Economic Outlook:
Policy Seen as "Appropriate" Despite Evidence of Mounting Weakness

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"We decided to lower the interest rates for the third time this year. We took this step to help keep the U.S. economy strong in the face of global developments and to provide some insurance against ongoing risks."

- Fed Chairman Powell, October 30th Press Conference

Fed Cuts Rates

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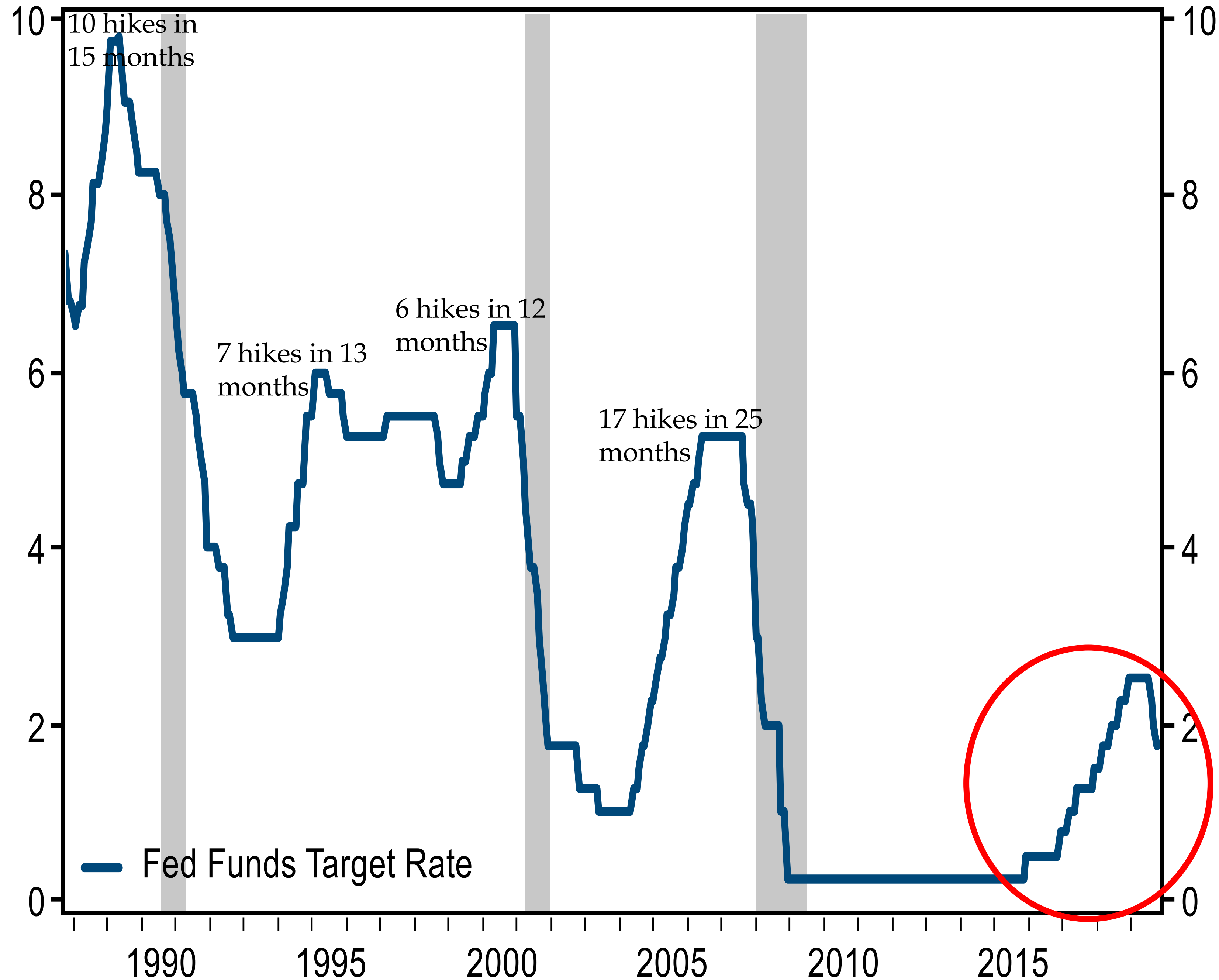
Fed cut rates 25bps to 1.50%-1.75% in October, the third rate cut this year

Liftoff in December 2015
1 hike in 2016
3 hikes in 2017
4 hikes in 2018

9 hikes or 225bps in four years



Source: Federal Reserve Board /Haver Analytics

Equity Market Volatility

Ahead of the Fed's October rate decision, equities were up 0.1%

Equities rose, however, 0.4% following Chair Powell's press conference

Year-over-year, equities are up 9.3%

Equities are up 1.2%, however, since the Fed's July rate cut

Dow Jones Industrial Average

Probability of Rate Cut

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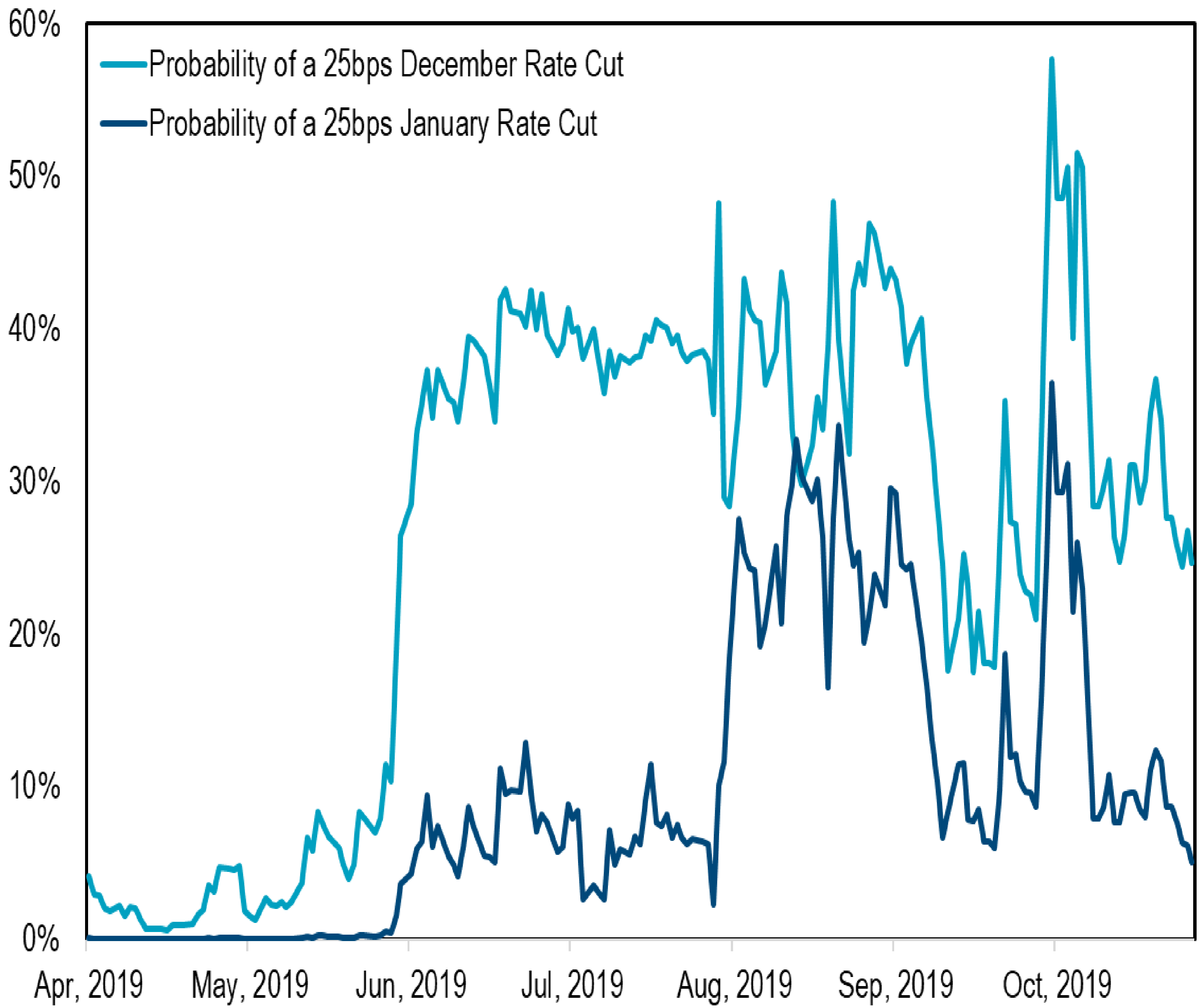
The market has priced in a fourth-round December rate cut at 28%



Source: Bloomberg

"The U.S. economy is in its 11th year of expansion, and the baseline outlook remains favorable."

- Fed Chairman Powell, October 30th Press Conference

Growth: Headline Strength, Weak Details

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U.S. GDP:
2018: 2.5%/3.5%/2.9%/1.1%

Q3 GDP rose **1.9%,** a three-quarter low, and down from 2.0% in Q2 and a 3.1% rise at the start of the year

GDP in Oregon rose **3.1%** in Q1, a two-quarter high and up from 1.3% in Q4 2018

Real private domestic sales up **2.0**%, a two-quarter low

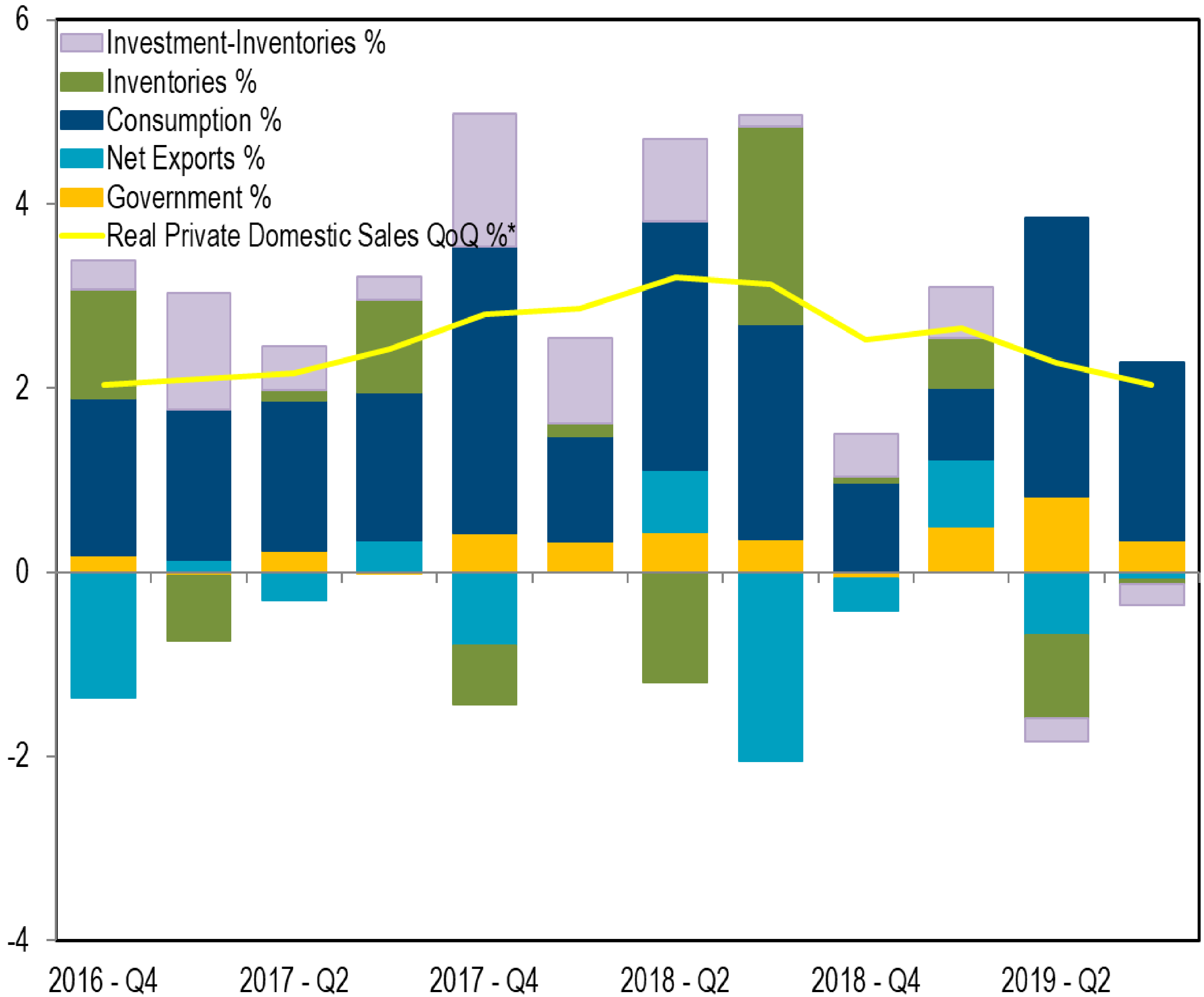
Consumption rose **2.9%** in Q3, down from 4.6% in Q2 and a two-quarter low

Business investment fell **3.0**%, a more than three-year low

Housing investment rose **5.1%**, following six consecutive quarters of decline

Inventory rose $69.0B (-0.05%)
Net trade was -0.5% (-0.08%)
Government rose 2.0% (+0.35%)

Avg growth:
2015 1.9%/2016 2.0%
2017 2.8%/2018 2.5%

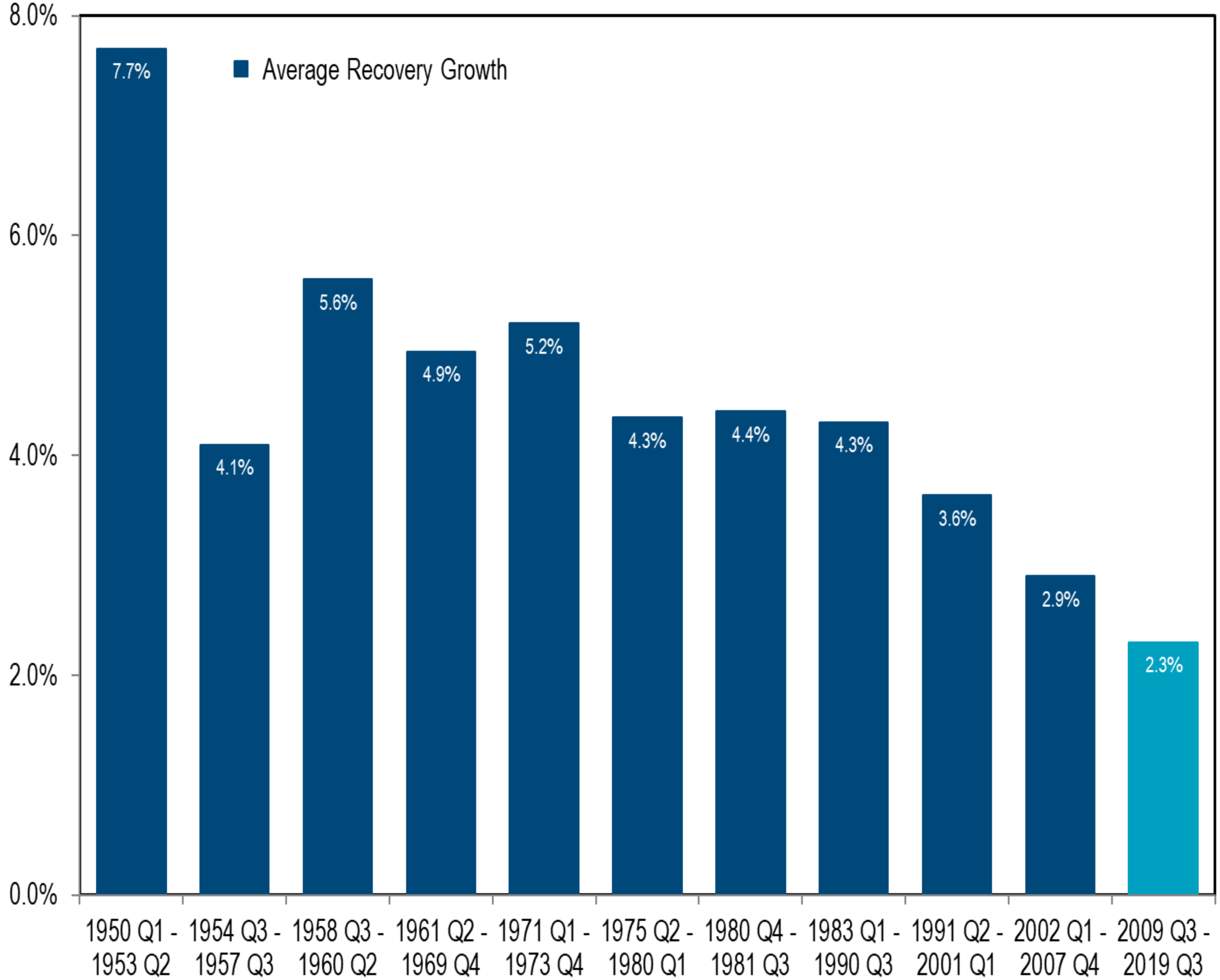


Source: Bureau of Economic Analysis/Haver Analytics

*Excludes inventories, trade and government spending

Average Growth vs. Previous Recoveries

2.3% average growth since the Great Recession, the lowest average growth rate compared to previous recoveries



Source: NBER/ Haver Analytics

GDP Forecast

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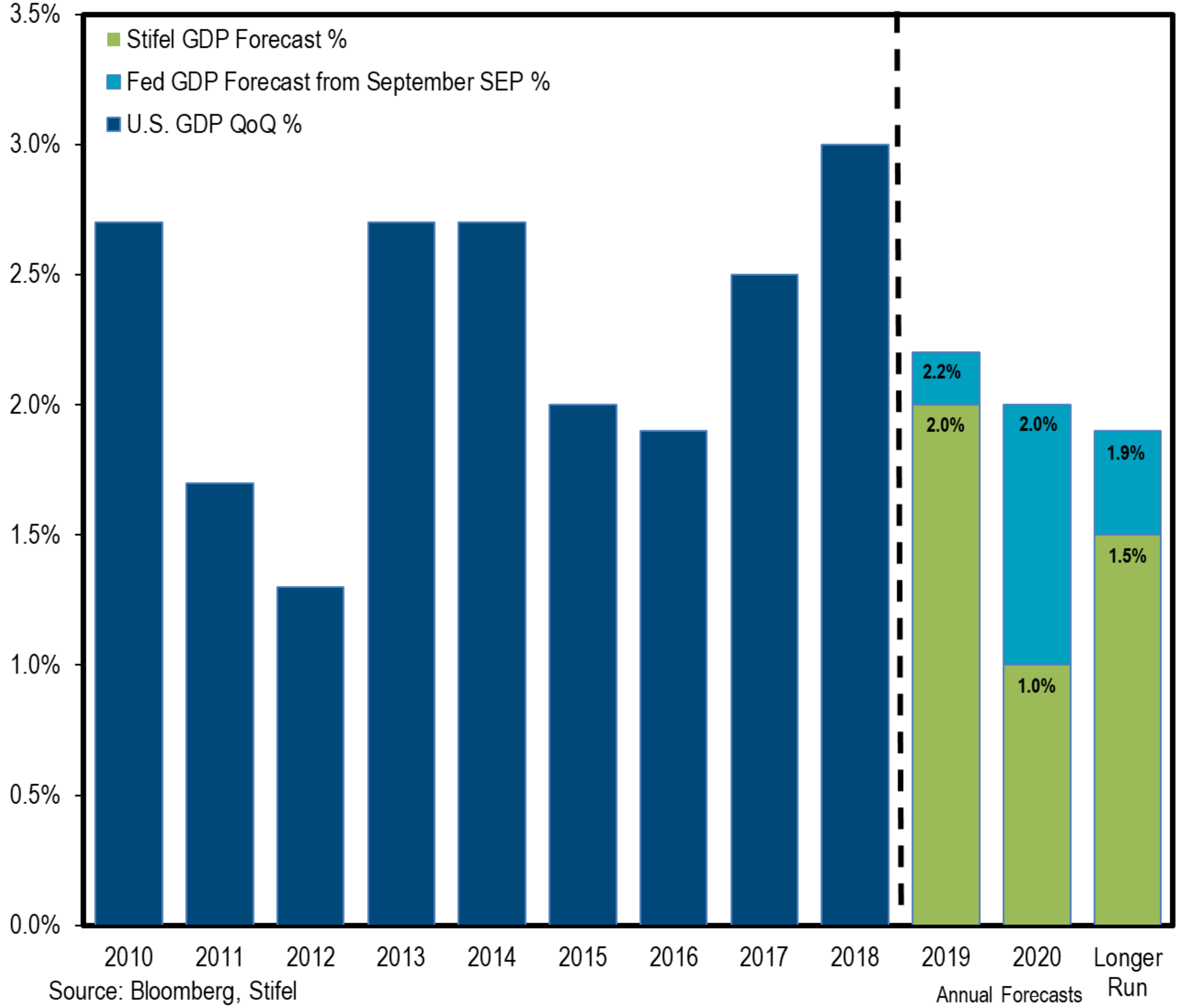
With declining trends in consumption and investment, GDP will expectedly slow in the coming quarters

The Fed increased its 2019 GDP forecast from 2.1% to **2.2%,** while its 2020 and longer-run forecast was unrevised at **2.0%** and **1.9%,** respectively, in the latest September SEP

Growth is likely to lose considerable momentum in 2019 with the risk of recession rising in 2020 and beyond



Source: Bloomberg, Stifel

"Participants generally judged that downside risks to the outlook for economic activity had increased somewhat since their July meeting, particularly those stemming from trade policy uncertainty and conditions abroad."

