

“Key Trends in the US Economy, the Industrial and the Rail Sectors”

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SAK ECONOMICS

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NATIONAL ASSOCIATION OF BUSINESS ECONOMICS

There are many exciting NABE events on the 2019 calendar, including some taking place in Seattle, WA



Upcoming NABE Events

Conferences:

- 35th Annual NABE Economic Policy Conference, February 27 - March 1, 2019, Washington, DC
- 16th Annual NABE Foundation Economic Measurement Seminar, July 15-16, 2019, Washington, DC
- 9th Annual NABE Transfer Pricing Symposium, July 16-18, 2019, Washington, DC
- 61st NABE Annual Meeting, October 5 - 8, 2019, Denver, CO
- **3rd Annual NABE Tech Economics Conference (TEC2019)**, November 3-5, 2019, Seattle, WA

CBE Courses:

- *Applied Econometrics*, May 20-23, 2019, Seattle, WA
- *Machine Learning & Data Science for Economists*, November 6-7, 2019, Seattle, WA
- More at NABE.com/CBE

Certified Business Economist (CBE) Program

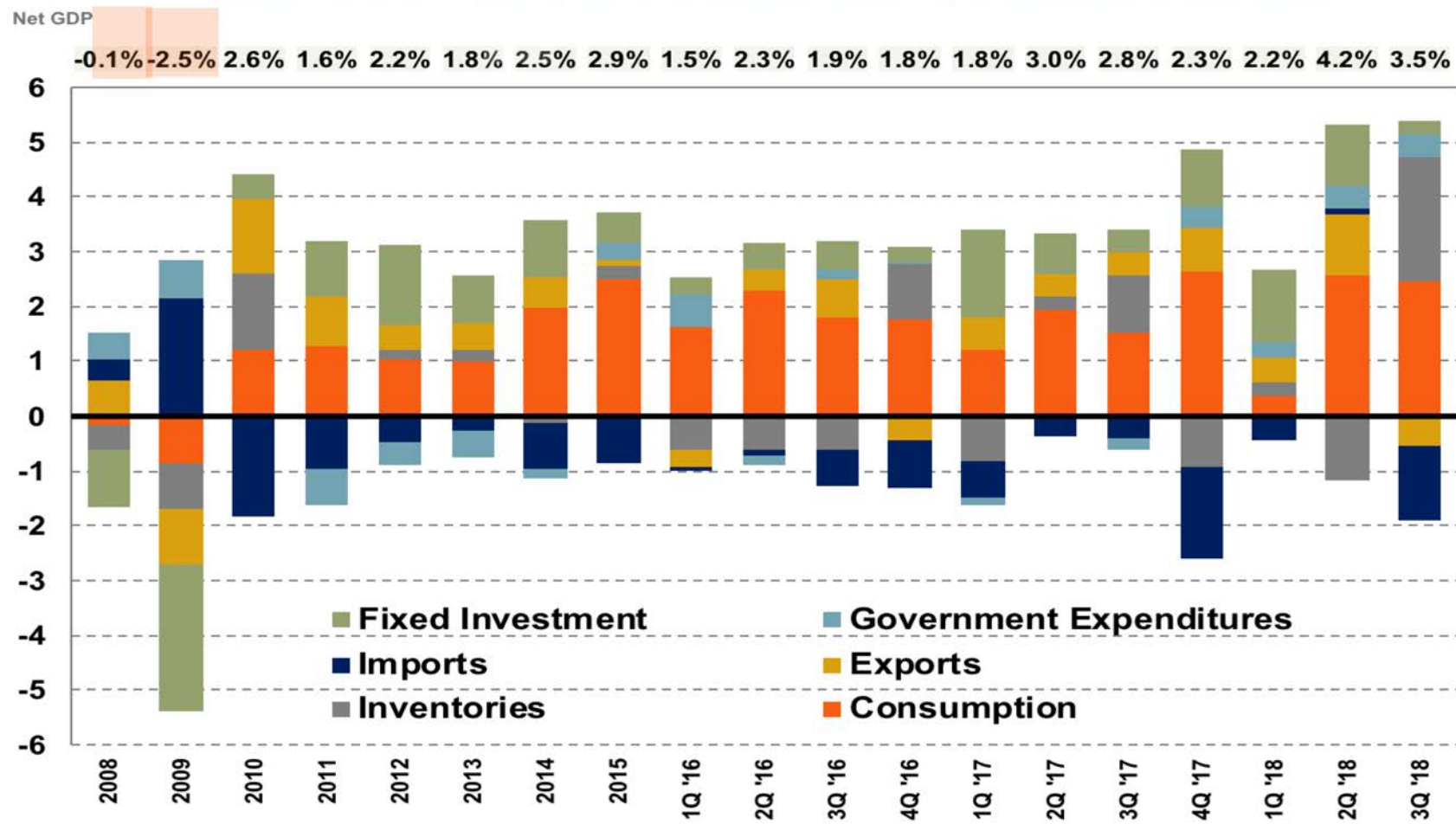
- CBE was designed by chief economists and leaders in the profession to fill the gap between an academic education and what is needed on the job
- Encompasses training and a comprehensive exam covering these areas:
 - Applied Econometrics
 - Business Applications of Statistics and Data Analytics
 - Economic Measurement
 - Economics of Strategy and Managerial Decision Making
 - Foundations of Macroeconomics/Microeconomics
 - Communications/Writing Skills
 - **NEW!** Machine Learning & Big Data for Economists

CBE practice exam, course calendar, exam dates, and more info at NABE.com/CBE

U.S. ECONOMIC GROWTH

Q3 real GDP growth was 3.5% q/q, but a careful look beyond the headlines reveals huge tariff-related inventory rebuilding

Real GDP Growth and its Contributions



Source: U.S. Dept. of Commerce, Bureau of Economic Analysis, November 28, 2018

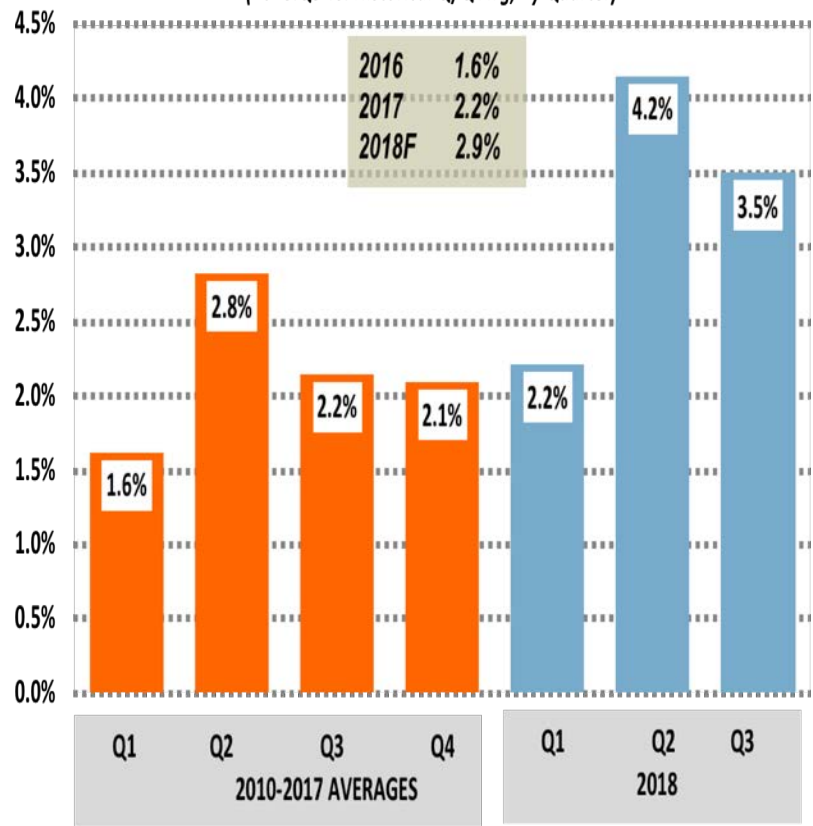
U.S. ECONOMIC GROWTH

Q3 real GDP growth was 3.5% q/q, but a careful look beyond the slower headline number reveals an economy gaining momentum

U.S. Real GDP Growth

(2018:Q3 vs. Historical Q/Q Avg, By Quarter)

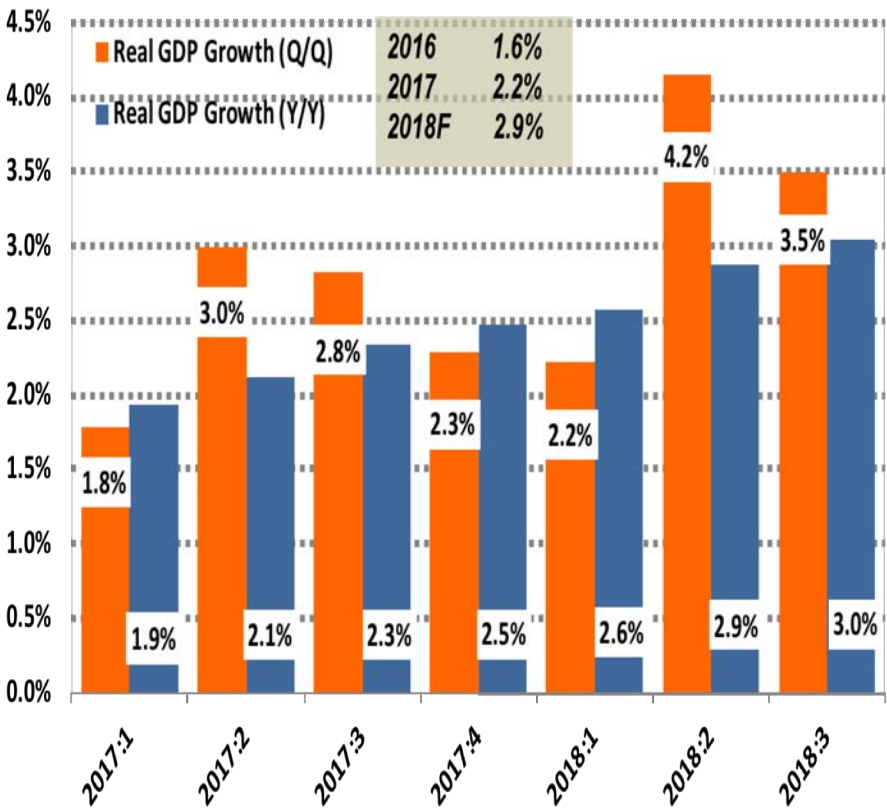
| | |
|-------|------|
| 2016 | 1.6% |
| 2017 | 2.2% |
| 2018F | 2.9% |



U.S. Real GDP Growth

(2017-2018 By Quarter)

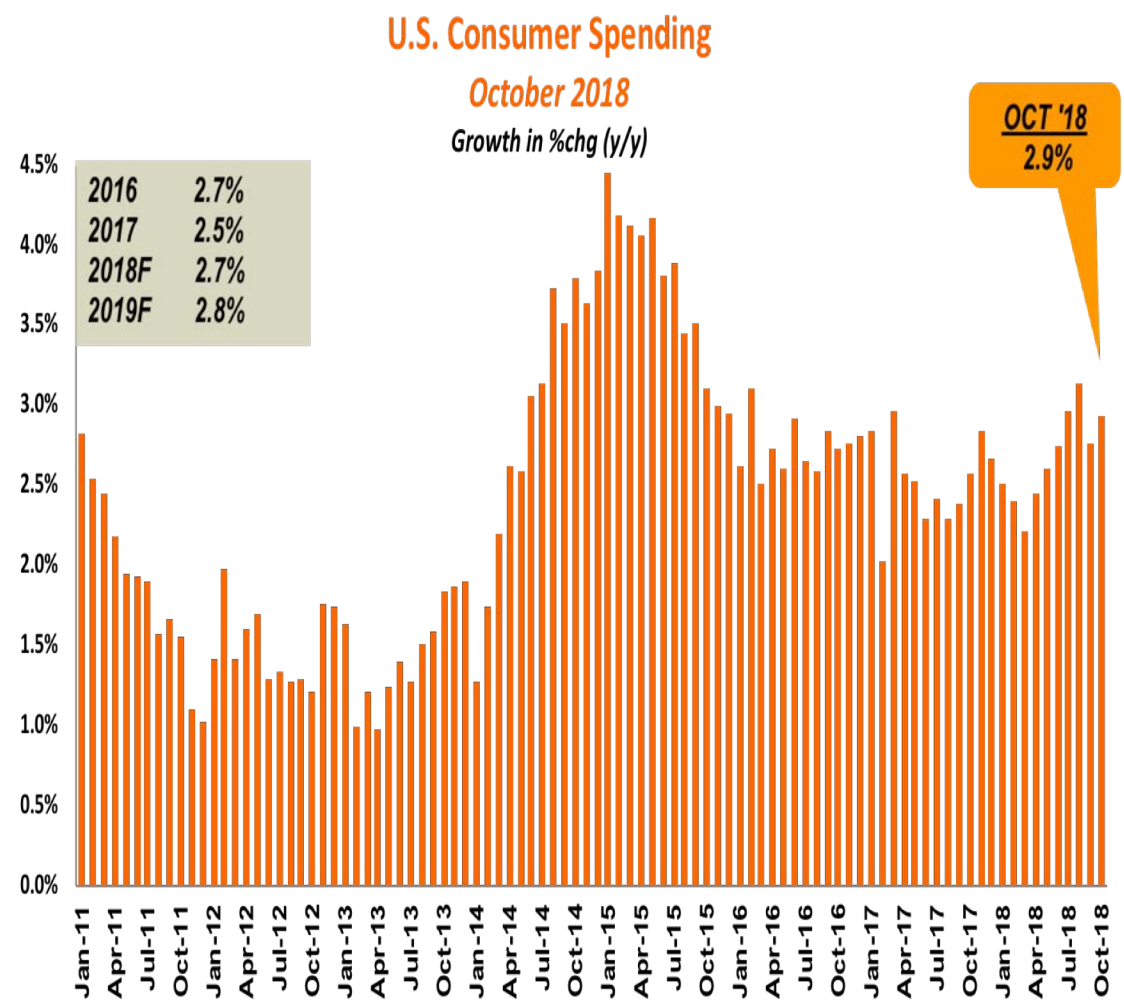
| | | |
|-----------------------|-------|------|
| Real GDP Growth (Q/Q) | 2016 | 1.6% |
| Real GDP Growth (Y/Y) | 2017 | 2.2% |
| | 2018F | 2.9% |



