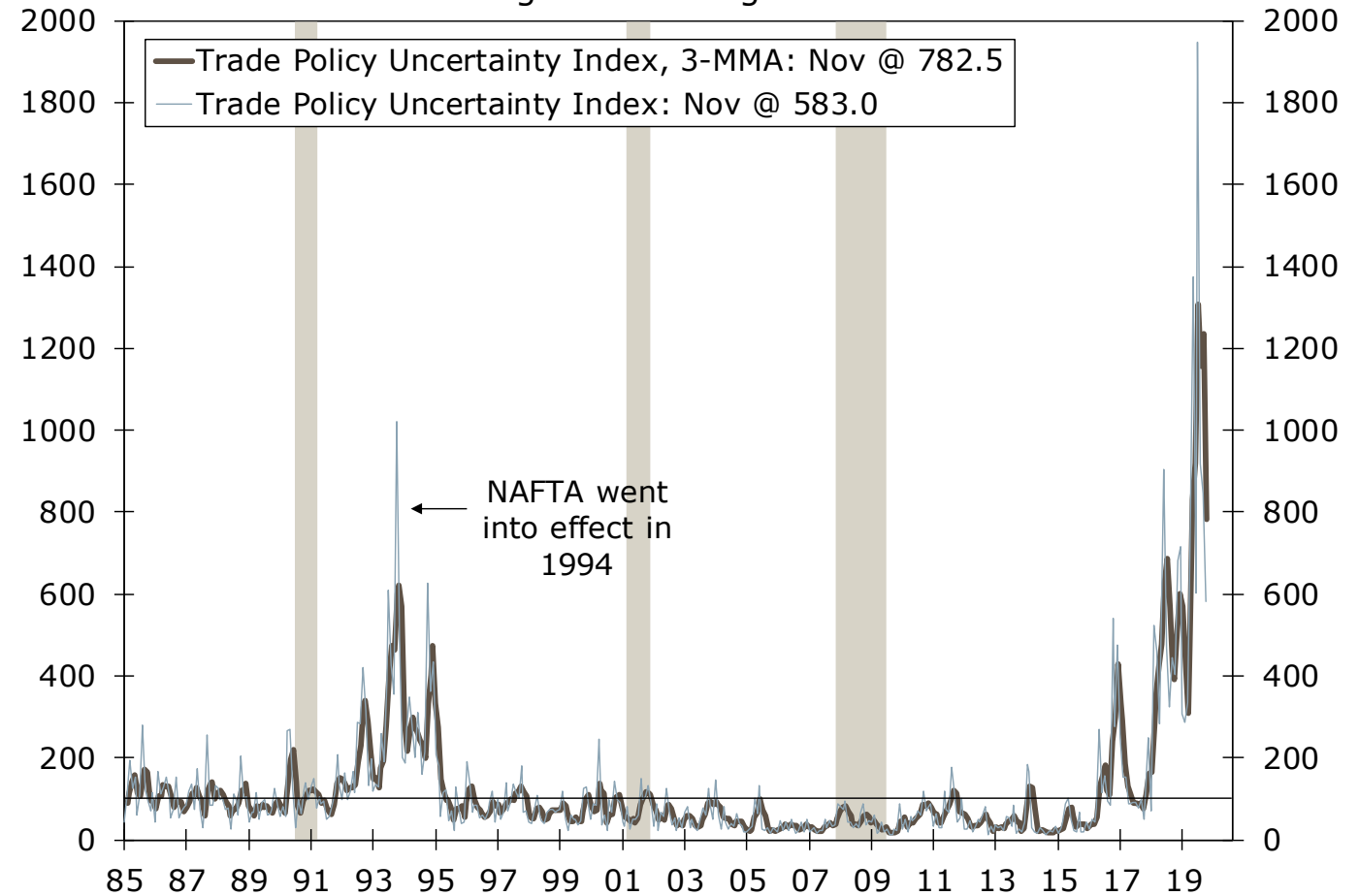


Source: U.S. Department of Commerce, Office of the United States Trade Representative and Wells Fargo Securities

Uncertainty surrounding trade policy creates indirect costs to investment and confidence that are more damaging to the economy

U.S. Trade Policy Uncertainty Index

Long Term Average = 100

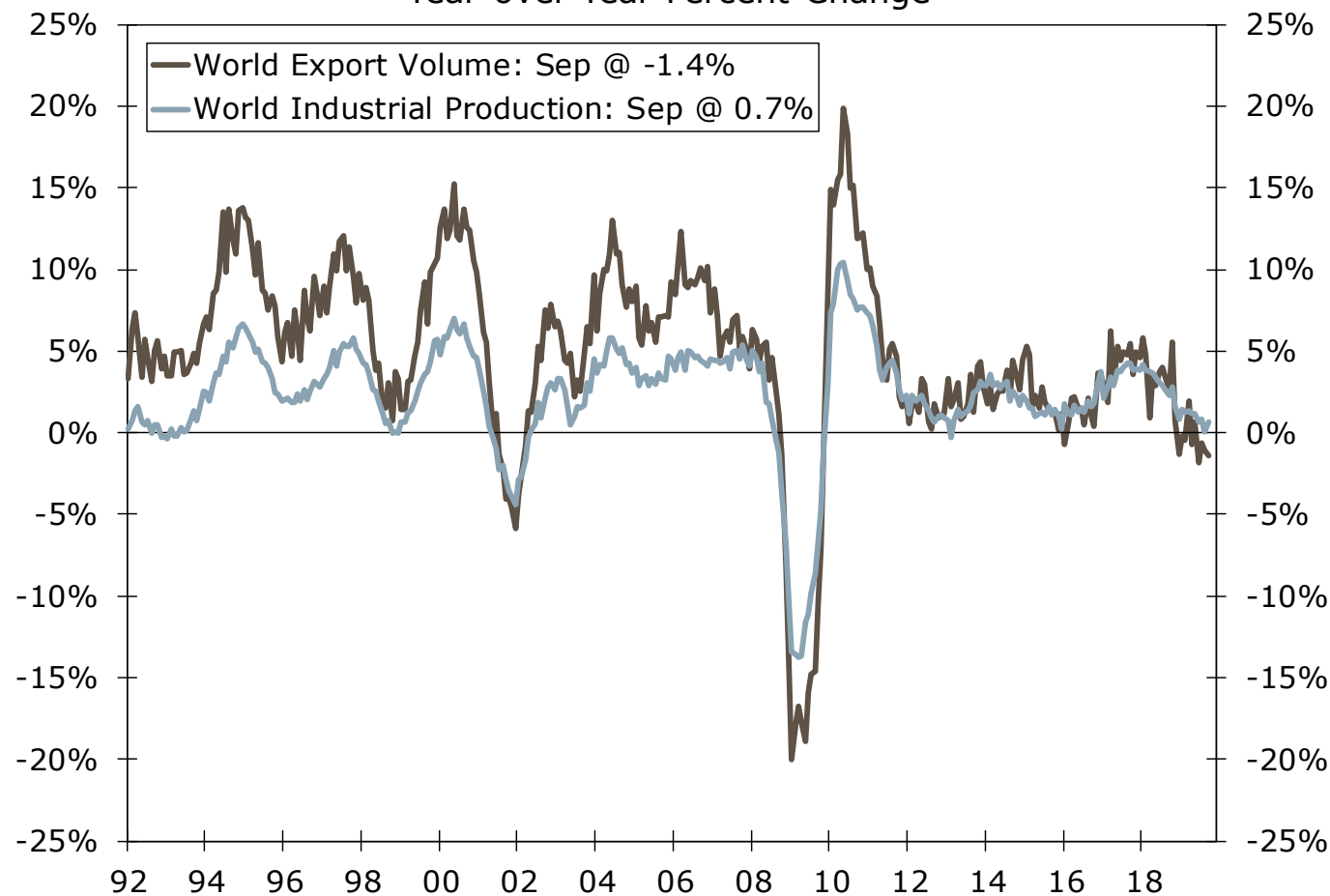


Source: Baker, Bloom & Davis and Wells Fargo Securities

Other countries have been caught in the trade-war crosshairs, contributing to a slowdown in trade and global growth more generally

World Export & IP Volume

Year-over-Year Percent Change

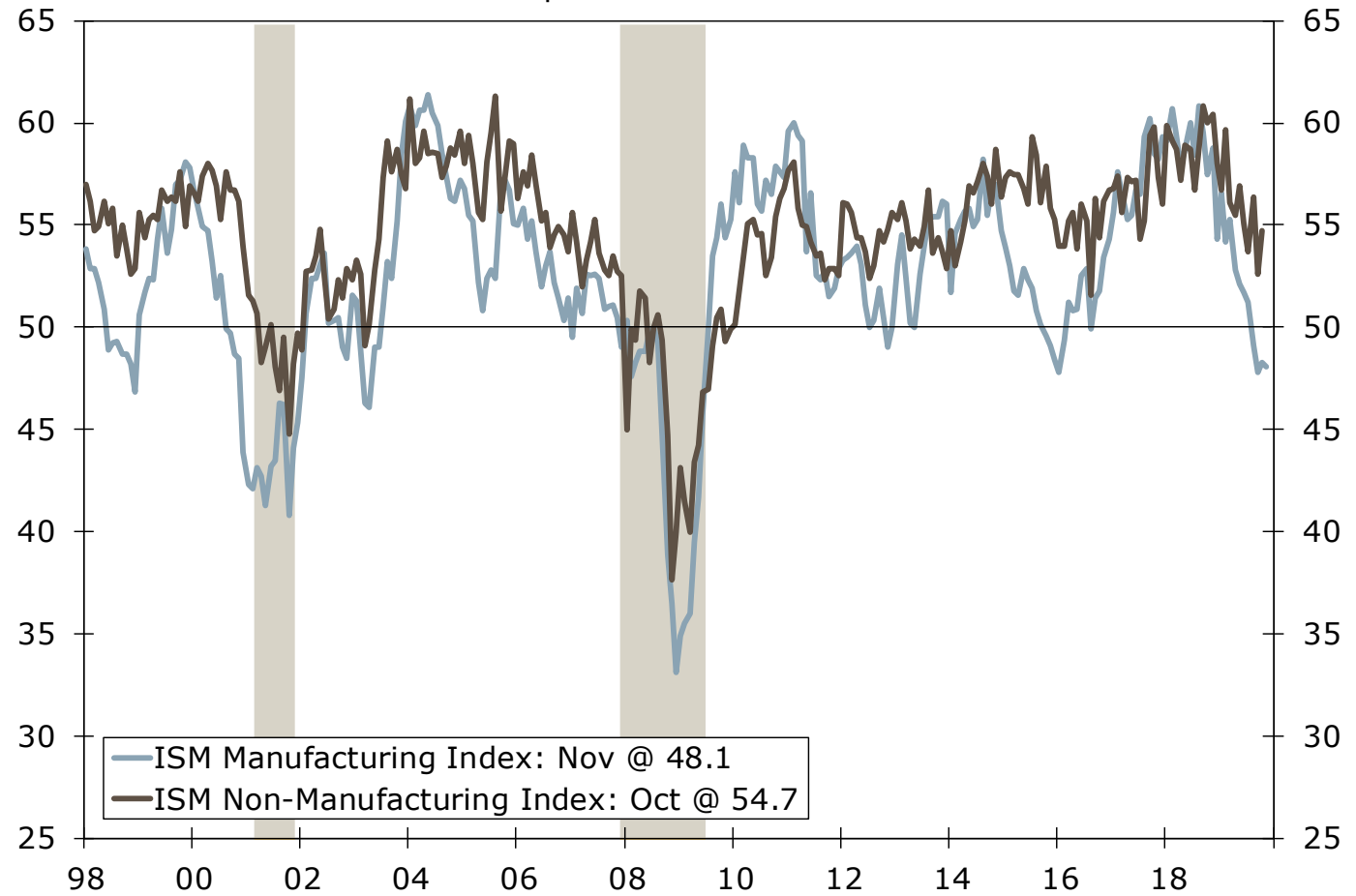


Source: IHS Markit and Wells Fargo Securities

Although slowing, service-sector activity is holding up better than manufacturing