"Several participants noted that statistical models designed to gauge the probability of recession, including those based on information from the yield curve, suggested that the likelihood of a recession occurring over the medium term had increased notably in recent months."

- September 18th FOMC Meeting Minutes

"The job market remains strong. The unemployment rate has been near half-century lows for a year and a half, and the pace of job gains has eased this year, but has remained solid. We had expected some slowing after last year's strong pace."

- Fed Chairman Powell, October 30th Press Conference

Payrolls Disappoint with Declining Trend

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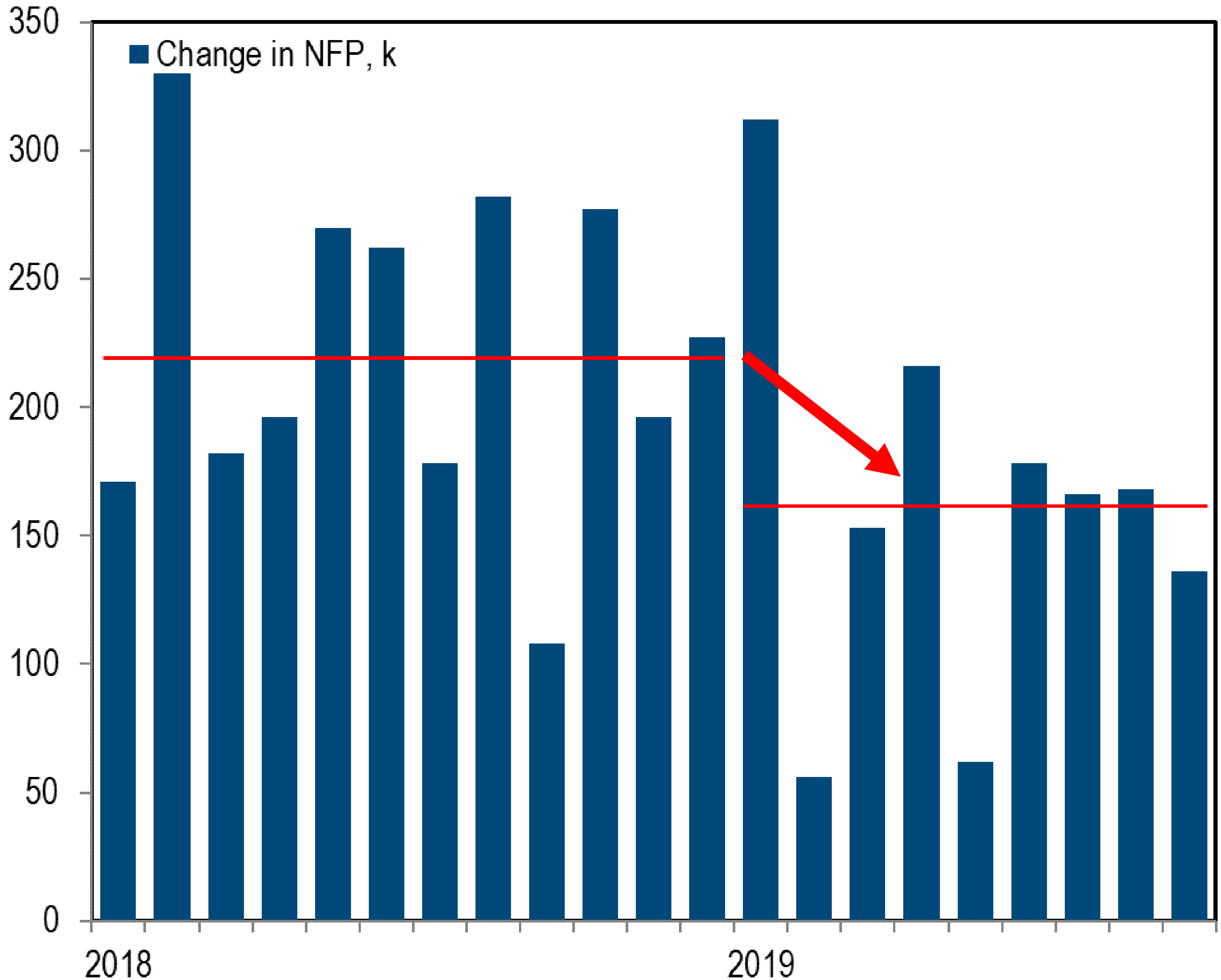
Job gains *"solid, on average"*
- October 30th FOMC Statement

The latest September jobs report marked the 108th consecutive month of positive job creation in the U.S.

Payrolls rose **136k** in September, a four-month low, and following a 168k rise in August

Average job creation was **223k** in 2018 which has slowed to an average pace of **158k** in 2019



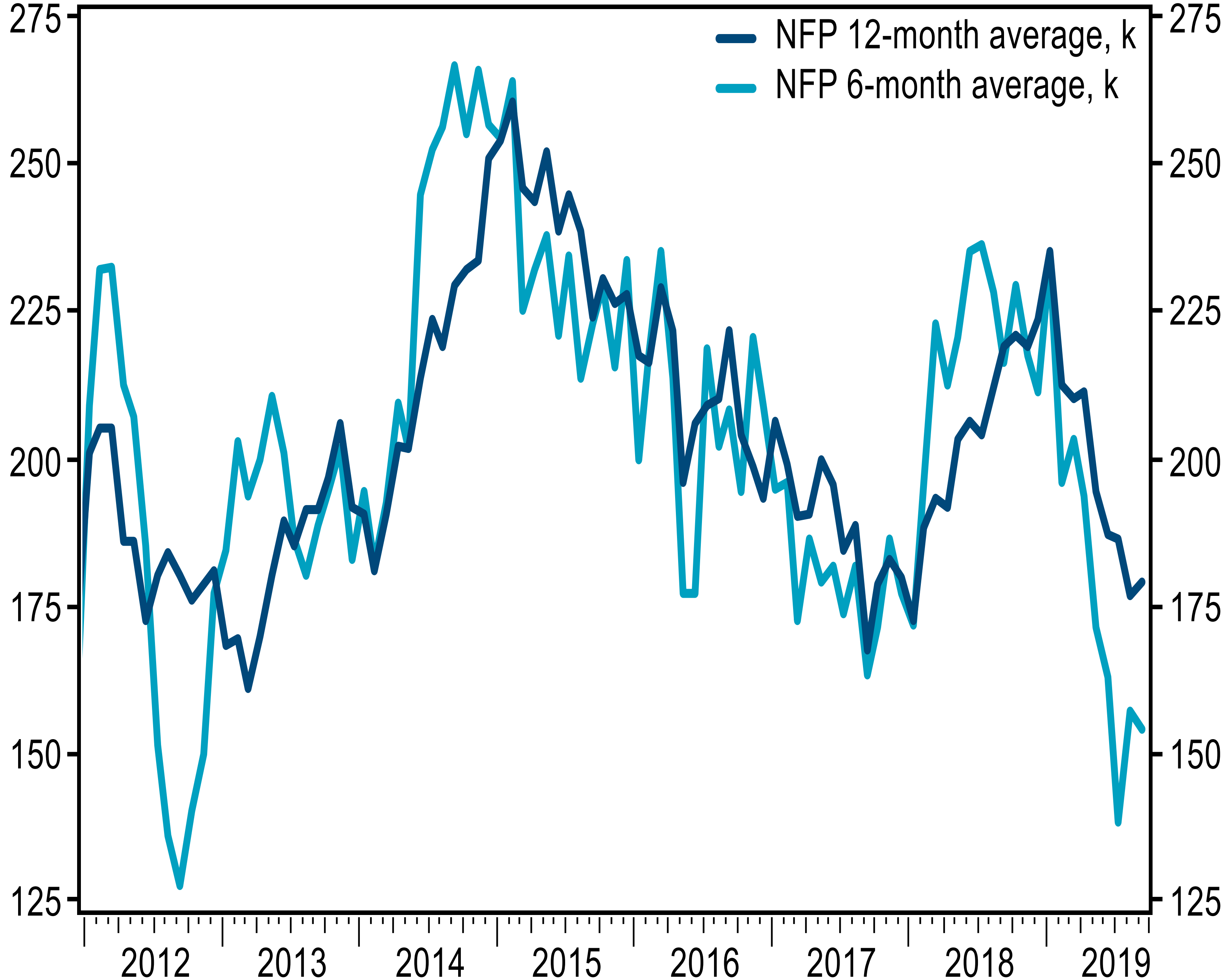
Source: Bureau of Labor Statistics/Haver Analytics

Payrolls Disappoint with Declining Trend

Payrolls rose **136k** in September, a four-month low, and following a 168k rise in August

Smoothing out monthly volatility, the six-month average fell from 157k to **154k,** down from a recent peak of 235k in mid-2018

On a 12-month average, job creation rose from 177k to **179k**, still down from a recent peak of 235k in January of this year



Source: Bureau of Labor Statistics /Haver Analytics

Reliance on Low Wage and Temp Workers

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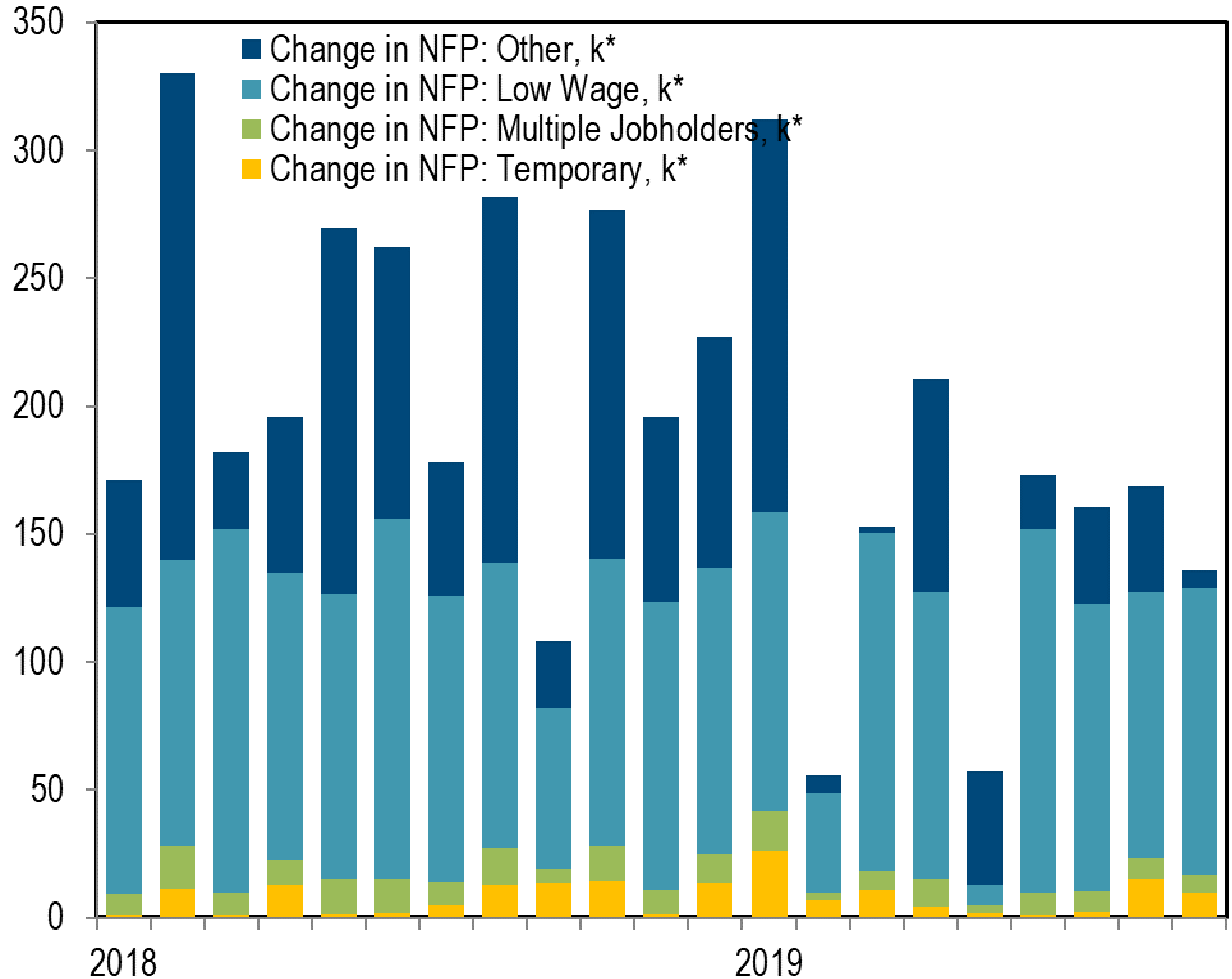
Despite positive job creation, there is still a lingering reliance on temporary and low-wage employment

Since the start of the year, 70k temp payrolls have been added with more than 500k low-wage jobs



Source: Bureau of Labor Statistics/Haver Analytics

*Estimated from Establishment Survey (Payroll Employment) & Household Survey

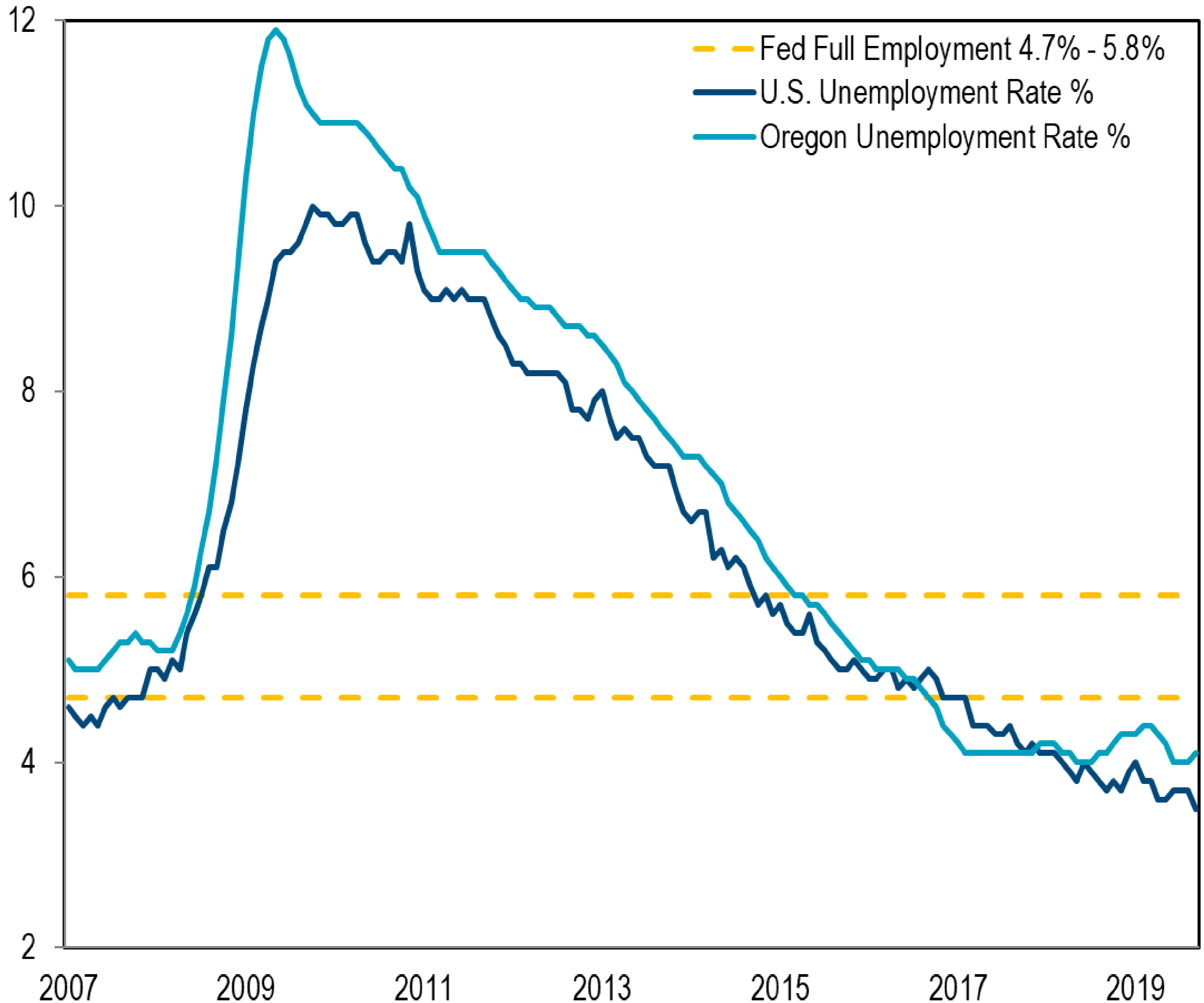
Unemployment at 3.5%; Oregon 4.1%

Unemployment rate has *"remained low"*
- October 30th FOMC Statement

U.S. unemployment ticked down two-tenths of a percentage point to **3.5%** in September, the lowest since December 1969

The unemployment rate has been well within the Fed's full employment range since October 2014 and now falling below the Fed's target range since March 2017

Oregon unemployment rate rose from 4.0% to **4.1%** in September, a four-month high



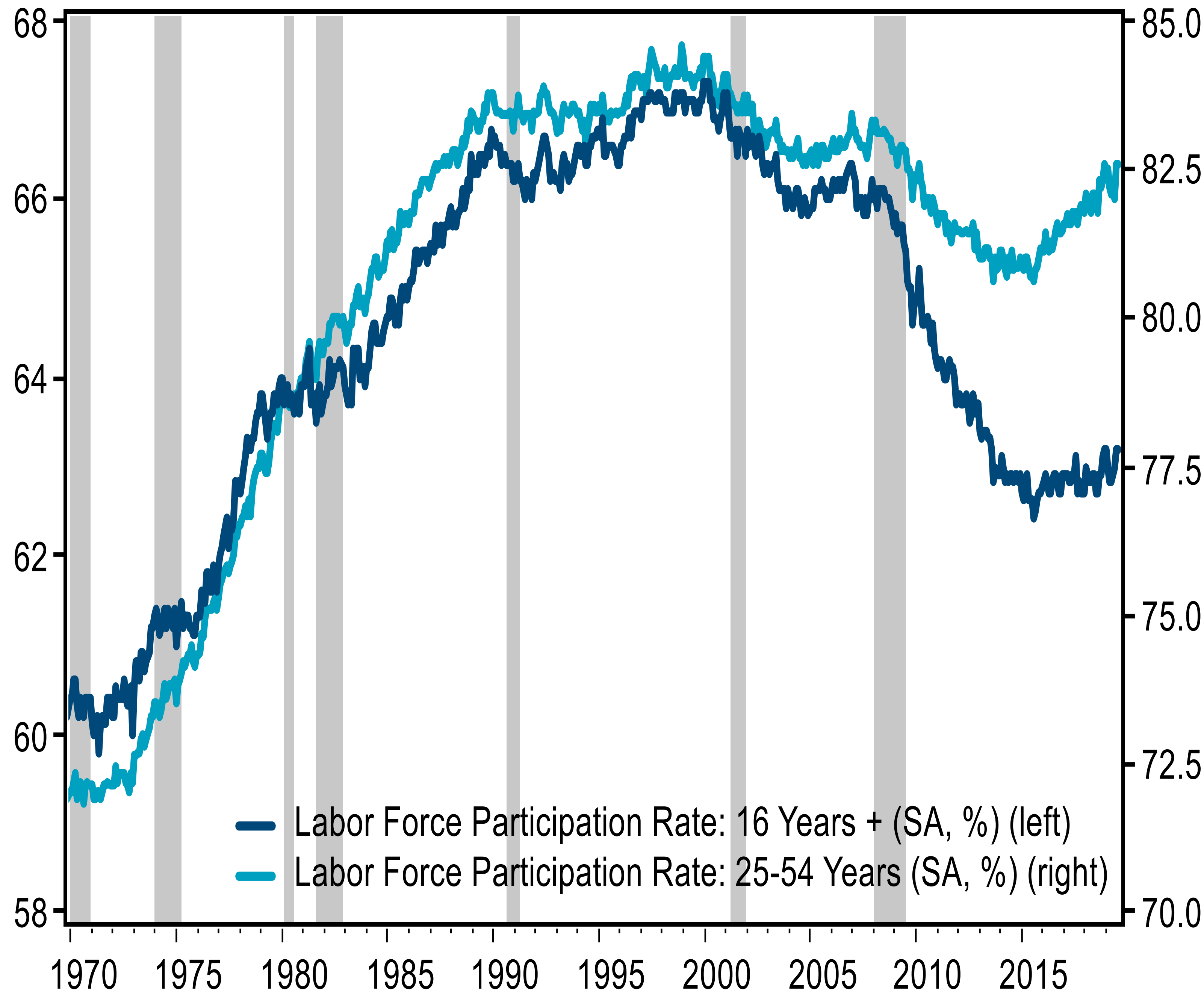
Source: Bureau of Labor Statistics

Participation Rate Still Low

Participation rate at a multi-decade low, **63.2**% in September and lower than almost every other advanced country

The prime-age participation rate while improved from a low of 80.6% in September 2015, remains depressed at **82.6**% in September, a multi-decade low

20-55 year olds account for the majority of the decline in the labor force, **8.0m** Americans (only 59% of working age population)



Source: Bureau of Labor Statistics /Haver Analytics

Where Have All the Workers Gone?