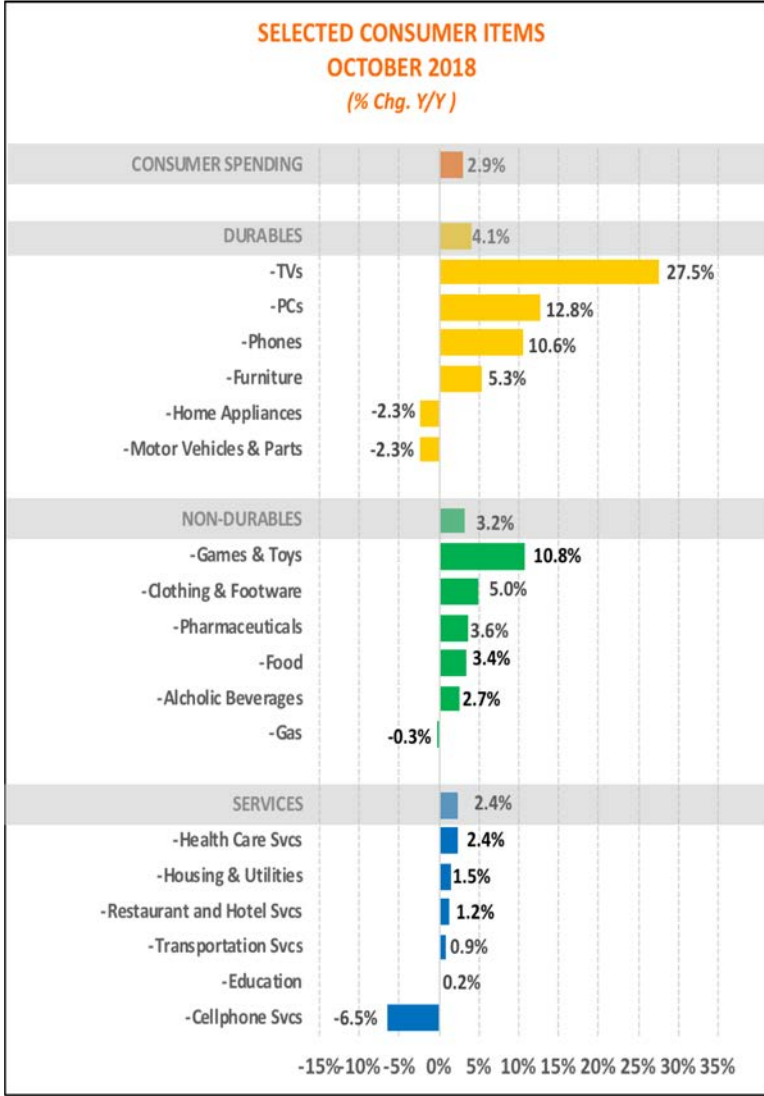
Source: IHS Markit, October 26, 2018

THE CONSUMER SECTOR

Consumer spending rose 2.9% y/y in Oct '18, reflecting double-digit spending growth for TVs, computers, phones, games & toys



Source: Bureau of Economic Analysis, November 29, 2018



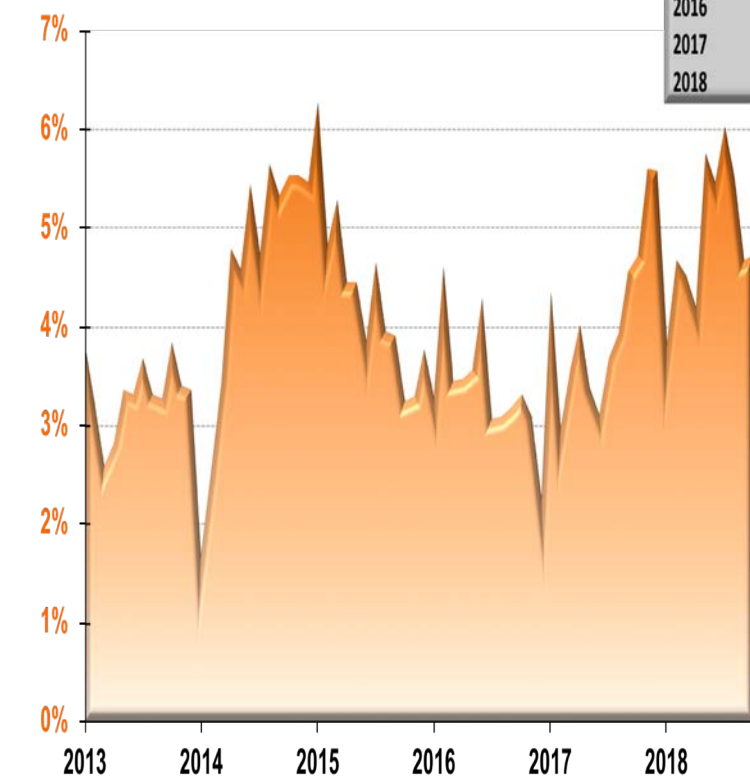
THE CONSUMER SECTOR

Oct '18 retail sales rose 4.7% y/y, reflecting consumer confidence and stimulus. The NRF estimate of 4.3-4.8% for holiday sales

Retail Sales (Excludes Food, Gas, Automotive & Parts Dealers)

Thru October 2018

% Change (y/y)

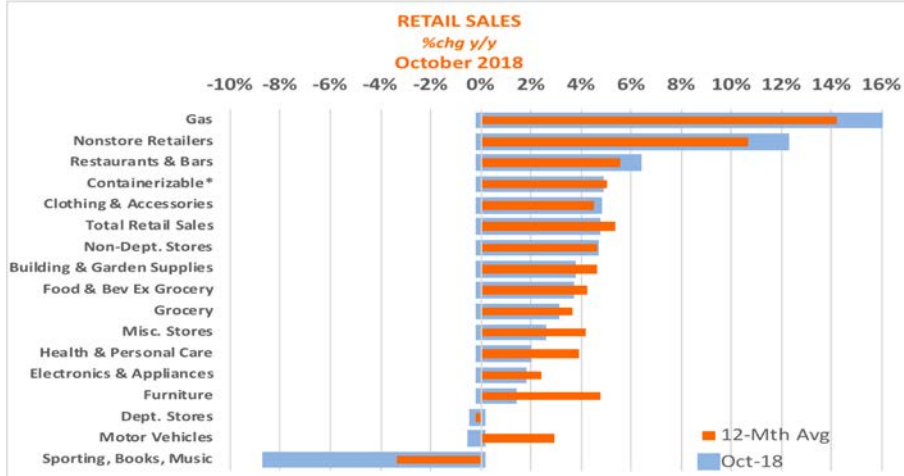


| National Retail Federation | | |
|----------------------------|----------|--------|
| Holiday Sales | | |
| | Estimate | Actual |
| 2015 | 3.7% | 3.2% |
| 2016 | 3.7% | 3.6% |
| 2017 | 3.6-4.0% | 5.5% |
| 2018 | 4.3-4.8% | |

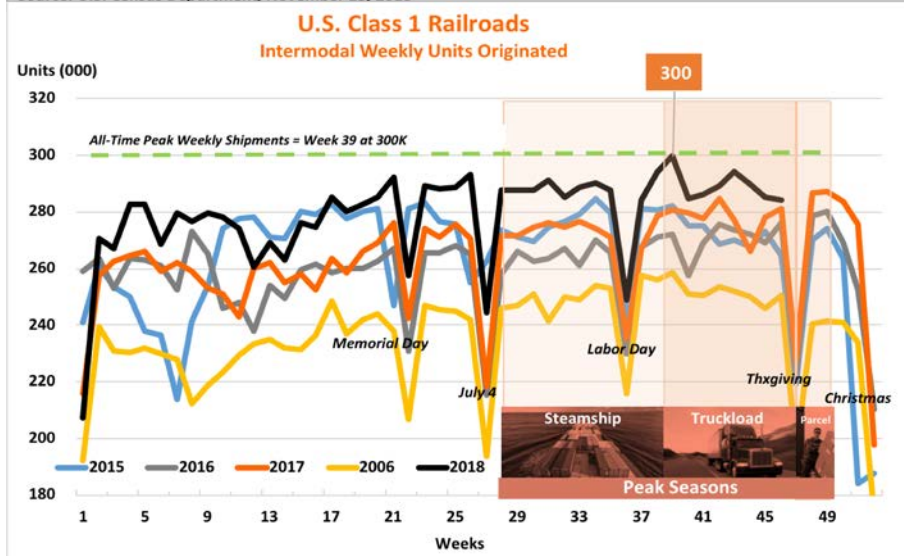
OCT 2018
+4.7%

OCT 2017
+4.7%

Source: U.S. Census Department--Seasonally Adjusted , November 15, 2018, NRF October 3, 2018



Source: U.S. Census Department, November 15, 2018



Source: American Association of Railroads, November 28, 2018

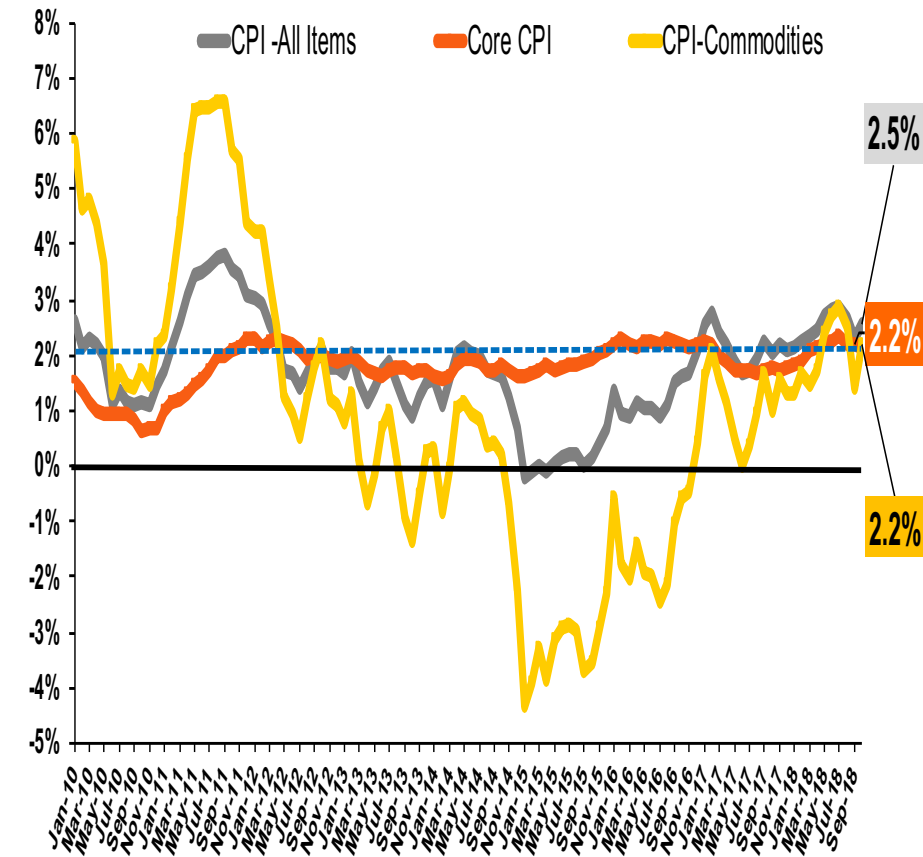
CONSUMER INFLATION

Core PCE inflation has stabilized at the Fed's 2% target for 7 of the last 8 months, reflecting lower import prices

Consumer Price Inflation

October 2018

(seasonally adjusted, % chg y/y)

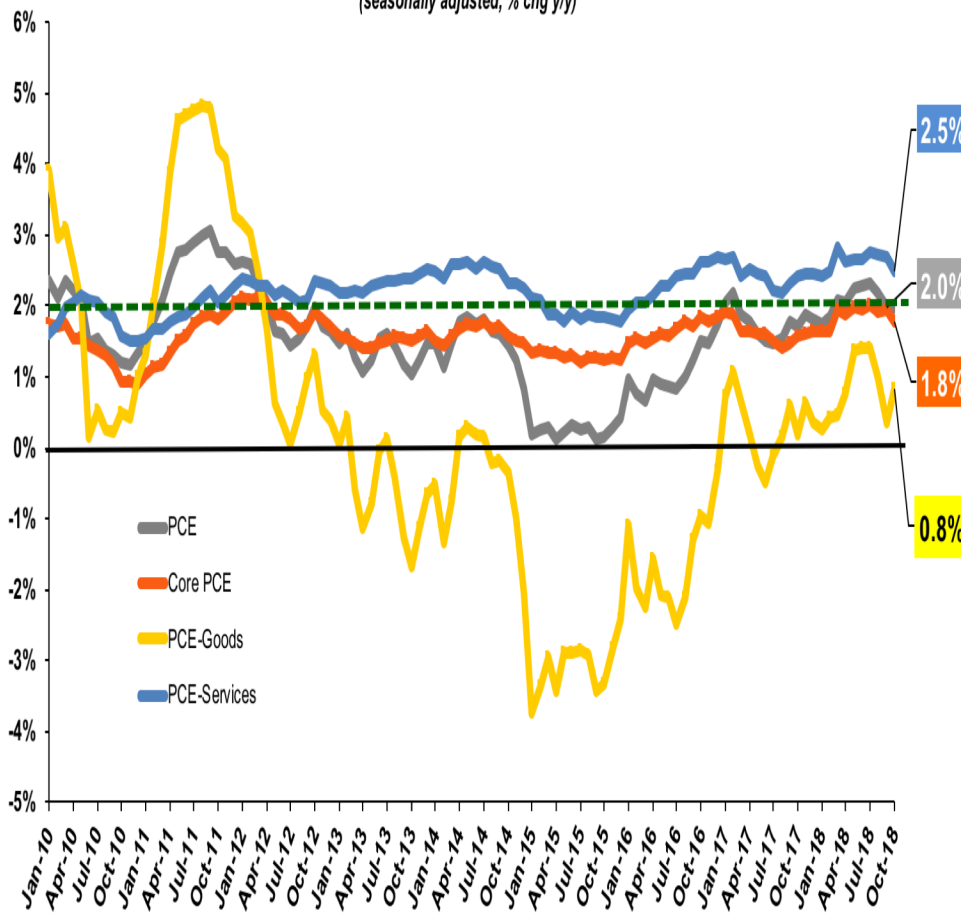


Source: Bureau of Labor Statistics, November 14, 2018

Personal Consumer Expenditure (PCE) Inflation

October 2018

(seasonally adjusted, % chg y/y)