ISM Manufacturing & Non-Manufacturing

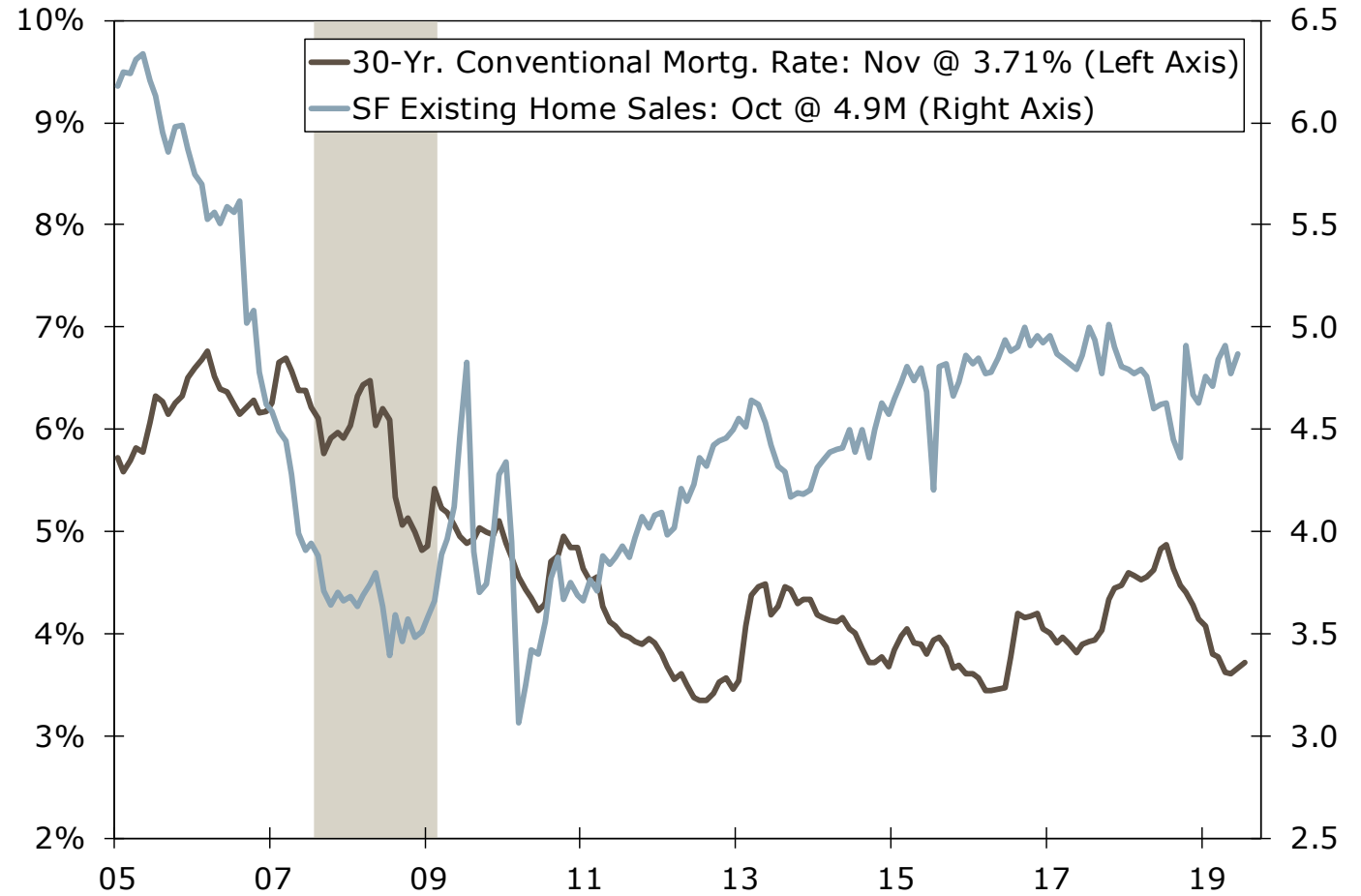
Composite Diffusion Index



Source: Institute for Supply Management and Wells Fargo Securities

Lower mortgage rates have helped arrest the slide in home sales, but broader affordability issues are limiting the upside

Existing Single Family Home Sales vs. Mortgage Rate
Percent and Seasonally Adjusted Annual Rate In Millions