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An aging population. 10k Baby Boomers a day reach retirement age. According to the Census Bureau, by 2035, there will be 78.0 million people 65 years and older compared to 76.4 million under the age of 18, the first time in U.S. history older Americans will outnumber children.

Rising rate of disability. According to the Conference Board, increasingly more Americans consider themselves disabled. The portion of working age adults who say they're not in the labor force because of a disability has risen to nearly 20%. Currently, over 24M Americans consider themselves disabled.

Childcare costs. According to the Bureau of Labor Statistics (BLS), childcare costs have risen 168% over the past 25 years. According to care.com, in just the past two years, after-school care costs have gone up nearly 20% and the cost of child care centers or daycare services have risen more than 40%.

Cash economy. The St. Louis Fed concluded that about *"16 percent of workers employed full time participated in informal work,"* meaning working outside of the system and not paying taxes. Estimates for the shadow economy range from 5% to more than 15%.

The opioid epidemic. The Cleveland Fed concluded that *"prescription opioids can account for 44% of the realized national decrease in men's labor force participation between 2001 and 2015"* and a 17% decline for prime age women.

Job Openings Point to Skills Mismatch

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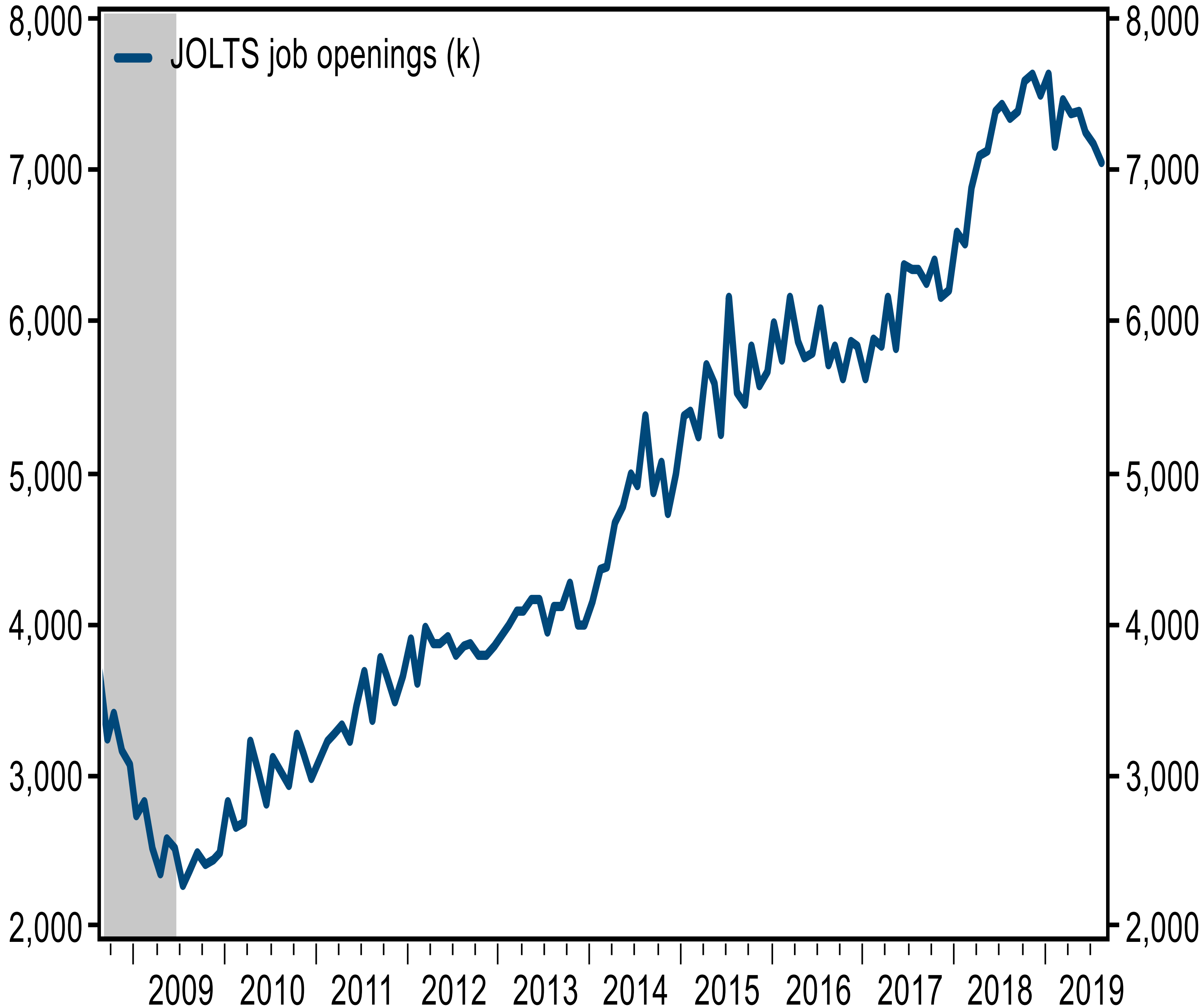
The number of job openings according to JOLTS – the Job Openings and Labor Turnover Survey – declined 123k from 7.174m to 7.051m in August, the lowest level since March 2018



Source: Bureau of Labor Statistics /Haver Analytics

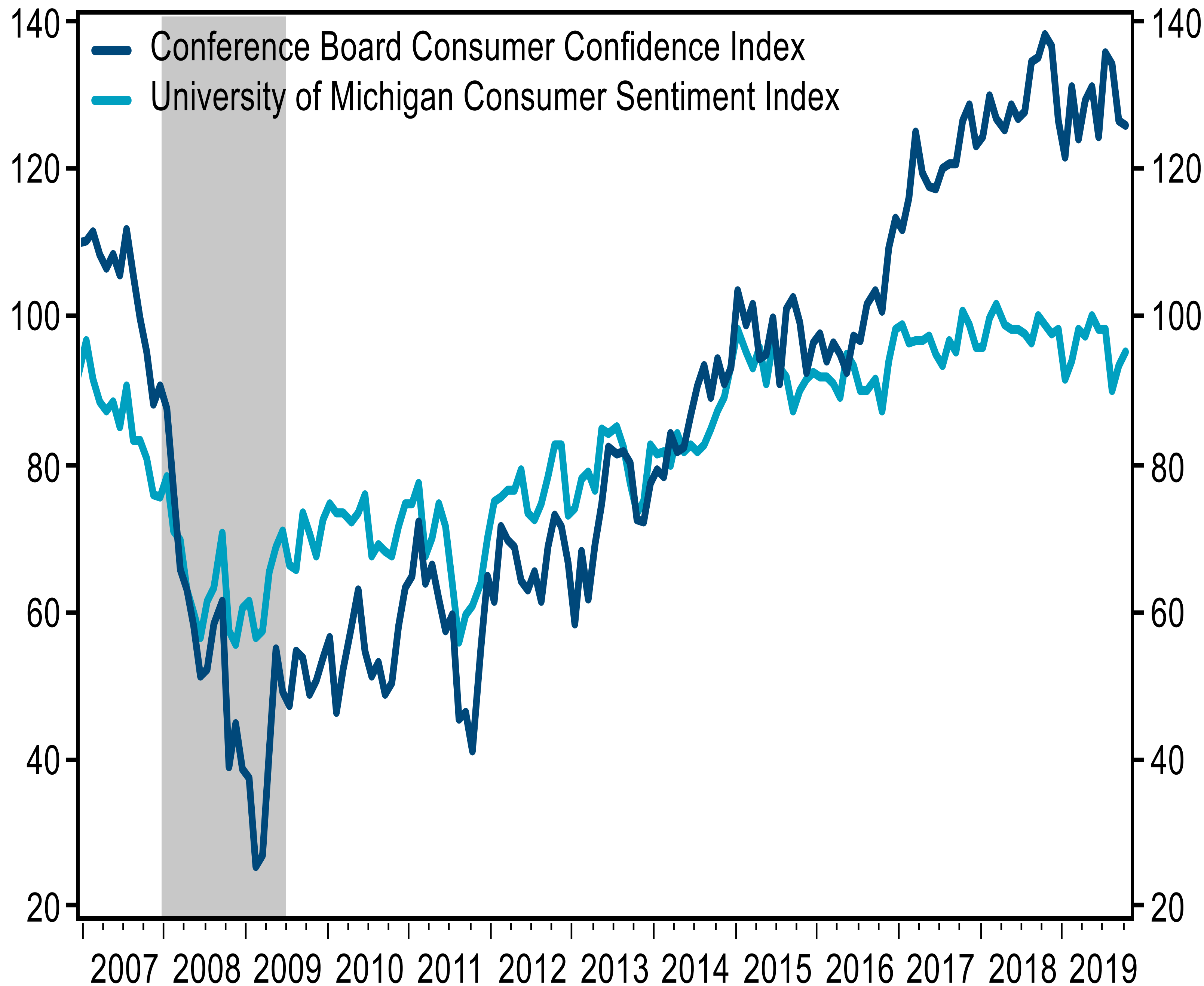
"Household spending continues to be strong—supported by a healthy job market, rising incomes, and solid consumer confidence."

- Fed Chairman Powell, October 30th Press Conference

Consumer Confidence Peaked

The University of Michigan Consumer Sentiment Index rose from a reading of 93.2 to 95.5 in October, a three-month high

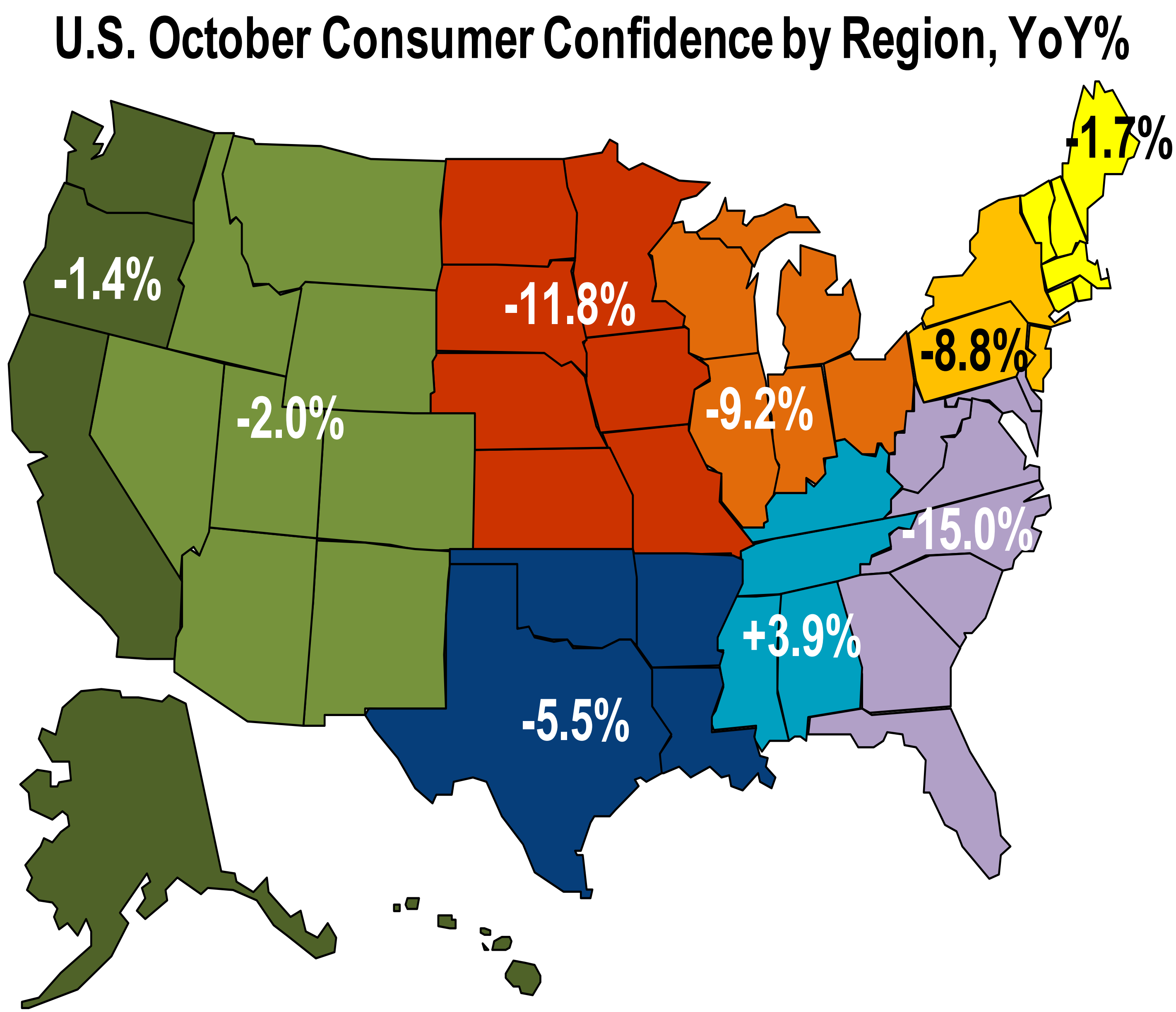
The Consumer Confidence Index declined from 126.3 to a reading of 125.9 in October, a four-month low



Sources: The Conference Board, University of Michigan /Haver Analytics

Consumer Confidence Uneven

U.S. consumer confidence varies by region with confidence in the South Atlantic region down 15.0%, while confidence in the East South Central region is up 3.9%



Source: Conference Board/ Bloomberg

Retail Sales Uneven Momentum

"Household spending has been rising at a strong pace"
- October 30th FOMC Statement

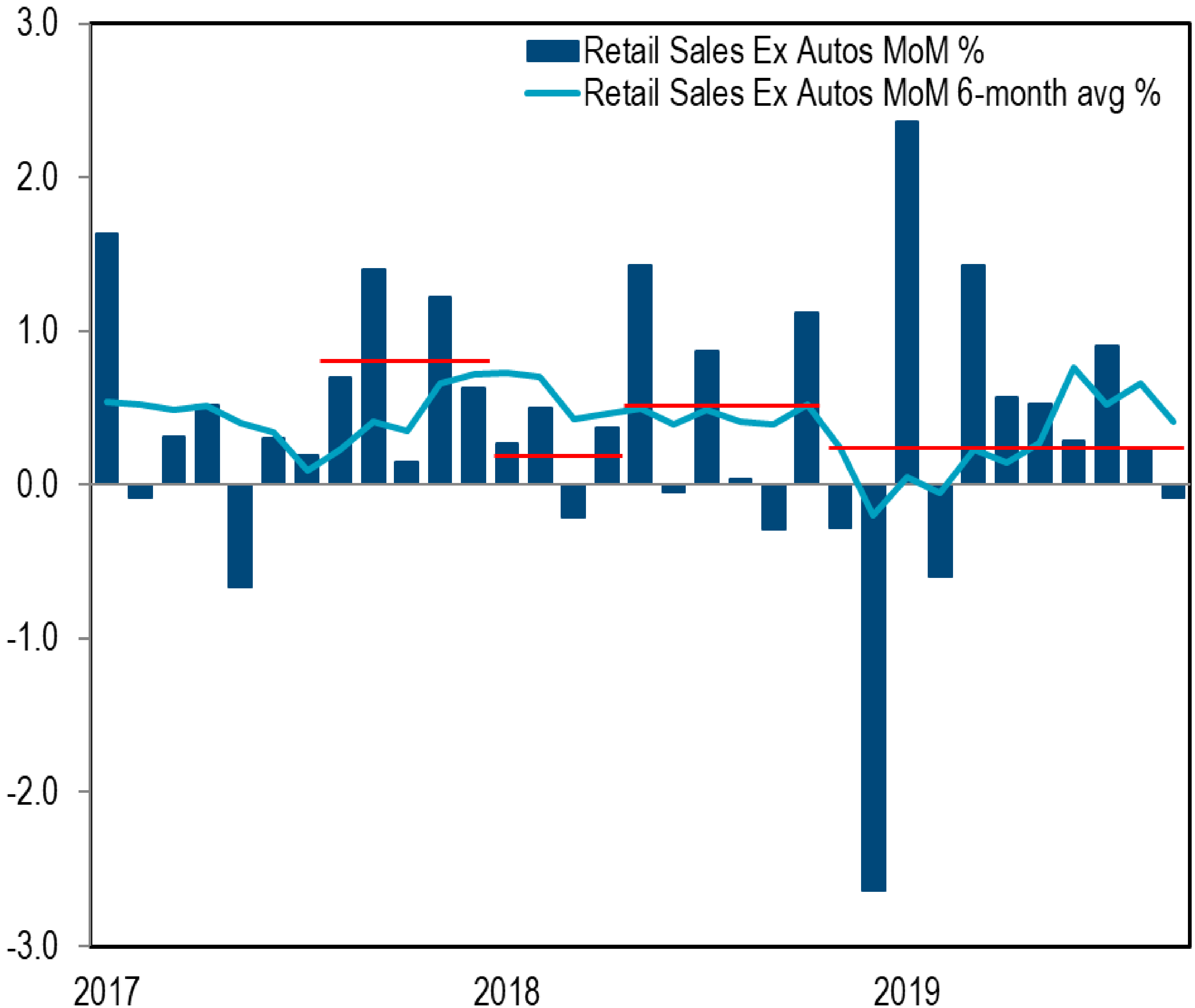
September sales fell **0.3%**, a seven-month low

Y/Y sales rose **4.1%** vs. 4.4% in August

Ex autos, sales declined 0.1% in September and rose **3.7%** Y/Y following a similar rise in August

Late 2017 avg: 0.8%
Early 2018 avg: 0.2%
Mid-2018 avg: 0.5%
Late 2018 – 2019 avg: 0.2%