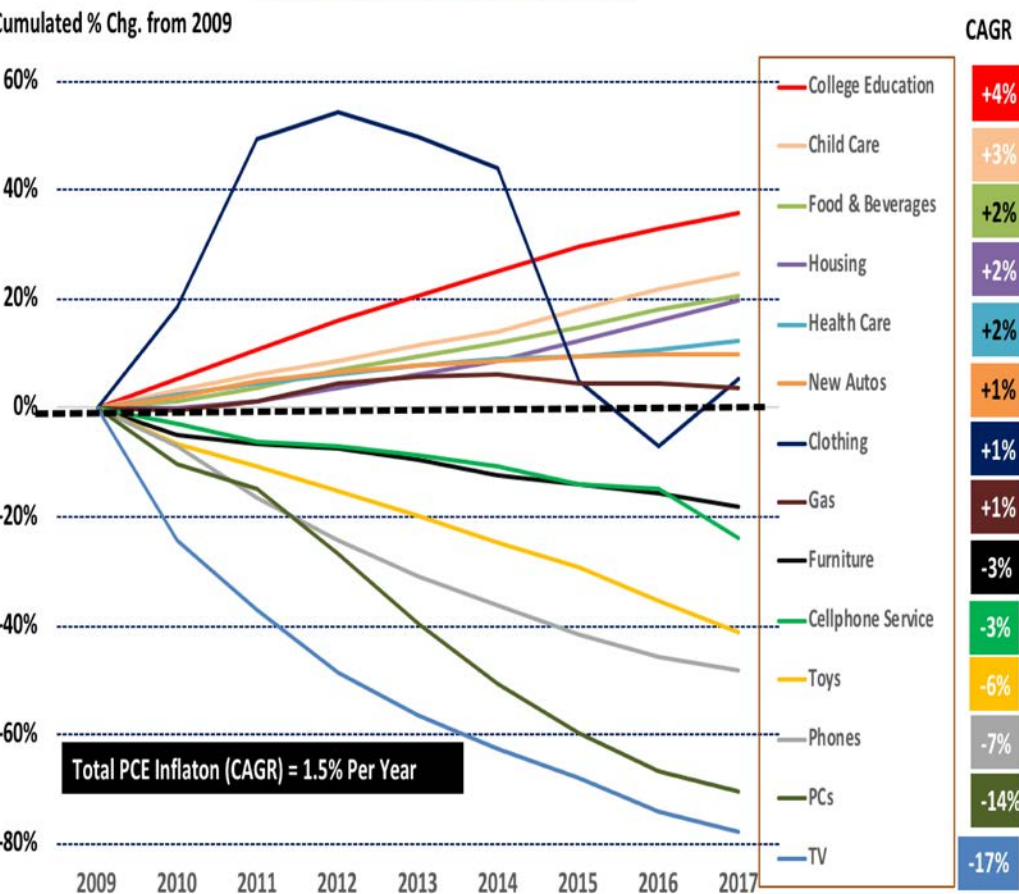


Source: Bureau of Economic Analysis, November 29, 2018

CONSUMER INFLATION

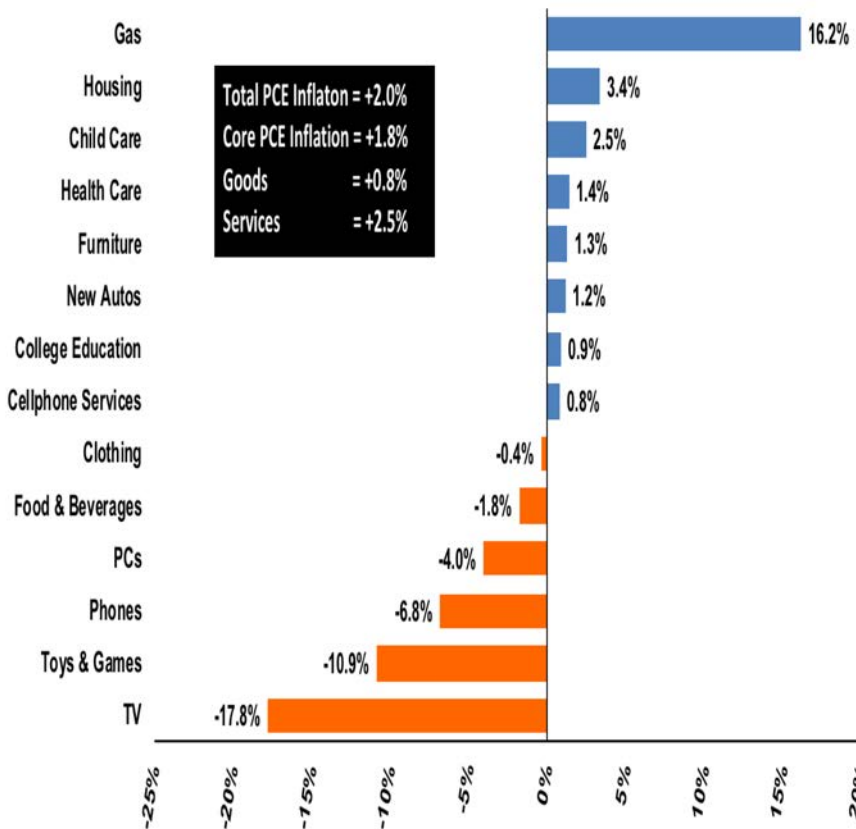
Consumer inflation has risen by 1.5% per year during this expansion, largely due to globalization

CONSUMER PRICE INFLATION (PCE)
(2009-2017)
Selected Consumer Goods and Services



Source: Census Bureau, October, 2018

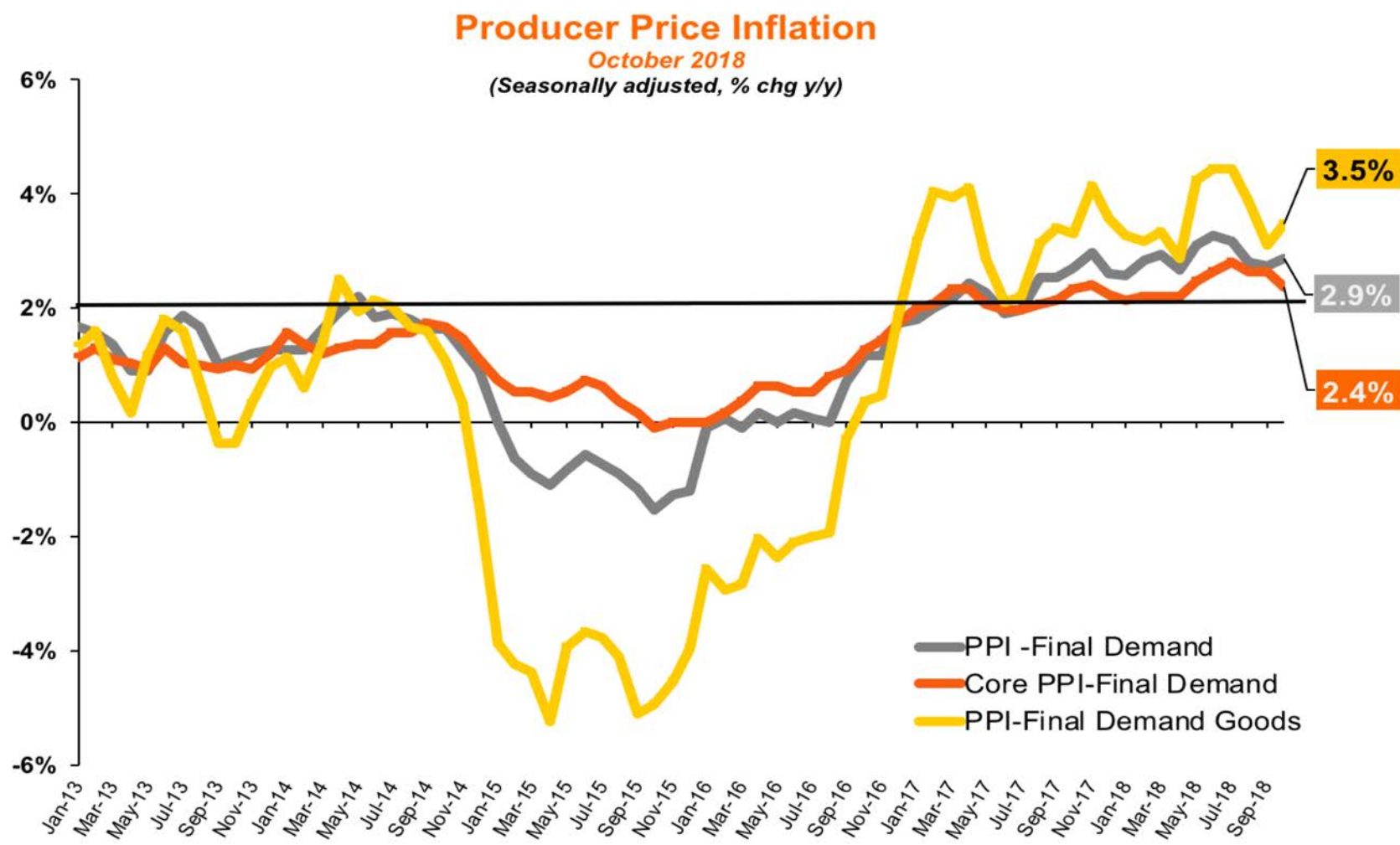
CONSUMER PRICE INFLATION (PCE)
October 2018
Selected Consumer Goods and Services
(% Chg Y/Y)



Source: Bureau of Economic Analysis, November 29, 2018

PRODUCER INFLATION

Producer inflation is running stronger than consumer inflation, due to higher input costs (not only for wages, but also material prices)

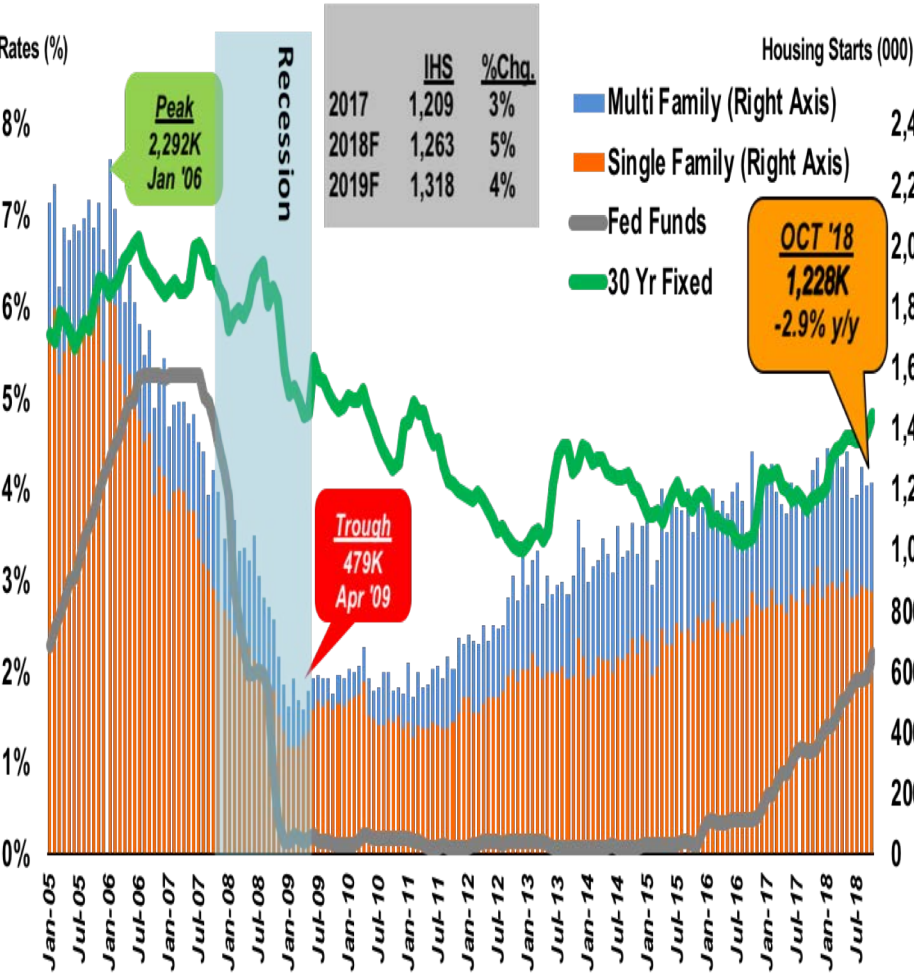


Source: Bureau of Labor Statistics, November 15, 2018

HOUSING SECTOR

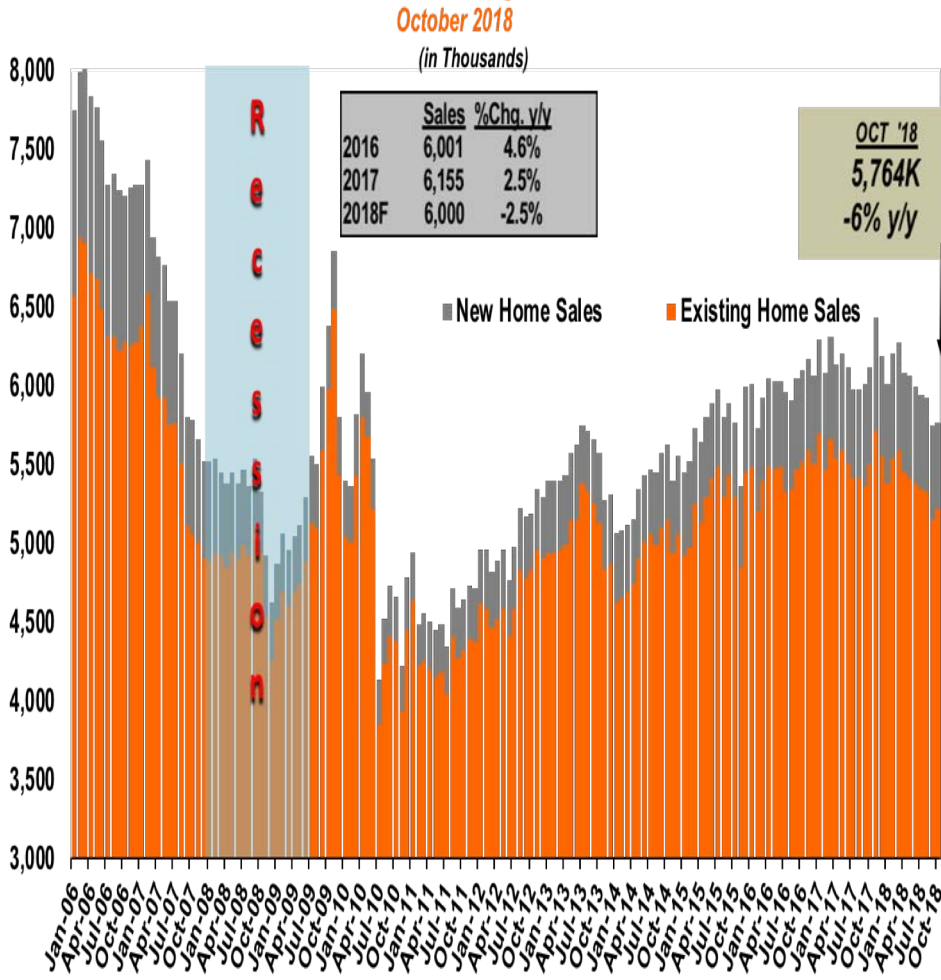
The housing market is softening with rising rates. Both home construction and home sales are weakening, on a sequential basis