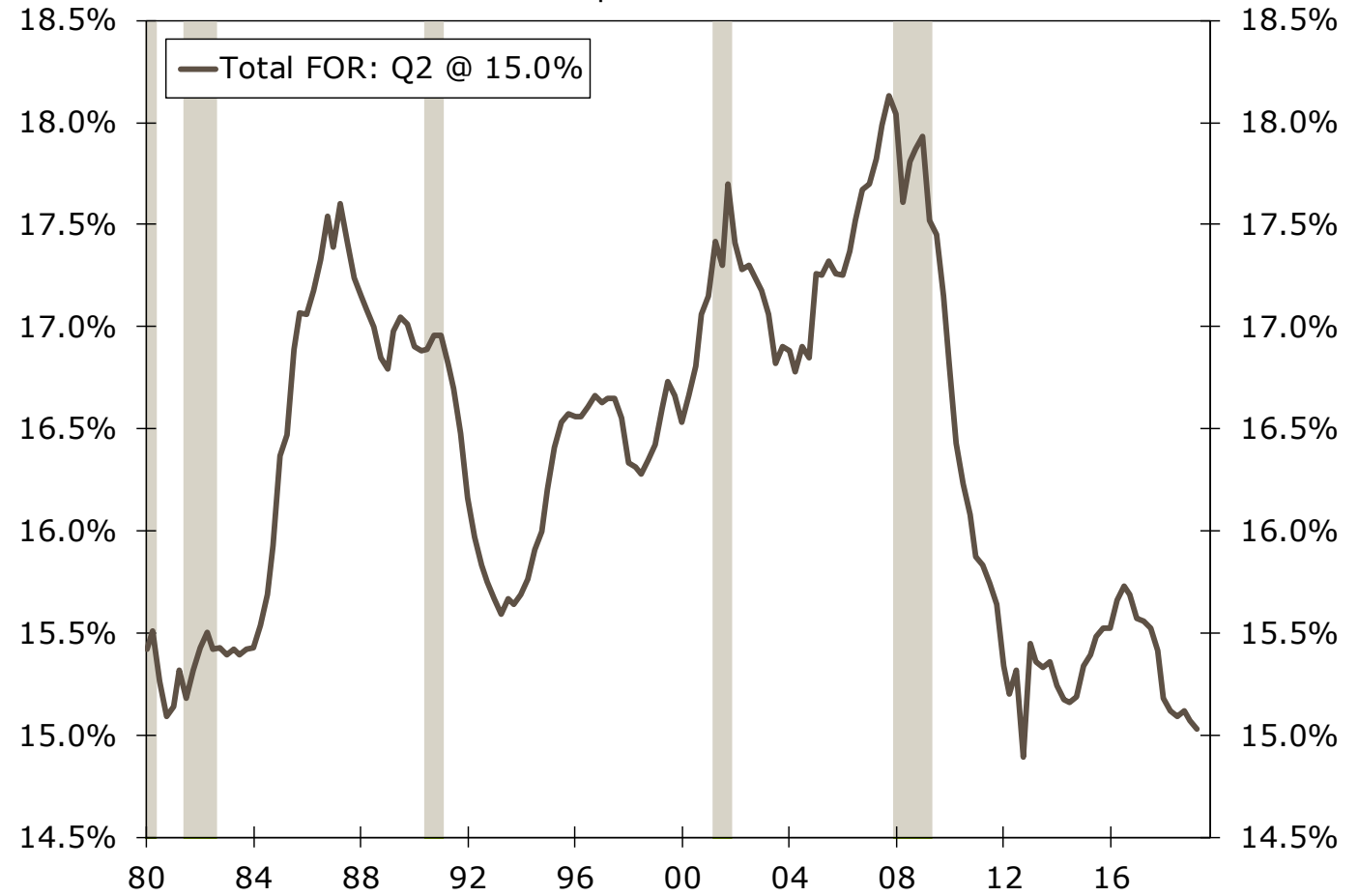


Source: Freddie Mac, U.S. Department of Commerce and Wells Fargo Securities

Household balance sheets are in good shape

Household Financial Obligations Ratio

Percent of Disposable Personal Income

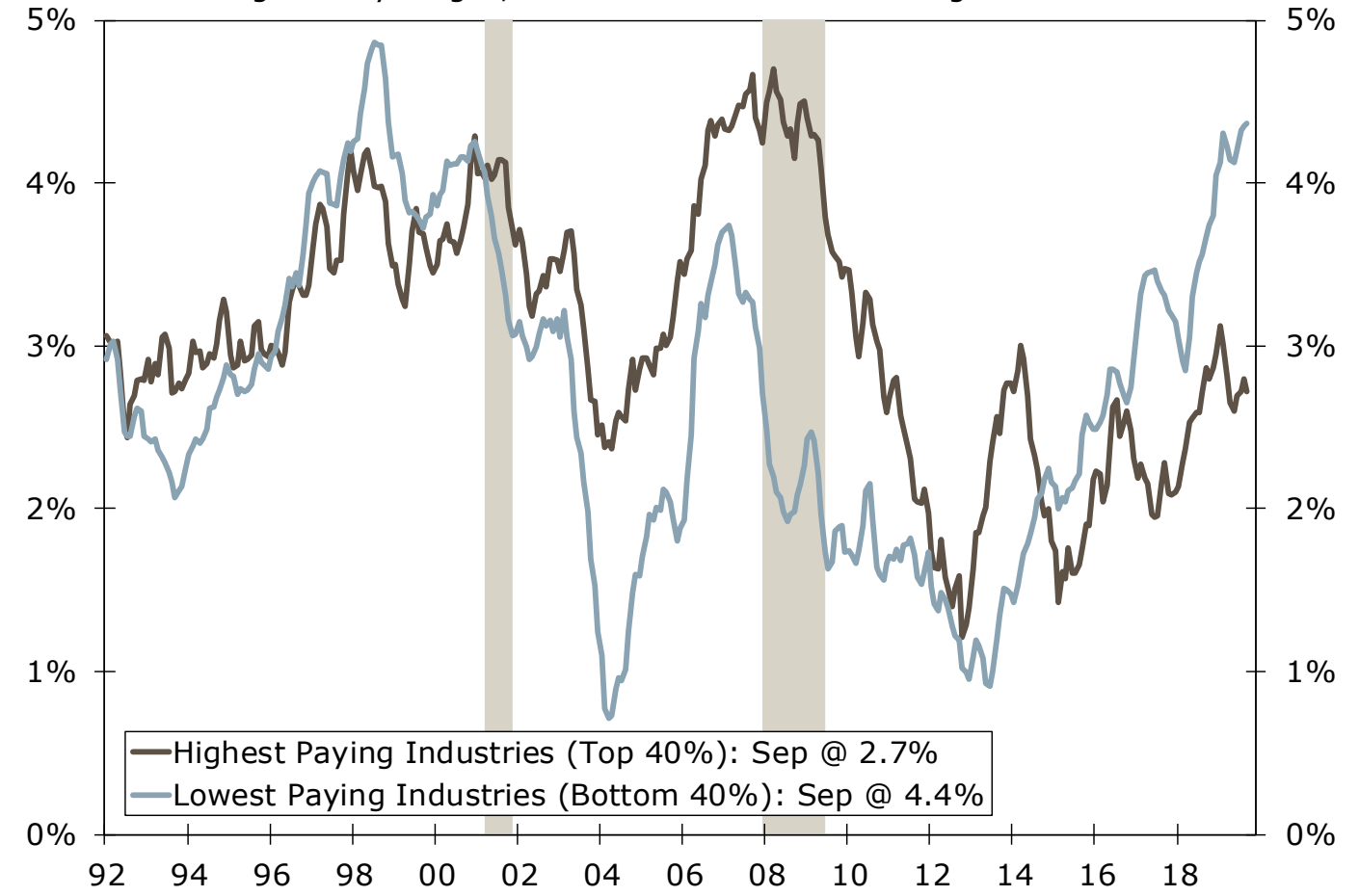


Source: Federal Reserve Board and Wells Fargo Securities

Wages are picking up, especially for lower-paid workers

Wage Growth in High & Low Pay Industries

Avg. Hourly Wages, Year-over-Year Percent Change of 3-MMA

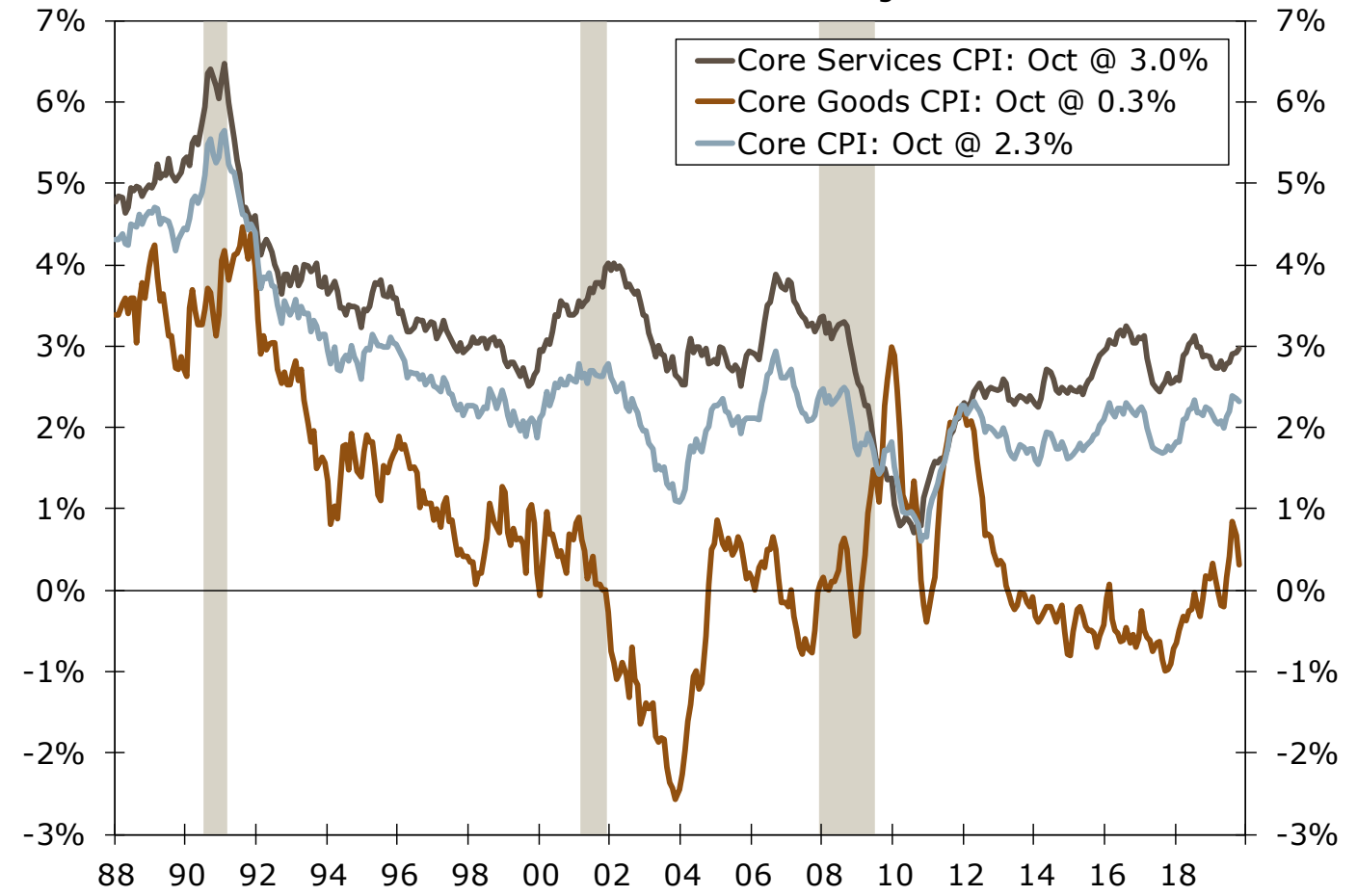


Source: U.S. Department of Labor and Wells Fargo Securities

Tariffs have pushed up goods prices, but overall inflation is expected to remain near the Fed's target

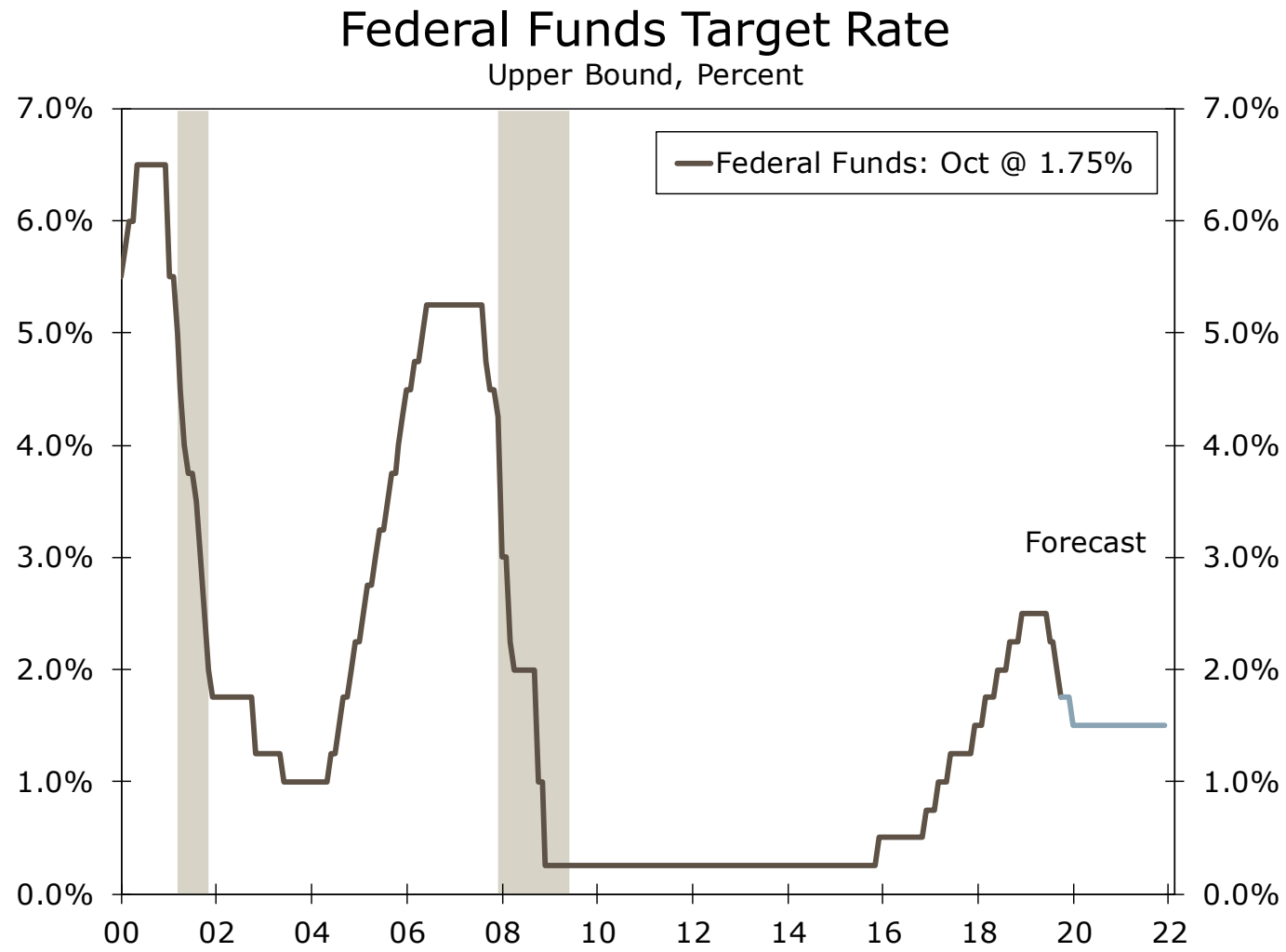
Core Goods vs. Core Services CPI

Year-over-Year Percent Change



Source: U.S. Department of Commerce, Office of the United States Trade Representative and Wells Fargo Securities

The FOMC has neared the end of its mini-easing cycle



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

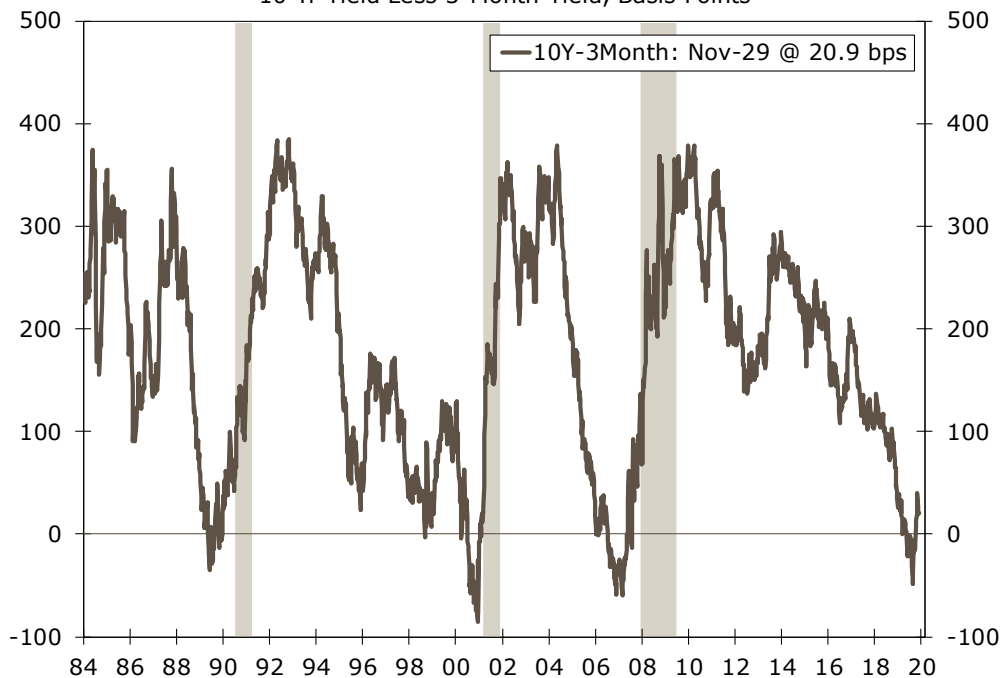
End of the Line?

The yield curve inverted for a time earlier this year, but financial conditions more generally remain accommodative