Consumption rose **2.9%** in Q3, a two-quarter low



Source: Census Bureau

Temporary Support From Household Debt

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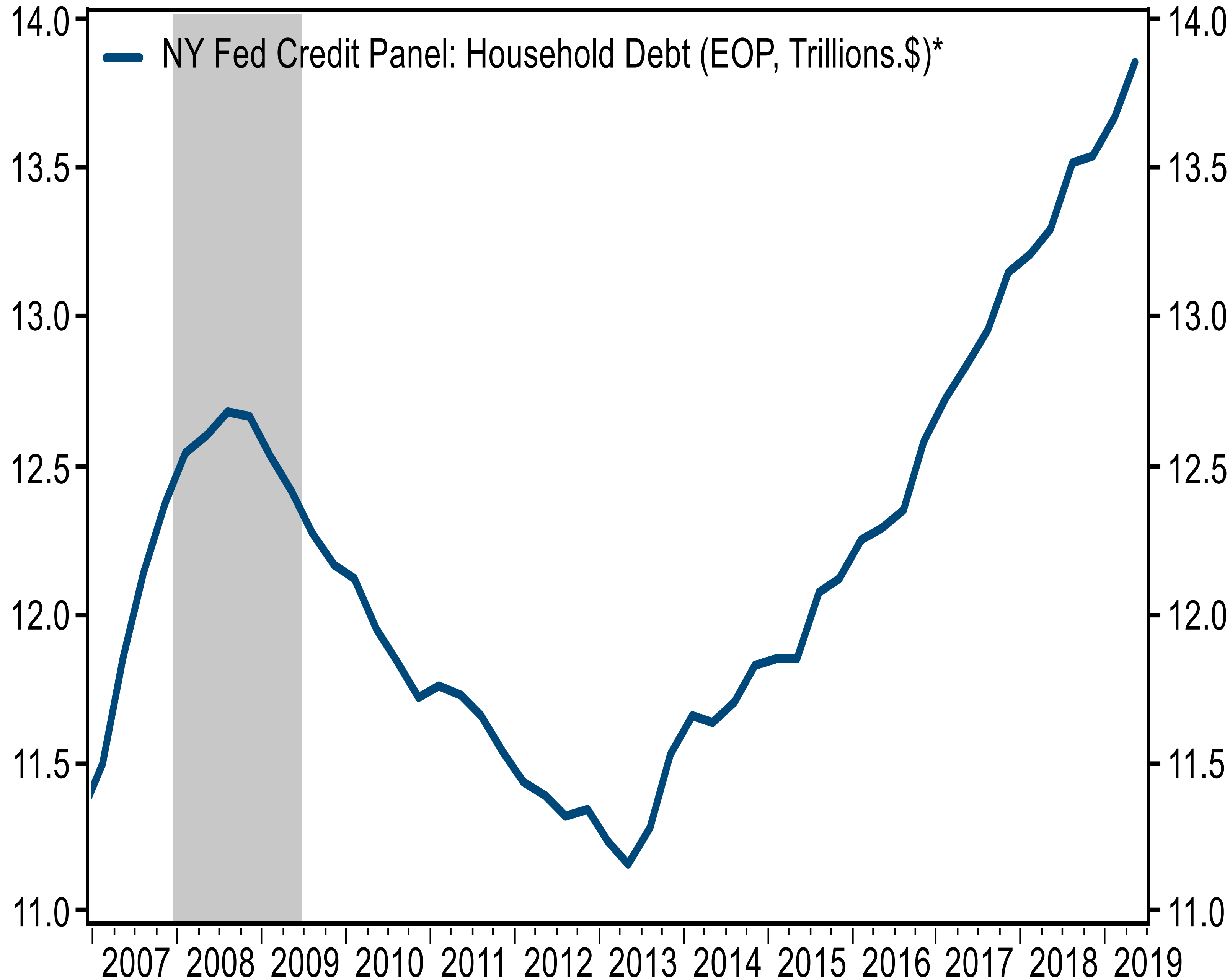
Total household debt rose 4.3% in Q2 from a year earlier to reach $13.86 trillion, the twentieth consecutive quarterly increase

Total debt now stands at $1.2 trillion or 9.3% higher than the previous peak of $12.68 trillion in the third quarter of 2008

Debt balance per capita currently stands at $51,180, more than the $50,930 in 2007



Source: FRBNY Consumer Credit Panel/Equifax /Haver Analytics

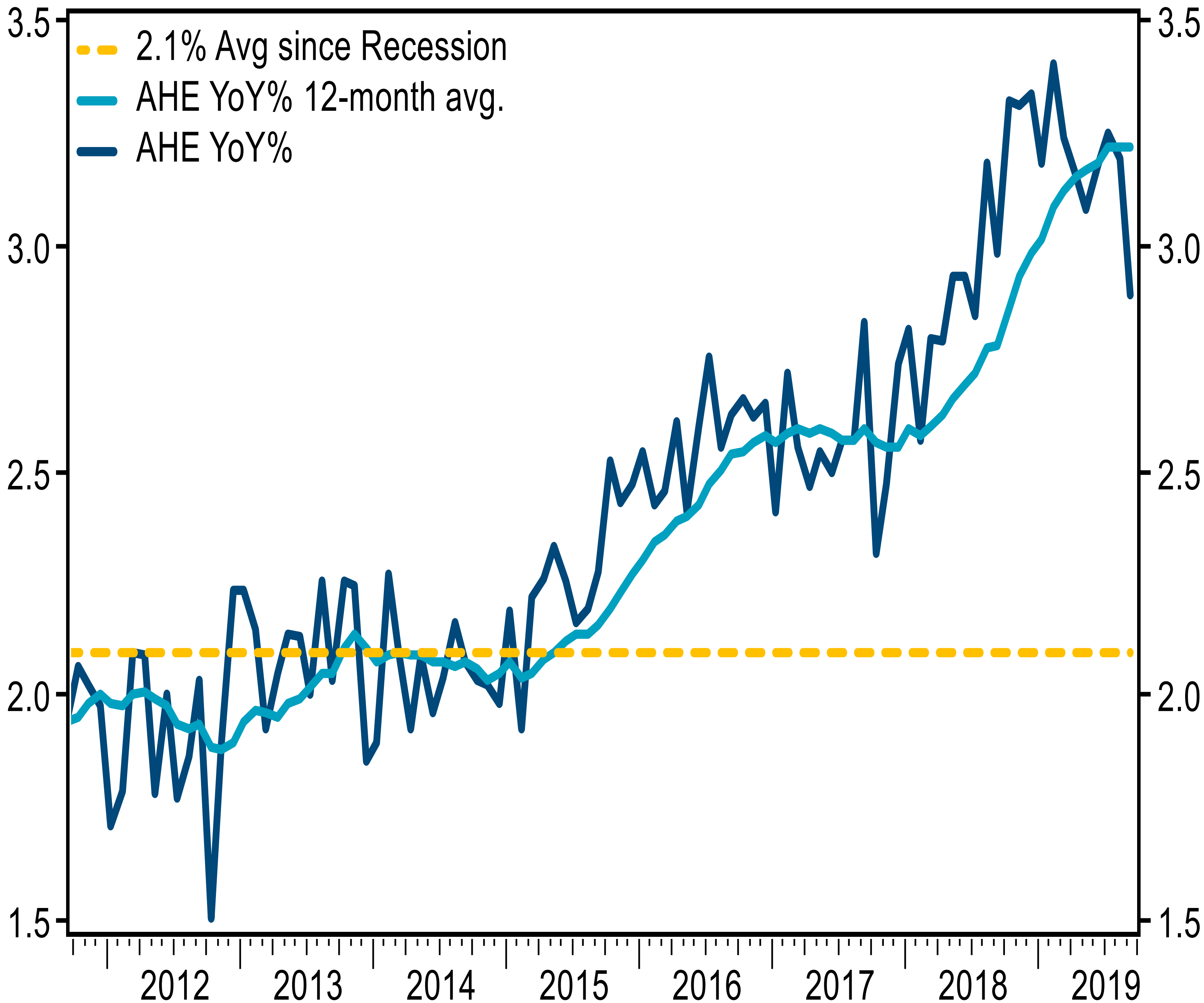
*Includes mortgages, home equity, auto loans, credit card & student loan debt as well as consumer finance and retail loans

Avg. Hourly Earnings Peaked

Wages remained somewhat robust, rising **2.9%** from a year earlier in September, the weakest pace since July 2018, and following thirteen consecutive months of at least 3% annual wage gains and marking the longest stretch of pay improvements since the recession ended in 2009

YoY wages increased 2.9%, down from a peak of 3.4% in February

Wage gains somewhat segmented: wages for information services and logging rose 3.7% and 13.4%, respectively, in September, while manufacturing wages continue to lag near 2%



Source: Bureau of Labor Statistics /Haver Analytics

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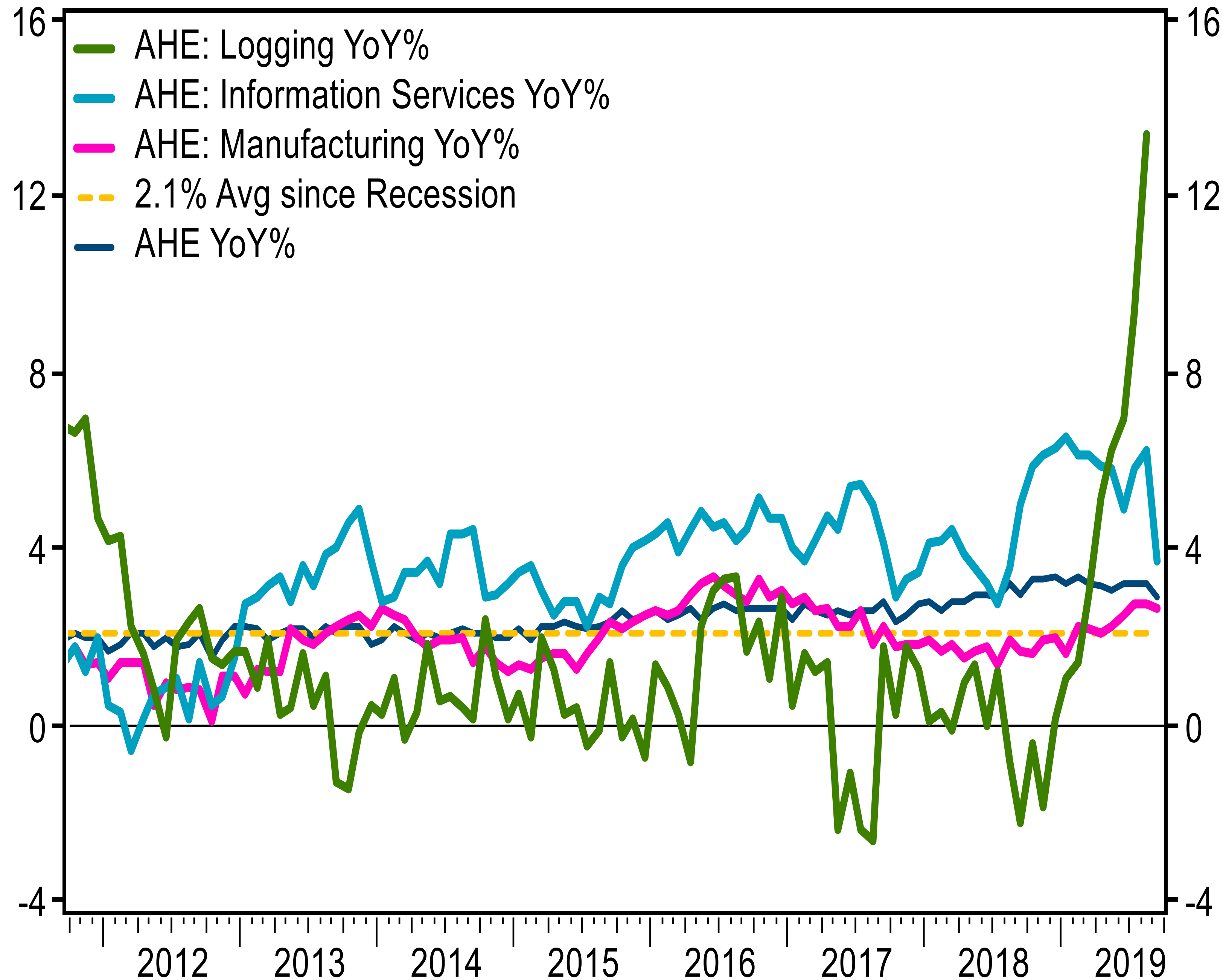

Source: Bureau of Labor Statistics /Haver Analytics

Housing investment is *"starting to rebound."*
- September 18th FOMC Meeting Minutes

Home Price-Income Spread has Closed

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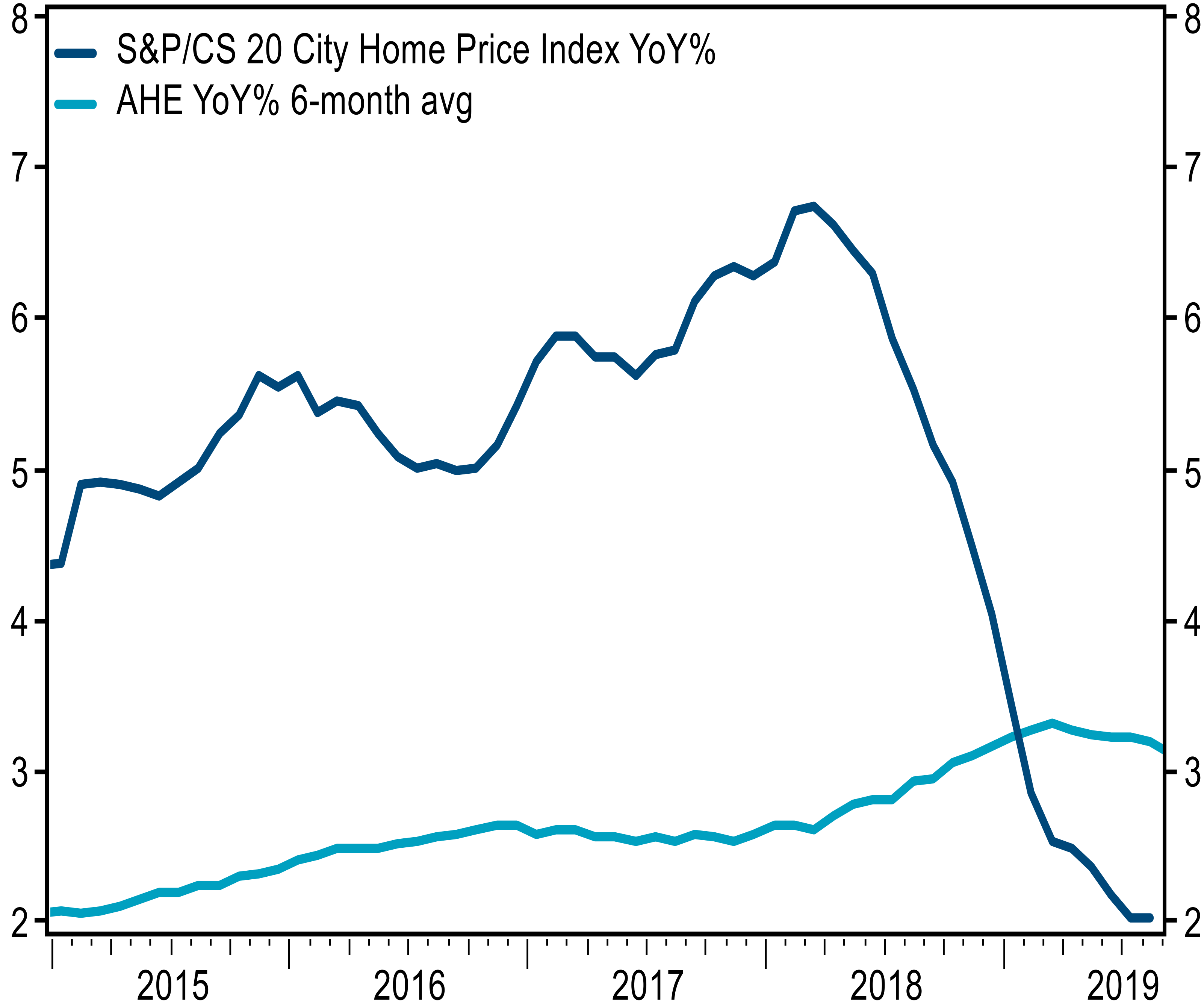
U.S. existing home sales fell 2.2% in September from 5.50m to a 5.38m unit pace, a three-month low

Up 3.9% YoY, following a 2.8% rise the month prior

U.S. home prices rose **2.0%** in August for the second consecutive month, down from a 2.2% rise in June

Income growth has averaged **2.9%** since the beginning of 2017



Sources: Standard & Poor's, Bureau of Labor Statistics /Haver Analytics

Home Sales Slow

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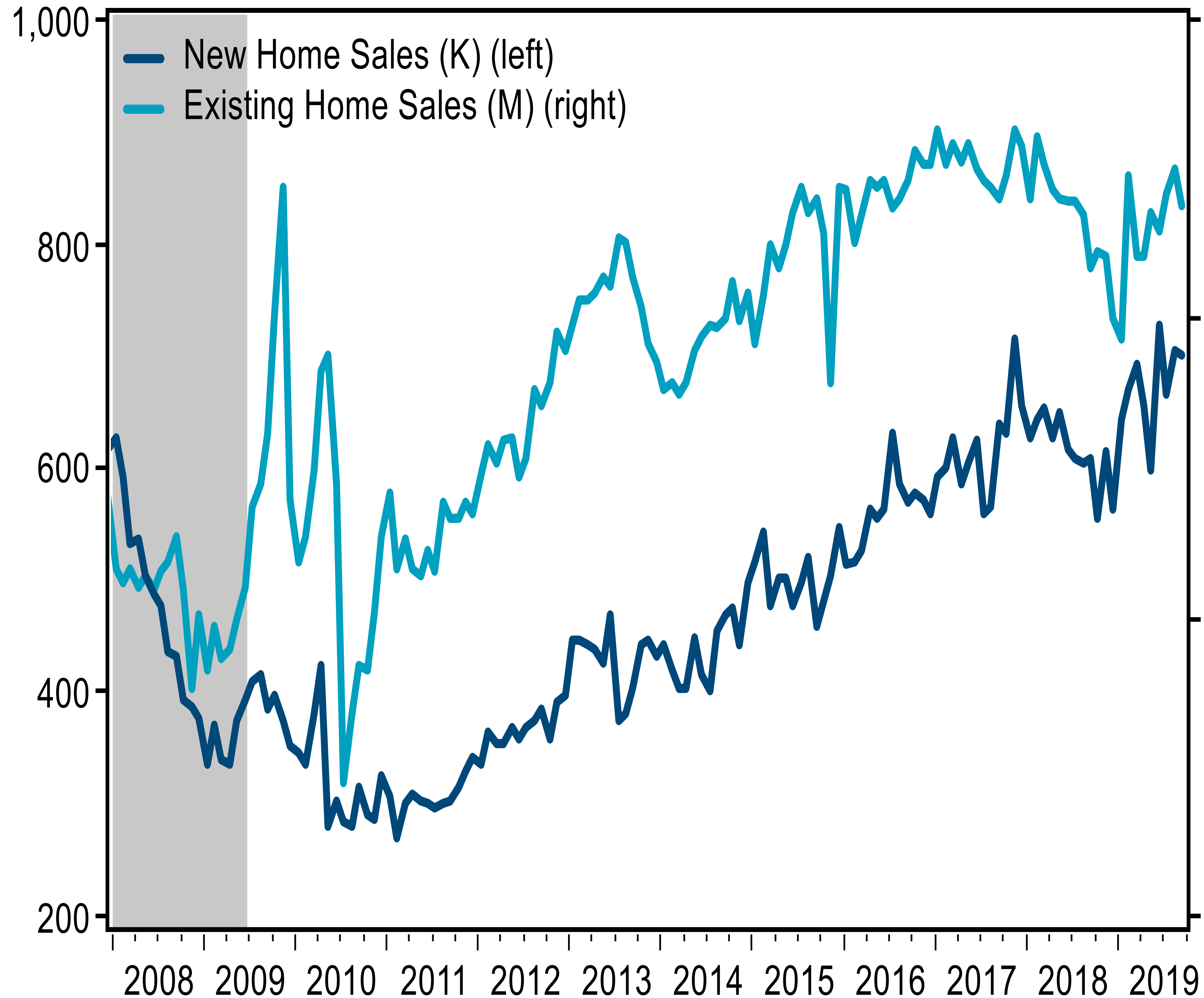
U.S. existing home sales fell 2.2% in September from 5.50m to a 5.38m unit pace, a three-month low