Housing Starts vs. Fed Funds and Mortgage Rates



Source: Census Bureau, November 20, 2018, IHS Markit, October 2018

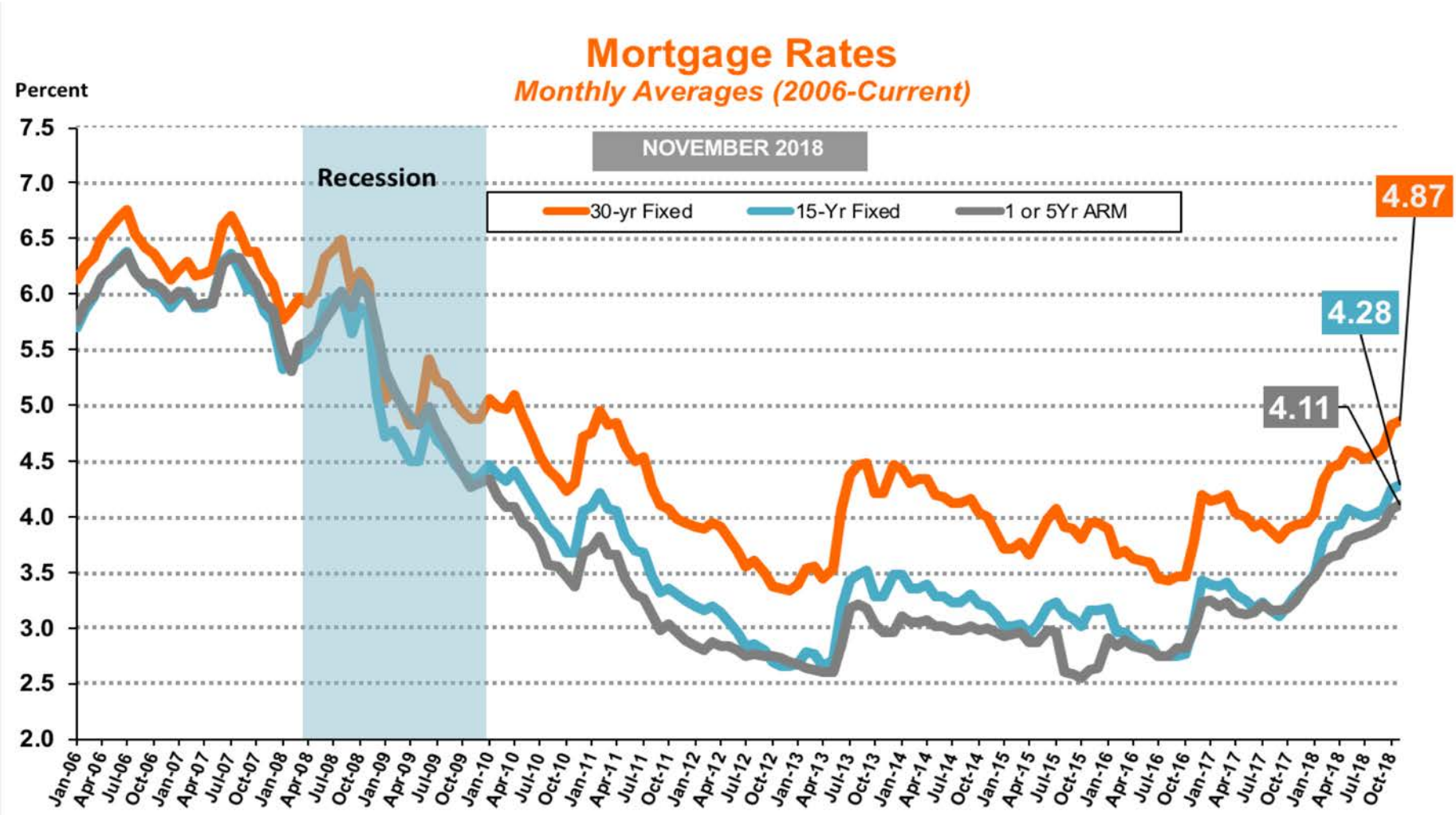
U.S. New and Existing Home Sales



Source: U.S. Department of Census, November 28, 2018; NAR November 21, 2018, IHS Markit October 2018

HOUSING SECTOR

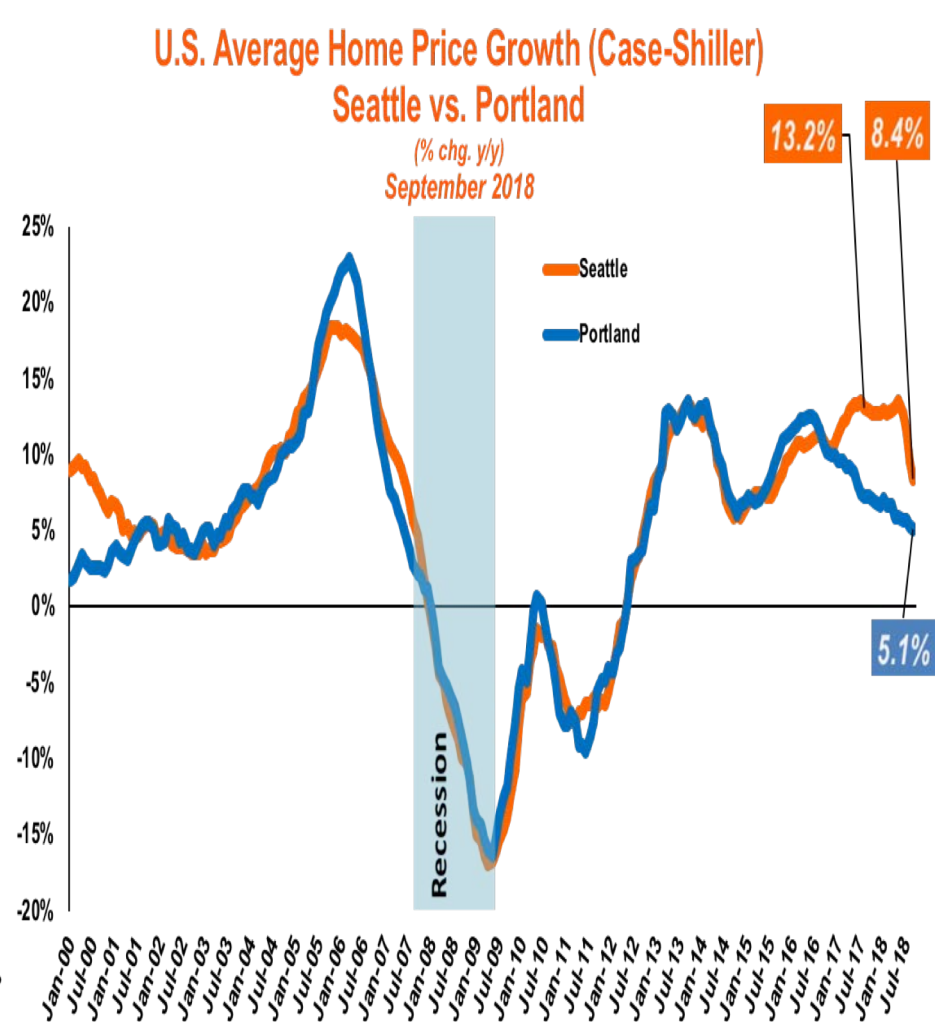
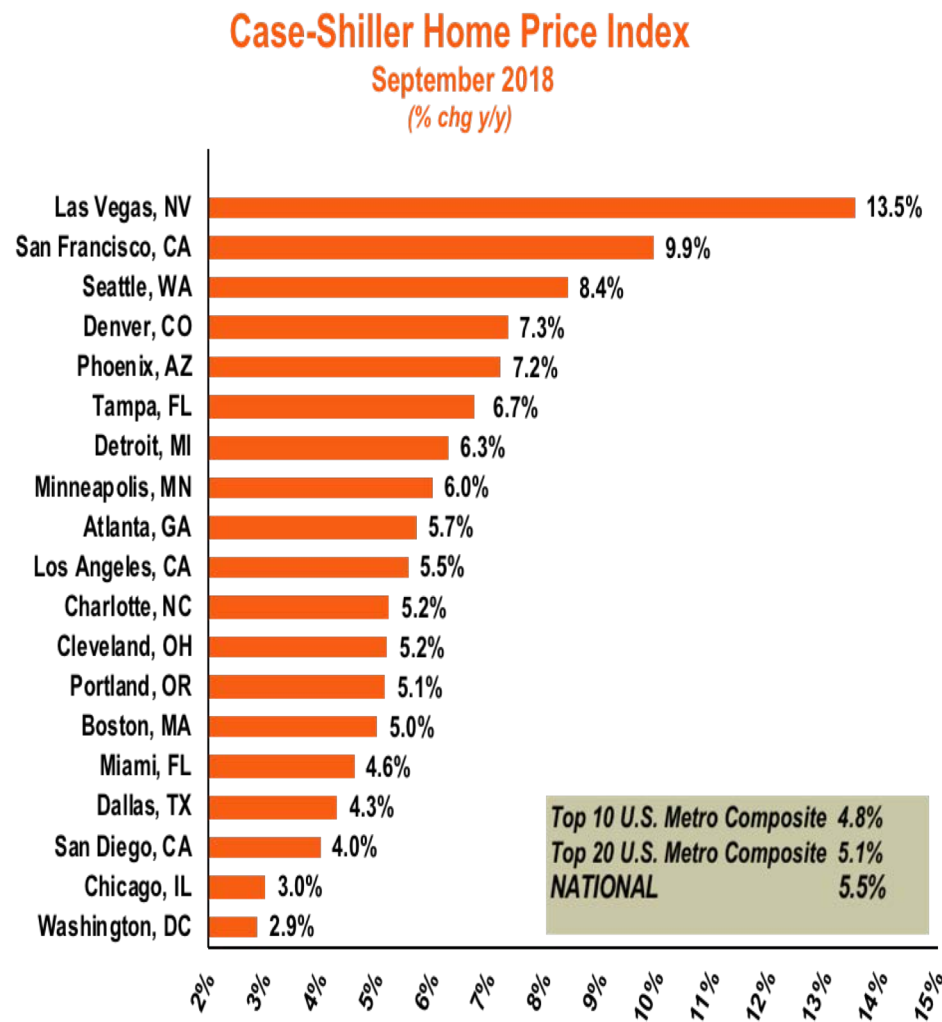
Mortgage rates have risen by over 100 basis points since the Nov '16 election, but they are still low by historical standards



Source: Freddie Mac, Primary Mortgage Market Survey, November 29, 2018

HOUSING SECTOR

Home price gains slowed in Sep '18 for a 6th consecutive month. Sequential price growth slowed in many markets, including Seattle and Portland