Yield Curve

Yield Curve Spread

10-Yr Yield Less 3-Month Yield, Basis Points

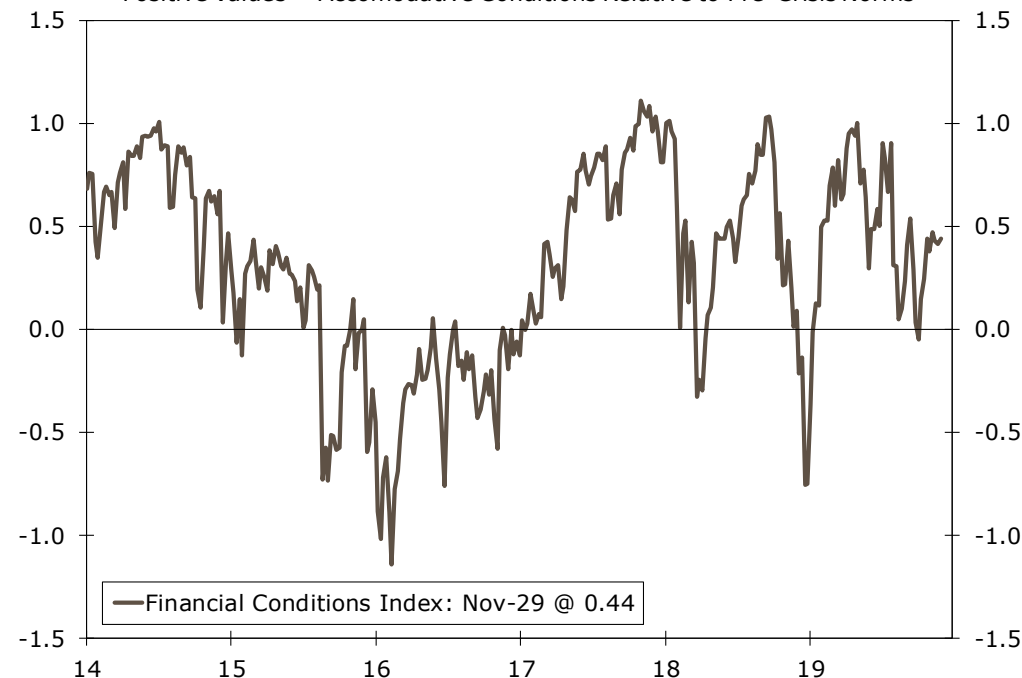


Source: U.S. Department of Labor and Wells Fargo Securities

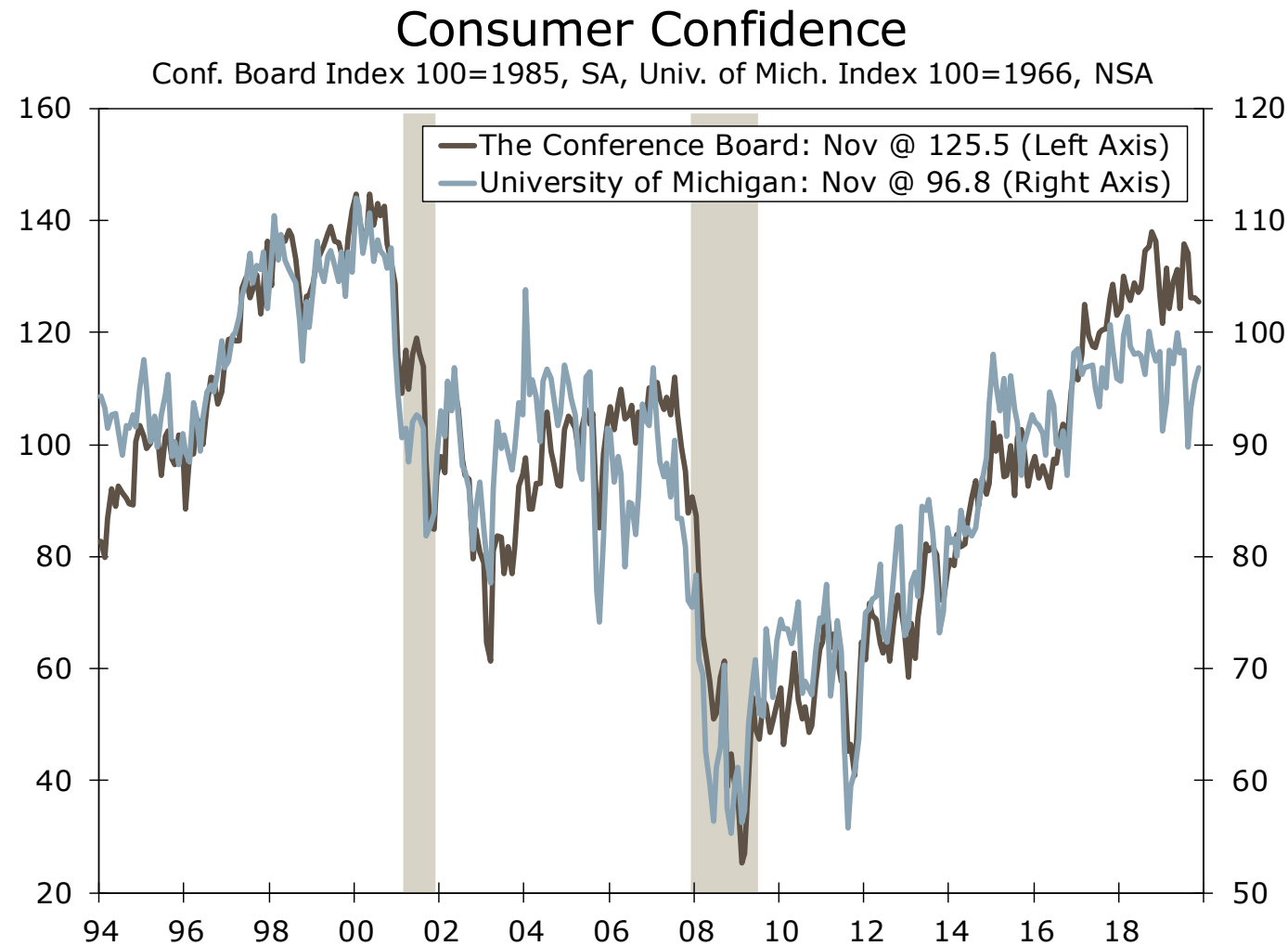
Financial Conditions

Bloomberg Financial Conditions Index

Positive Values = Accommodative Conditions Relative to Pre-Crisis Norms



Consumers have the means to spend, but do they have the will?

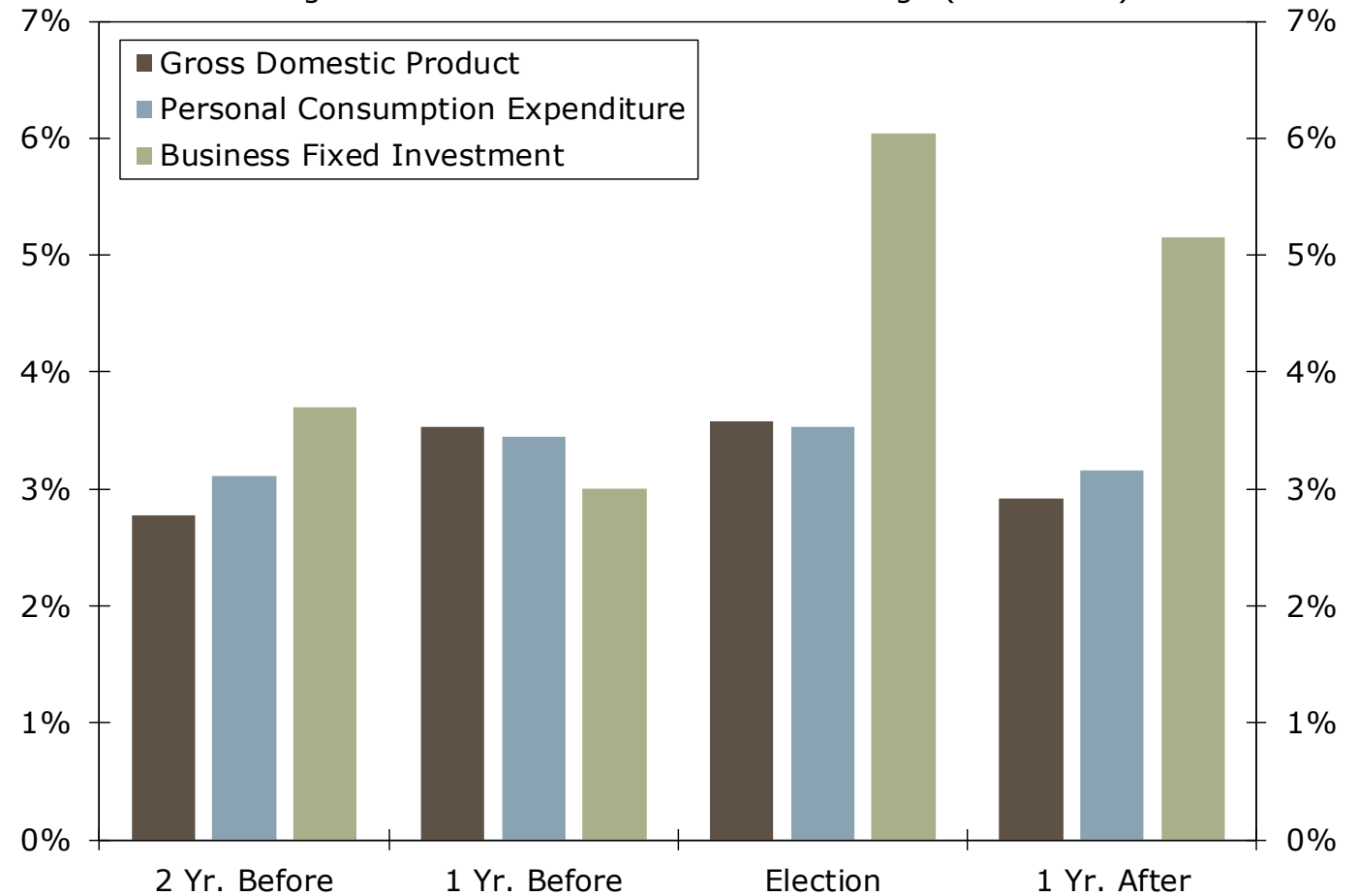


Source: The Conference Board, University of Michigan and Wells Fargo Securities

Growth during election years is not statistically different than non-election years

Economic Activity in the Election Cycle

Average Annual Year-over-Year Percent Change (1948-2018)

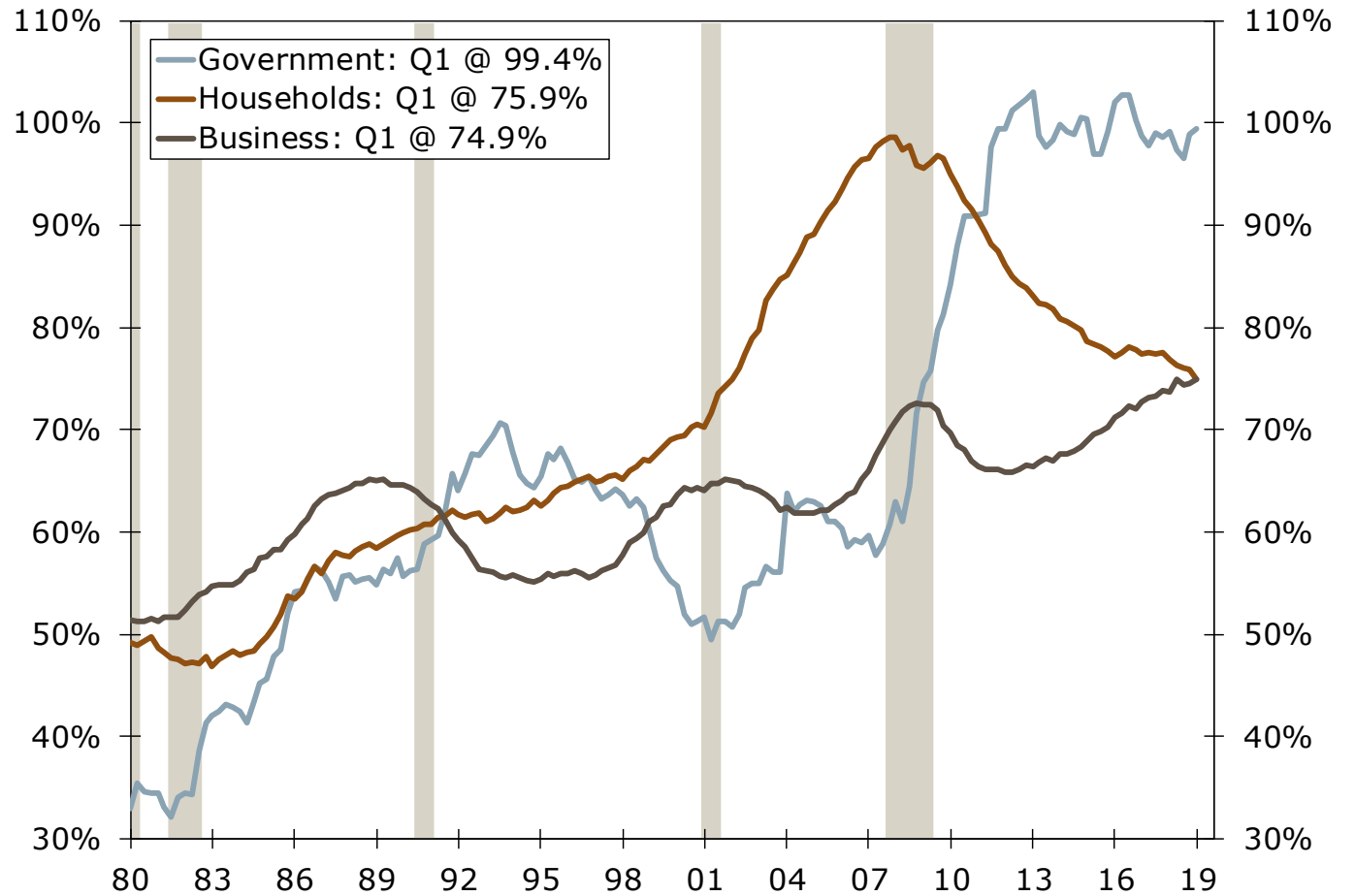


Source: U.S. Department of Commerce and Wells Fargo Securities

Corporate debt is trending higher while government debt ratios have not improved with the stronger economy