Up 3.9% YoY, following a 2.8% rise the month prior

U.S. new home sales fell 0.7% in September from 706k to a 701k unit pace, a two-month low

Year-over-year, new home sales rose 15.5%, a two-month low and following a 16.9% rise the month prior

New home sales account for about 11% of housing market sales



Sources: Census Bureau, National Association of Realtors /Haver Analytics

Price Gains/Losses Localized

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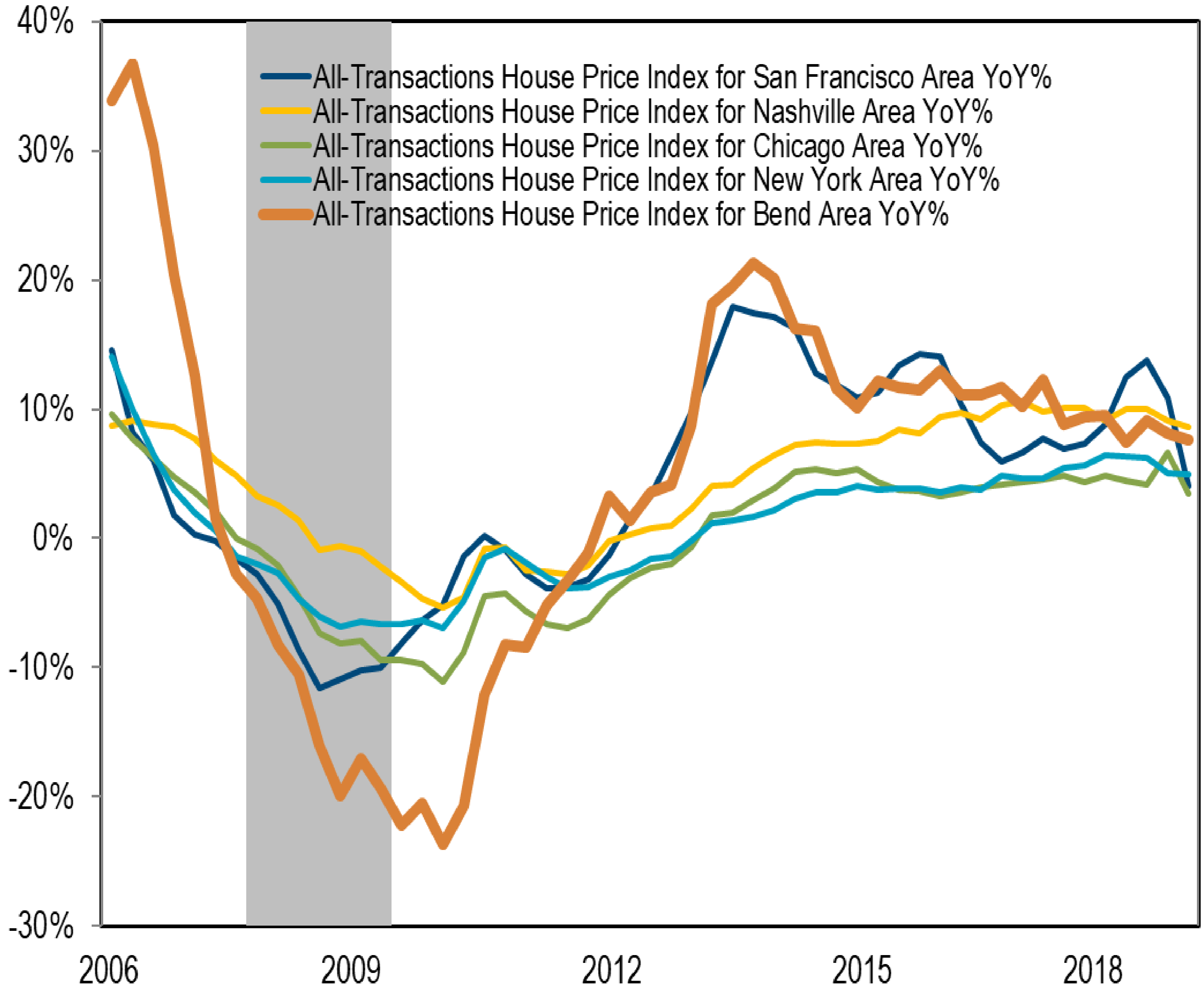
Home prices in the Bend area rose 5.7% over the past 12 months in Q2, while home prices in the Chicago area rose at an annual rate of 3.5% in Q2, an eleven-quarter low



Source: U.S. Federal Housing Agency/FRED

Unable to Afford Home Purchase

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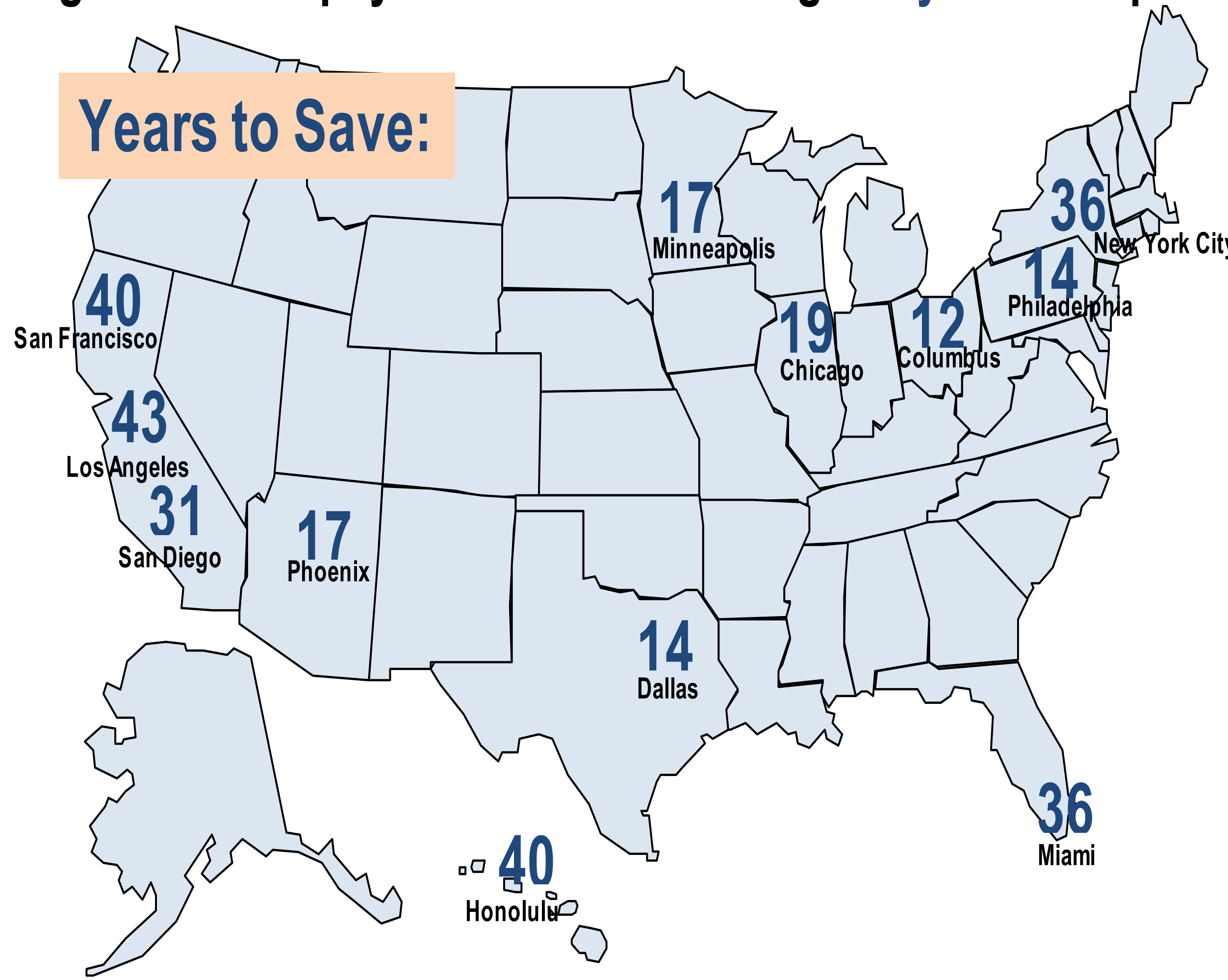
The nationwide average to save for a 20% down payment for a median-priced home on a median income is now 14 years, according to Unison's Home Affordability Report

Saving for a down payment takes an average 27 years in top U.S. cities



Source: Unison 2019 Affordability Report

Unwilling to Make Home Purchase

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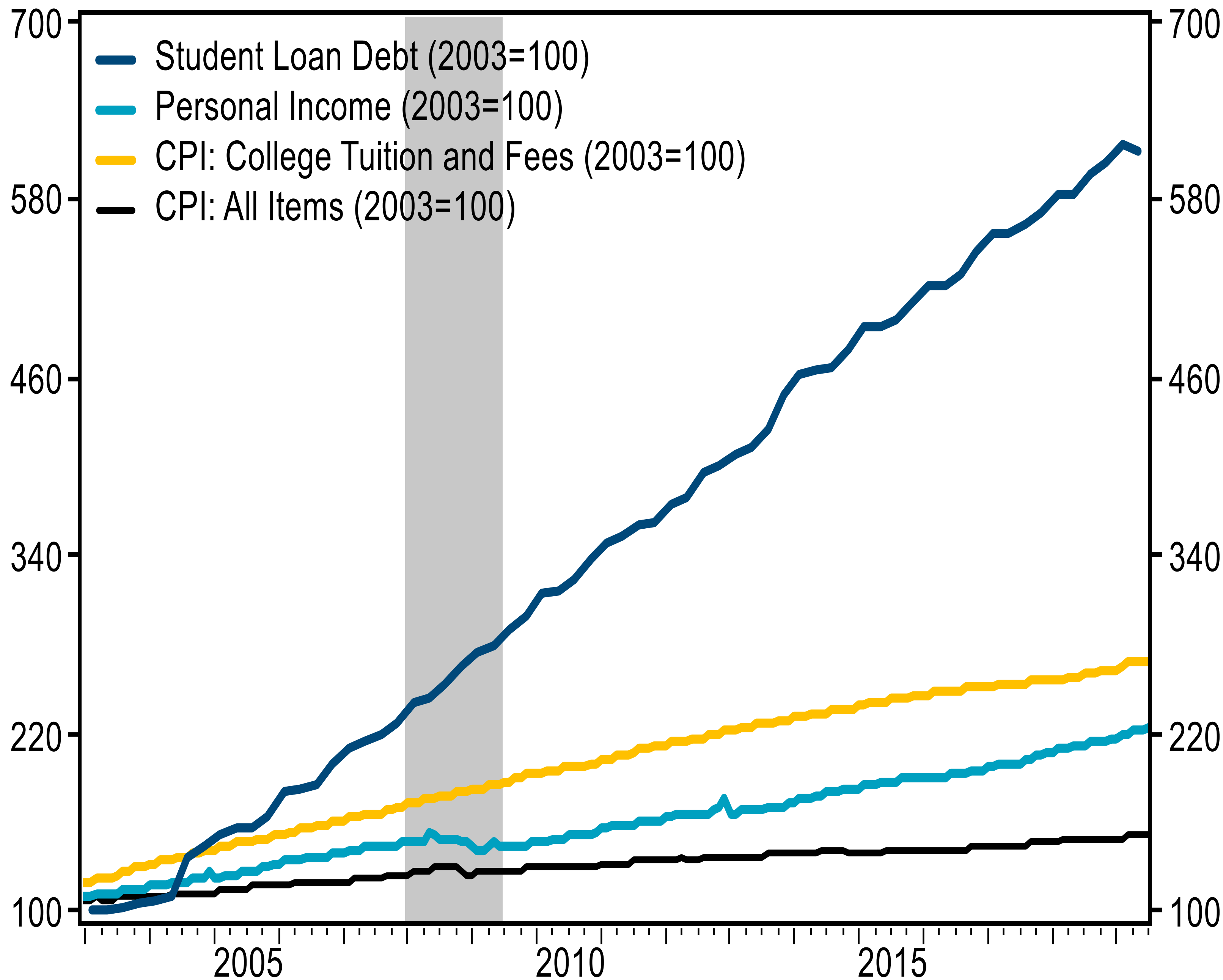
Outstanding student loan debt rose 5.6% in Q1 from a year ago, totaling $1.49T

The average college tuition for a public four-year college is $10,230, while the average college tuition for a private four-year college is $35,830 up from $8,270 and $28,440, respectively, 10 years ago



Sources: FRBNY/EF, BEA, BLS /Haver

"Business investment and exports remain weak and manufacturing output has declined over the past year. Sluggish growth abroad and trade developments have been weighing on those sectors."

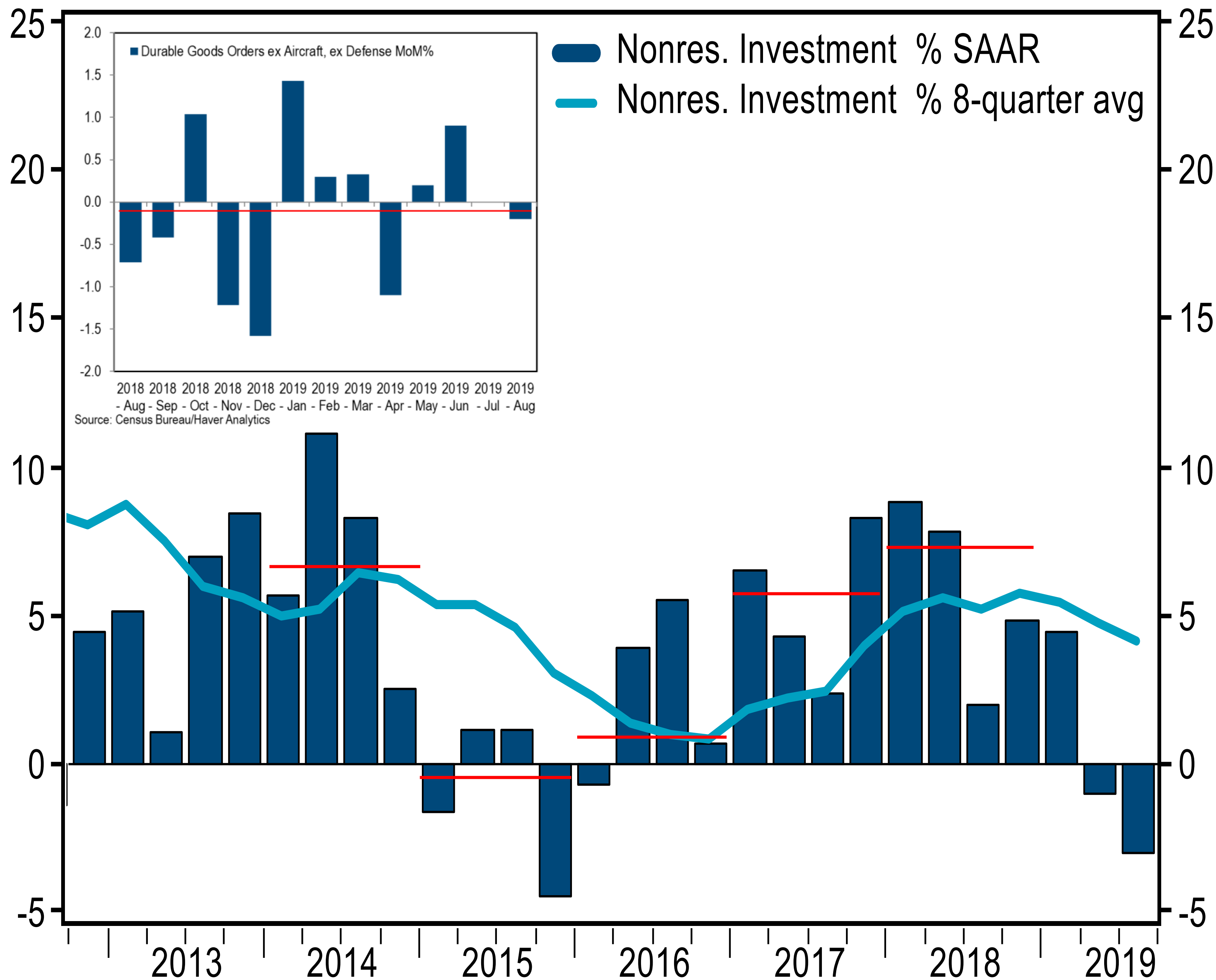
- Fed Chairman Powell, October 30th Press Conference

Uneven Business Investment

Indicators of business investment *"remain weak"*
- October 30th FOMC Statement

Investment rose 6.4% in 2014,
-0.7% 2015
1.8% 2016
6.3% 2017
7.0% 2018

Investment fell **3.0%** in Q3, following a 1.0% decline in Q2, thanks to a 15.3% decline in structures investment and a 3.8% fall in equipment investment



Source: Bureau of Economic Analysis /Haver Analytics

Uneven Business Investment

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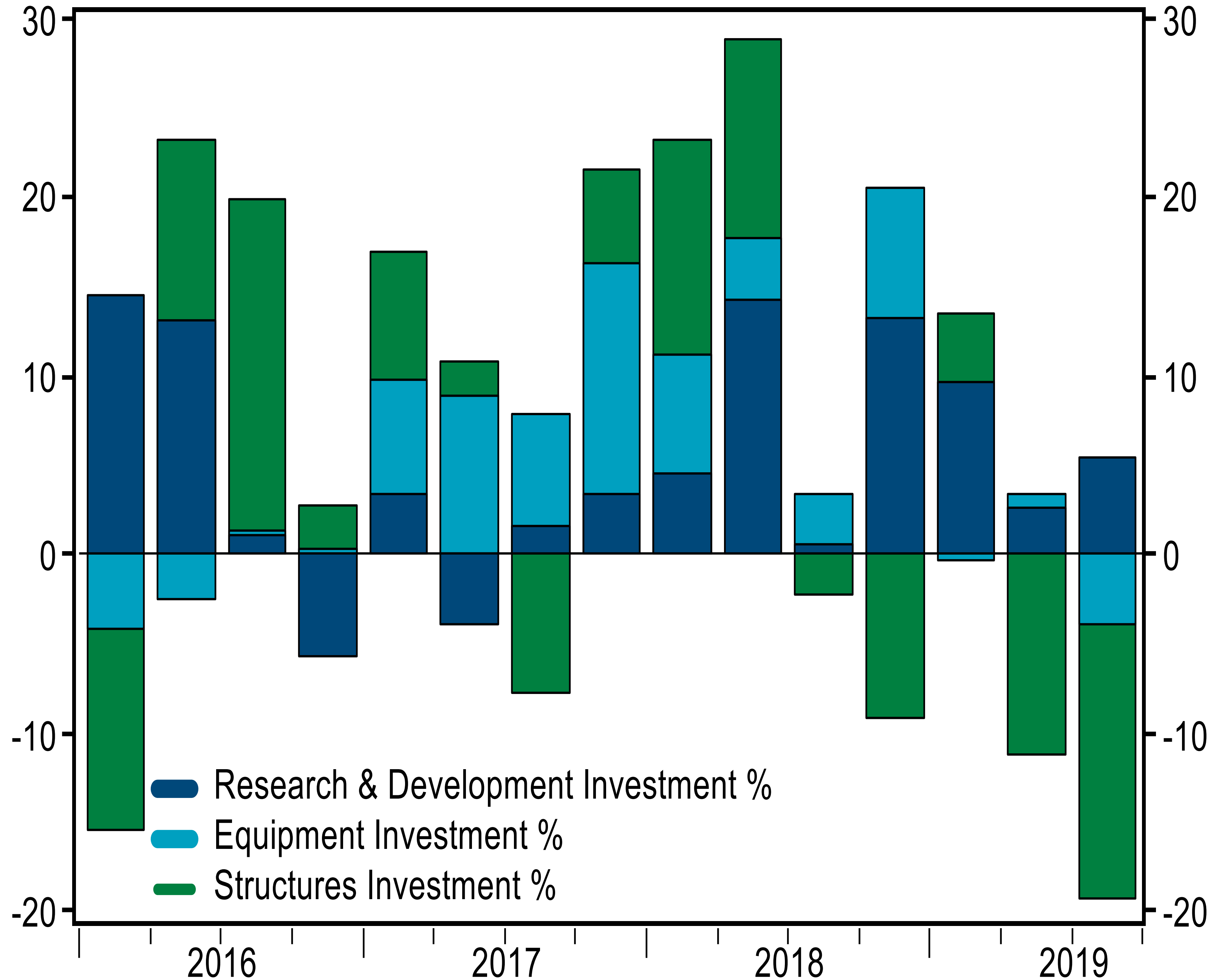
Research & development investment rose 5.4% in Q3, the ninth consecutive quarter of positive growth, albeit down from the 9.7% rise in Q1