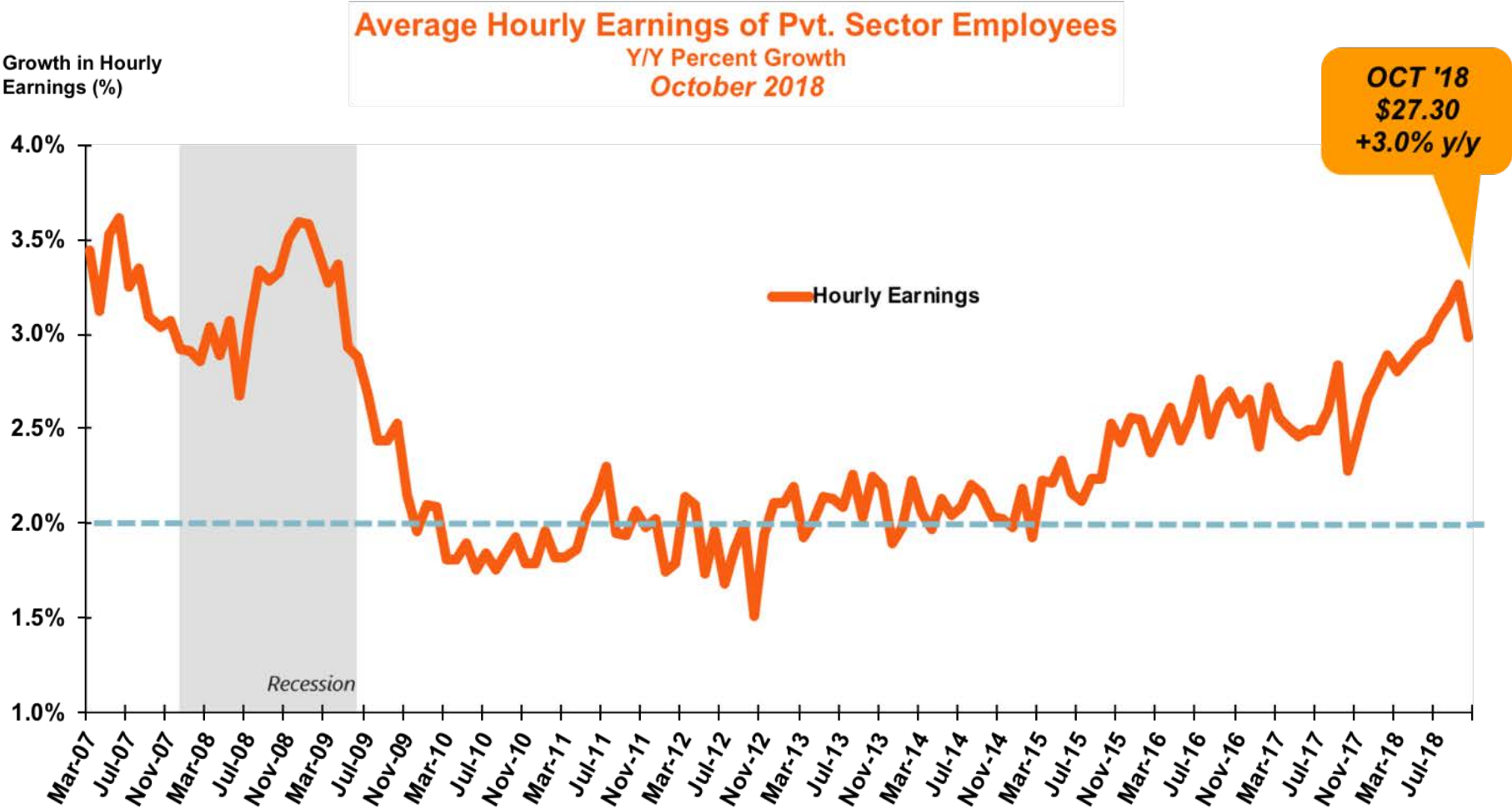


Source: S&P Corelogic Case Shiller Home Price Index, November 27, 2018

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THE LABOR MARKET

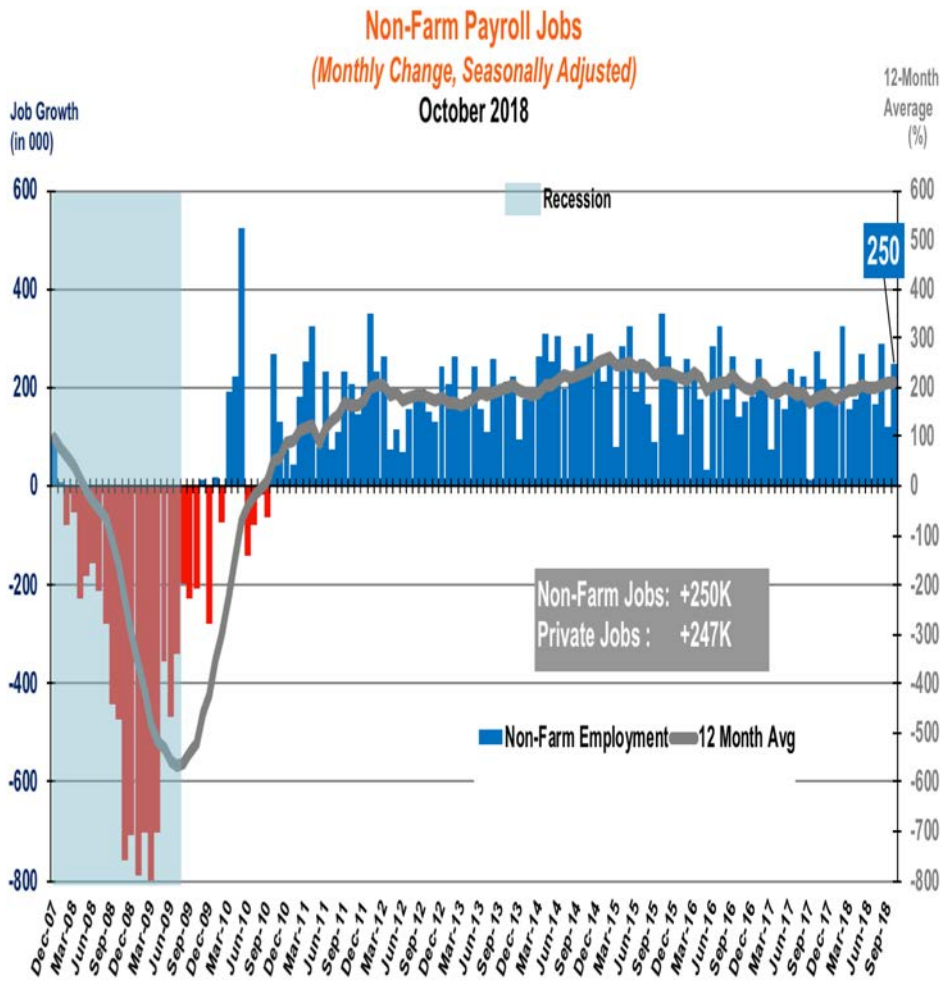
Oct '17 avg. hourly earnings of \$27.30/hour was up 3% y/y, but this is still lower than pre-recession levels of closer to 3.5-4%



Source: U.S. Dept. of Labor, Bureau of Labor Statistics, November 2, 2018

THE LABOR MARKET

The labor market added 250K more jobs in October vs. September. The jobless rate stayed at 3.7%, an 18-year low



Source: U.S. Dept. of Labor, Bureau of Labor Statistics, November 2, 2018



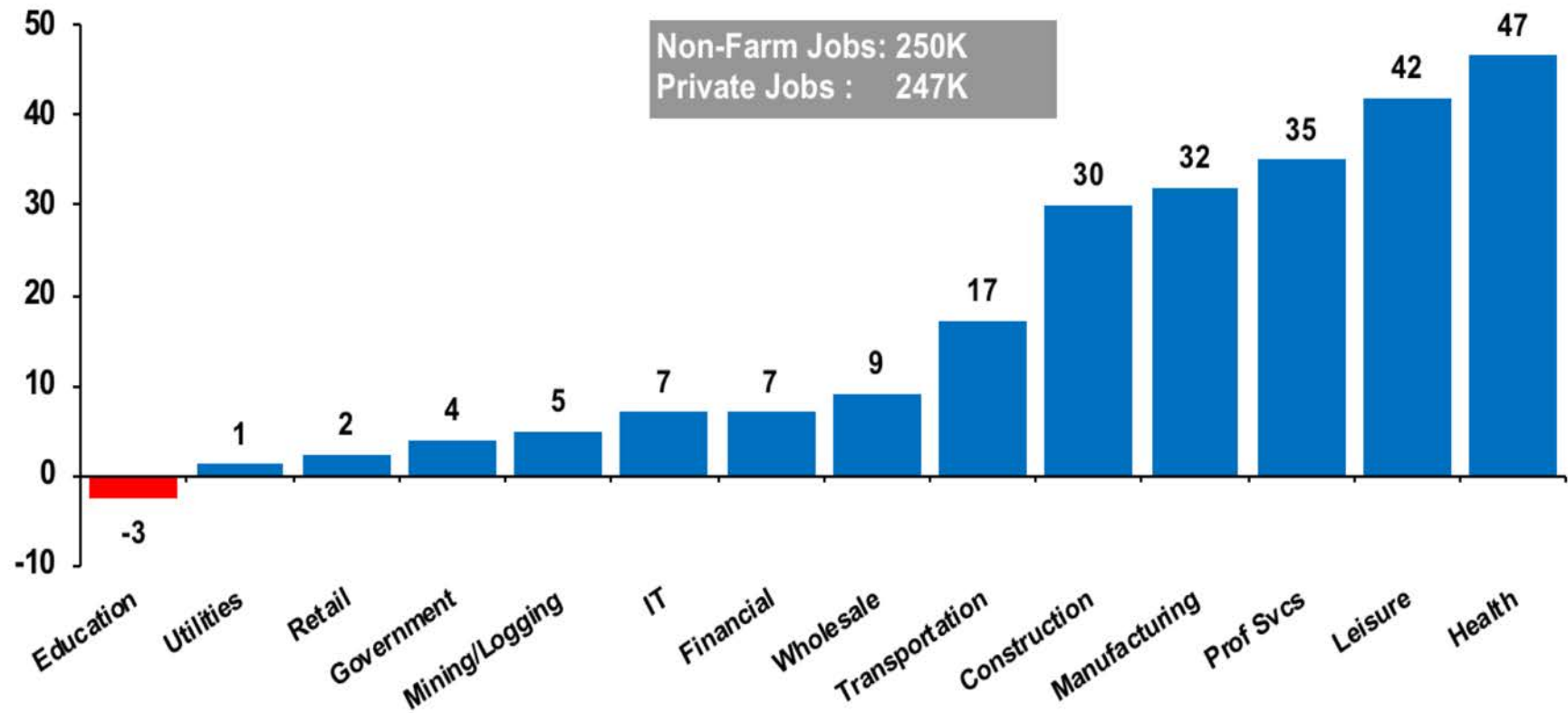
Source: U.S. Dept. of Labor, Bureau of Labor Statistics, November 2, 2018

THE LABOR MARKET

October 2018 payroll job gains were largely broad-based, including strong gains in construction and manufacturing

Payroll Employment Growth- By Sector October 2018

Job Growth (in 000)