Debt in the United States

Percent of GDP

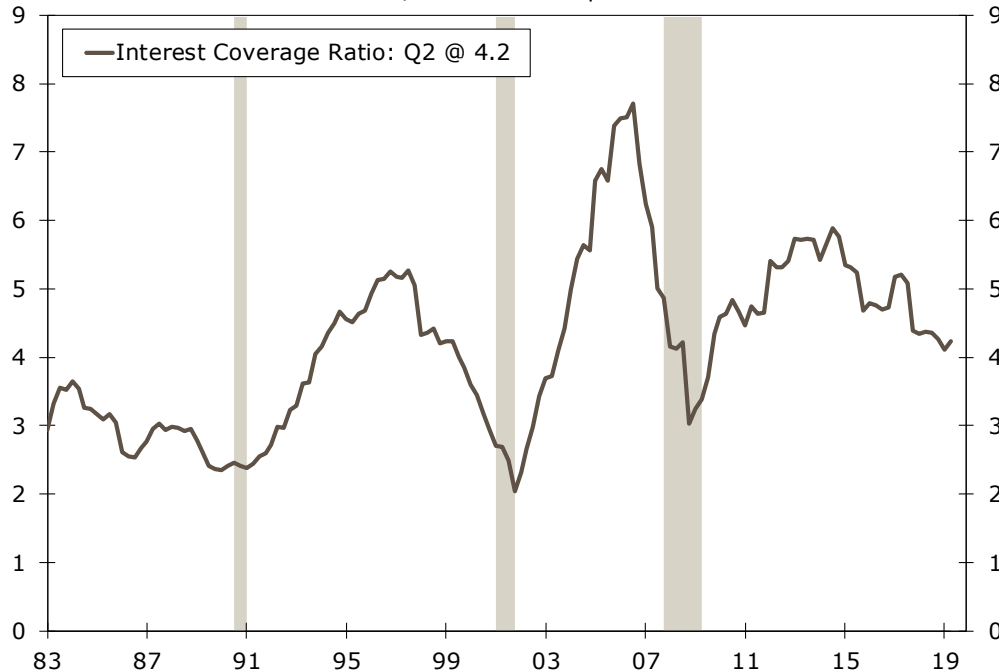


Source: Bank of International Settlements and Wells Fargo Securities

Corporate Debt is not overly burdensome at present, but with margins already declining, a sharp slowdown in profit growth could be troublesome

Corporate Interest Coverage

Interest Coverage Ratio
EBIT/Net Interest Expense

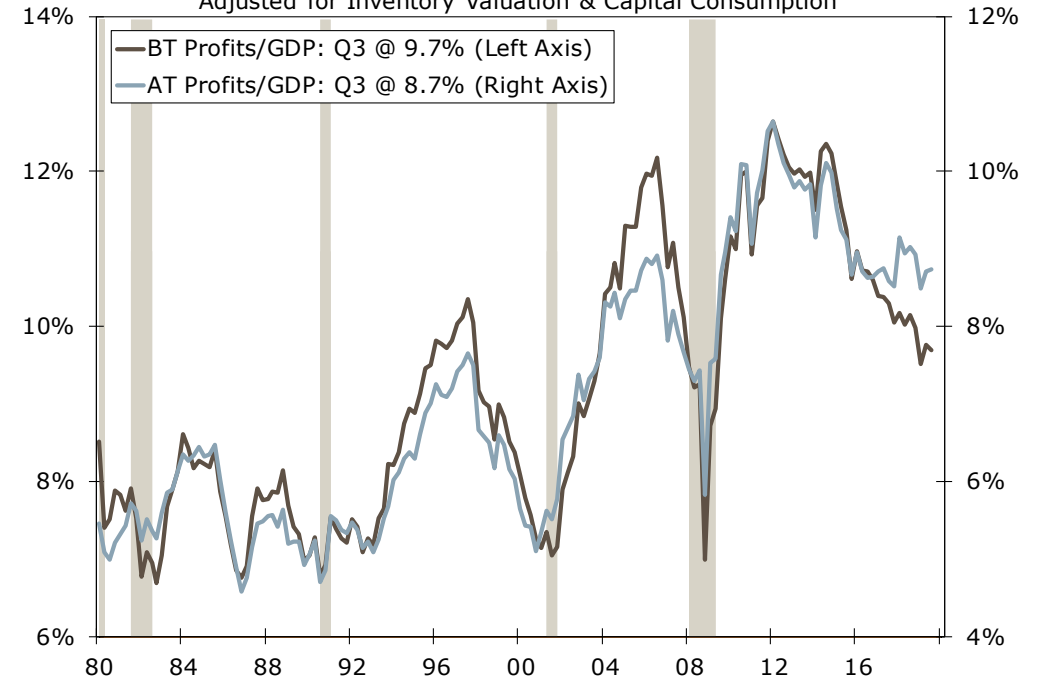


Source: U.S. Department of Commerce and Wells Fargo Securities

Corporate Profit Margins

Corporate Profit Margins

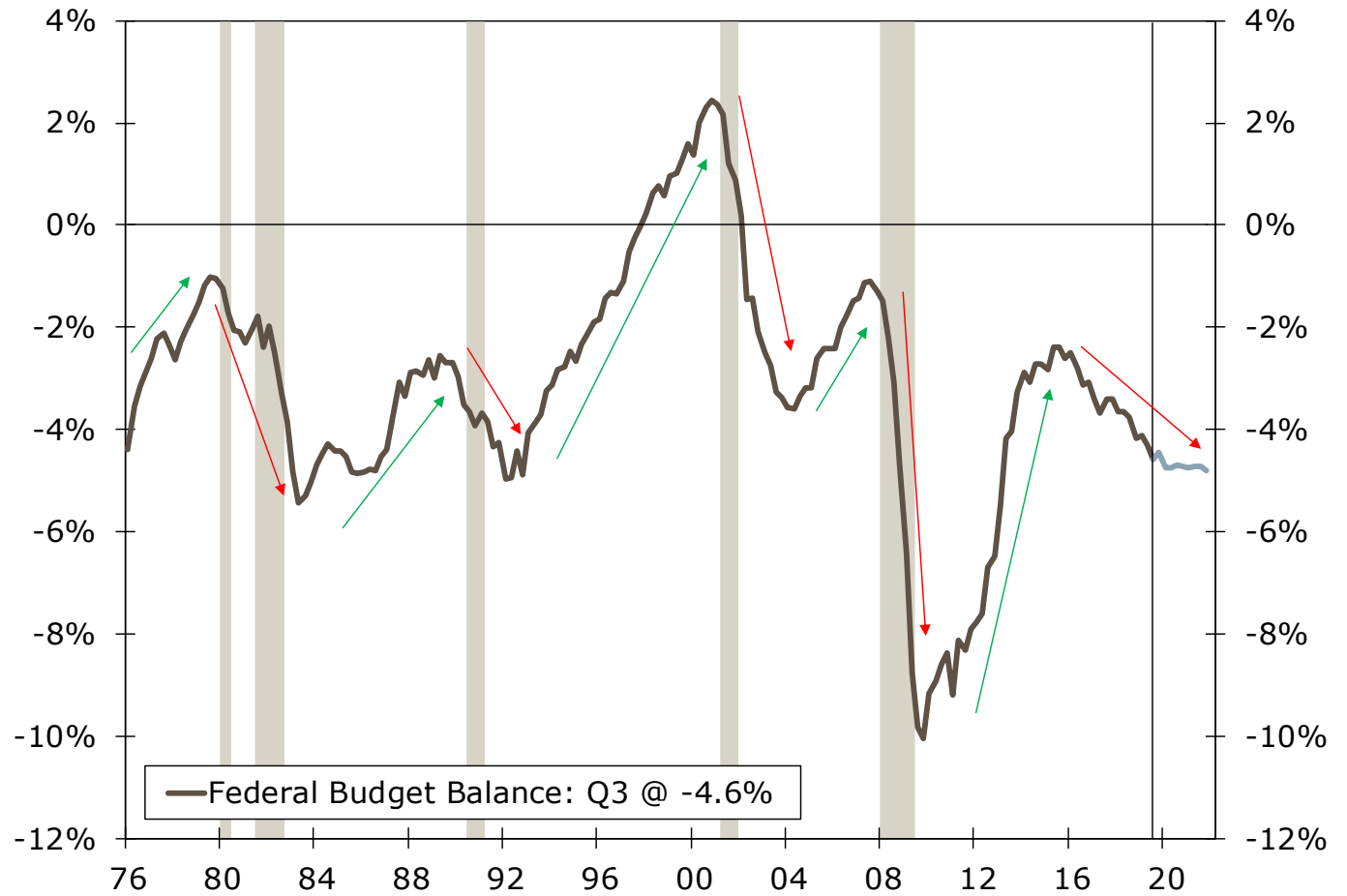
Before & After Tax Corporate Profits as Percent of Nominal GDP
Adjusted for Inventory Valuation & Capital Consumption



Expansions have traditionally been associated with balanced budgets, but that has changed

Federal Budget: Deteriorating in an Expansion

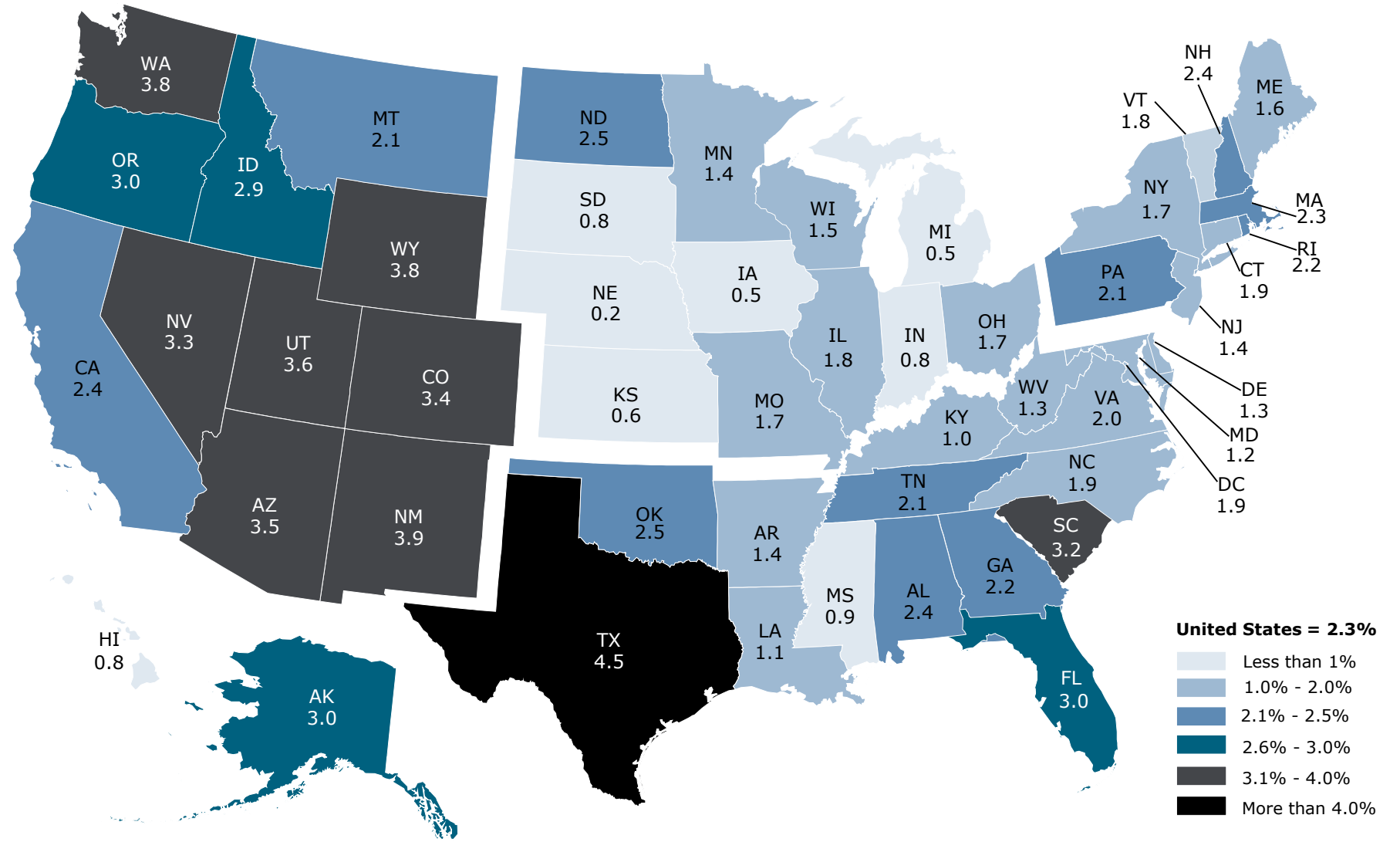
4-Quarter Moving Sum, Percent of GDP, Wells Fargo Forecast in Blue