Structures investment declined 15.3% in Q3, a more than three-year low

Equipment investment fell 3.8% in Q3, a two-quarter high, the largest decline since Q1 2016



Source: Bureau of Economic Analysis /Haver Analytics

The Impact of Technology

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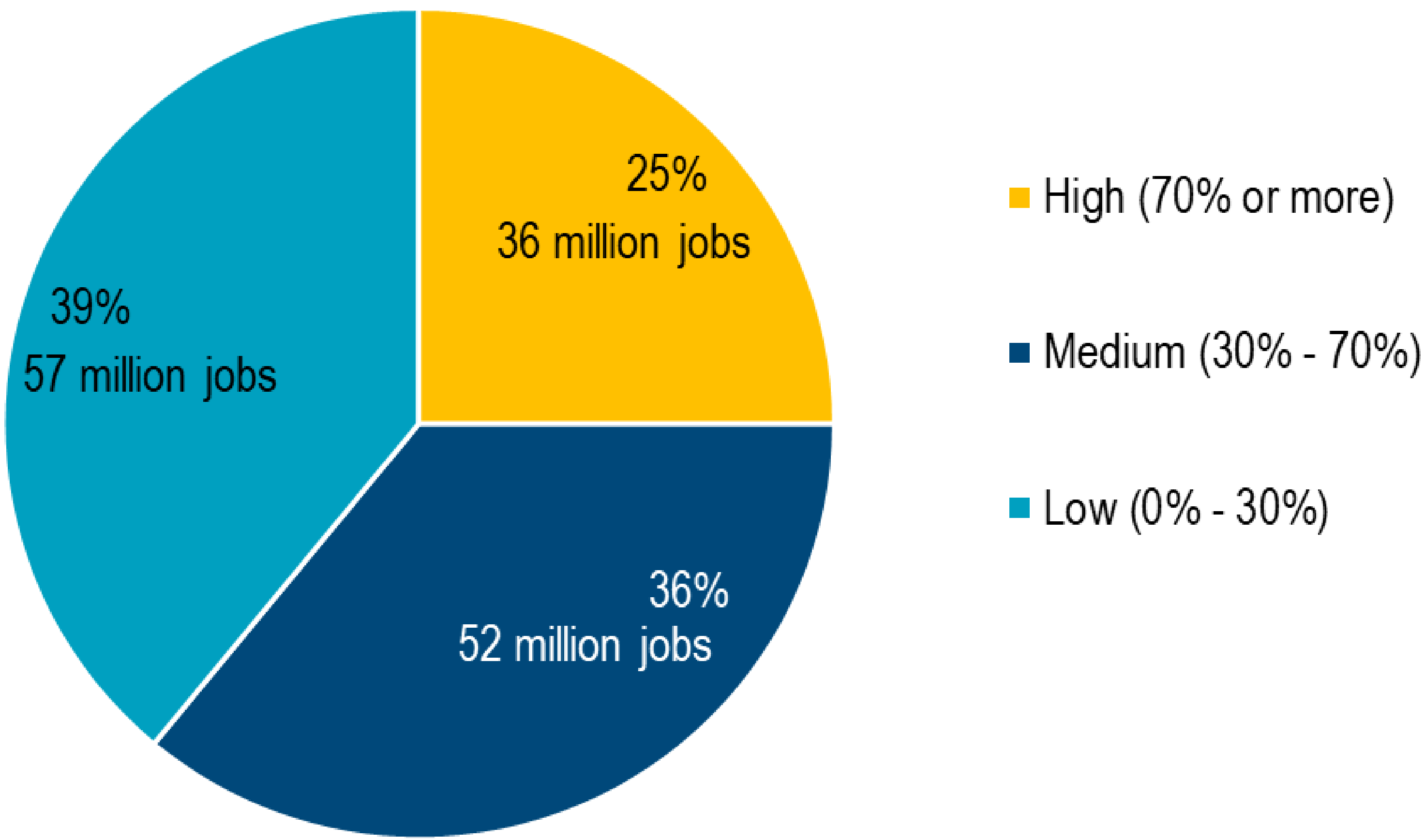
Roughly 36 million Americans hold jobs with "*high exposure*" to automation - meaning at least 70% of their tasks could soon be performed by machines using current technology

Among those most likely to be affected are cooks, waiters and others in food services; short-haul truck drivers; and clerical office workers

Potential for Automation
(volume of tasks within job that are susceptible to automation)



Source: Brookings analysis of BLS, Census, EMSI & McKinsey data

"Inflation pressures remain muted, and indicators of longer term inflation expectations are at the lower end of their historical ranges. We are mindful that continued below-target inflation could lead to an unwelcome downward slide in longer-term inflation expectations."

- Fed Chairman Powell, October 30th Press Conference

Dis-Inflation Momentum

The PCE was flat in August and rose **1.4%** year-over-year for the fourth consecutive month, down from the 2.5% peak reported in July of 2018

The core rose 0.1% in August and rose **1.8%** year-over-year, a seven-month high

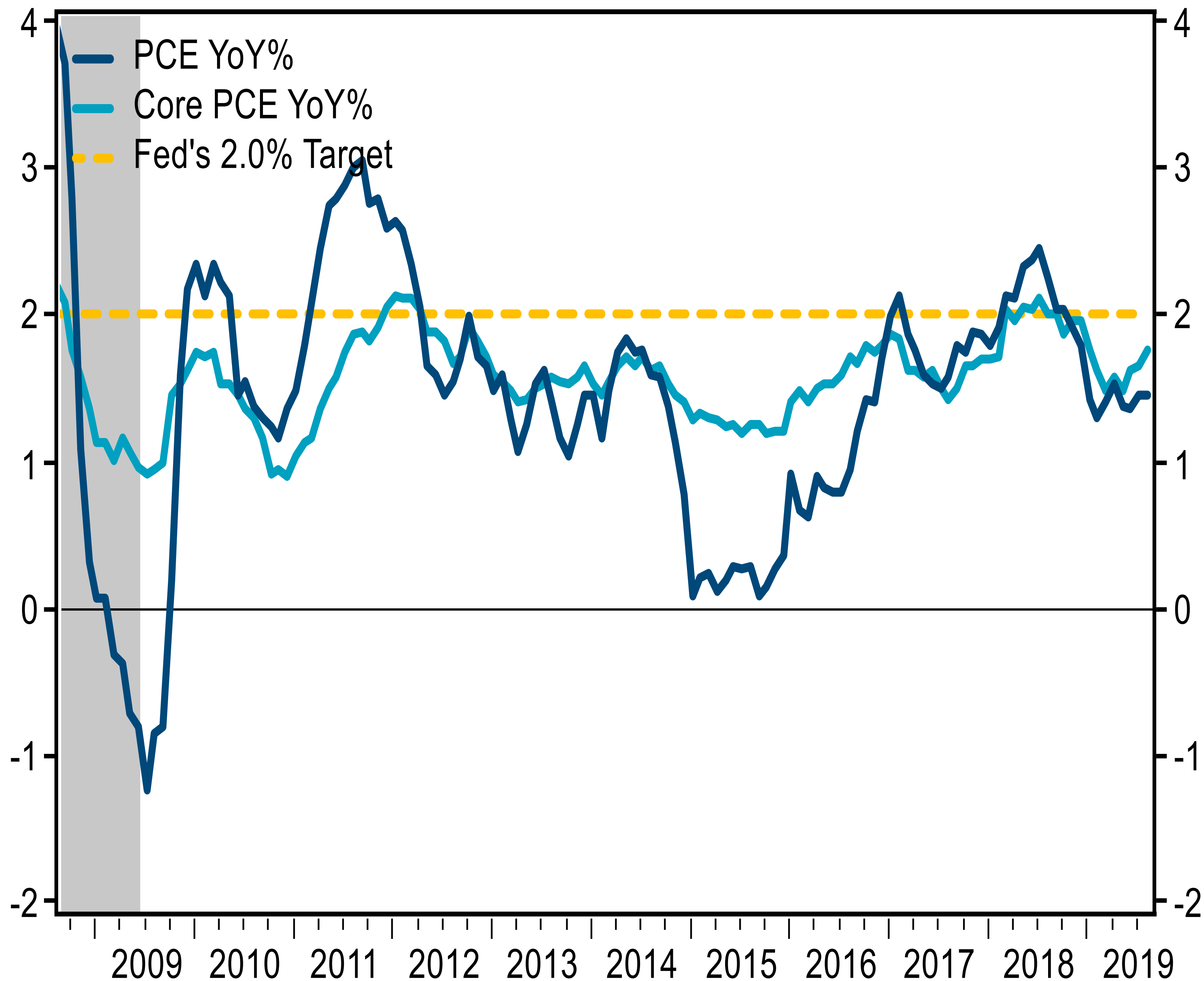
2017: 1.8% PCE YoY%
1.7% Core PCE YoY%
2018: 1.8% PCE YoY%
2.0% Core PCE YoY%

Strongest components in 2018: gasoline, financial services & food services

Strongest components in 2017: gasoline & financial services

Weakest components in 2018: motor vehicles & parts, and recreational services

Weakest components in 2017: clothing & footwear and grocery purchases



Source: Bureau of Economic Analysis /Haver Analytics

Goods & Services Inflation

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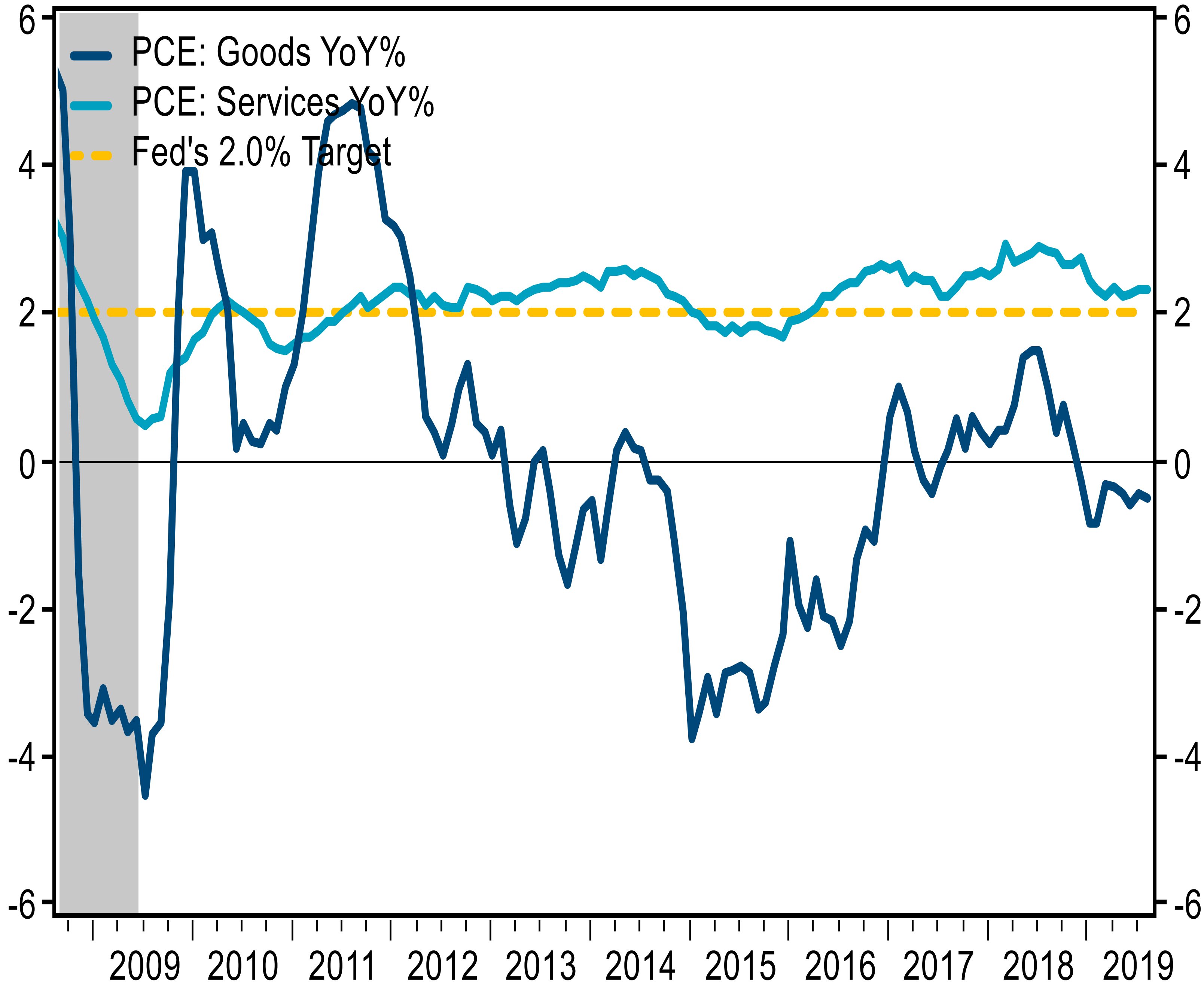
Goods inflation declined 0.5% over the past 12 months in August, the ninth consecutive month of decline, while services inflation rose 2.3% in August for the third consecutive month



Source: Bureau of Economic Analysis /Haver Analytics

Weak Energy Prices

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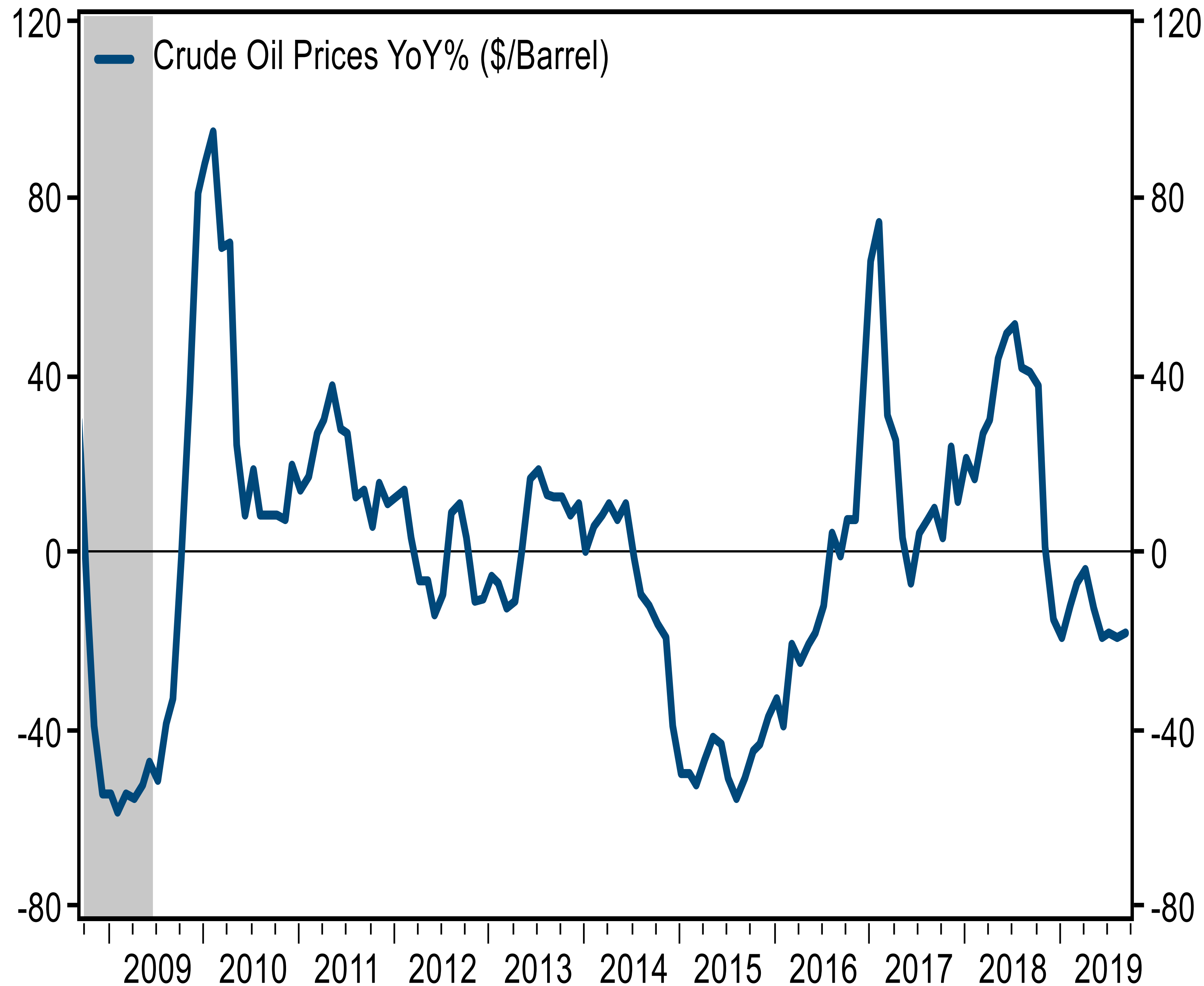
Over the past 12 months, oil prices declined 18.9% in September to $56.96 a barrel

"Inflation continues to run below our symmetric 2 percent objective. Over the 12 months through August, total PCE inflation was 1.4 percent and core inflation was 1.8 percent."
- Fed Chairman Powell, October 30th FOMC Press Conference



Source: Energy Information Admin/Chicago Mercantile Exch /Haver Analytics

"Weakness in global growth and trade developments have weighed on the economy and pose ongoing risks. These factors, in conjunction with muted inflation pressures, have led us to lower our assessment of the appropriate level of the federal funds rate over the past year."