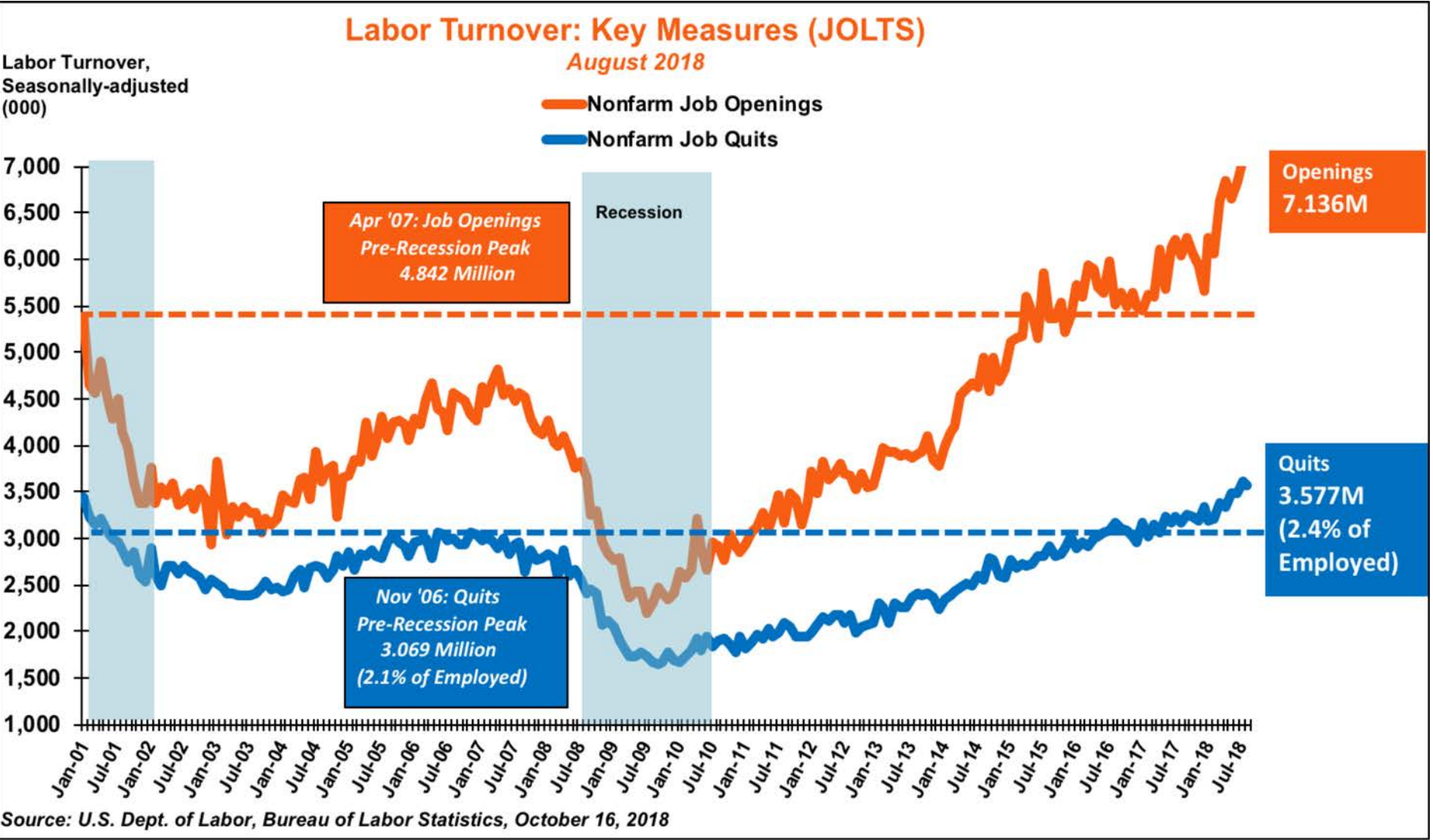


* Temp Workers are not classified by sector

Source: U.S. Dept. of Labor, Bureau of Labor Statistics, November 2, 2018

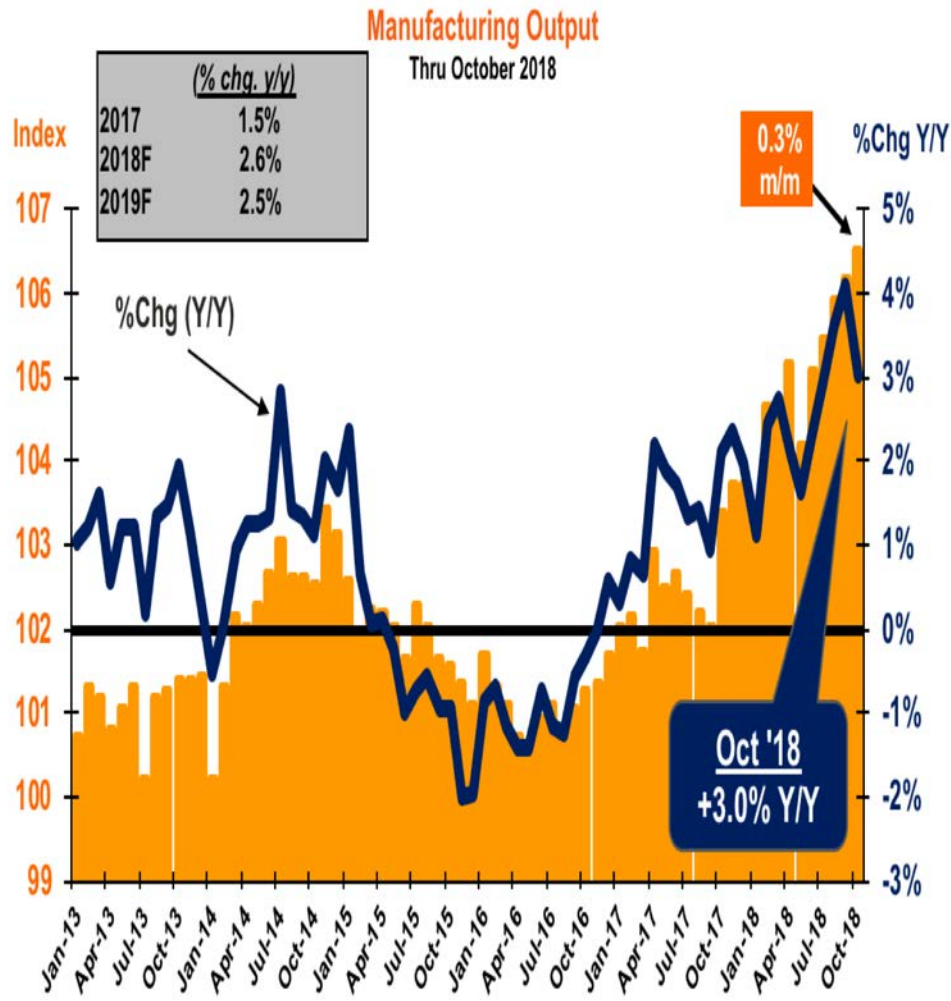
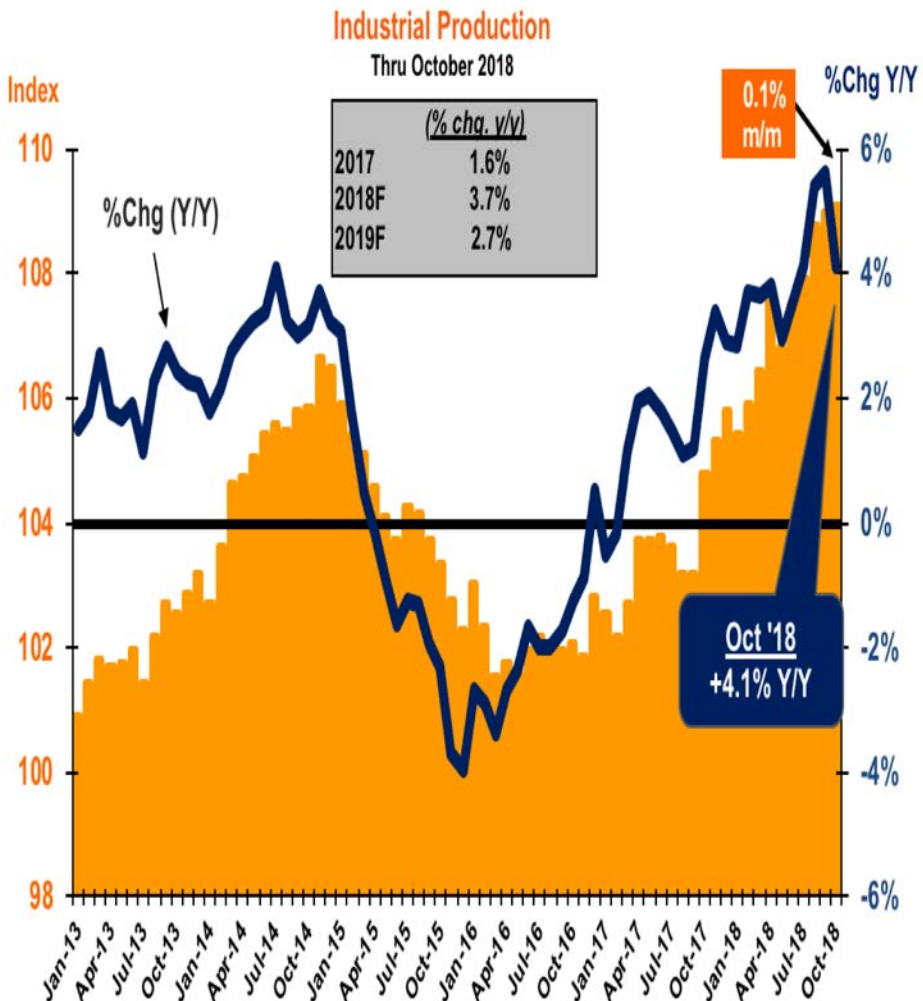
THE LABOR MARKET

Due the tightening of the labor market, job openings are becoming plentiful and the quit rate exceeds pre-recession levels



THE U.S. INDUSTRIAL SECTOR

Industrial sector, which includes manufacturing, is growing again after two years of slow or declining growth (in 2014-16)

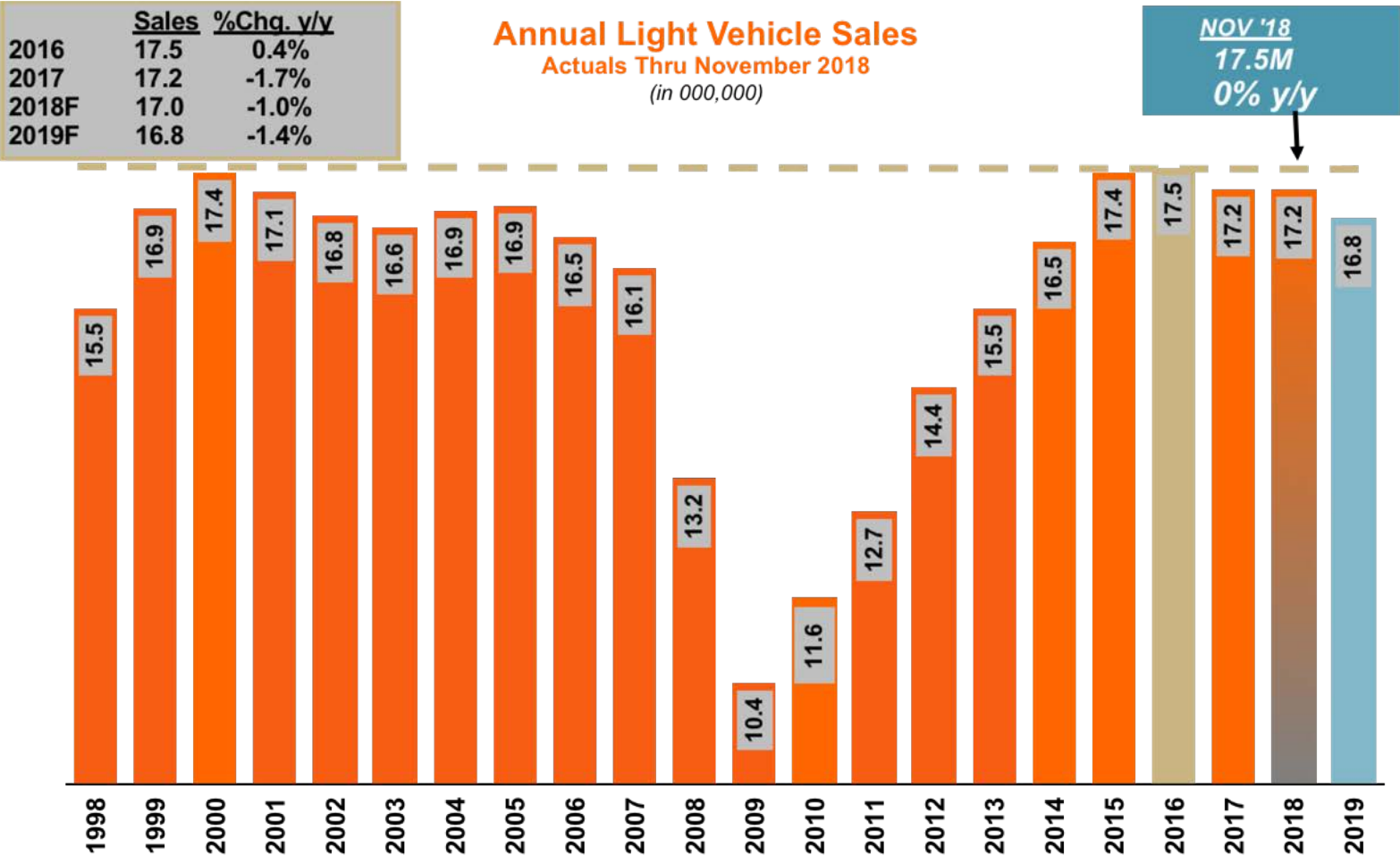


Source: Federal Reserve Board, November 15, 2018

Source: Federal Reserve Board, November 15, 2018

THE AUTO SECTOR

Like the housing market, the auto sector, which is very interest-sensitive, is weakening from the Fed tightening and trade policy

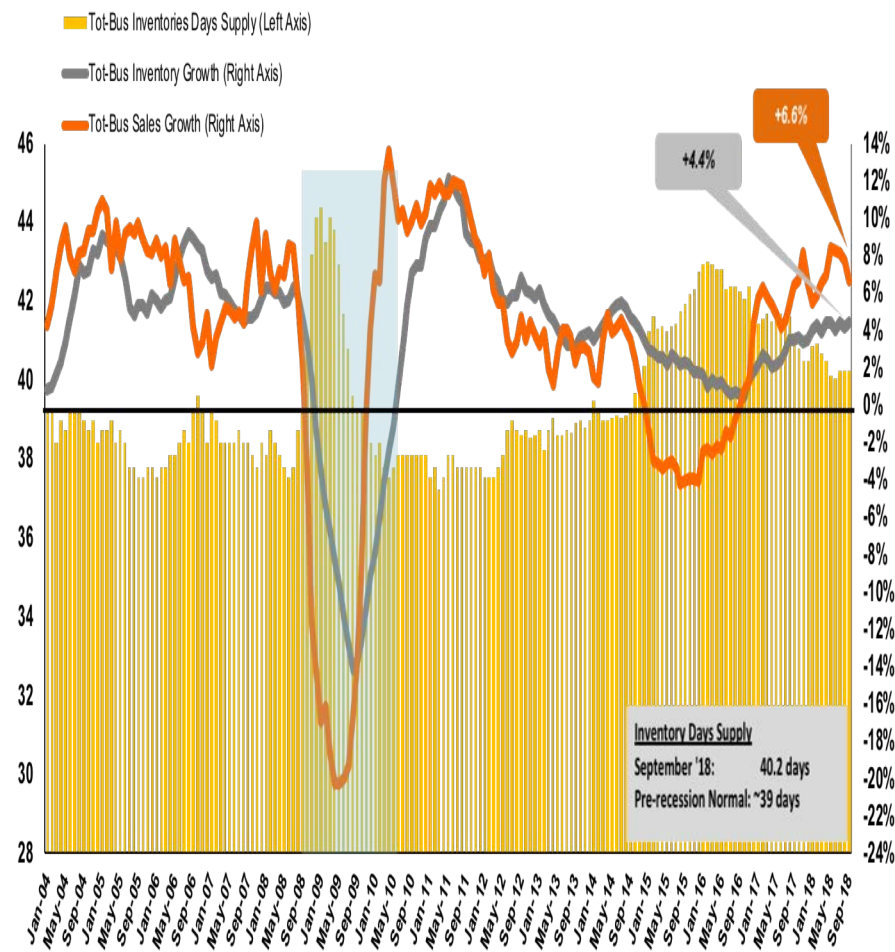


Source: BEA, December 3, 2018; IHS Markit, October 2018

INVENTORIES

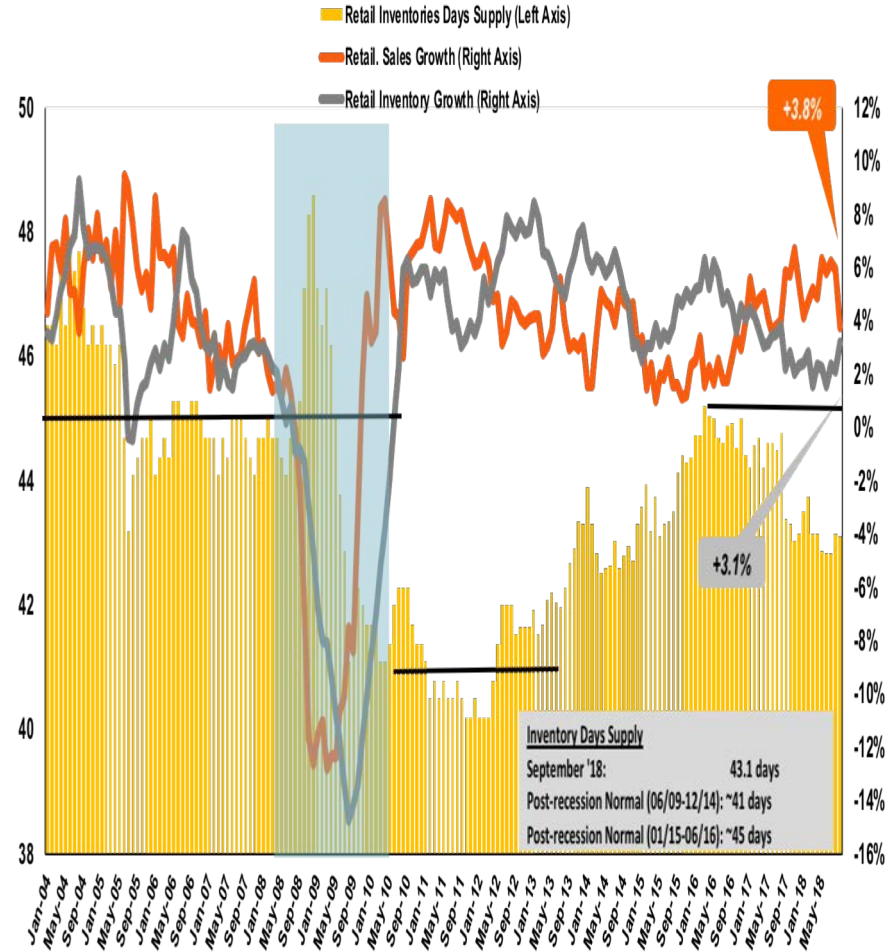
Both retailers and other businesses have been rebuilding stocks since late 2016. Some retailers have front-loaded inventories due to tariffs