Source: Congressional Budget Office and Wells Fargo Securities

The Texas & Austin Economy

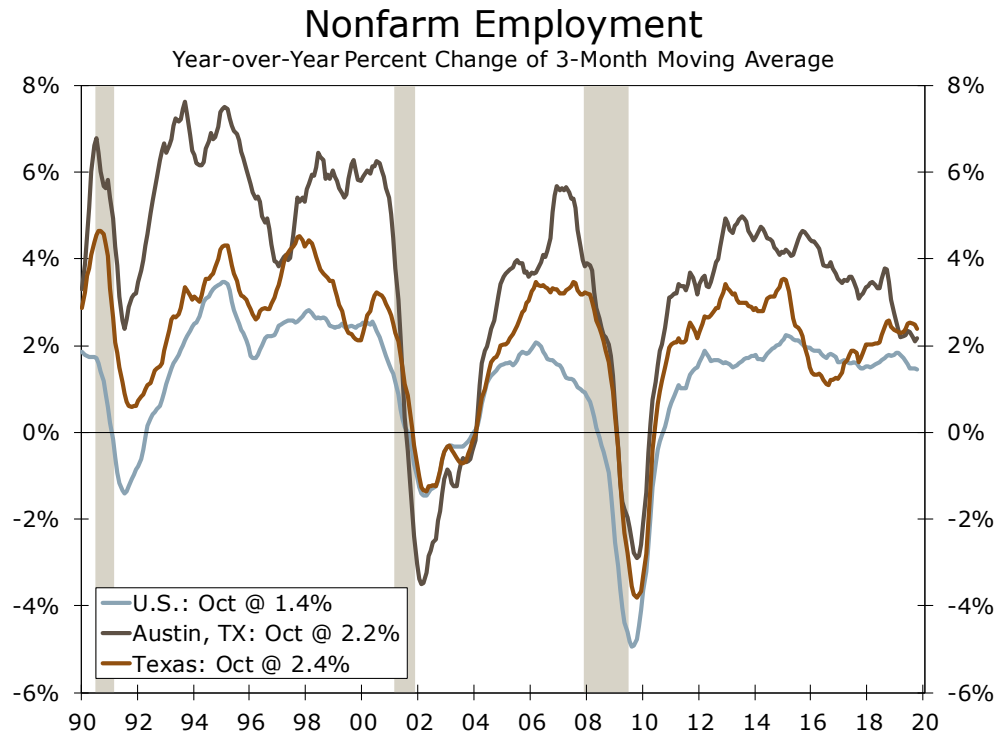
Texas is leading the nation in growth



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

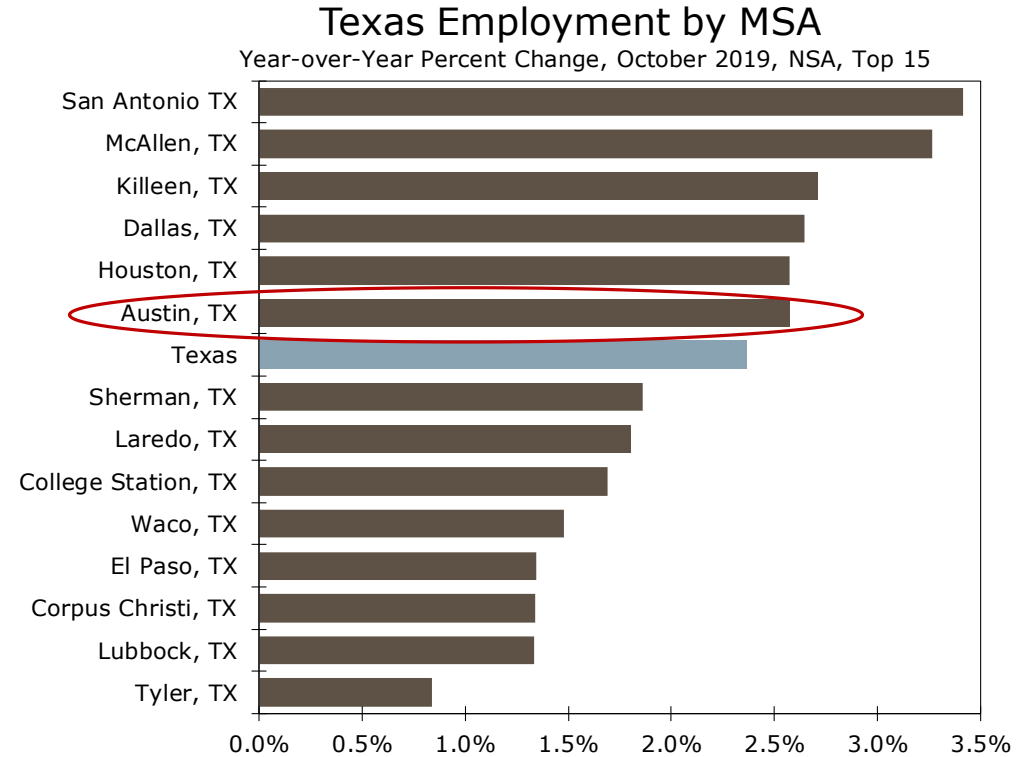
Employment growth remains solid in Austin, but has moderated over the past year

Employment Growth



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

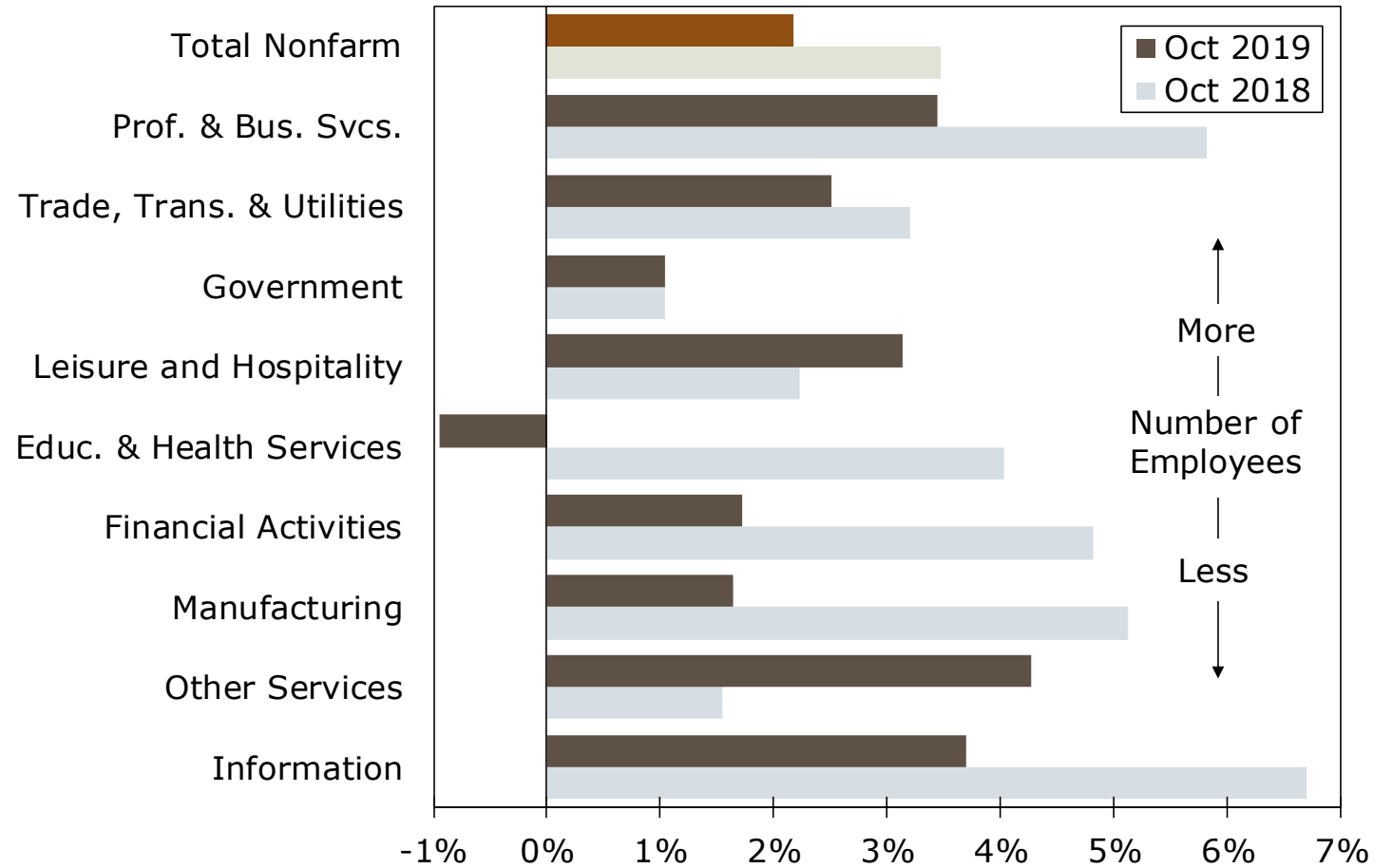
Employment Growth by Metro



The slowdown in hiring has been widespread across industries, although most are still hiring at a decent rate