- Fed Chairman Powell, October 30th Press Conference

International Weakness

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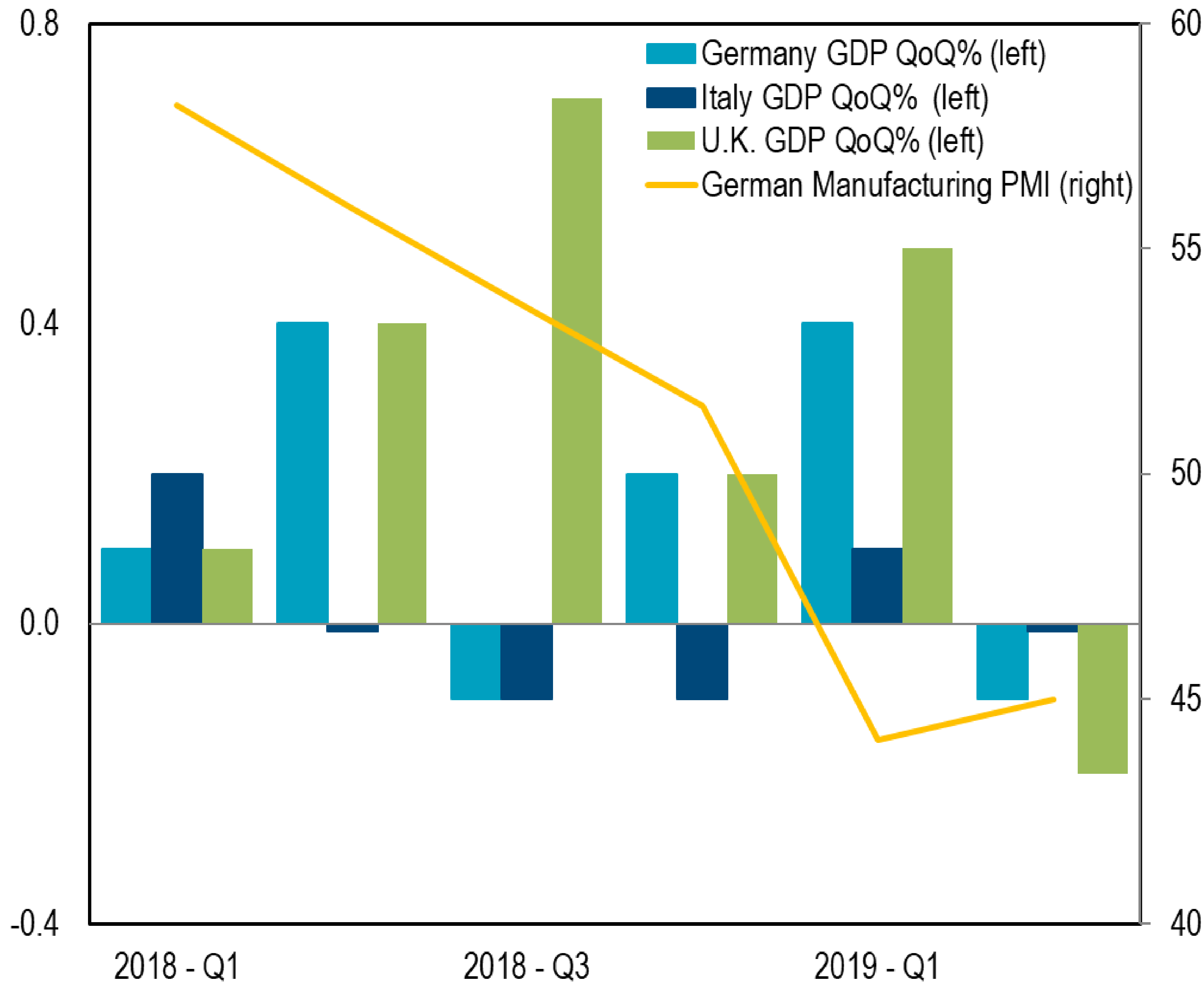
GDP in the Eurozone rose just 0.2% in Q2 and 1.1% over the past 12 months with Italy's economy stagnating and Germany narrowly escaping recession

The German Manufacturing PMI fell from 51.5 to a reading of 44.1 in Q1, signaling contraction (a reading below 50) in Q1 and currently stands at a reading of 45.0 in Q2

U.K. GDP shrank 0.2% in the second quarter, the first contraction since late 2012 and compounding concerns of a global slowdown

Year-over-year, GDP in the British economy rose 1.2% in Q2, a five-quarter low



Source: Bloomberg

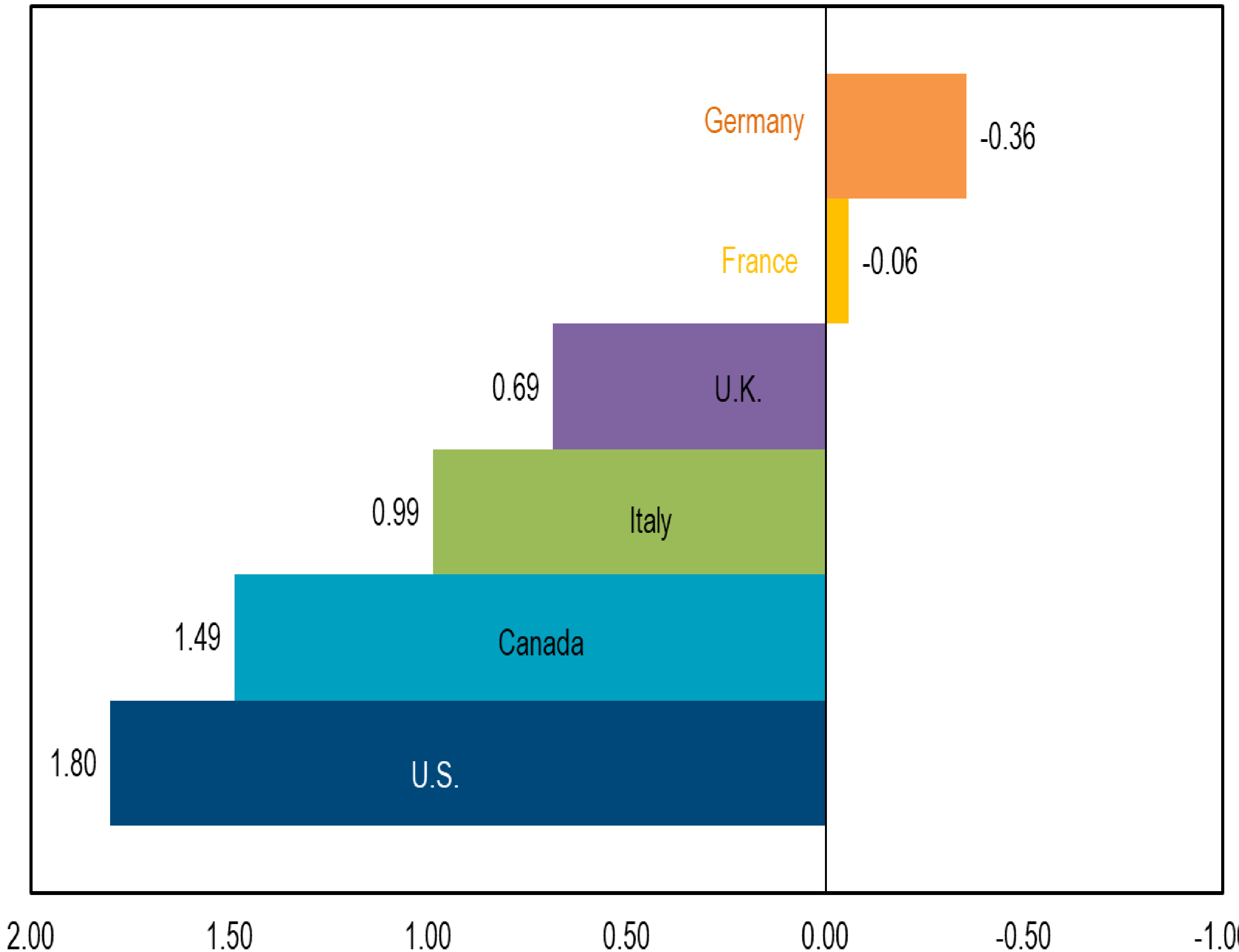
Global Yields Retreat

Across the Eurozone, most long-dated bond yields fell as much as 10bps in late August, in many cases hitting new all-time lows as curves continued to flatten

The global bid for bonds also inverted the sovereign yield curves in Canada and the U.K. in August

While some argue the yield curve no longer has the predictive power it once did given the distortion caused by unprecedented monetary policy intervention including a record of $15T of government bonds now trade at negative yields, still others remain concerned an inverted curve could signal a disconnect between monetary policy and market expectations

Global 10-Year Yields*



Source: Bloomberg

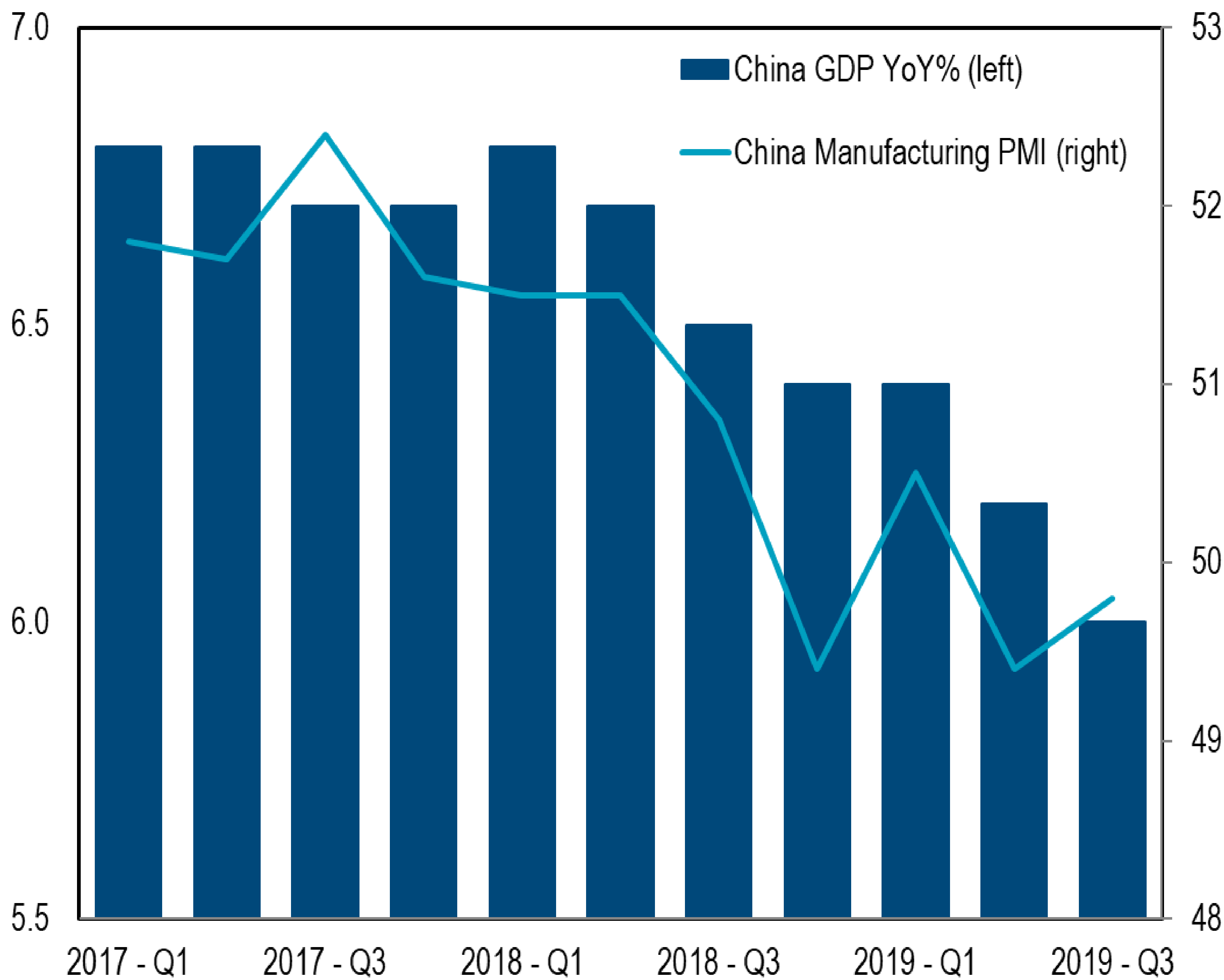
*As of 10/30/2019

International Weakness

IMF forecast revised down for the third time in six months from 3.5% to 3.3%

"Potential China trade agreement could reduce tension, boost business confidence."
- Fed Chairman Powell, October 30th Press Conference

Chinese growth rose 6.0% in Q3, the slowest pace of growth in nearly three decades



Source: Bloomberg

International Tariffs

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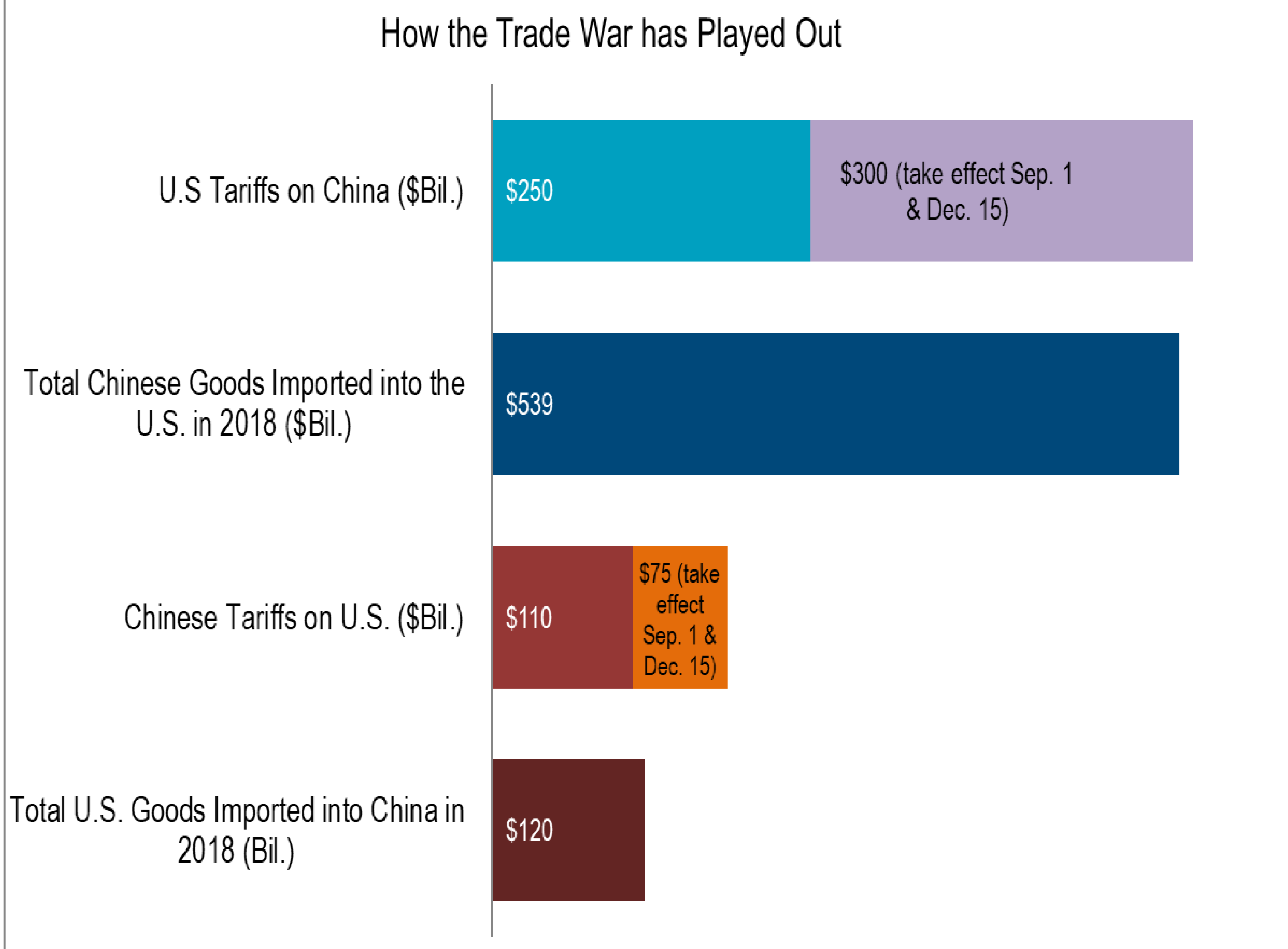
The U.S. and China have imposed tariffs on billions in goods since the start of 2018

The U.S has imposed a 25% tariff on 46% of Chinese imports and a 15% tariff on 56% of imports

Similarly, China has imposed tariffs on all of U.S. imports

The U.S. is holding off plans to implement tariffs on an extra $178 billion of imports from China as negotiations are underway; a lack of progress will result in further levies "*soon*" (December 15th)



Source: Census Bureau

Manufacturing Activity and Payrolls

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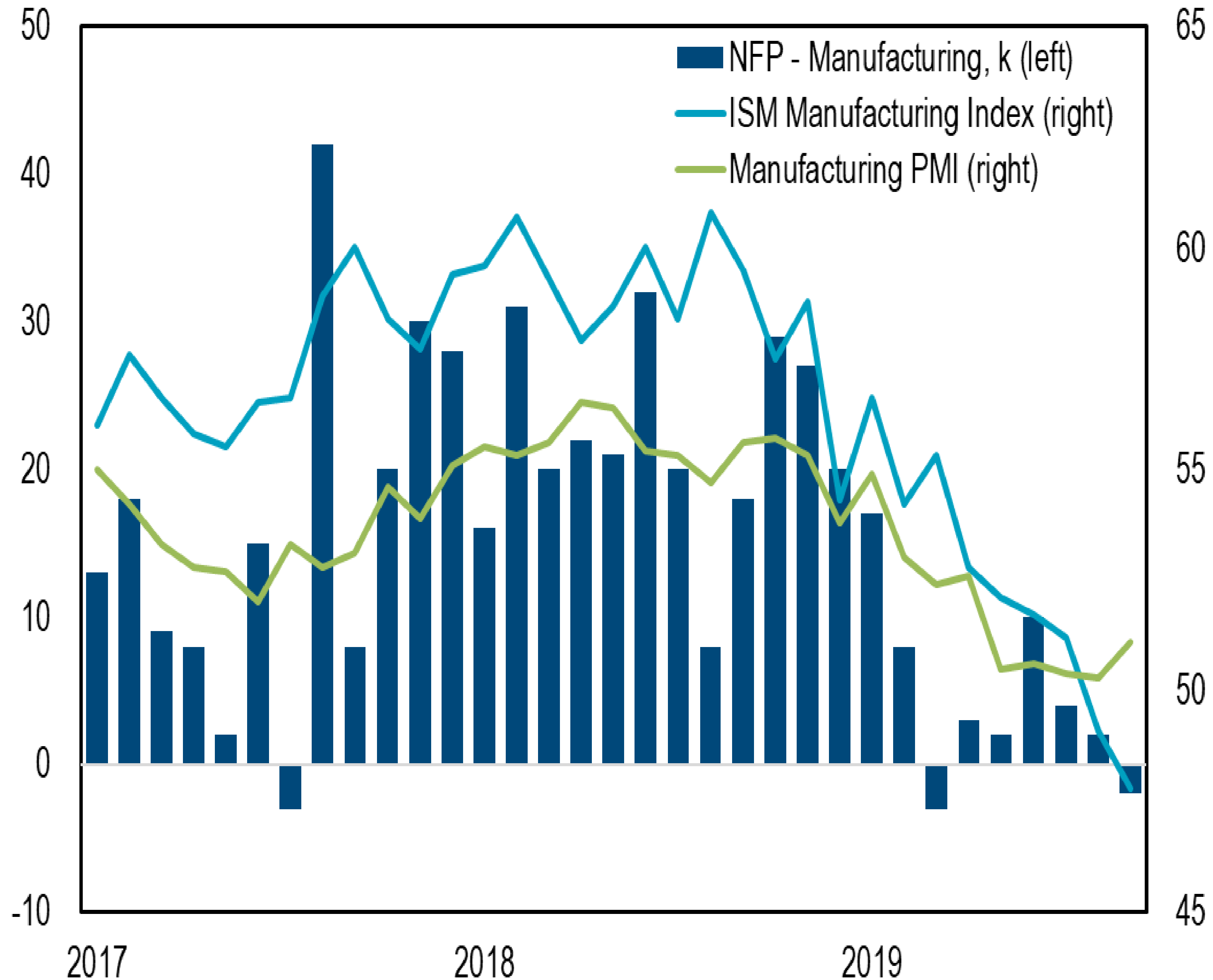
Goods producing payrolls gained 5k in September, a two-month high

Manufacturing payrolls fell 2k in September, a six-month low

The pace of manufacturing hiring has broadly declined for the past nine months, with the six-month average falling from 22k to 3k more recently

Assuming an average pace from 2018, nearly 160k jobs have been lost

The ISM Manufacturing Index fell from 49.1 to a reading of 47.8 in September, the lowest level since June 2009, and marking the second consecutive month of contraction (a reading below 50)



Source: BLS, ISM/ Haver

Regulatory Impact

- Tariffs can raise the cost of parts and materials for manufactures and producers
- Raises the price of goods using those inputs and reduces private sector output
- Result in lower incomes for both owners of capital and workers
- Higher consumer prices or reduced profits/ capital income
- Lower wages or hiring or both

"We see the current stance of monetary policy as likely to remain <u>appropriate</u> as long as incoming information about the economy remains broadly consistent with our outlook of moderate economic growth, a strong labor market, and inflation near our symmetric 2 percent objective. We believe monetary policy is in a good place to achieve these outcomes."