Total Business Inventories vs. Sales
September 2018



Source: U.S. Census Bureau, November 15, 2018

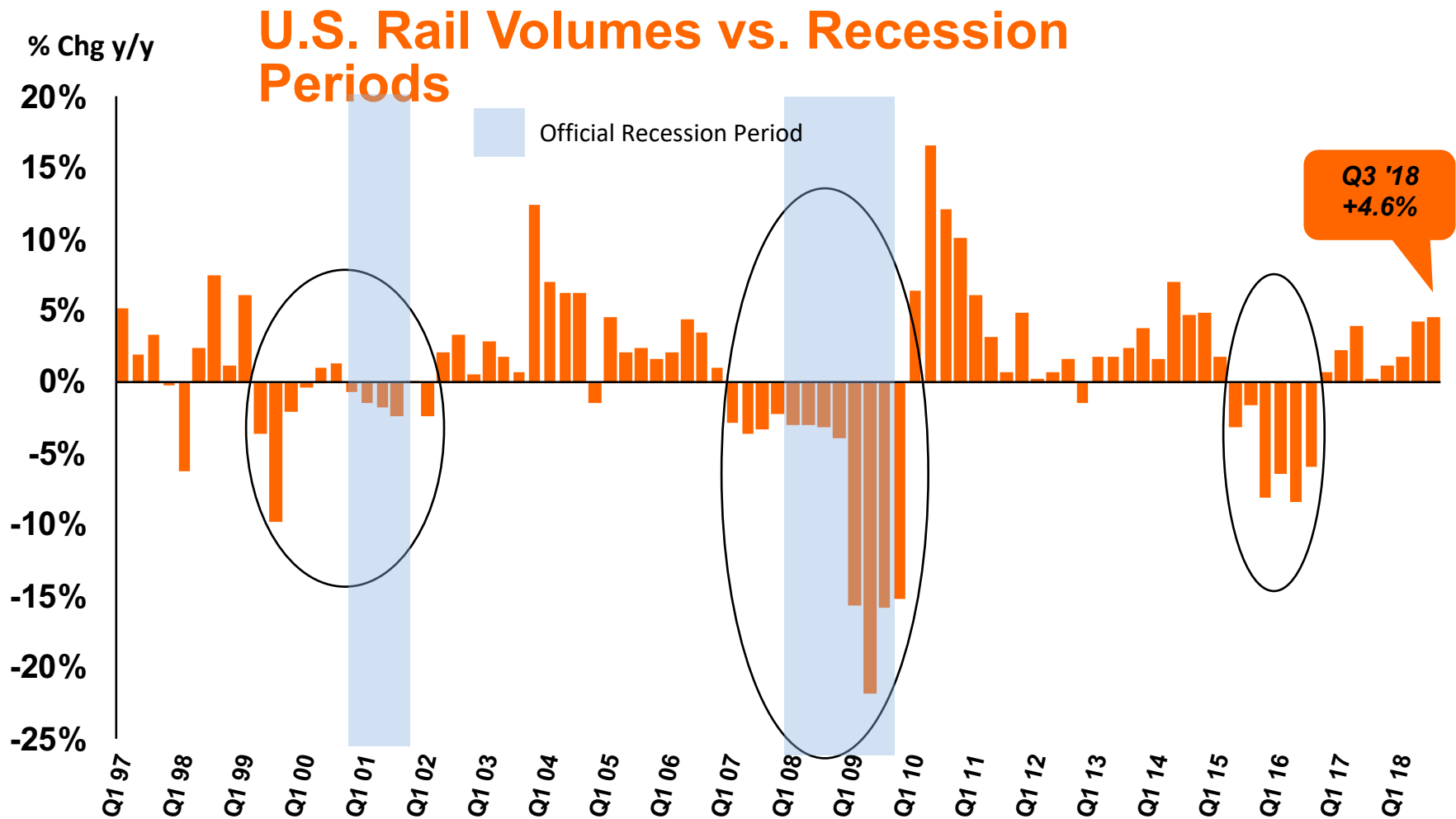
Retailers Inventories vs. Sales
September 2018



Source: U.S. Census Bureau, November 15, 2018

RAIL VOLUMES AND THE BUSINESS CYCLE

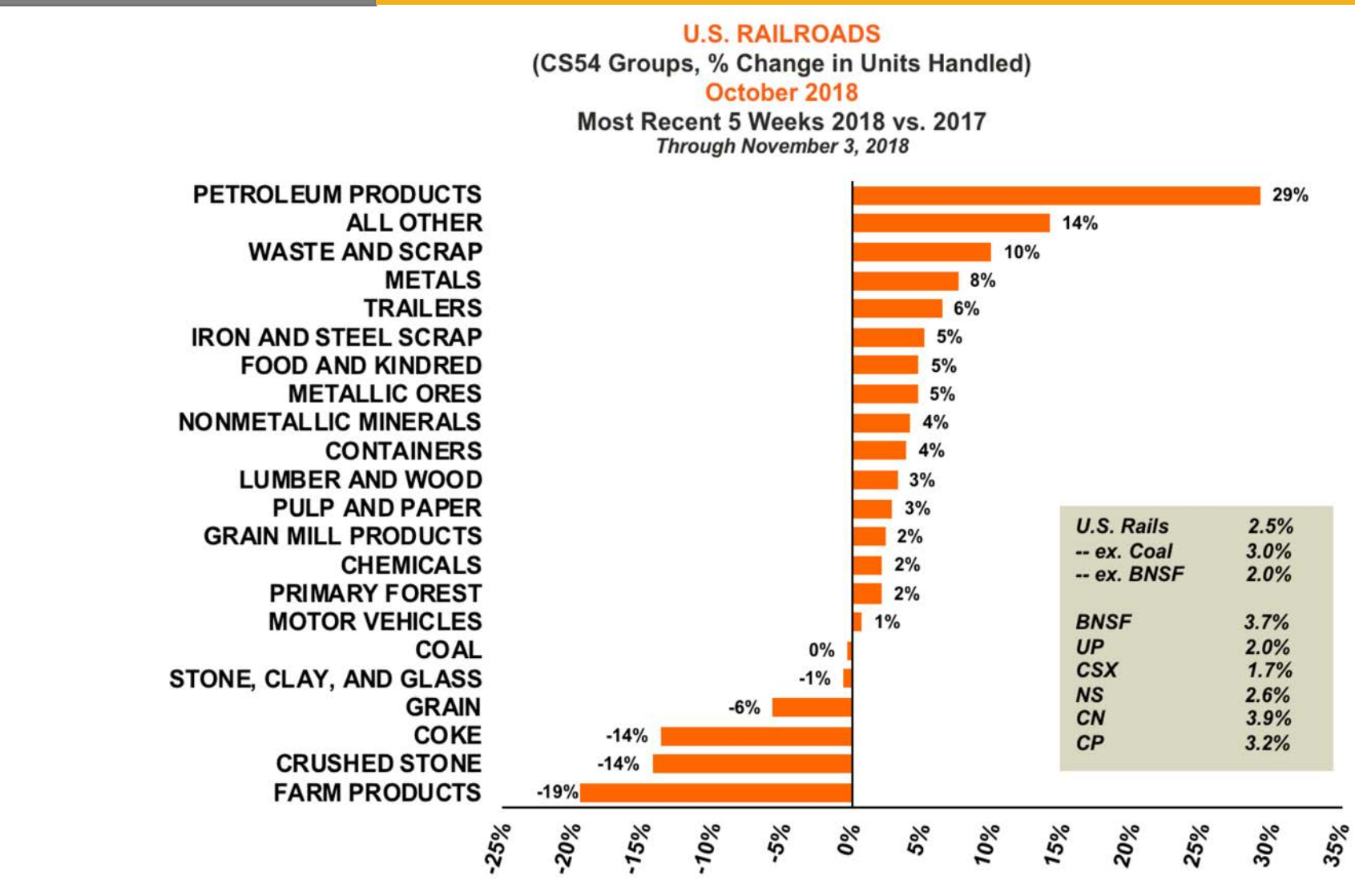
Rail sector volume growth is a leading indicator of recessions. Q3 '18 growth of 4.6% reflect stronger economic fundamentals



Source: Association of American Railroads, October 3, 2018

U.S. RAIL INDUSTRY TRENDS – BY SECTOR

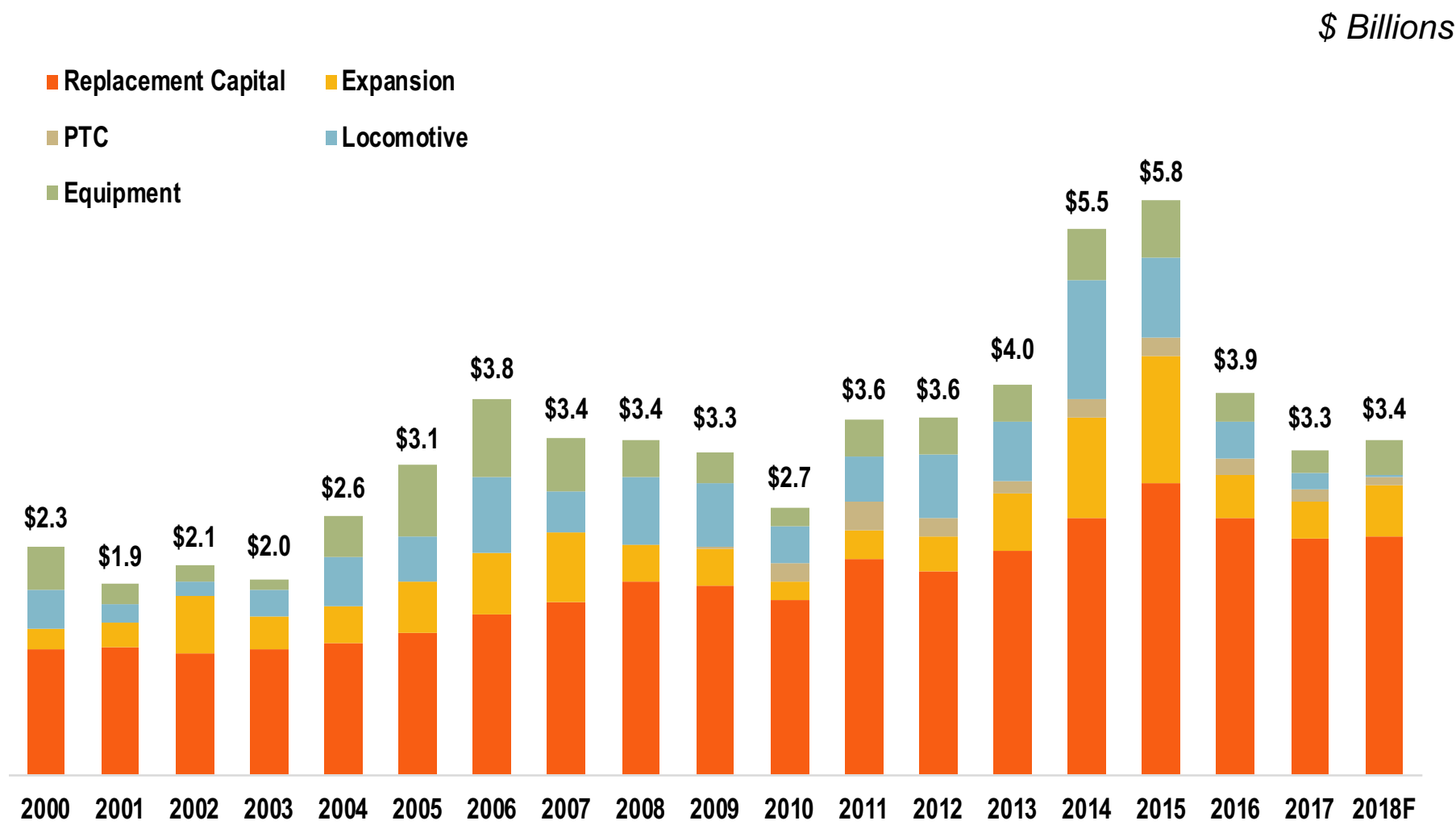
U.S. railroads ended Oct '18 up 2.5% y/y, bringing the YTD performance to 4% thru the end of October



Source: Association of American Railroads (AAR) through November 3, 2018

BNSF RAILWAY CAPITAL INVESTMENTS

BNSF will spend capex of about \$3.4 billion in 2018, bringing its 10-year capex total to almost \$40 billion