Austin MSA Employment Growth By Industry

Year-over-Year Percent Change, 3-MMA

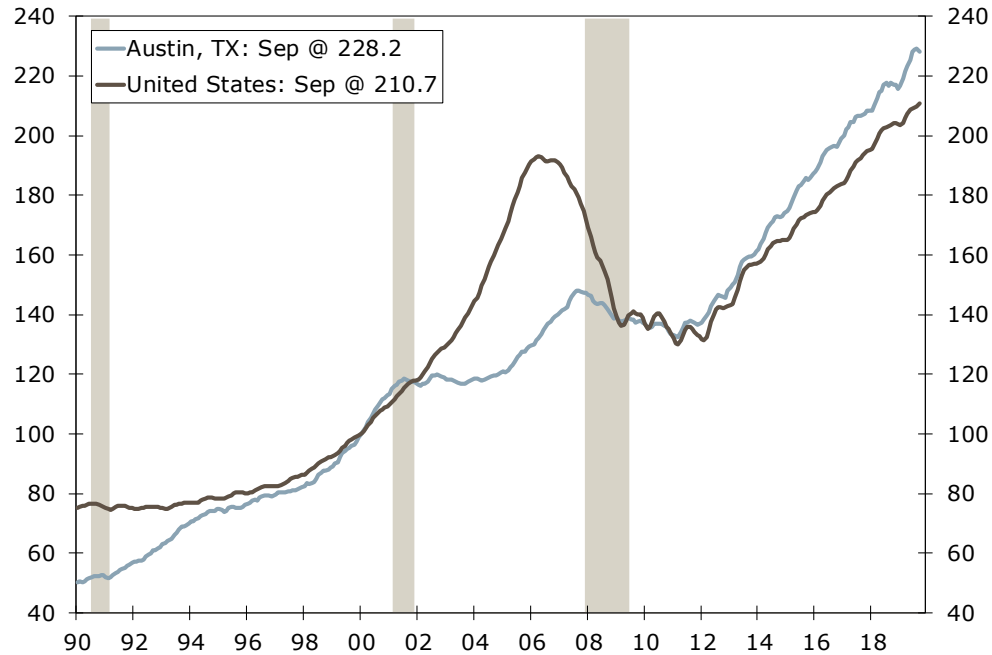


Source: U.S. Department of Labor and Wells Fargo Securities

Although job growth has cooled in Austin, the housing market remains hot

Home Price Index

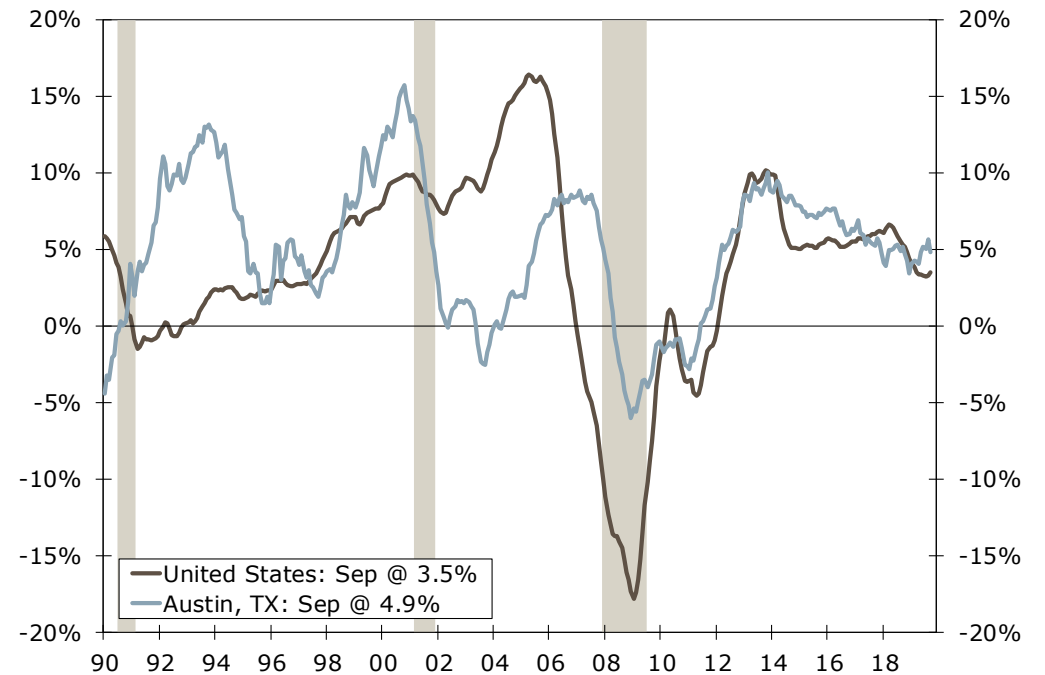
CoreLogic Home Price Index: Austin, TX
Index, 2000=100, Not Seasonally Adjusted



Source: CoreLogic, Inc. and Wells Fargo Securities

Home Price Change

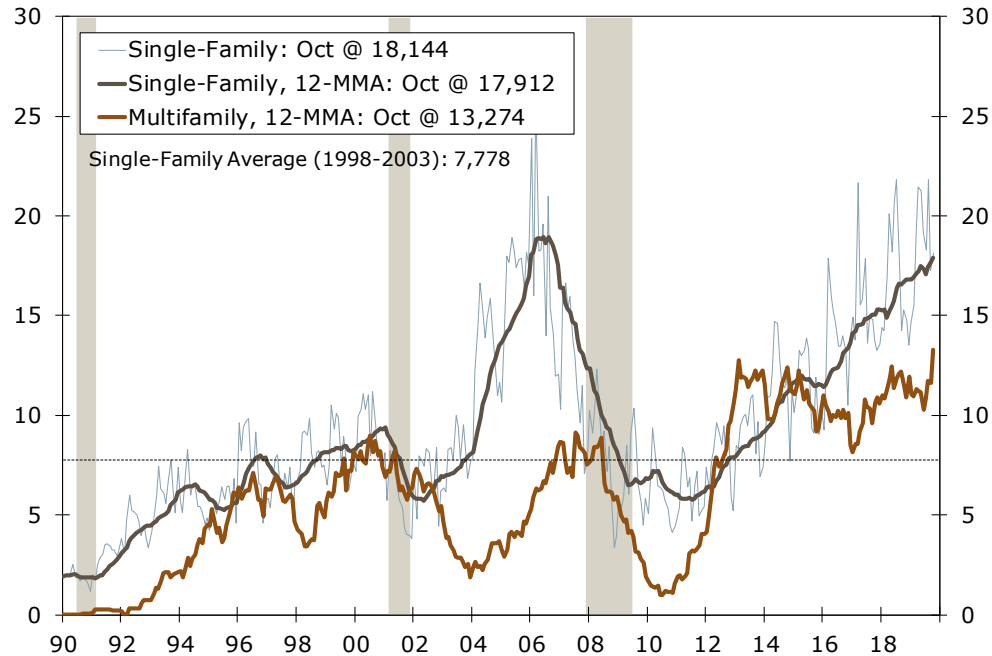
CoreLogic HPI: U.S. vs. Austin, TX
Year-over-Year Percent Change



Solid home price appreciation has come despite tremendous new construction

Housing Permits

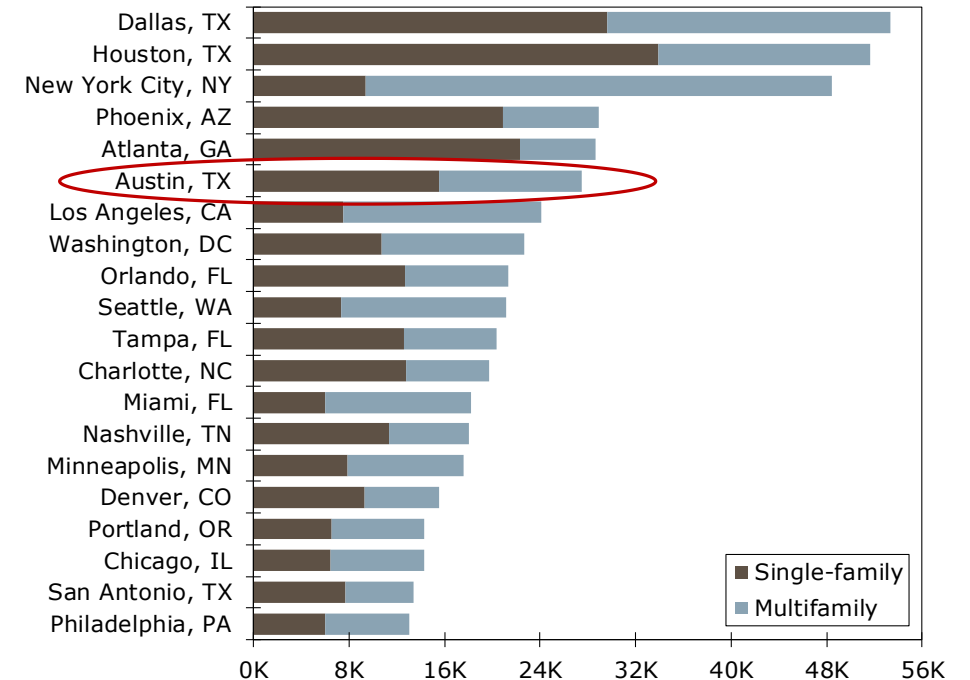
Austin MSA Housing Permits
Thousands of Permits, Seasonally Adjusted Annual Rate



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

Building Permits by Metro

Residential Building Permits by MSA
Thousands Permits Issued, YTD Oct 2019, NSA

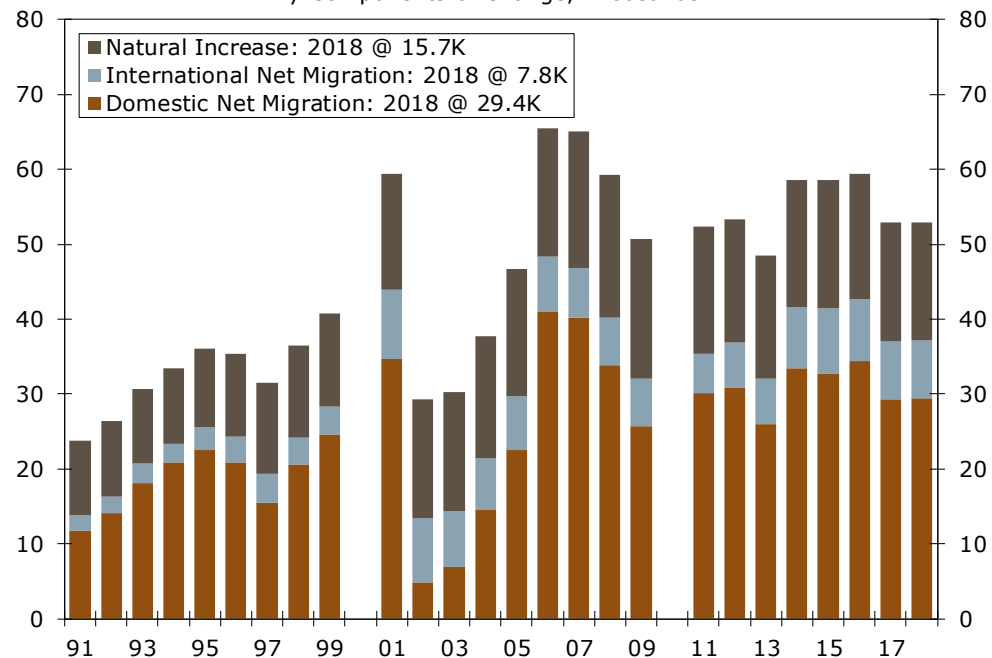


Austin continues to attract a sizeable number of residents from other parts of the country

Population Growth

Austin MSA Population Growth

By Components of Change, Thousands

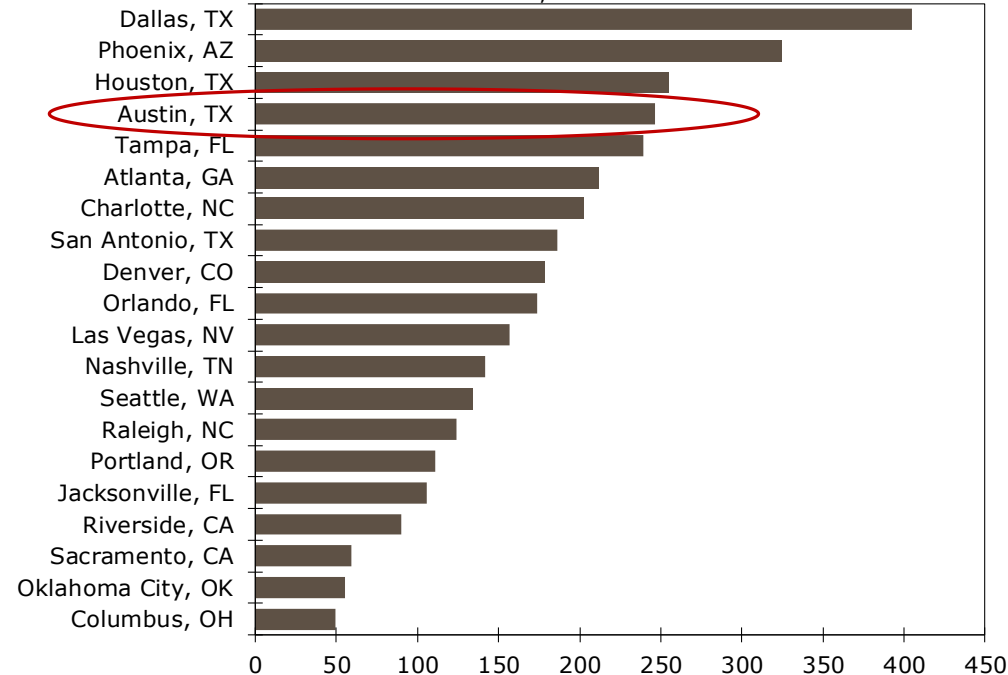


Source: U.S. Department of Labor and Wells Fargo Securities

Net Migration by Metro

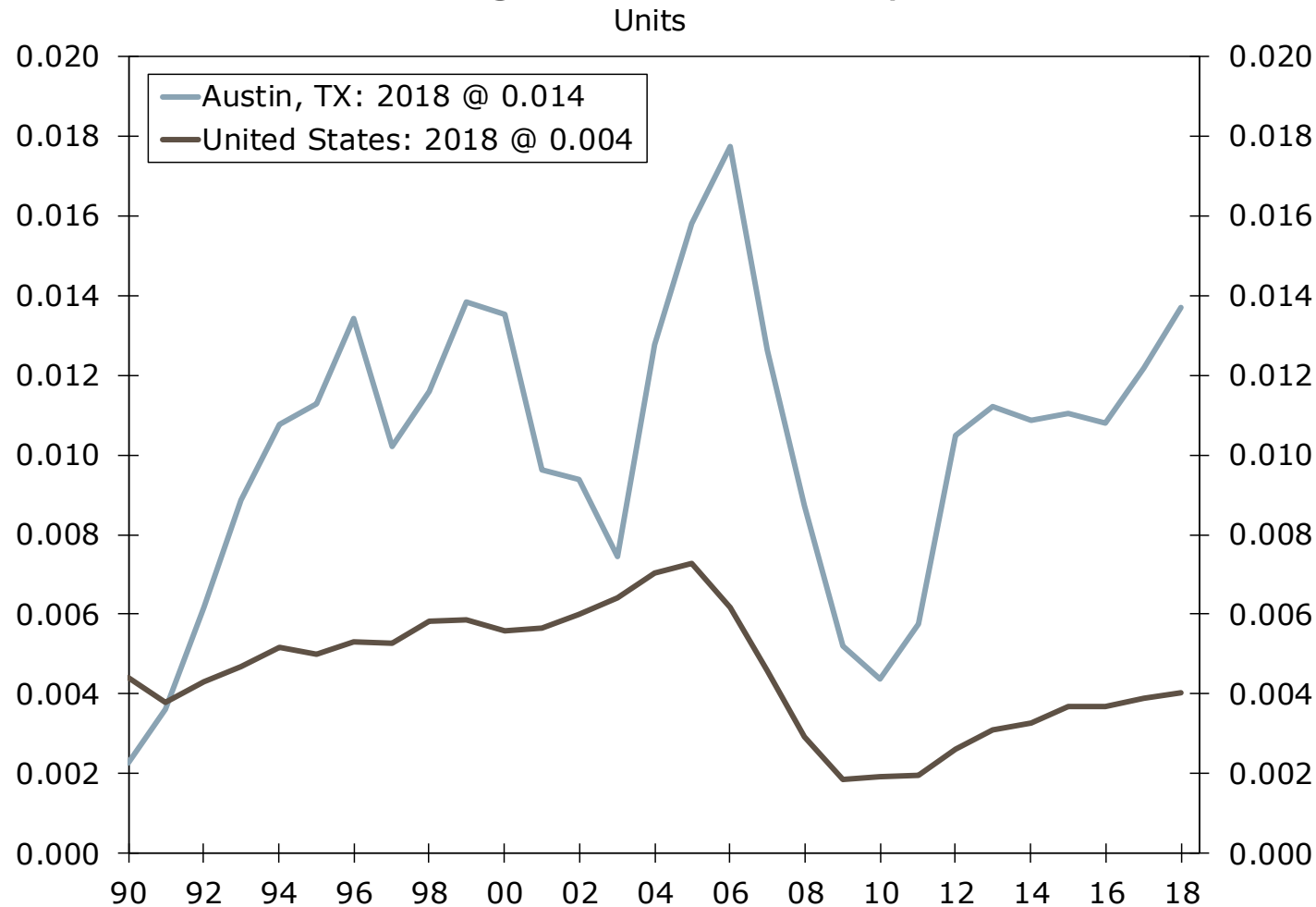
Net Domestic Migration

Cumulative Total, 2010-2018



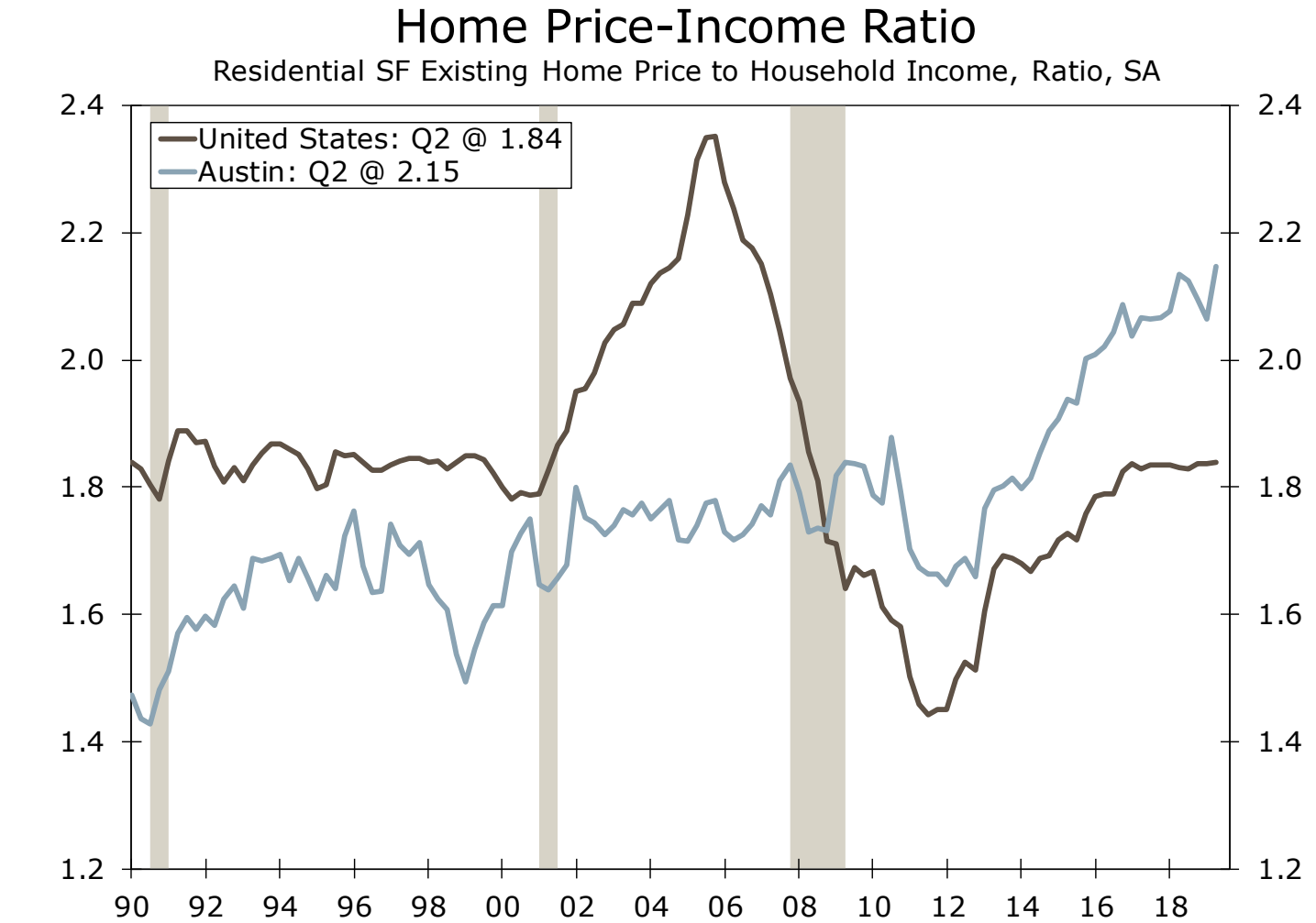
Permitting activity has done a better job of keeping up with population growth over the past year or so

Housing Permits Per Capita



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

Housing affordability nevertheless remains a challenge for the region



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

U.S. Outlook

- The late stage of the cycle and lower run rate of U.S. growth leaves the economy more vulnerable to a shock
- GDP to slow to less than 2% in 2020, but a recession should be avoided

Composition of Growth

- Slow global growth and trade uncertainty is weighing on capital investment while fiscal stimulus fades
- Consumer finances remain generally healthy, while at tight labor market is supporting wage growth and spending

Interest Rates

- Fed cuts have helped to ease financial conditions and offset some of the headwinds from trade policy
- More Fed easing to come if a “Phase I” trade deal does not include a delay of Dec. 15 tariffs

Risks to Watch

- Investor and consumer sentiment could be derailed by a further escalation in the trade war, a DC shutdown or election drama
- While not an imminent risk, business and government debt is high and is likely to exacerbate the next downturn

Austin

- Although slowing, activity continues to expand at a solid rate
- Strong population growth is supportive for the region’s longer-term prospects, but has created some near-term growing pains in terms of affordability

Wells Fargo U.S. Economic Forecast

	Actual				Forecast												Actual	Forecast	
	2018				2019				2020				2021				2018	2019	2020
	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	1.9	1.2	1.7	1.9	2.2	1.9	2.1	2.2	2.4	2.4	2.9	2.3	1.8
Personal Consumption	1.7	4.0	3.5	1.4	1.1	4.6	2.9	2.0	2.0	2.0	1.9	1.9	1.8	2.1	2.2	2.2	3.0	2.6	2.2
Business Fixed Investment	8.8	7.9	2.1	4.8	4.4	-1.0	-3.0	3.4	2.6	1.8	3.5	3.5	4.0	3.9	3.9	3.8	6.4	2.4	1.8
Equipment	6.6	3.4	2.9	7.4	-0.1	0.8	-3.8	-0.1	0.9	-0.5	2.1	2.1	3.4	3.4	3.2	3.0	6.8	1.5	0.1
Intellectual Property Products	9.7	11.9	4.1	11.7	10.8	3.6	6.6	6.1	4.9	4.2	5.7	6.0	5.9	5.5	5.6	5.7	7.4	8.0	5.3
Structures	12.1	11.0	-2.1	-9.0	4.0	-11.1	-15.3	0.5	2.5	3.0	2.5	2.0	1.8	1.9	2.0	2.1	4.1	-4.5	-1.2
Residential Construction	-5.3	-3.7	-4.0	-4.7	-1.0	-3.0	5.1	4.5	3.5	4.0	4.0	4.0	4.0	4.5	4.5	4.0	-1.5	-1.6	3.7
Government Purchases	1.9	2.6	2.1	-0.4	2.9	4.8	2.0	0.4	0.7	1.4	1.1	0.8	0.8	0.8	0.7	0.7	1.7	2.2	1.2
Net Exports ²	0.0	0.7	-2.1	-0.4	0.7	-0.7	-0.1	-0.1	0.0	0.0	-0.2	-0.3	-0.2	-0.1	0.0	0.0	-0.4	-0.3	-0.1
Inventories ²	0.1	-1.2	2.1	0.1	0.5	-0.9	-0.1	-0.6	-0.3	-0.1	0.3	0.2	0.2	0.0	0.0	0.0	0.1	0.1	-0.2
Nonfarm Payroll Change ³	228	243	189	233	174	152	188	143	170	395	-115	0	100	105	110	110	223	164	113
Unemployment Rate	4.1	3.9	3.8	3.8	3.9	3.6	3.6	3.6	3.6	3.5	3.6	3.7	3.7	3.7	3.7	3.7	3.9	3.7	3.6
Consumer Price Index ⁴	2.2	2.7	2.6	2.2	1.6	1.8	1.8	1.8	2.2	2.0	2.1	2.3	2.2	2.2	2.2	2.1	2.4	1.7	2.2
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	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.96	2.19	1.50
Conventional Mortgage Rate	4.44	4.57	4.63	4.64	4.28	3.80	3.61	3.55	3.50	3.55	3.65	3.75	3.80	3.90	3.95	4.00	4.54	3.81	3.61
2 Year Note	2.27	2.52	2.81	2.48	2.27	1.75	1.63	1.60	1.60	1.65	1.65	1.70	1.75	1.75	1.80	1.80	2.53	1.81	1.65
10 Year Note	2.74	2.85	3.05	2.69	2.41	2.00	1.68	1.70	1.75	1.85	1.95	2.05	2.10	2.20	2.25	2.30	2.91	1.95	1.90

Forecast as of: November 06, 2019

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 Markit and Wells Fargo Securities

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