- Fed Chairman Powell, October 30th Press Conference

Market Signals Policy Beyond *"Restrictive"*

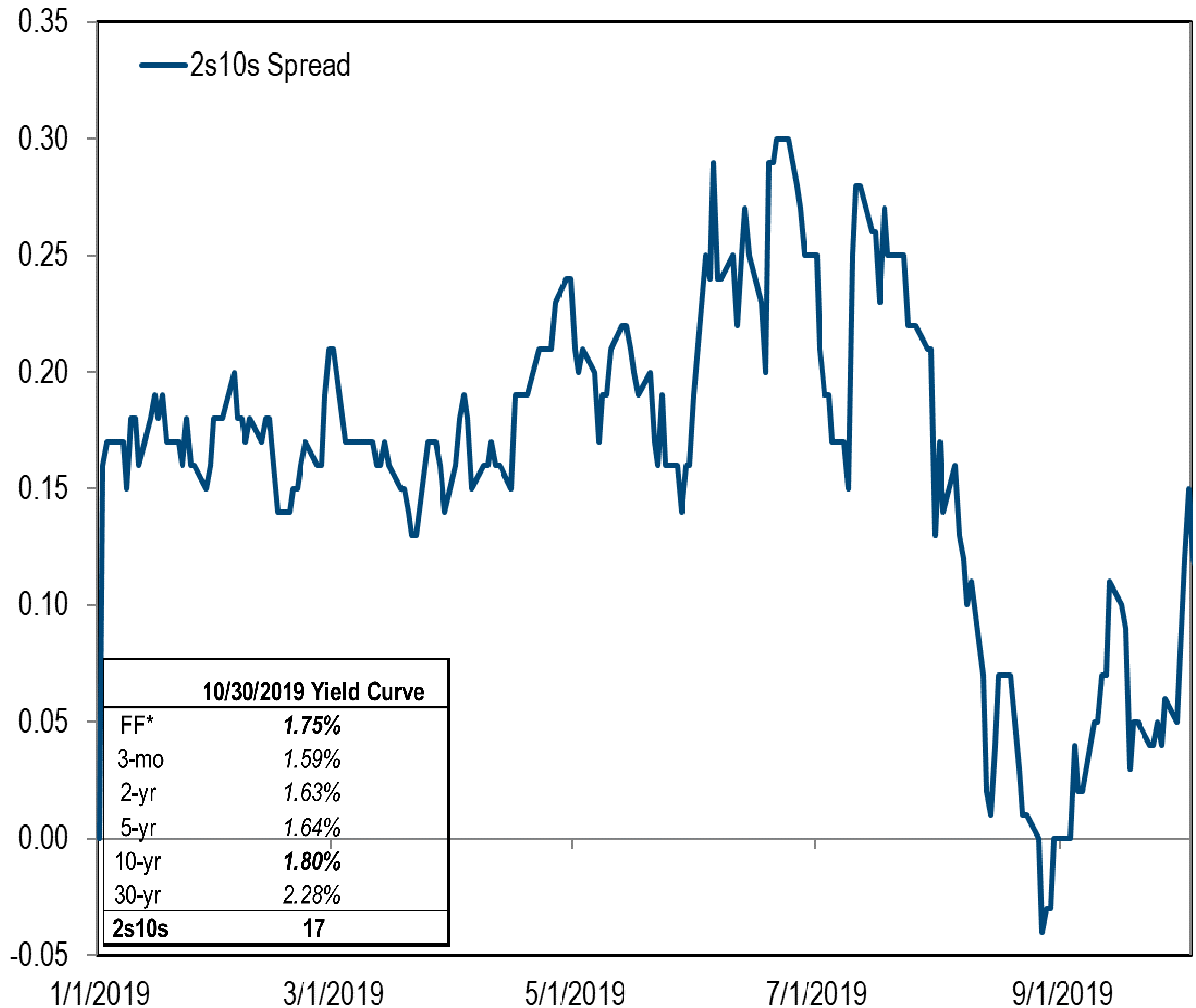
2s10s spread of **124bps** prior to liftoff and down to **17bps** following the October 2019 FOMC meeting

The Fed will arguably need to cut rates again to right the curve, leaving less momentum to combat eventual weakness

Projected to flatten further

In the beginning of December, the curve between U.S. 2-year and 5-year, and between 3-year and 5-year yields inverted for the first time since the financial crisis, and on March 22nd, the curve between the 3-month and 10-year yields inverted for the first time since 2007

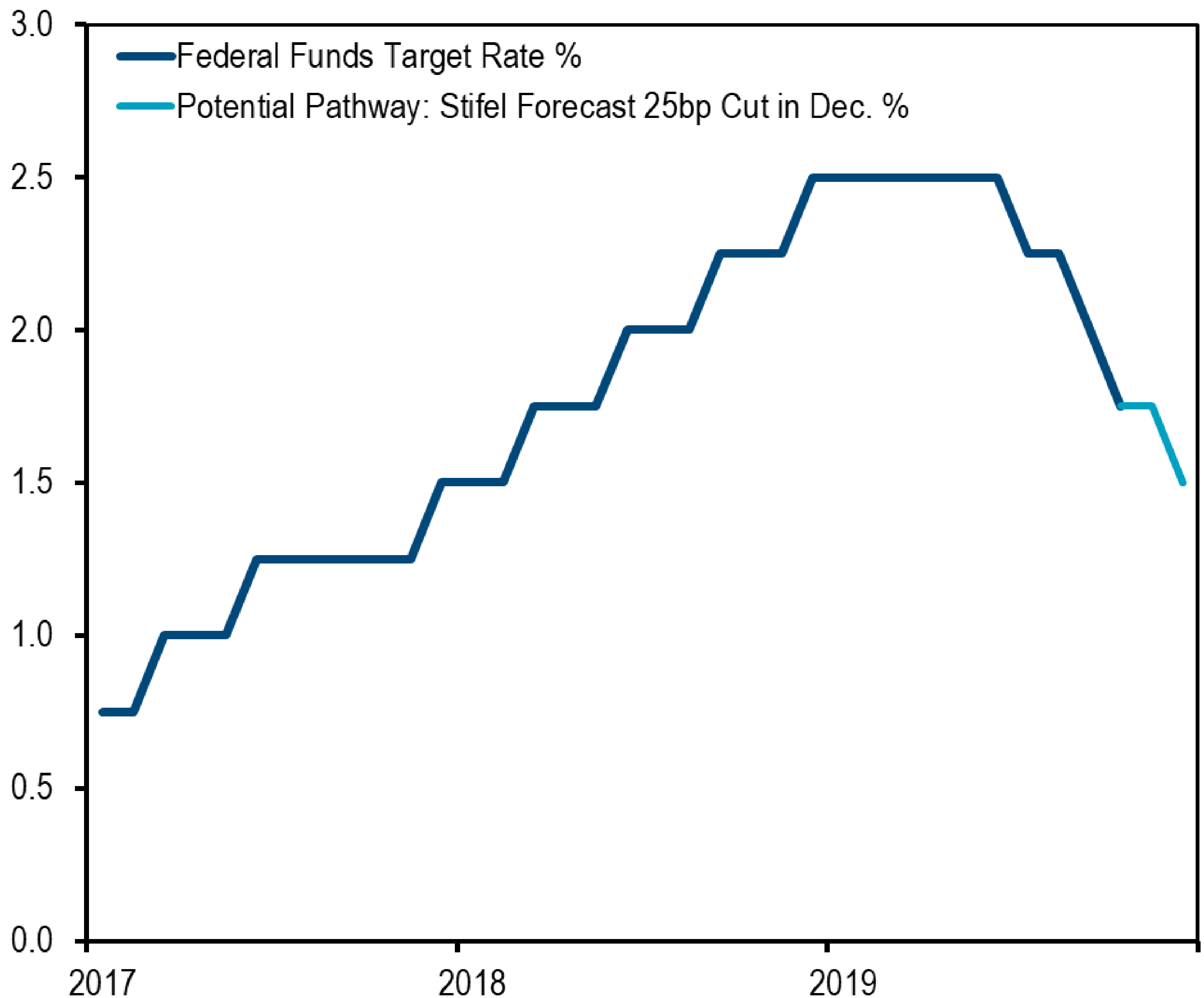
On August 14th, the curve between U.S. 2-year and 10-year yields, a reliable predictor of recession, inverted for the first time since 2007



Source: FRED

Fed Forecast

The market has priced in a 25bps December rate cut to 1.25% to 1.50% at 28%



Source: FRB, Bloomberg

Summary

- Moderate domestic conditions; positive but waning momentum
- Hiring remains positive but less robust; industry specific demands
- Business investment uneven at best; corporations hesitant to invest with uncertain economic outlook
- Price pressures muted despite international barriers to trade; slower global growth offsetting tariff impact in some cases
- Tariffs will serve to disrupt flow of goods, raising costs and reducing access to global goods
- International uncertainty weighing on market as yields retreat
- Policymakers will act to cushion economy from slow growth or recession with stimulus and lower rates; tools limited

Questions?

Economic Forecast Grid

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End of Quarter Figures

	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020		2018	2019	2020
Growth indicators												
GDP, QoQ %	**3.1%**	**2.0%**	**1.9%**	**1.1%**	**-0.2%**	**0.8%**	**1.9%**	**1.6%**		**2.7%**	**2.0%**	**1.0%**
Consumer Spending, %	1.1%	4.6%	2.9%	1.5%	1.0%	2.5%	2.0%	1.9%		2.3%	2.5%	1.9%
Fixed Investment, %	3.2%	-1.4%	-1.3%	1.3%	-2.5%	0.8%	2.5%	2.0%		4.6%	0.5%	0.7%
Housing Starts, k	1,199	1,233	1,256	1,110	1,080	1,075	1,065	1,060		1,221	1,200	1,070
Unemployment Rate, %	**3.9%**	**3.6%**	**3.6%**	**3.6%**	**3.6%**	**3.7%**	**3.7%**	**3.7%**		**3.9%**	**3.7%**	**3.7%**
Nonfarm Payrolls, k	153	178	136	130	110	140	165	170		195	149	146
Inflation indicators, YoY%												
PPI	2.2%	1.7%	1.4%	2.5%	2.4%	2.3%	2.3%	1.9%		2.9%	2.0%	2.2%
PCE	1.4%	1.4%	1.4%	1.6%	1.6%	1.5%	1.5%	1.3%		2.1%	1.5%	1.5%
Core PCE	1.5%	1.6%	1.7%	1.8%	1.7%	1.6%	1.4%	1.4%		2.0%	1.7%	1.5%
Interest rate, %												
FF	**2.50**	**2.50**	**2.00**	**1.50**	**1.00**	**0.75**	**0.75**	**0.75**		**2.13**	**2.13**	**0.81**
3month UST bills	2.39	2.09	1.82	1.45	0.95	0.80	0.85	0.85		2.05	1.94	0.86
2yr UST notes	2.26	1.76	1.62	1.35	1.20	1.12	1.15	1.15		2.53	1.75	1.16
5yr UST notes	2.23	1.77	1.55	1.20	1.10	1.10	1.18	1.20		2.69	1.69	1.15
10yr UST notes	**2.41**	**2.01**	**1.67**	**1.28**	**1.15**	**1.15**	**1.20**	**1.25**		**2.84**	**1.84**	**1.19**
30yr UST bonds	2.82	2.53	2.11	1.86	1.55	1.50	1.70	1.85		3.05	2.33	1.65
2s to 10s Spread bps	**14**	**25**	**4**	**-7**	**-5**	**3**	**5**	**10**		**31**	**9**	**3**

Lindsey Piegza, Ph.D. - Chief Economist

Source: Bloomberg, Stifel

"Effective August 1, 2019, the Committee directs the Desk to roll over at auction all principal payments from the Federal Reserve's holdings of Treasury securities and to reinvest all principal payments from the Federal Reserve's holdings of agency debt and agency mortgage-backed securities received during each calendar month. Principal payments from agency debt and agency mortgage-backed securities up to $20 billion per month will be reinvested in Treasury securities to roughly match the maturity composition of Treasury securities outstanding; principal payments in excess of $20 billion per month will continue to be reinvested in agency mortgage-backed securities. Small deviations from these amounts for operational reasons are acceptable."

- June 31st FOMC Implementation Note

Consolidated Balance Sheet

An increase on both sides of the Fed's balance sheet, as the Fed purchased bonds from primary dealers in reverse auctions but paid for them by essentially making a ledger notation in the dealers' reserve accounts

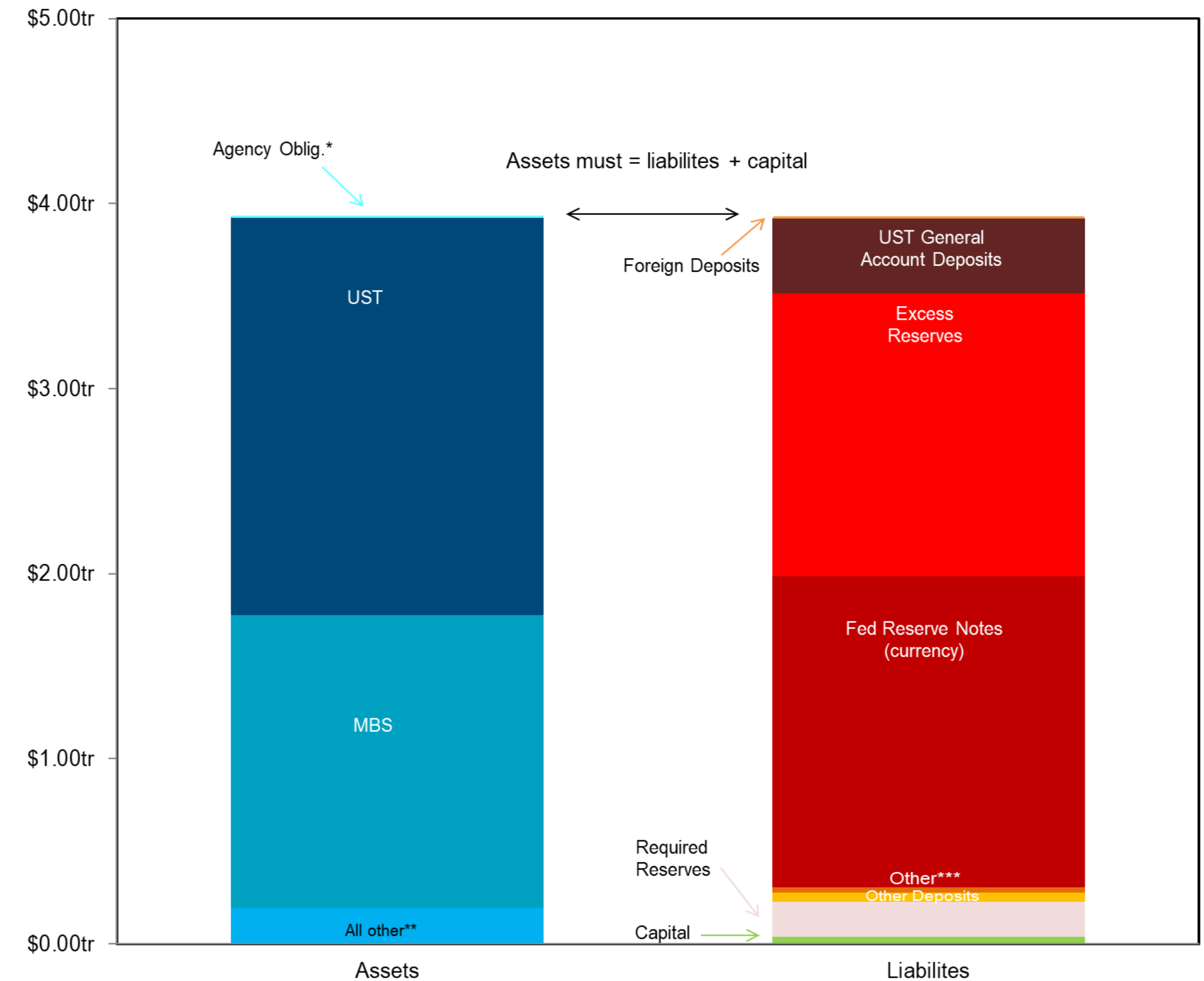
Essentially an equivalent impact had the Fed mandated purchases by the banks themselves

The balance sheet shrank by $700B from $4.5T to $3.8T, still $2.9T above pre-crisis levels

Growing liabilities provide a floor of $2.5-3 trillion

The Fed will conclude balance sheet reduction by August, *"two months earlier than previously indicated"*

Final size of balance sheet **$3.8T**



**Agency refers to the current face value of federal agency obligations held by Federal Reserve Banks. These securities are direct obligations of Fannie Mae, Freddie Mac, and the Federal Home Loan Banks.

Source: Federal Reserve Board/Haver Analytics

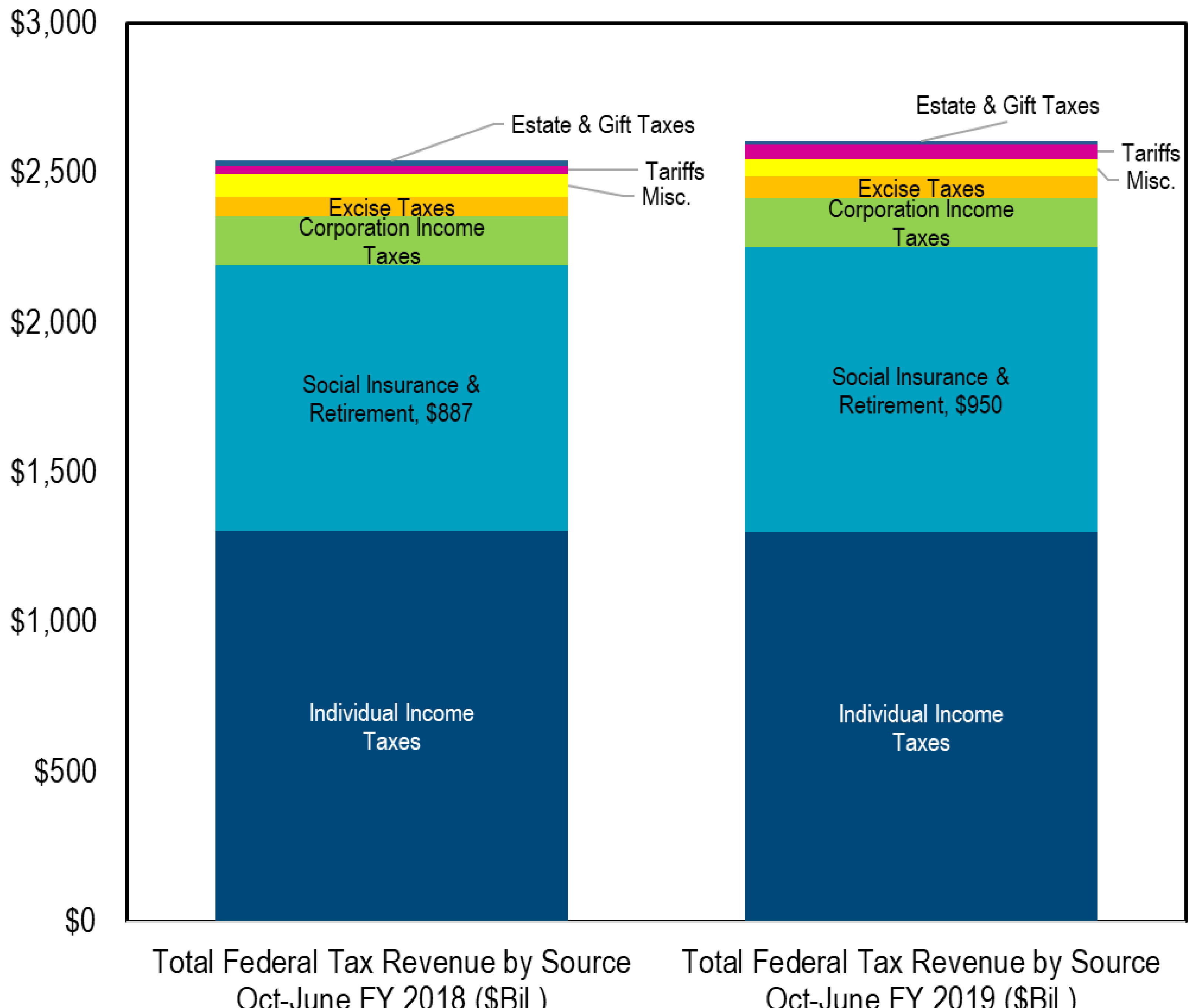
**Other assets: discount window lending, lending to other institutions, assets of LLCs that have been consolidated onto the Fed's balance sheet, and foreign central bank liquidity swaps

**Other liabilites: Includes the liabilities of Maiden Lane LLC and Commercial Paper Funding Facility LLC to entities other than the Federal Reserve Bank of New York, including liabilities that have recourse only to the portfolio holdings of these entities.

Tariff Revenues

Tariff revenues brought in by the federal government rose 75%from $28.8B to $50.5B in the first nine months of fiscal 2019 compared to the first nine months of fiscal 2018

Despite the significant increase in tariff revenue from fiscal 2018 to fiscal 2019, tariffs still equaled only 1.9% of total federal revenue in the first nine months of fiscal 2019



Source: U.S. Treasury

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Additional Information Is Available Upon Request

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