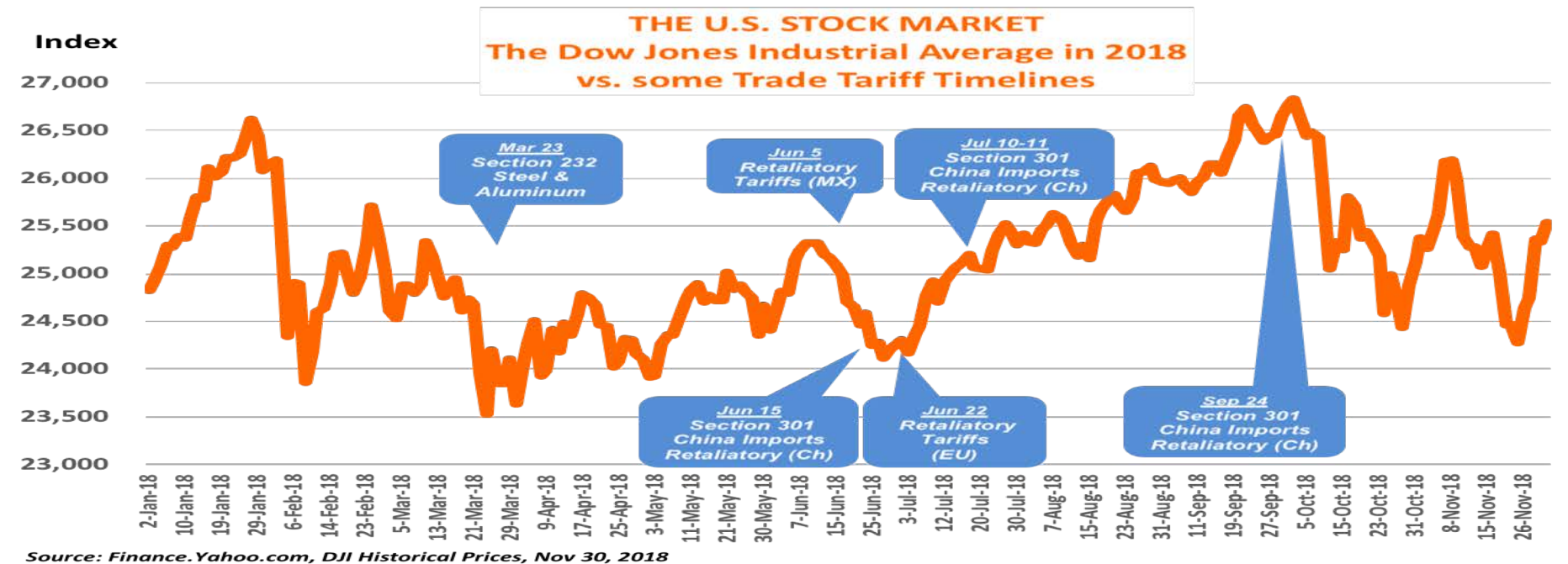
THE ECONOMIC OUTLOOK

| Macro Economic BASE CASE Assumptions | | |
|---|-------------|-------------|
| <i>(November 2018 Forecast)</i> | | |
| % Chg Y/Y Unless Stated | 2018 | 2019 |
| Real GDP | 2.9% | 2.7% |
| Industrial Production | 3.7% | 2.7% |
| IPI - Traditional Manufacturing | 2.2% | 2.4% |
| Unemployment Rate | 3.9% | 3.4% |
| EIA- Western Coal Production | -3.6% | -4.0% |
| Natural Gas Price (Henry Hub) | \$2.99 | \$3.12 |
| Whole Grains (Bushels, Billions) | 21.8 | 21.6 |
| Housing Starts (Thousands) | 1.263 | 1.318 |
| Housing Starts | 4.7% | 4.4% |
| Lt Veh - Sales (Millions) | 17.1 | 16.8 |
| Lt Veh - Sales (% Chg.Y/Y) | -0.6% | -1.9% |
| Imports | 4.9% | 6.4% |
| Exports | 4.3% | 4.1% |
| Consumer Expenditures | 2.7% | 2.8% |
| Retail Sales | 4.8% | 4.2% |
| RCAF-Unadjusted | 4.4% | 4.5% |
| RCAF- Less Fuel (All-LF) | 2.1% | 3.3% |
| WTI Crude Oil (\$/Barrel) | 66.8 | 64.9 |
| Brent Crude Oil (\$/Barrel) | 73.1 | 71.9 |

Source: IHS Markit (Nov, 2018); EIA and ProExporter (Nov 2018), SAK Economics

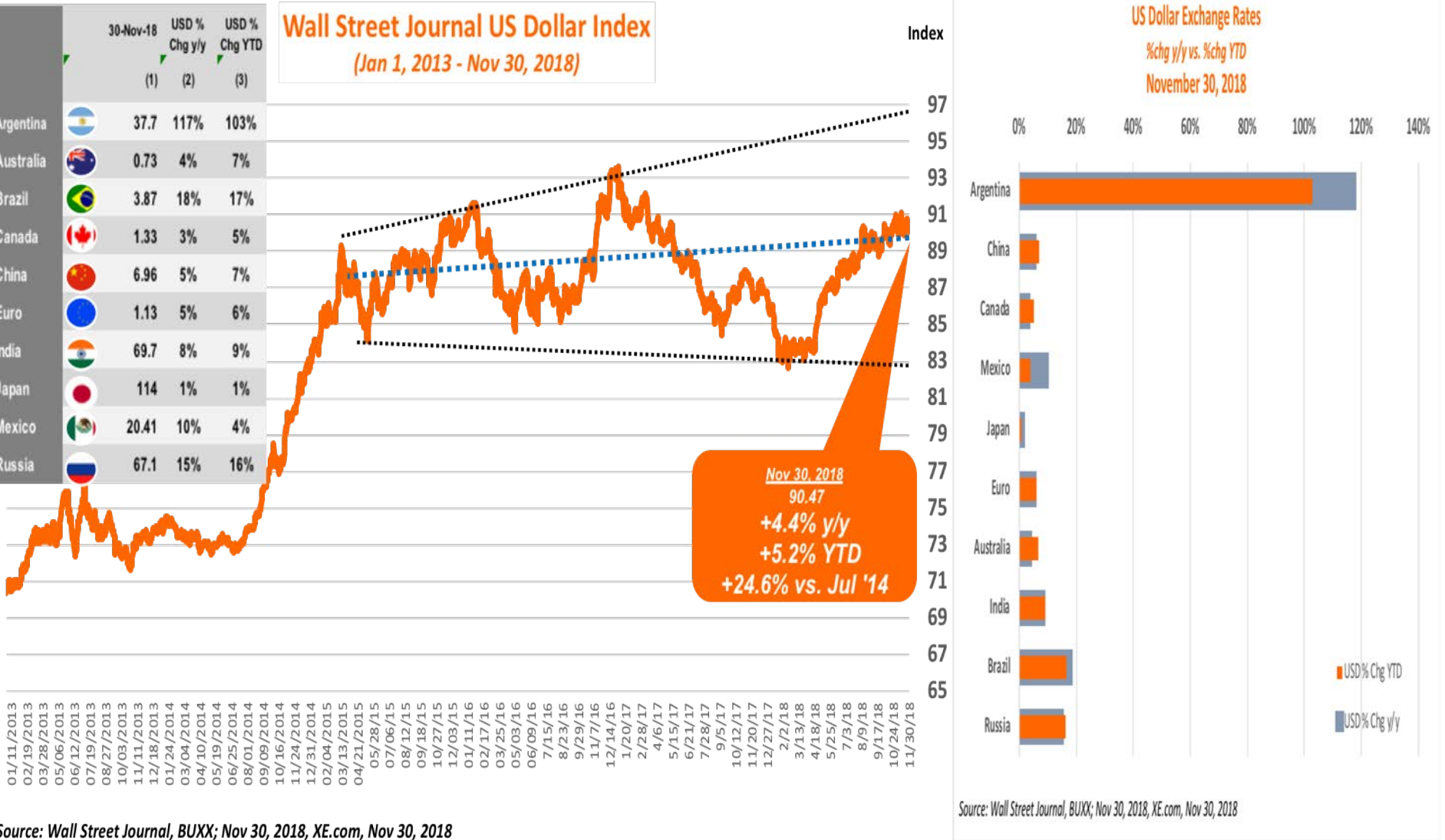
RISKS AND OPPORTUNITIES – TRADE POLICY

Many large firms are estimating negative impacts of US trade tariffs on quarterly earnings, resulting in stock market weakness



RISKS AND OPPORTUNITIES – EXCHANGE RATES

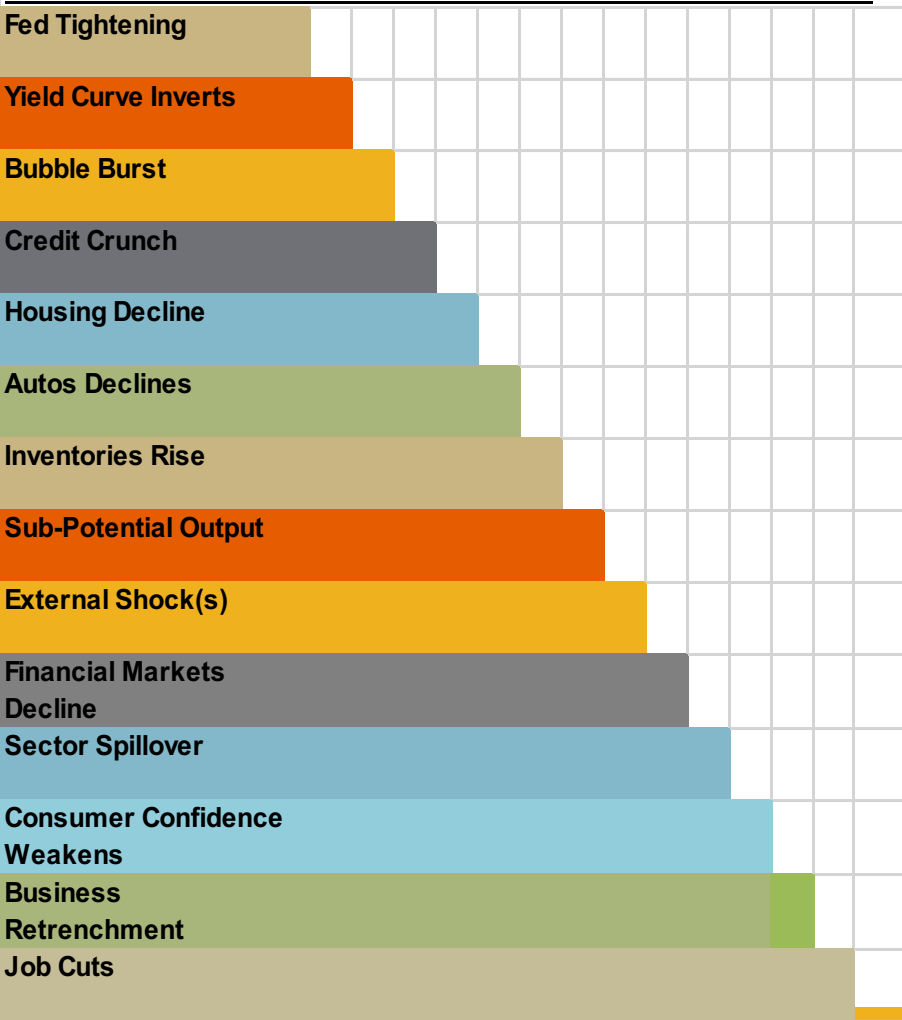
The stronger USD reflects divergent global monetary policies, US fiscal and trade policies and slowing global growth



RISKS AND OPPORTUNITIES – MONETARY POLICY

Probability of 2018 recession is rising and a business cycle downturn should remain on the watch lists of all cyclical firms

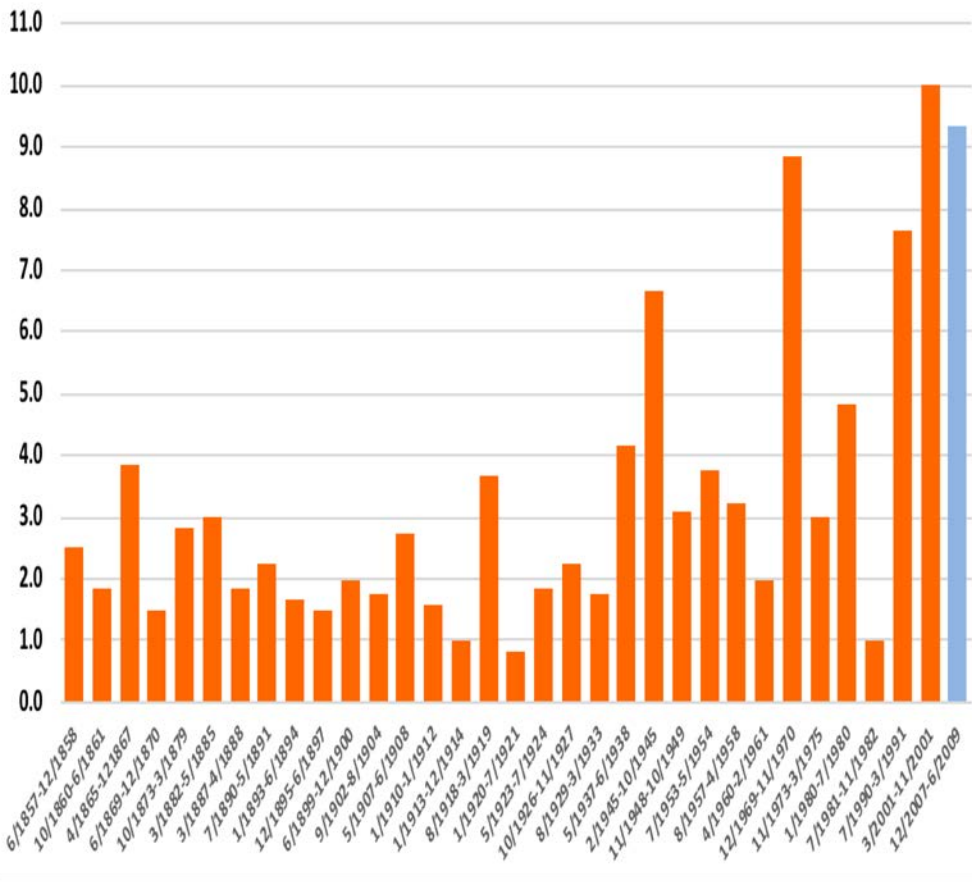
SOME KEY STEPS FROM BUSINESS CYCLE PEAK TO TROUGH



U.S. Business Cycle Expansions

1857-2018

(Duration in Years)



Source: National Bureau of Economic Research (NBER), October 26, 2018

Sam's Hey (Hair) Days:

