

Economic Outlook: *Improved Forecast of Continued Moderation* June 2017

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Chief Economist



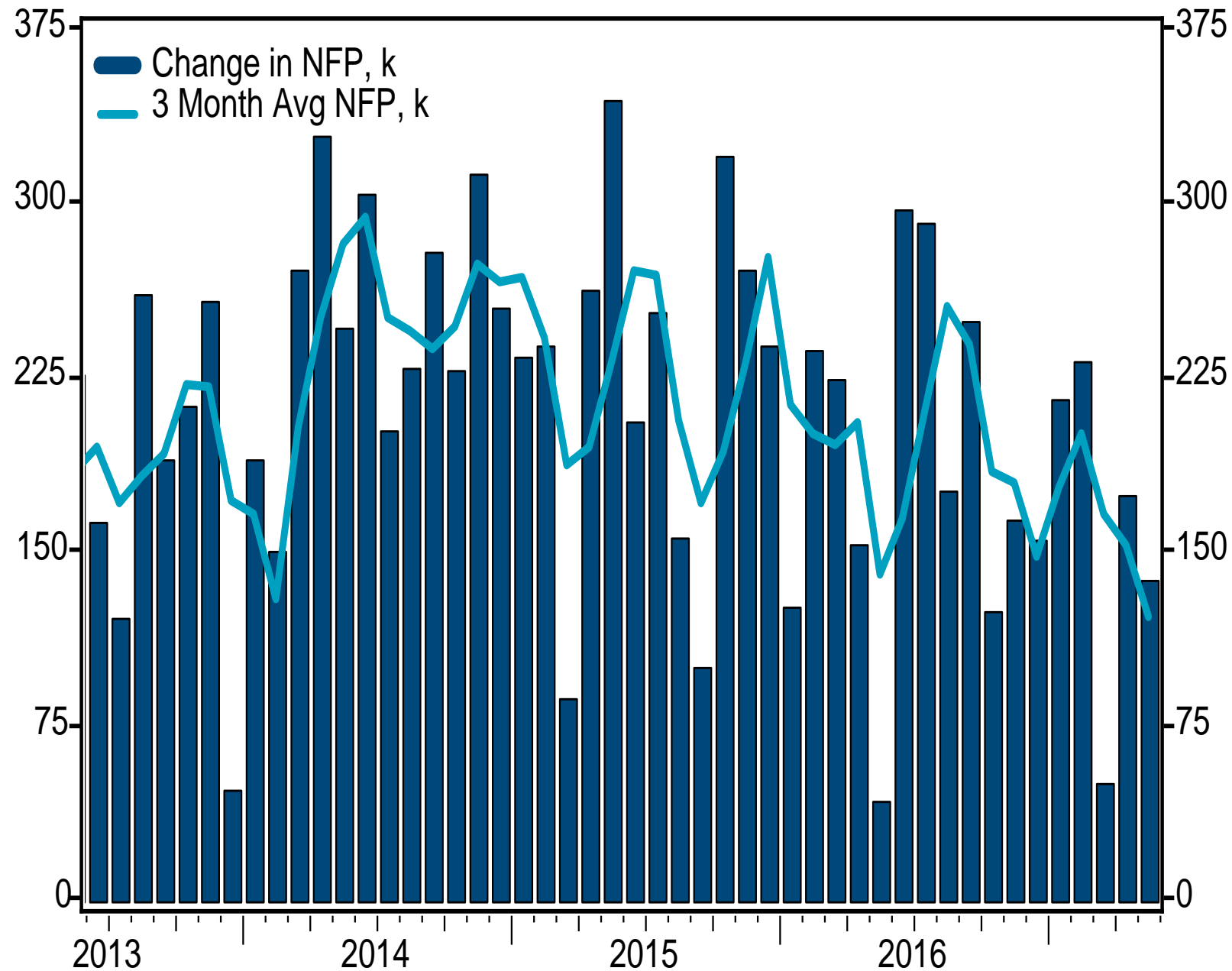
Labor Market Stable but Far from Robust

Positive Employment Trend

80 consecutive months
of positive payroll
growth

May payrolls
increased **138k** after a
174k rise in April and
a 50k rise in March,
the weakest since May
2016

Employment reached
and surpassed the
previous 2007 peak
with more than **150m**
Americans employed
as of May



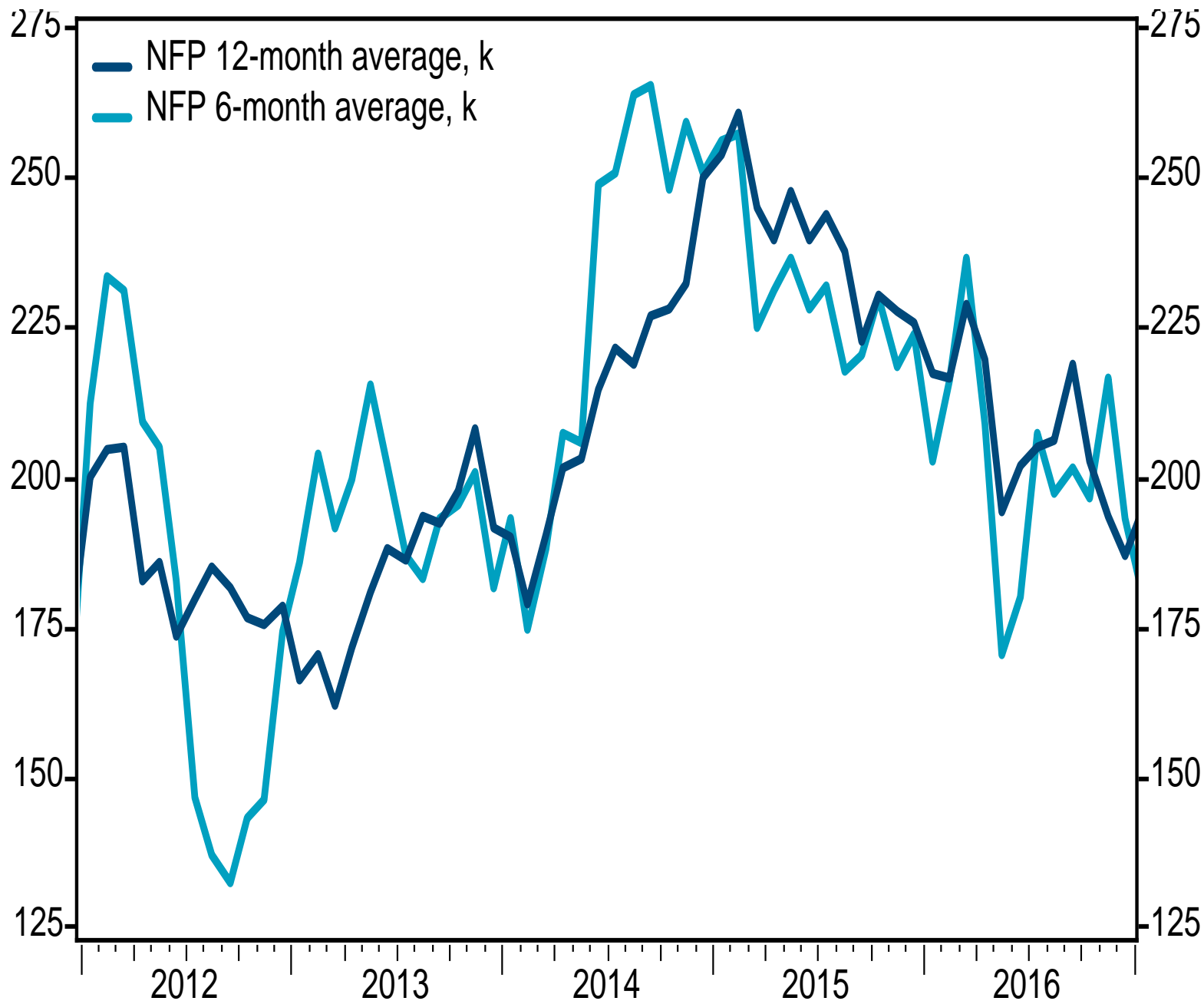
Source: Bureau of Labor Statistics /Haver Analytics

Average Payroll Growth Declining

The 6-month average fell from 165k to **161k** in May, a two-month low

The 12-month average rose from 181k to **189k** in May, a three-month high

Payroll growth averaged **180k** in 2016 compared to 229k in 2015 and 251k in 2014



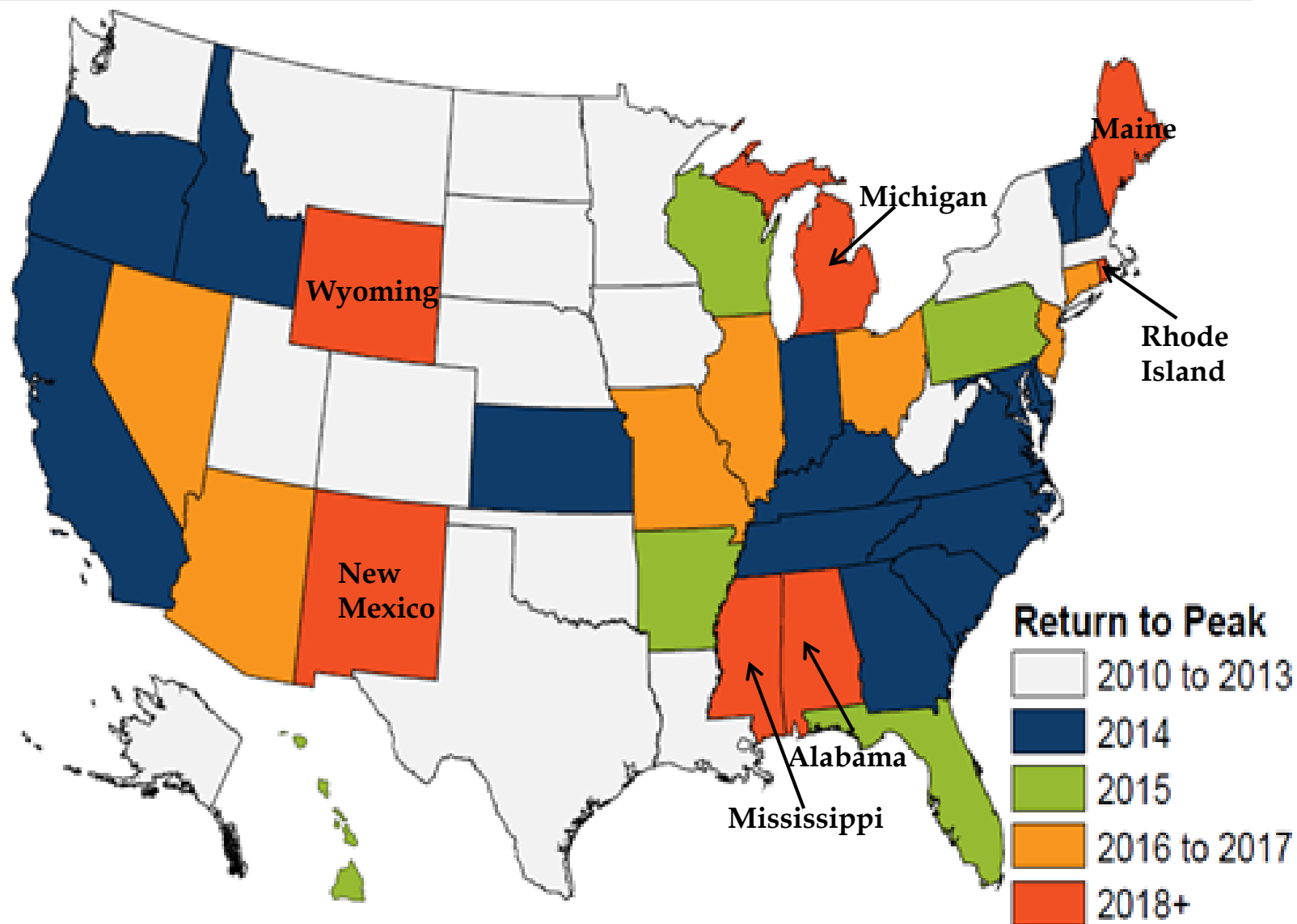
Source: Bureau of Labor Statistics /Haver Analytics

The recovery has been notably uneven across state lines

States in the Central Plains were among the earliest states to reach and surpass their previous peaks in employment

However, several states in the Deep South and West are among the slowest labor markets to recover

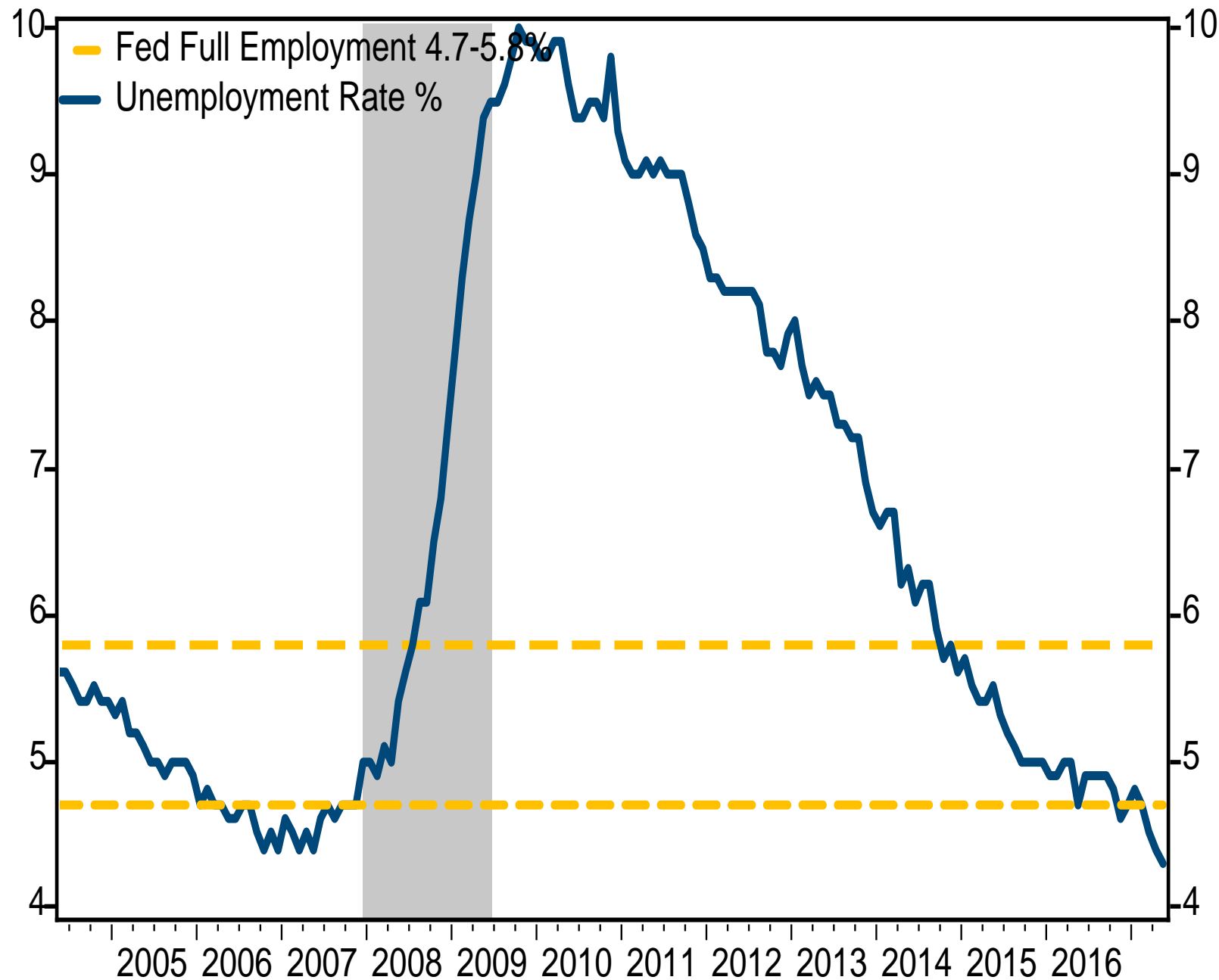
Employment Recovery post Recession



Unemployment at 4.3%

Unemployment fell one-tenth of a percentage point to 4.3% in May, a sixteen-year low

The unemployment rate has been in the Fed's full employment range since October 2014

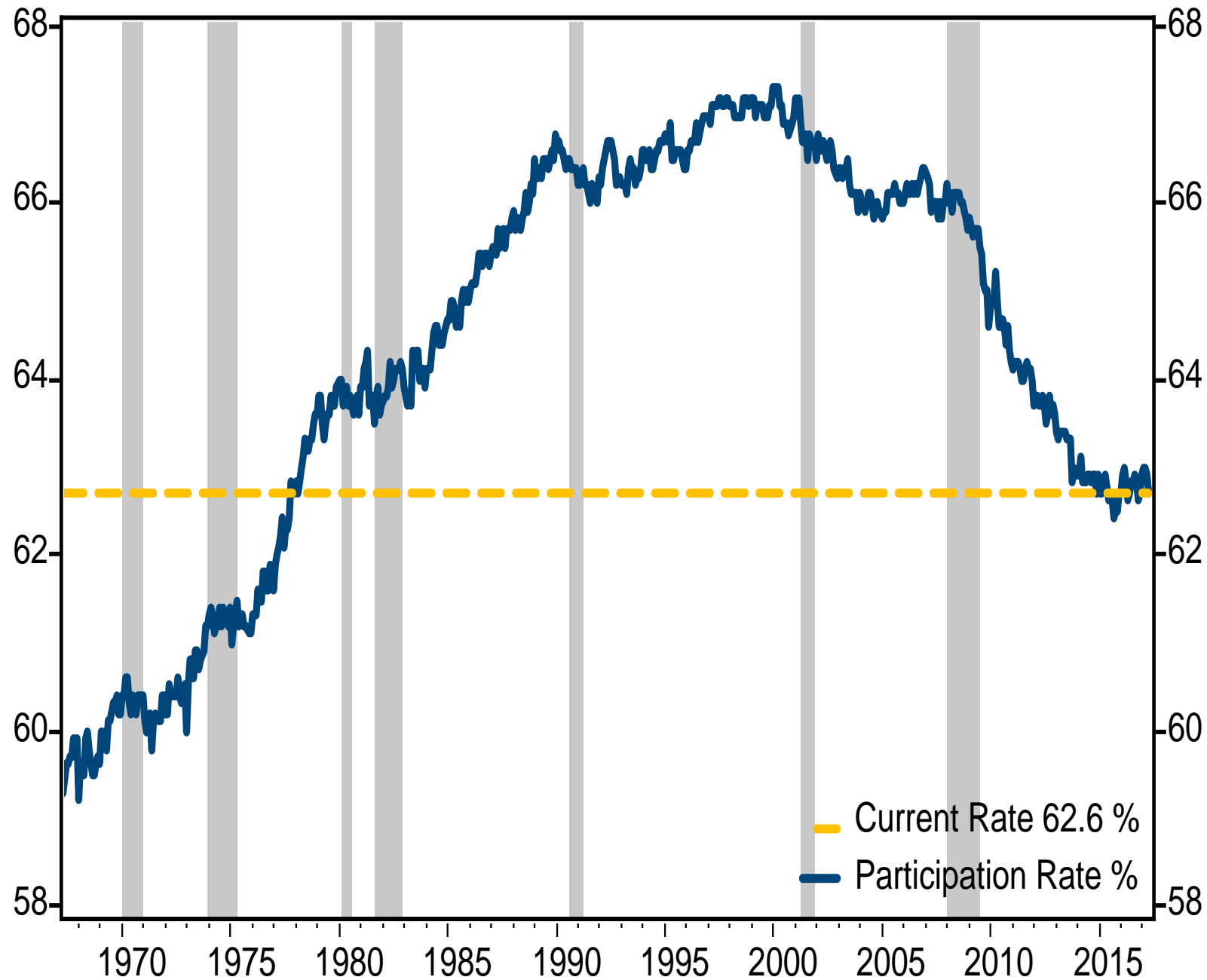


Source: Bureau of Labor Statistics /Haver Analytics

Participation Rate Still Declining

Participation rate at a multi-decade low, **62.7%** in May

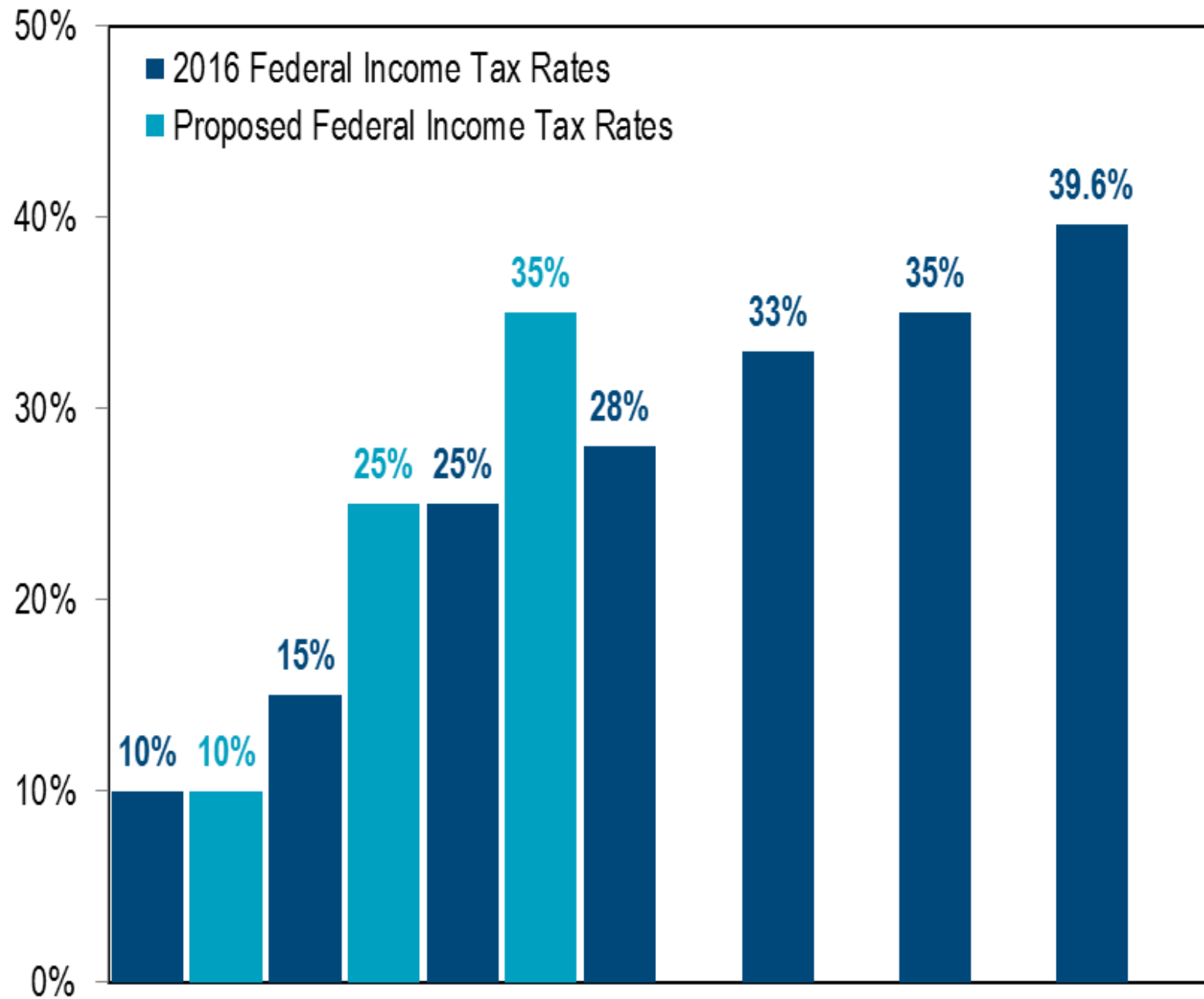
20-55 year olds account for the majority of the decline in the labor force, **8.0m** Americans (only 59% of working age population)



Source: Bureau of Labor Statistics /Haver Analytics

Still-Moderate Labor Market Conditions, Consumers Losing Momentum

Simplified tax plan with reduced brackets (10%, 25% and 35% vs. current 10%, 15%, 25%, 28%, 33%, 35% and 39.6%)



Source: Tax Foundation

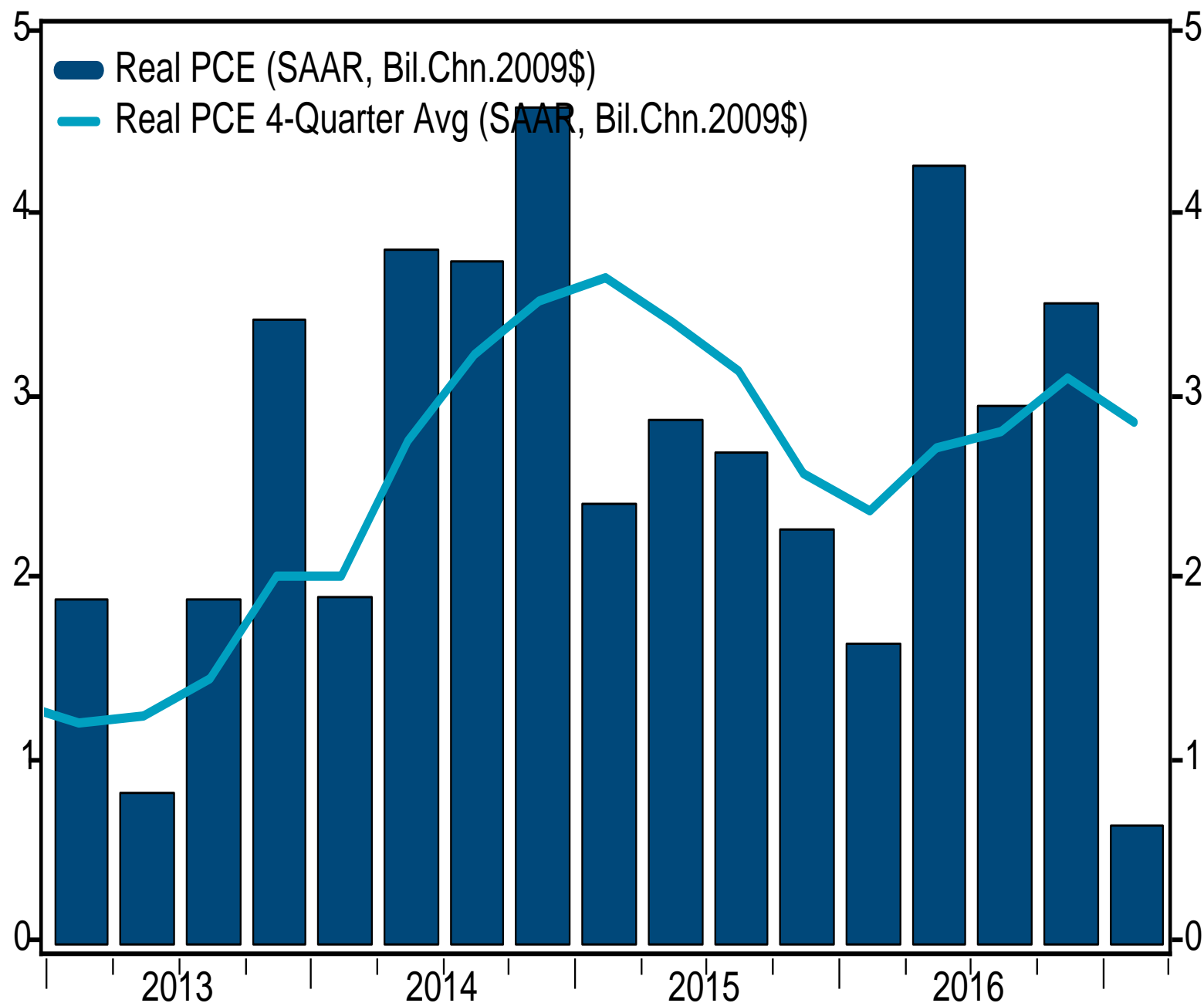
- Simplified tax plan with reduced brackets (10%, 25% and 35% vs. current 10%, 15%, 25%, 28%, 33%, 35% and 39.6%)
- Repeal & reform the Affordable Care Act while keeping coverage for people with pre-existing conditions, and allowing Americans under the age of 26 to stay on their parents' plans.

- Additional discretionary income resulting from a direct tax cut or indirect cost reduction will help alleviate mounting pressure from moderate employment opportunities and waning income growth, and reflate the household balance sheet.

Consumers Losing Momentum

Q1 2017 consumption rose **0.6%** following a **3.5%** increase in Q4, a **3.0%** increase in Q3, a **4.3%** increase in Q2, the strongest since Q4 2014, and following a **1.6%** increase in Q1

Consumption averaged **2.9%** over the previous 12 months, down from a **3.1%** pace 12 months prior



Source: Bureau of Economic Analysis /Haver Analytics

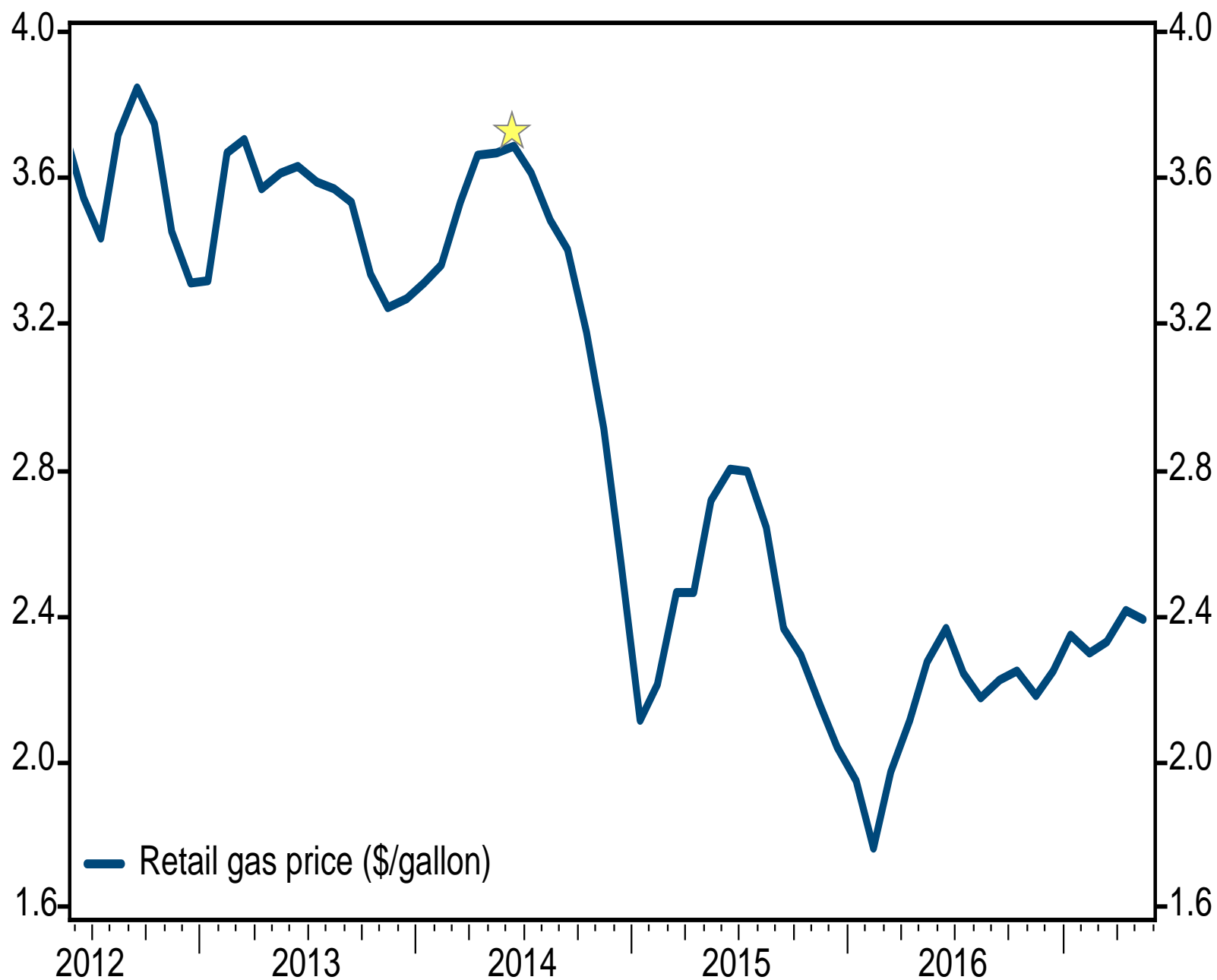
Gas Prices Give Muted Boost

May price of **\$2.39**
near 2009 low

\$2.34 six-month
average vs. **\$3.55** long-
term average

Down **\$1.30** and **35%**
from a peak monthly
average of **\$3.69** in
June 2014 (star)

Gas prices are up **5%**
from **\$2.27** a year ago



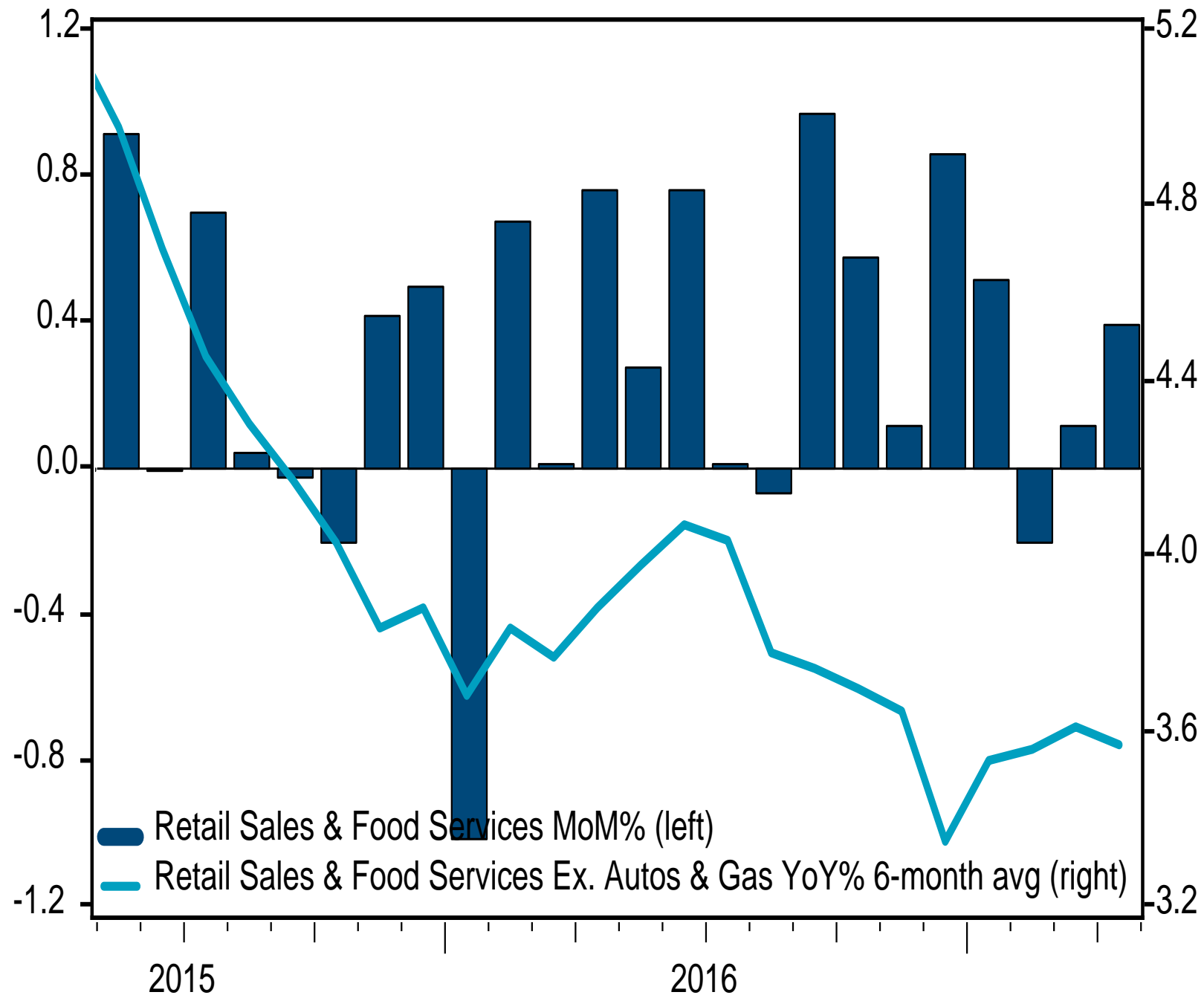
Source: Haver Analytics

Retail Sales Still Weak

April sales rose **0.7%**
Y/Y sales are up **4.5%**
vs. 5.2% in March

Ex-autos & gas
April sales increased
0.3%
Y/Y up **3.7%** vs. 4.1%
in March

Ex-autos & gas 12-
month avg: **0.3%**



Source: Census Bureau/Haver Analytics

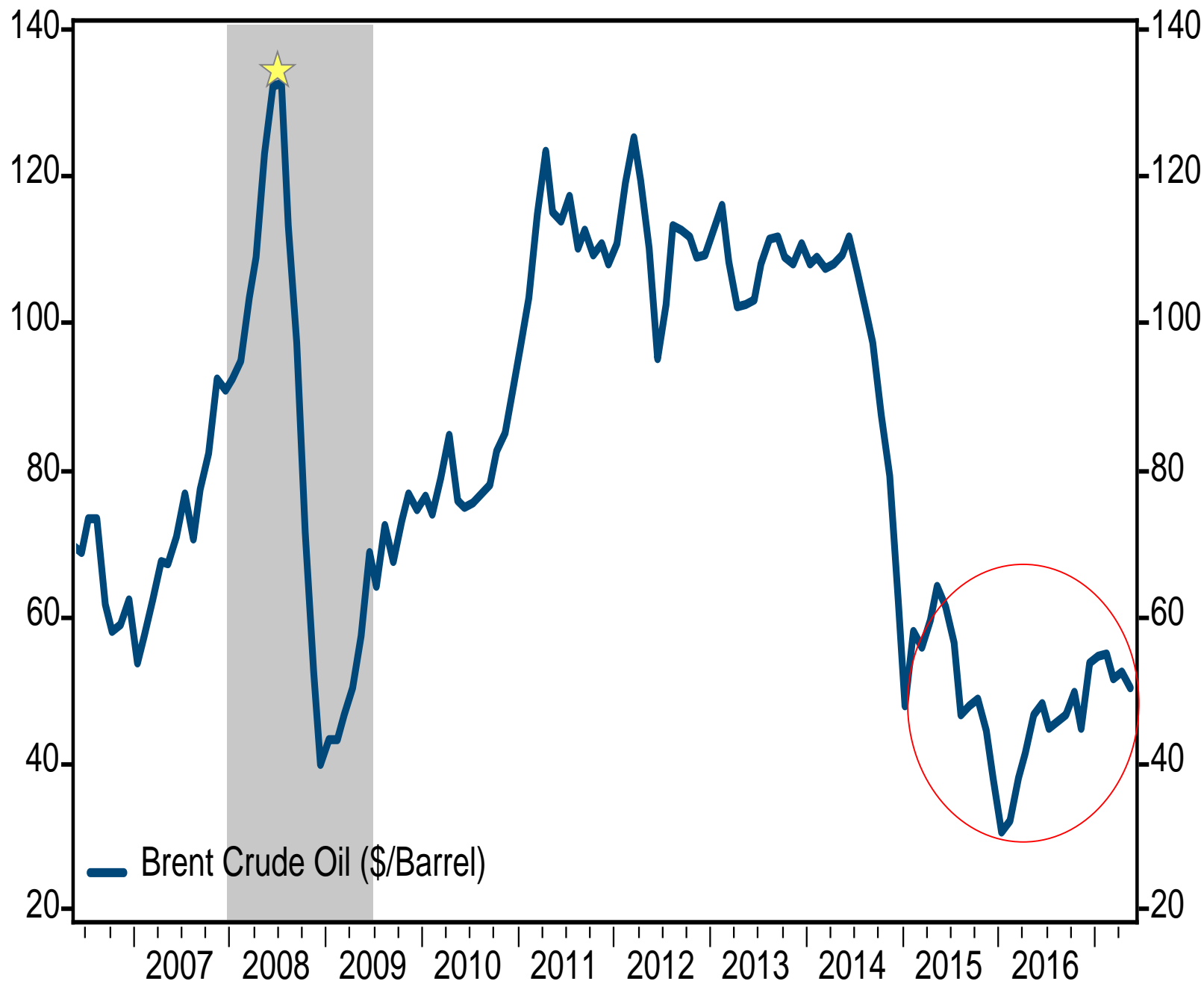
Crude Oil Prices Improving Modestly

Monthly prices for May averaged \$50.30, following a \$52.31 monthly average in April

The price of oil is down 60+% from 2008 high

Prices pushed above \$55 for the first time since July 2015

Oil prices up 64% (\$19.60 a barrel) from a low in January 2016

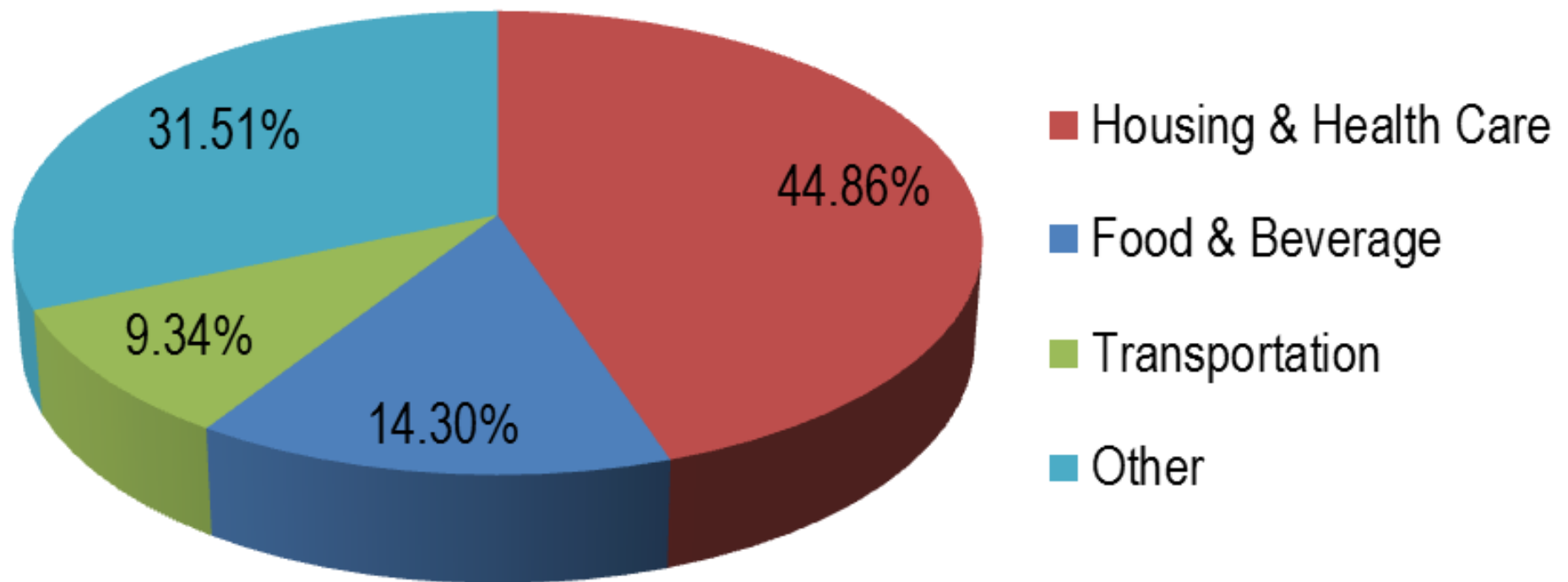


Source: EIA/WSJ/Haver

Health insurance premiums have increased between 39-56% since early 2013 for an average family, that means paying \$727 a month, an increase of \$256 a month or more than \$3,000 annually.

-National Online Private Health Insurance Exchange

Household Consumption Expenditures



Source: Haver Analytics

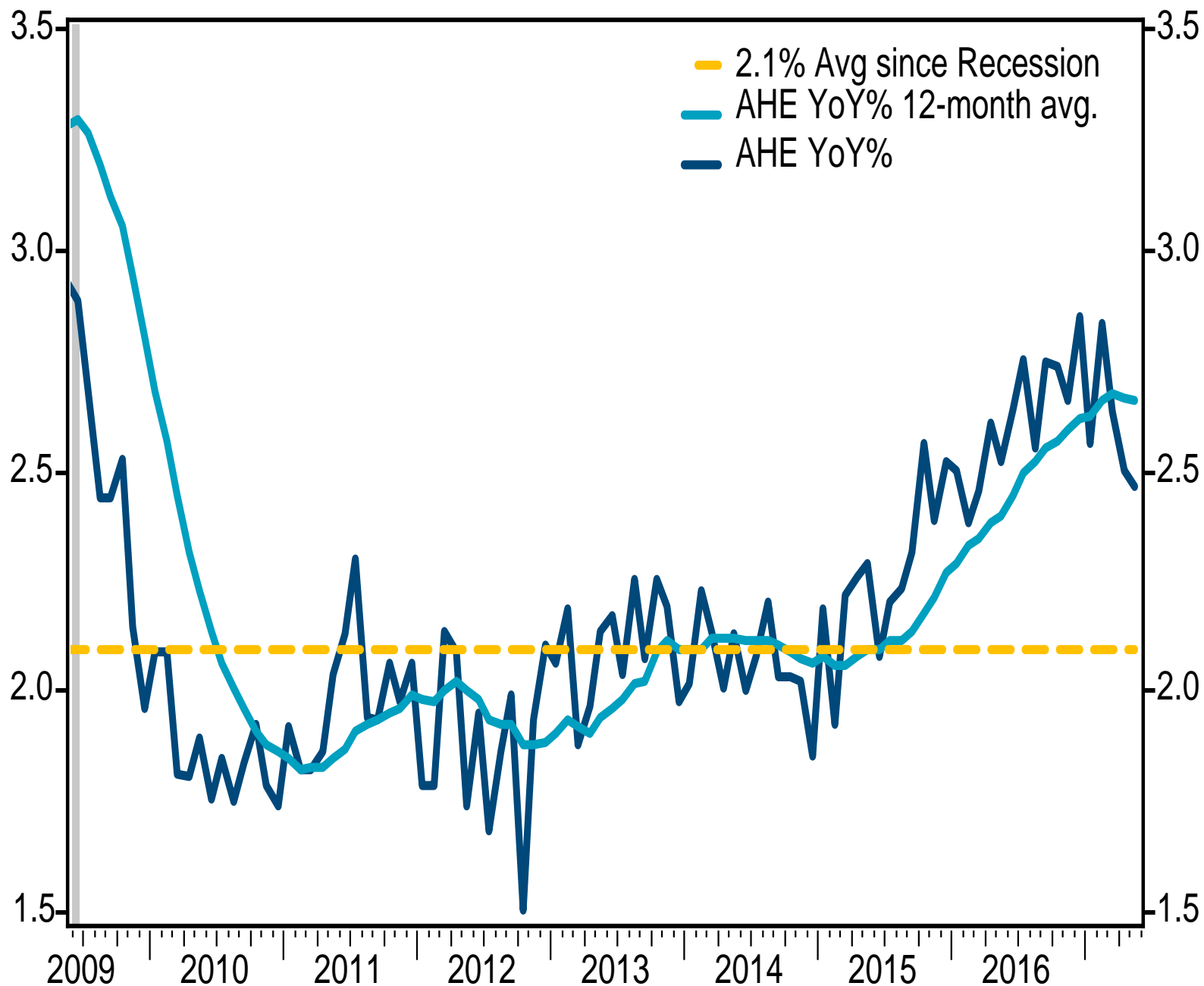
Avg. Hourly Earnings Edging Lower

Wages rose **0.2%** in May, following a 0.2% rise the month prior

Up **2.5%** Y/Y as of May for the second consecutive month

2.7% 12-month average in May

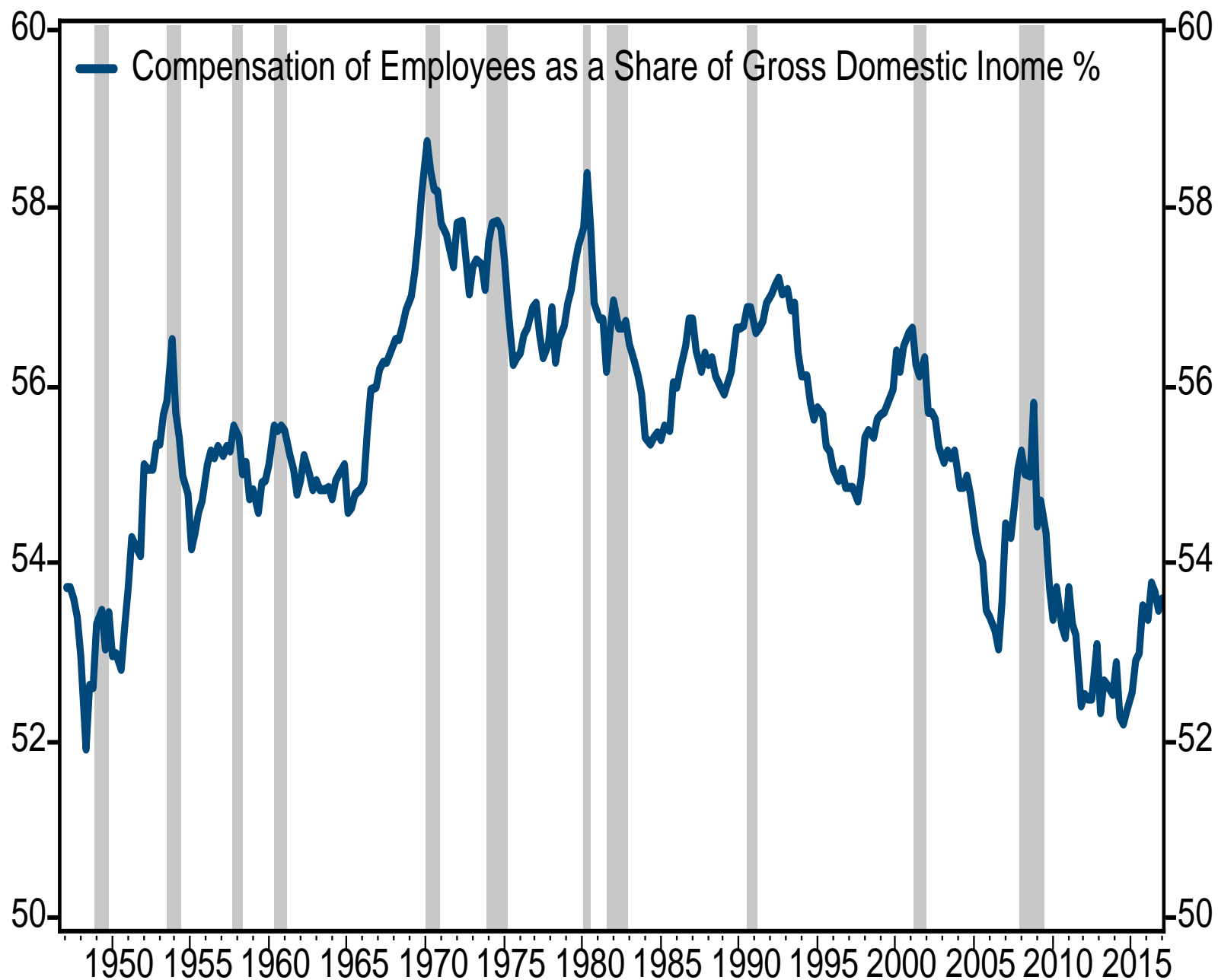
2.1% average since Recession



Source: Bureau of Labor Statistics /Haver Analytics

Compensation of employees as a share of gross domestic income in Q1 was **53.6%**

Labor's share of the economy has been getting squeezed since the early 1990s



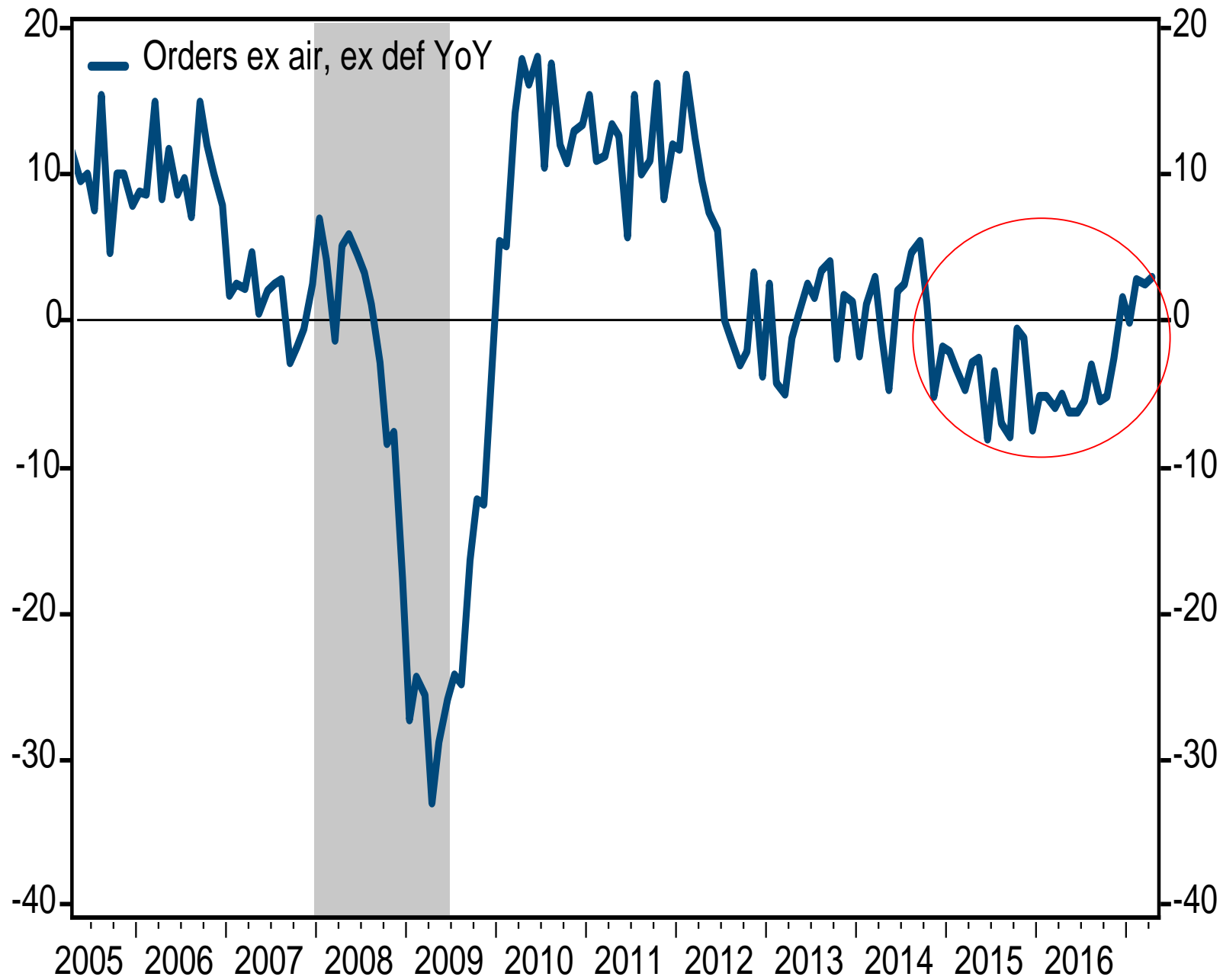
Source: Haver Analytics

Business Investment Sluggish

Orders ex-air, ex-def were flat in April, up **2.9%** year-over-year, the fifth month of reported gain after 23 months of near-zero or negative growth

Durable goods fell **0.7%** in April and are flat year-over-year

Transportation orders fell **1.2%** in April and fell **6.7%** year-over-year



Source: Census Bureau /Haver Analytics

- Simplify tax plan with reduced brackets (10%, 25% and 35%), and a reduced corporate tax rate to 15%.
- Reduce regulation, repeal Dodd-Frank and sweeping bank reforms, and eliminate ones that “*needlessly kill jobs.*” Undoing the Obama administration’s policies on energy and climate control.
- Repeal & reform the Affordable Care Act while keeping coverage for people with pre-existing conditions, and allowing Americans under the age of 26 to stay on their parents’ plans.

- A simplified tax and reduced regulatory burden will boost corporate participation in the market, helping to reverse the restrained activity of the past several years.

Individual Reform

- Tax relief for American families, especially middle-income families:
 - Reducing the 7 tax brackets to 3 tax brackets of 10%, 25% and 35%
 - Doubling the standard deduction
 - Providing tax relief for families with child and dependent care expenses
- Simplification:
 - Eliminate targeted tax breaks that mainly benefit the wealthiest taxpayers
 - Protect the home ownership and charitable gift tax deductions
 - Repeal the Alternative Minimum Tax
 - Repeal the death tax
- Repeal the 3.8% Obamacare tax that hits small businesses and investment income

Business Reform

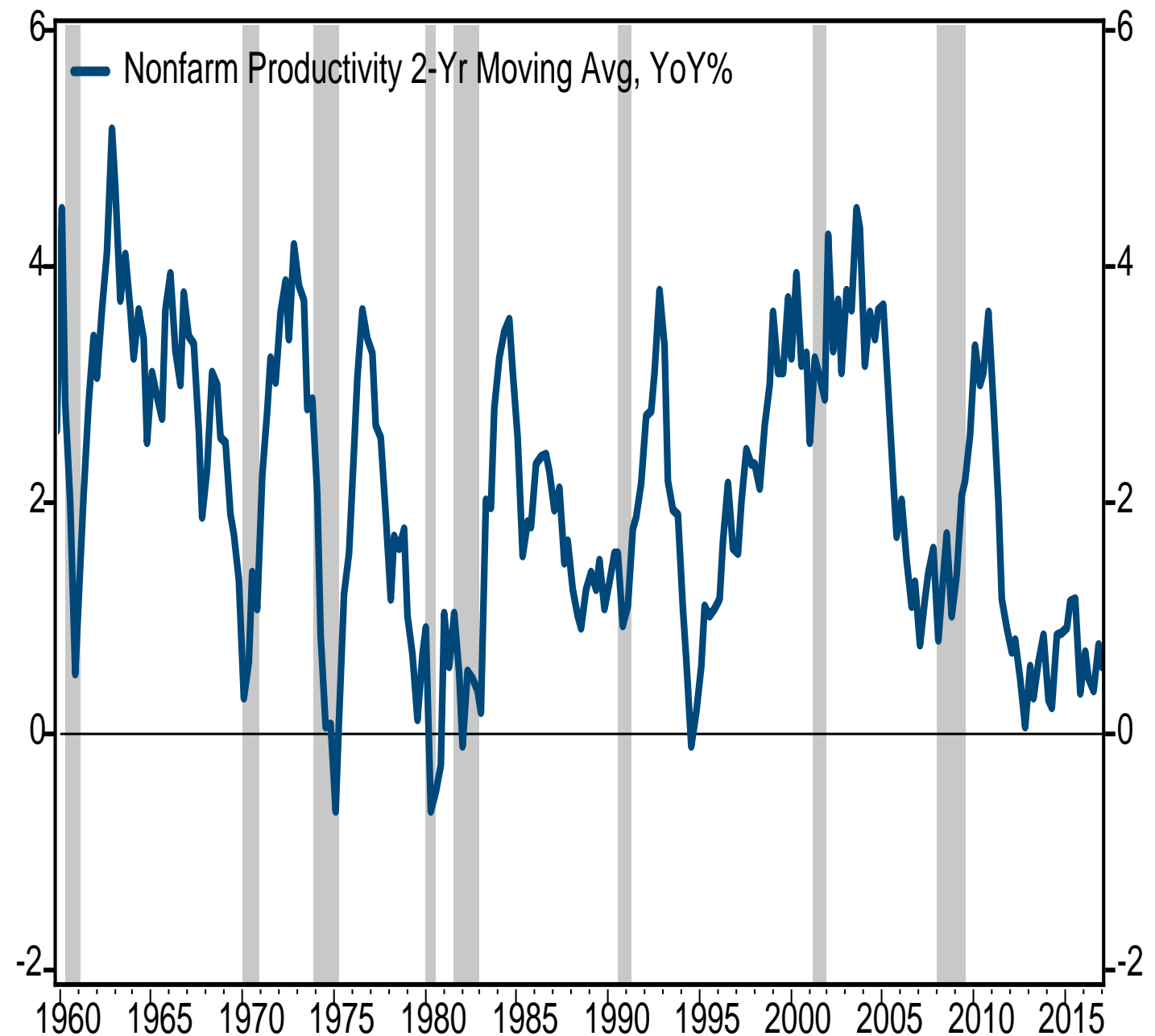
- 15% business tax rate
- Territorial tax system to level the playing field for American companies
- One-time tax on trillions of dollars held overseas
- Eliminate tax breaks for special interests

"I've continued to highlight the importance of spurring productivity growth, that I think that would be something that's beneficial for the economy."

-Chair Janet Yellen,
December 2016 Press
Conference

Productivity has hit
historic lows since
2014

Productivity in Q1
was **0.6%**, averaging
0.6% in 2016 and **0.6%**
over the past 5 years



Source: Bureau of Labor Statistics /Haver Analytics

- Among regulatory burdens and tax uncertainty, rising health care costs have been one of the top restraints to business development and expansion, as well as employment opportunities.
- **Still No Vote on Revised Health Care Reform Bill:**
 - Repeal the individual and employer mandates
 - Change tax credit calculations for middle and low-income
 - Raise HSA contribution levels (\$6,550 to \$13,100 for families and \$3,400 to \$6,550 for singles)
 - Increase restrictions on cost differentials for older Americans
 - Adjust the Medicaid expansion, reducing federal funding for newly eligible enrollees or those that left the program and reenrolled, as well as capping funding per enrollee
 - Option for states to obtain Limited Waivers from certain federal standards (Essential Health Benefits & community rating rules), in the interest of lowering premium costs and expanding the number of insured persons
 - CBO score: lower premiums, reduce coverage (23m by 2026)

“In most fields, technological progress is generally cost-reducing as individuals discover more effective ways of accomplishing things that were already being done. In medicine, however, technological progress in recent decades has been almost exclusively cost increasing, without generating a commensurate increase in value.”

-White House Health Care Report*

“Computers make things better and cheaper. In health care, new technology makes things better, but more expensive.”

-Jonathan Gruber, Economist at MIT & Leader of a health-care group at the National Bureau of Economic Research*

*https://www.whitehouse.gov/assets/documents/CEA_Health_Care_Report.pdf

*<https://www.technologyreview.com/s/518871/we-need-a-moores-law-for-medicine/>

Market Optimism

Dow Jones Industrial Average

Last Price	21115.55
High on 03/01/17	21115.55
Average	18540.89
Low on 03/02/16	16899.32

After an initial fallout on election day, equities have since rebounded, pushing the Dow to a record high as of March 1st

Since the start of May, the Dow is up 1.1% and up 6.3% since the start of the year



U.S. treasury yields surged after election day with the 10-year pushing over 2% for the first time since January 2015

10-year UST is down 7bps since the start of 2016, up 19bps since the November election to **2.16%**

10-year UST reached a high of 2.62% on March 13th, the highest level since September 2014

U.S. 10-Year Treasury



CT10 Govt (US TREASURY N/B) US 10 yr Daily 02JUN2016-02JUN2017

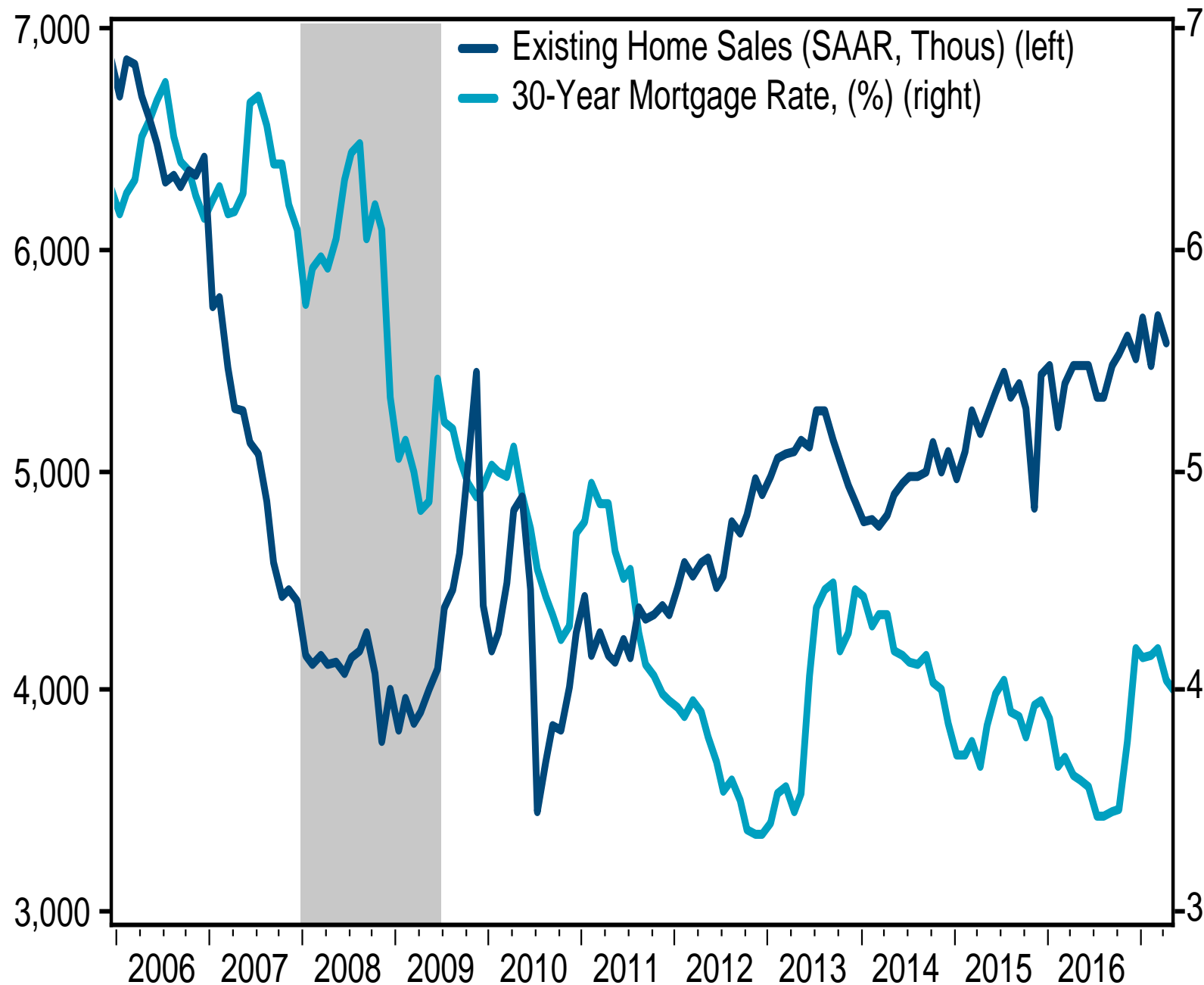
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Existing Home Sales vs. 30-yr Mortgage

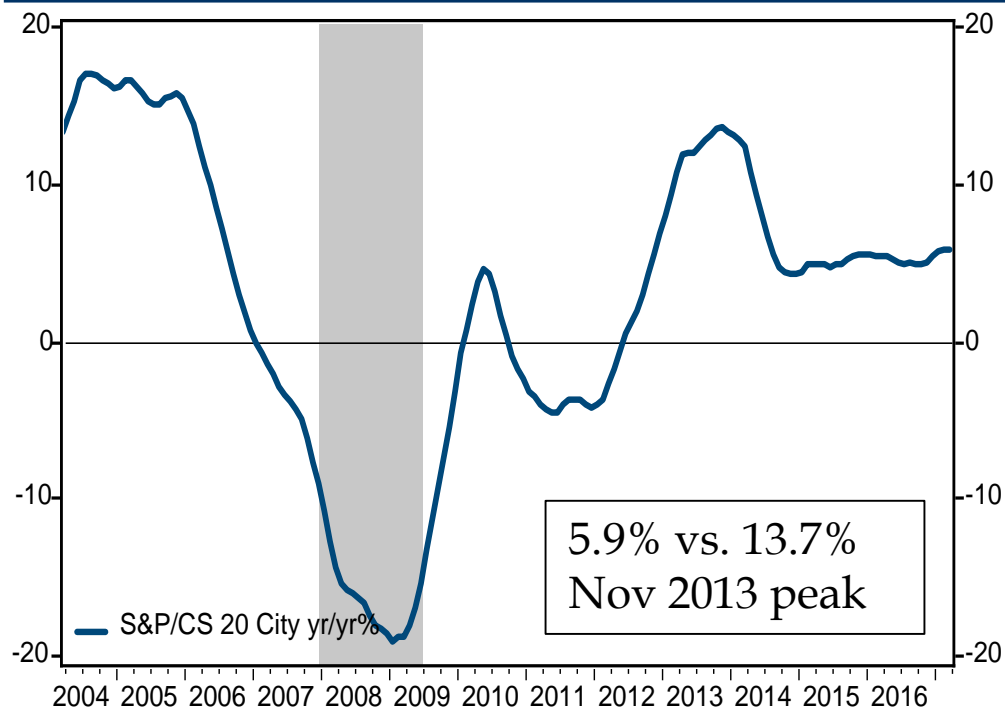
Existing home sales fell 2.3% in April from 5.70m to a 5.57m unit pace, a two-month low

Mortgage rates have been on the decline, but have surged in the weeks since the presidential election

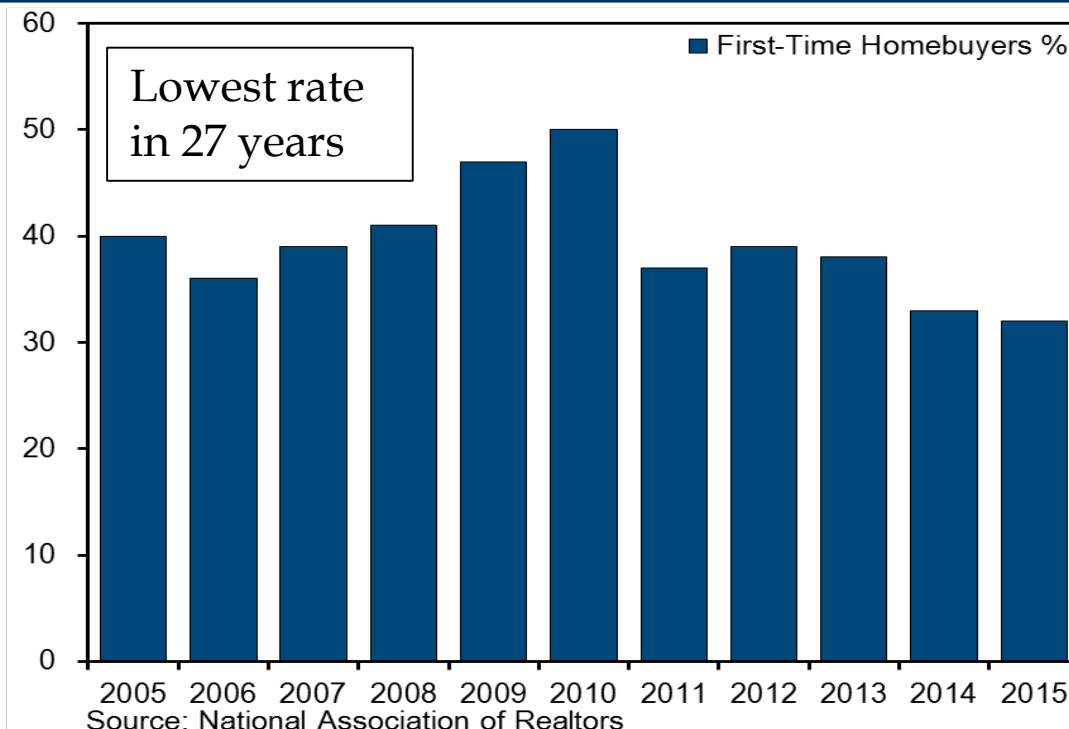


Sources: NAR, FHLMC /Haver

Housing Showing Signs of Weakness? Inability to Finance/Change in Preferences



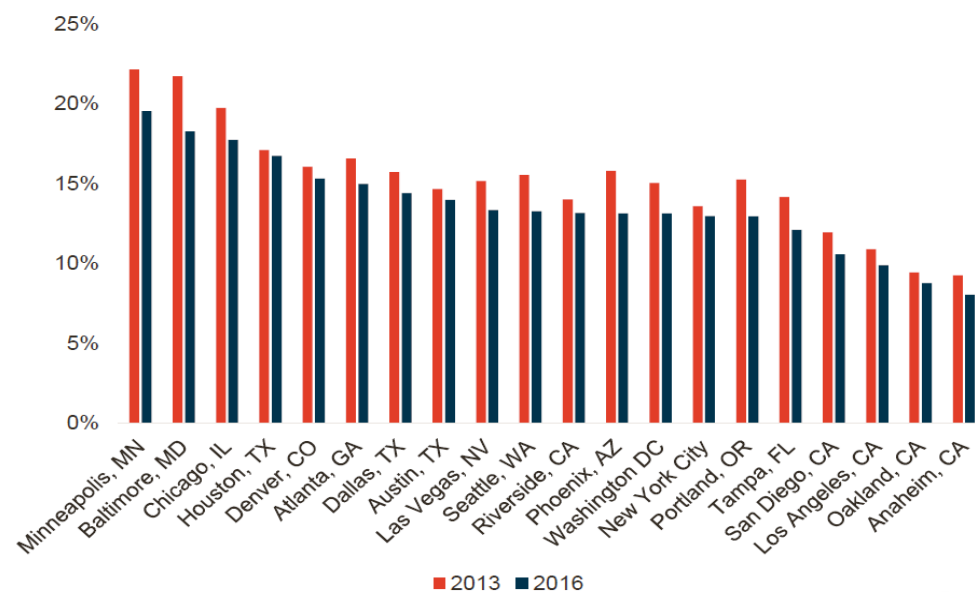
Source: Standard & Poor's /Haver Analytics



Source: National Association of Realtors

Millennial Purchase Demand is Declining...

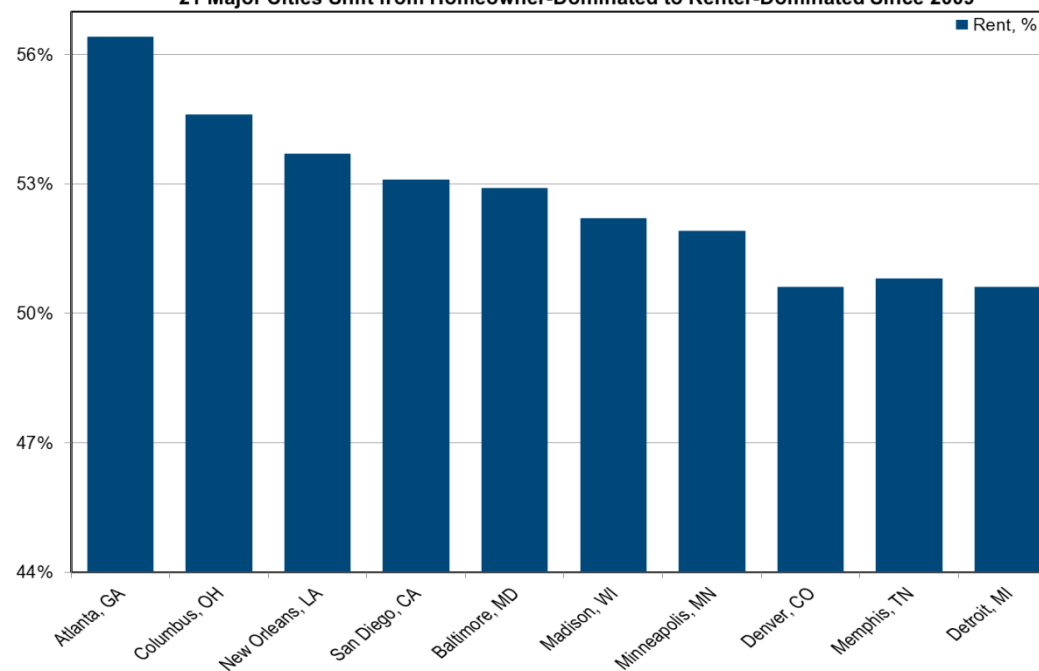
Share of Purchase Mortgage Applications for Borrowers Under 30 Years of Age



Source: CoreLogic

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21 Major Cities Shift from Homeowner-Dominated to Renter-Dominated Since 2009

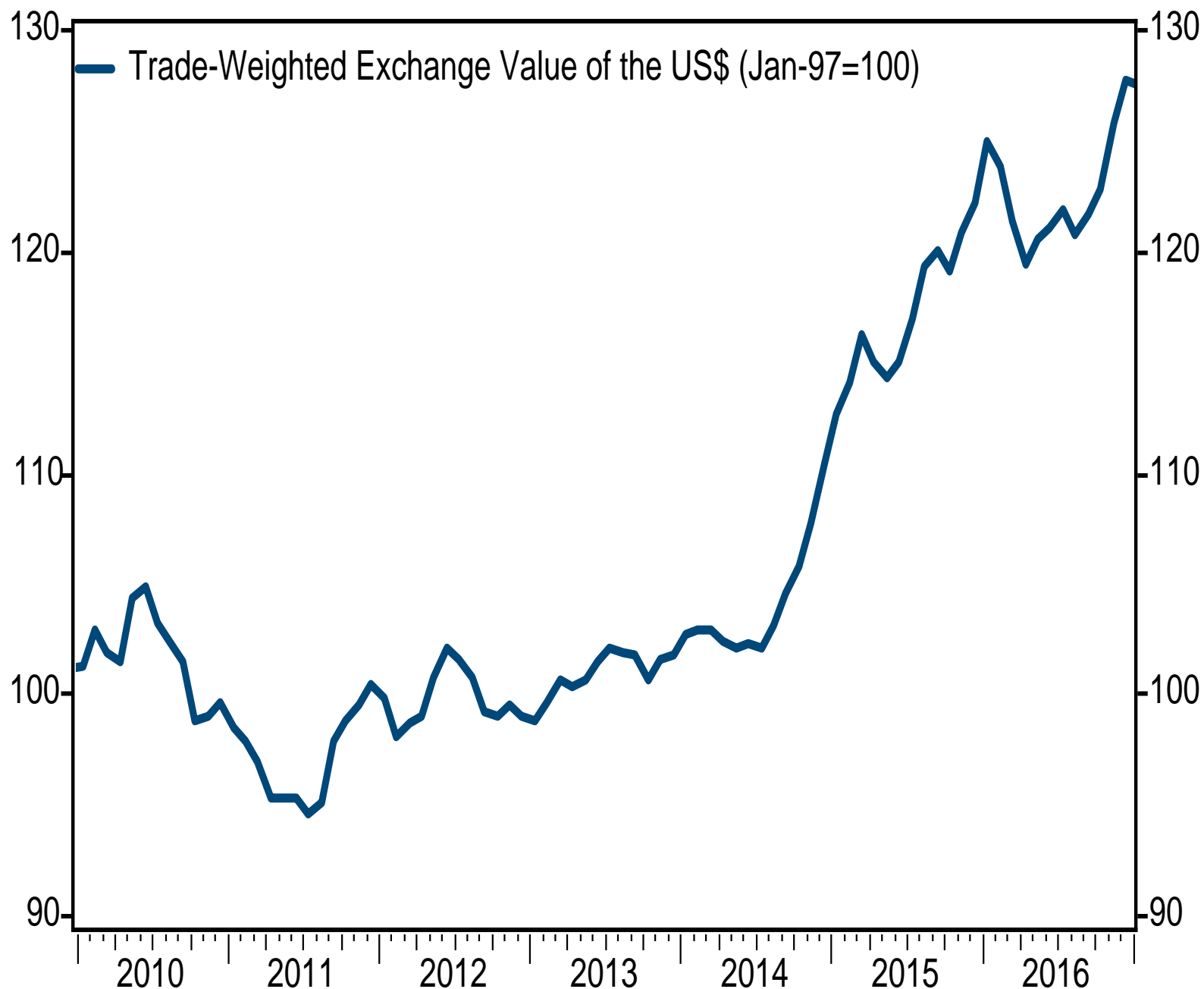


Source: Bloomberg, Redfin

The dollar fell from \$124.35 to **\$123.96** in May, the fourth decline following six consecutive months of gains

2013-2014 Average:
\$102.57

2015-2016 Average:
\$119.95



Source: Federal Reserve Board /Haver Analytics

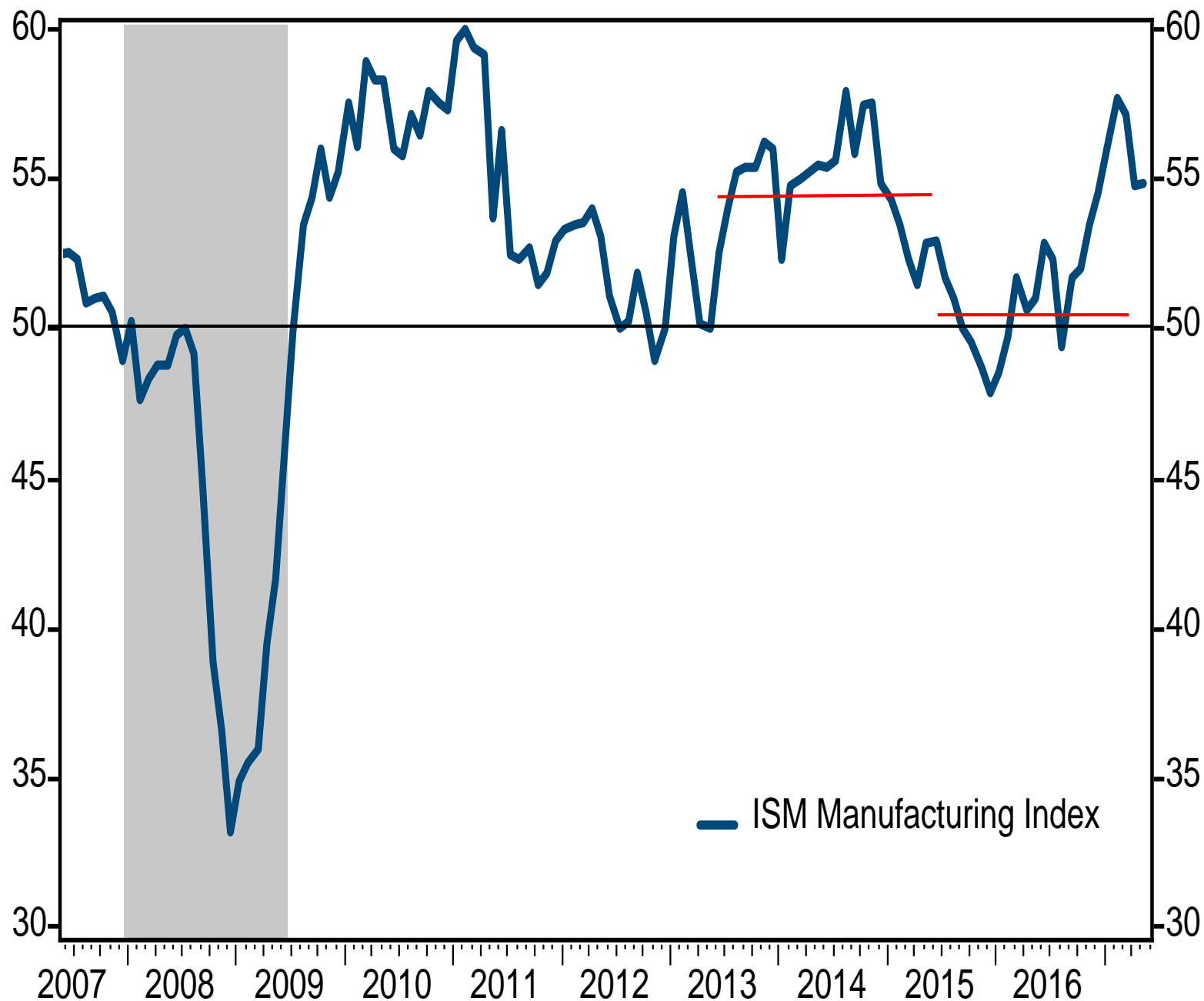
Production Improved Above Trend

ISM expanded in May for the ninth consecutive month after hitting a seven-month low in August

ISM rose from 54.8 to **54.9** in May, a two-month high

2013-2014 Average:
54.7

2015-2016 Average:
51.4



Source: Institute for Supply Management /Haver Analytics

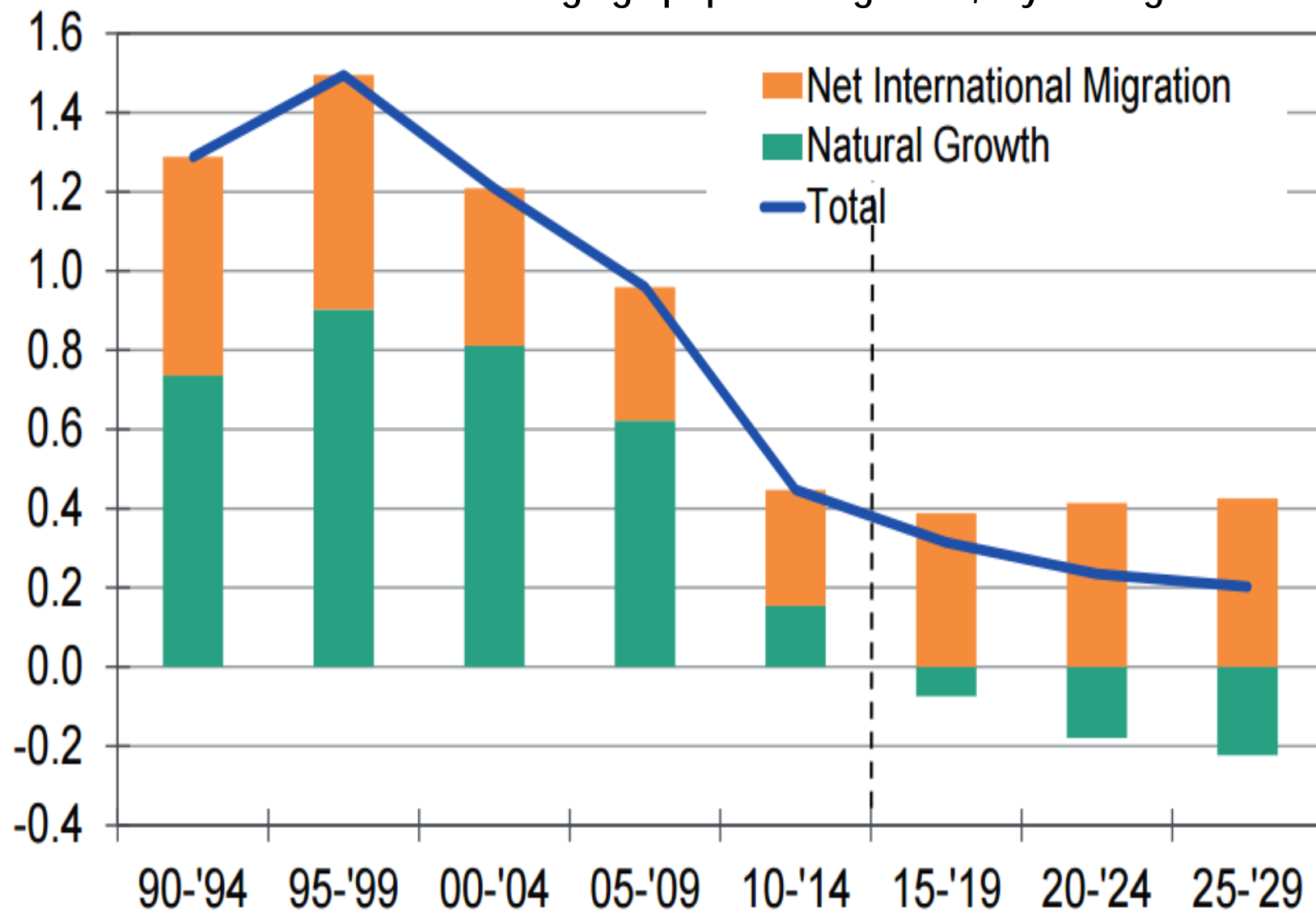
- International “*fairness*” and protectionist policies; immigration reform by building a “*wall*” (or fence in some areas) and deporting 2-3 million illegal immigrants with criminal records.
- Withdraw from TPP and renegotiate trade deals that have left the U.S. disadvantaged with technologies and patents exploited or goods counterfeited.
- Proposed a 5-35% tariff or tax on imported goods into the U.S. to disincentivize moving overseas.

- The more narrow focus will limit the disruption to the labor market, particularly in sectors heavily reliant on immigrant labor.

Given the declining participation rate in the U.S., coupled with an aging population, many researchers argue America is in need of more immigration, not less

According to Pew Research center, as Baby Boomers leave the workforce, the majority of growth in the working-age population over the next two decades will be from immigrants and their children

Economy Needs More Immigration, Not Less?
Contribution to working age population growth, 5-year avg



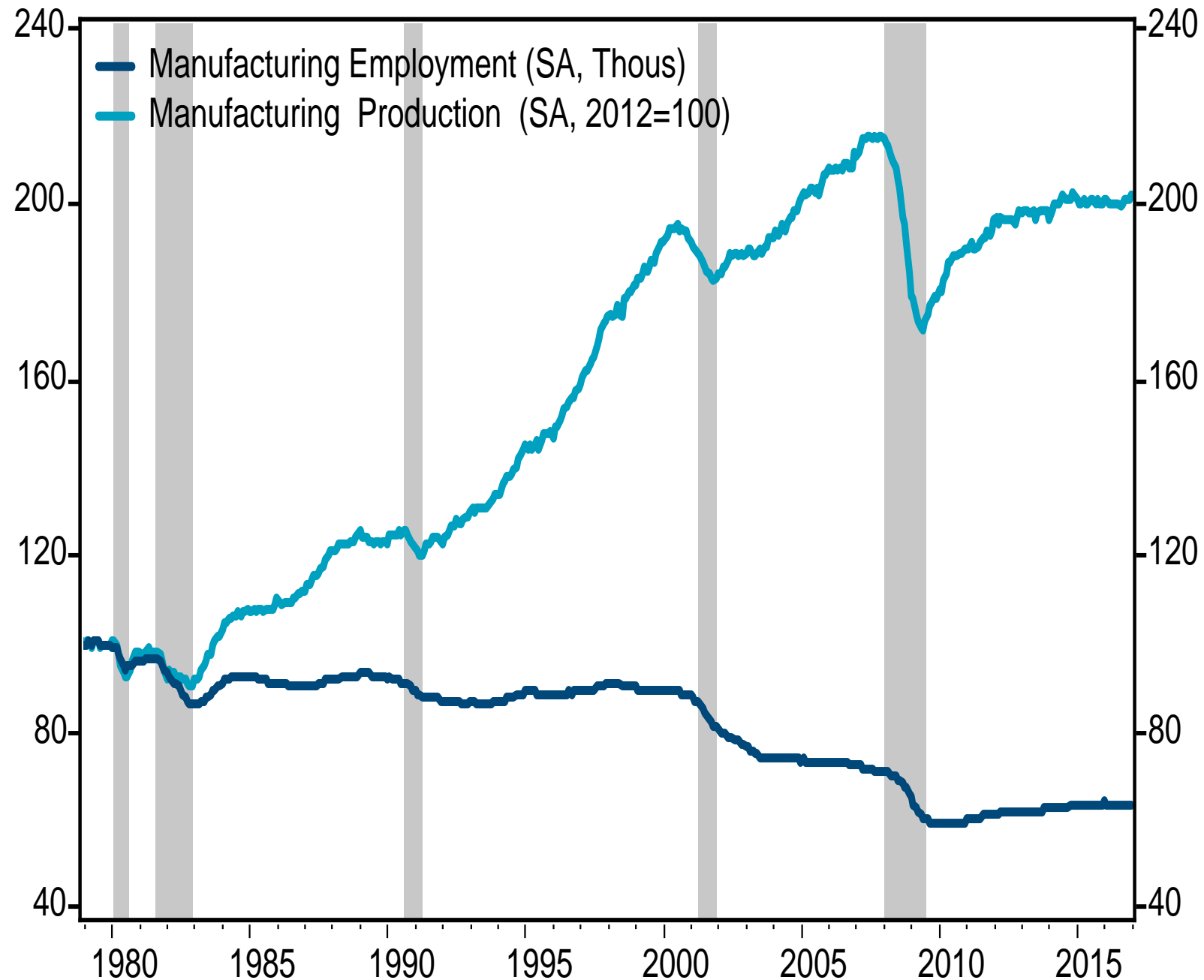
Sources: Census Bureau, Moody's Analytics

- Restructuring U.S. trade deals could act to increase protection of U.S. made goods and intellectual property. (*Free trade vs. managed trade.*)
- On net, however, restricting the free flow of capital and labor will undermine business development and job creation with minimal impact in goods-producing employment.
- Ford car company cancels \$1.6b Mexican plant, creating 700 jobs vs. history of declining U.S. manufacturing jobs.

Production and Jobs in Manufacturing

Manufacturing employment in May was **64k**, down 37% from a peak of 101k in 1979

Production, on the other hand, has doubled over the past three decades



Sources: BLS, FRB /Haver

- The imposition of large penalties or a proposed tariff on imported goods will only serve to drive costs higher, offsetting gains from a reduced domestic tax burden and offering moderate support to inflation, while at the same time acting as an anchor to domestic growth potential.

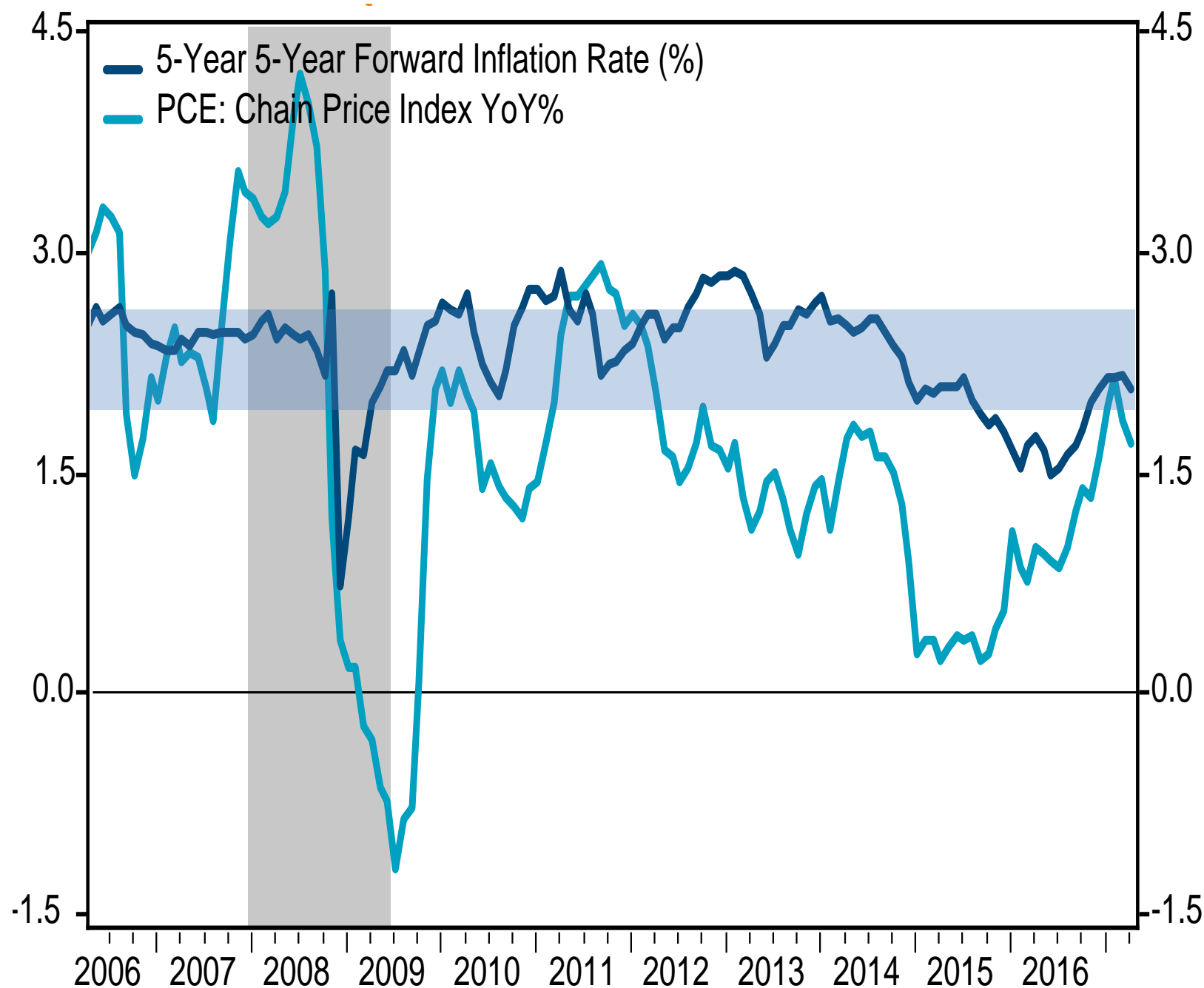
Subdued Inflation vs. Heightened Expectations

Inflation Improves from 2015 Lows

The PCE rose **0.2%** in April and rose **1.7%** year-over-year, a four-month low

The core PCE rose **0.2%** in April and rose **1.5%** year-over-year, down from a 1.6% pace in March

Inflation expectations climbed to a more than one-year high at 2.1% amid expectations of increased fiscal investment being stimulative and becoming reflationary



Sources: FRB/H, BEA/Haver

- Infrastructure spending to build roads, bridges, schools and airports “*second to none*,” potentially totaling \$1 trillion.

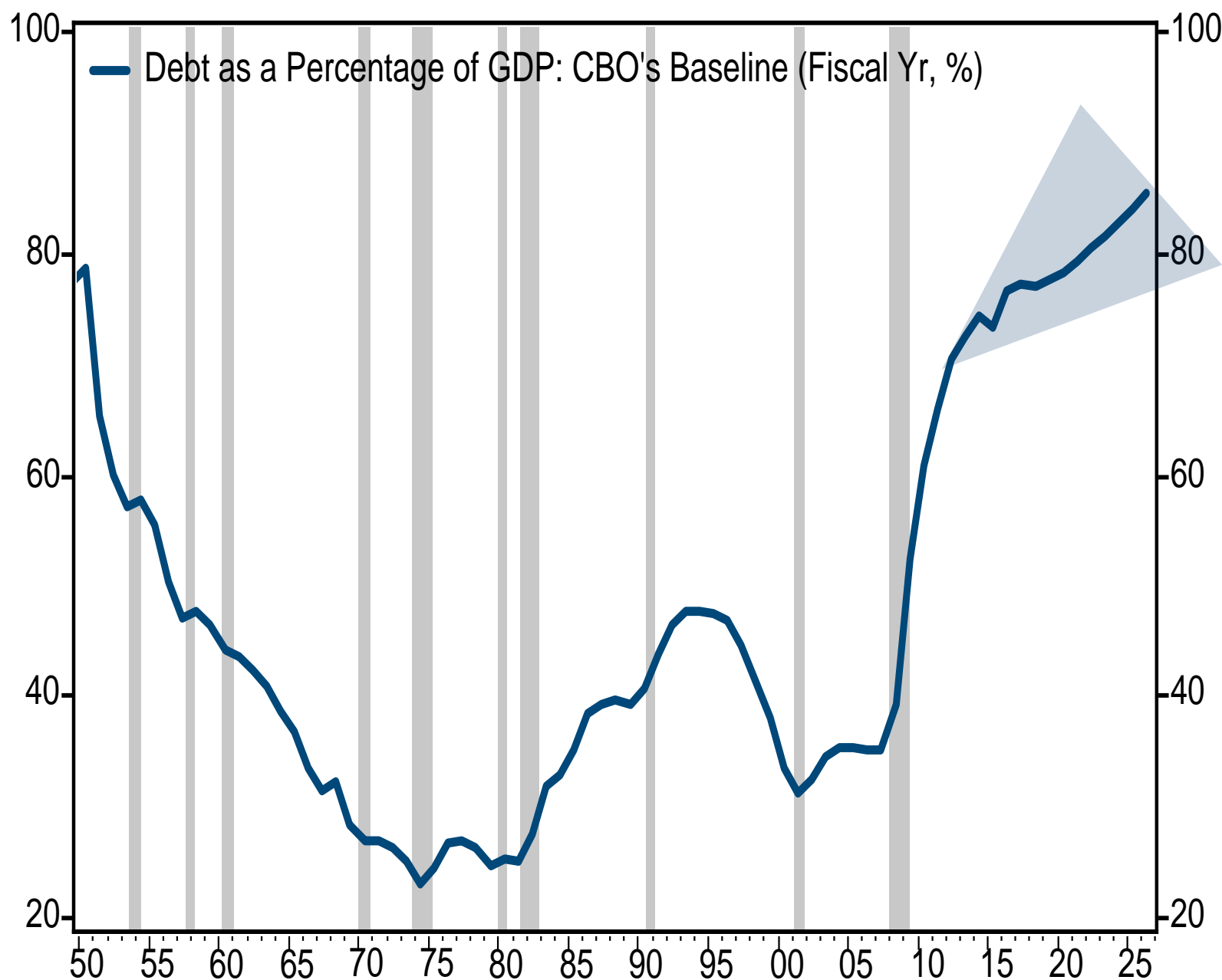
Debt Appetite Diminished

77% of GDP, the highest level relative to the size of the economy since 1950

1950s decade-long expansion posting over 4.5% GDP vs. stagnant 2%

According to the CBO, financing the debt coupled with rising interest rates would result in a four-fold increase

Federal interest outlays totaled more than **\$330b**



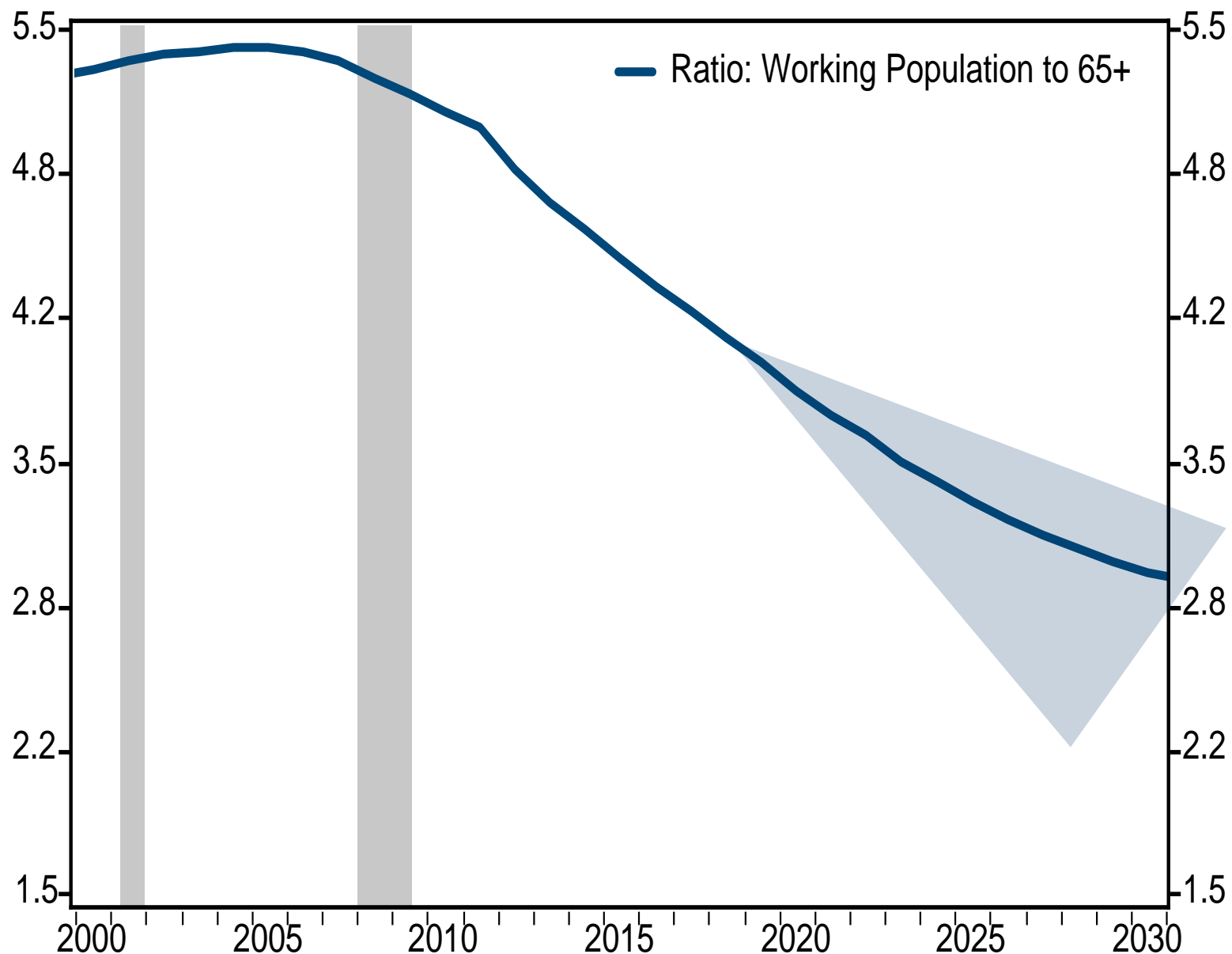
Source: Congressional Budget Office /Haver Analytics

Ratio of Employed to Retired

76.4m Baby Boomers

The amount of retirees continues to increase in the U.S. as **10,000** Baby Boomers retire everyday

From 2010-2030, about **4m** Americans will retire each year while the population is increasing at **3.3m** a year



Source: Haver Analytics

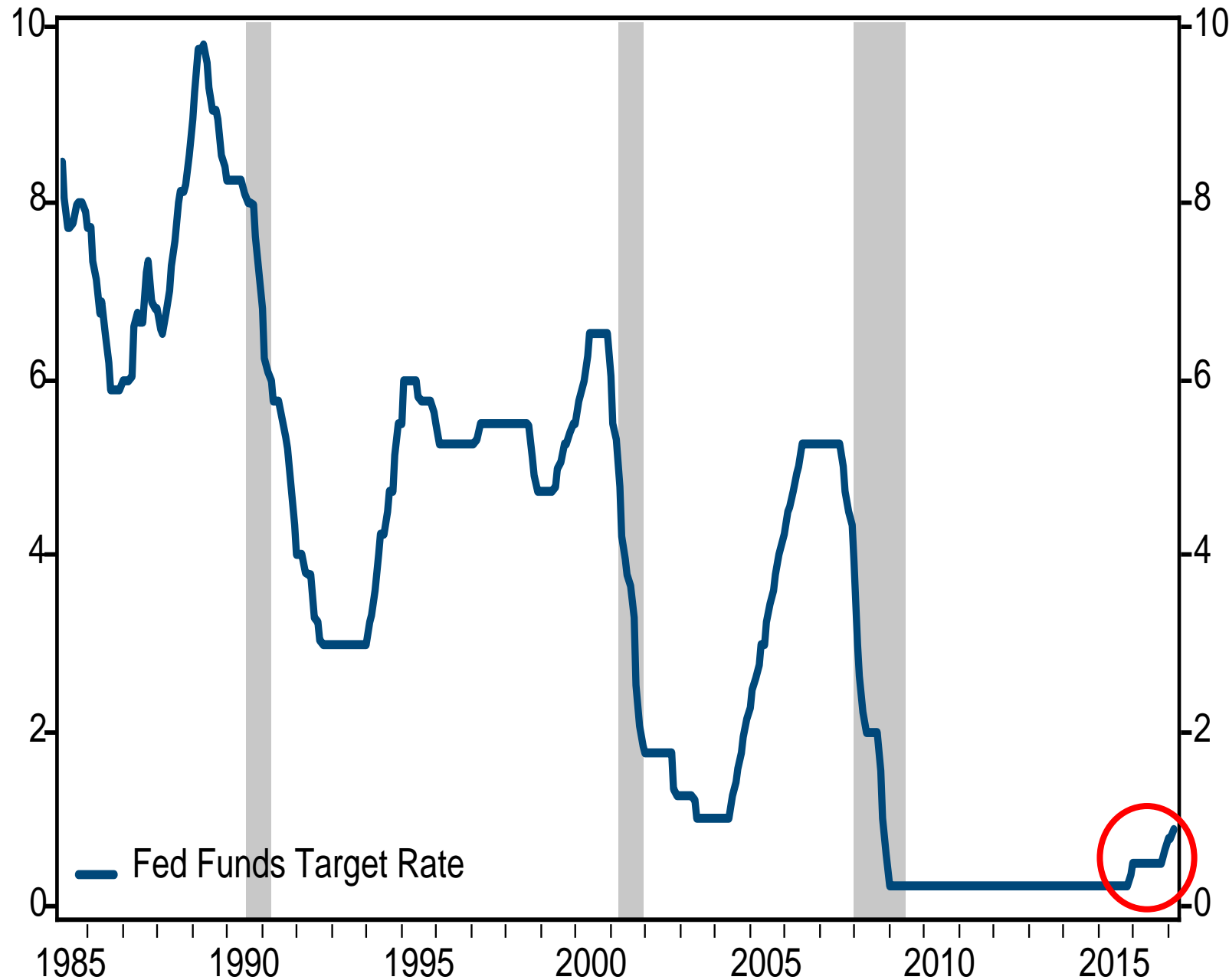
The Fed: Raising Rates with a Cautious Tone

Historically Low Rates

Fed keeps rates steady at latest May meeting at a range of 0.75-1.00%

Fed raised rates 25bps to 1.00% at March meeting

Fed raised rates 25bps to 0.75% in December 2016 after seven consecutive meetings of unchanged policy



Source: Federal Reserve Board /Haver Analytics

“In their discussion of their economic forecasts, participants emphasized their considerable uncertainty about the timing, size, and composition of any future fiscal and other economic policy initiatives as well as about how those policies might affect aggregate demand and supply. Several participants pointed out that, depending on the mix of tax, spending, regulatory, and other possible policy changes, economic growth might turn out to be faster or slower than they currently anticipated.”

-December 14th FOMC Meeting Minutes

“In discussing the risks to the economic outlook, participants continued to view the possibility of more expansionary fiscal policy as having increased the upside risks to their economic forecasts, although some noted that several potential changes in government policies could pose downside risks.”

-February 1st FOMC Meeting Minutes

“In view of the substantial uncertainty, about half of the participants did not incorporate explicit assumptions about fiscal policy in their projections. Nonetheless, most participants continued to view the prospect of more expansionary fiscal policies as an upside risk to their economic forecasts.”

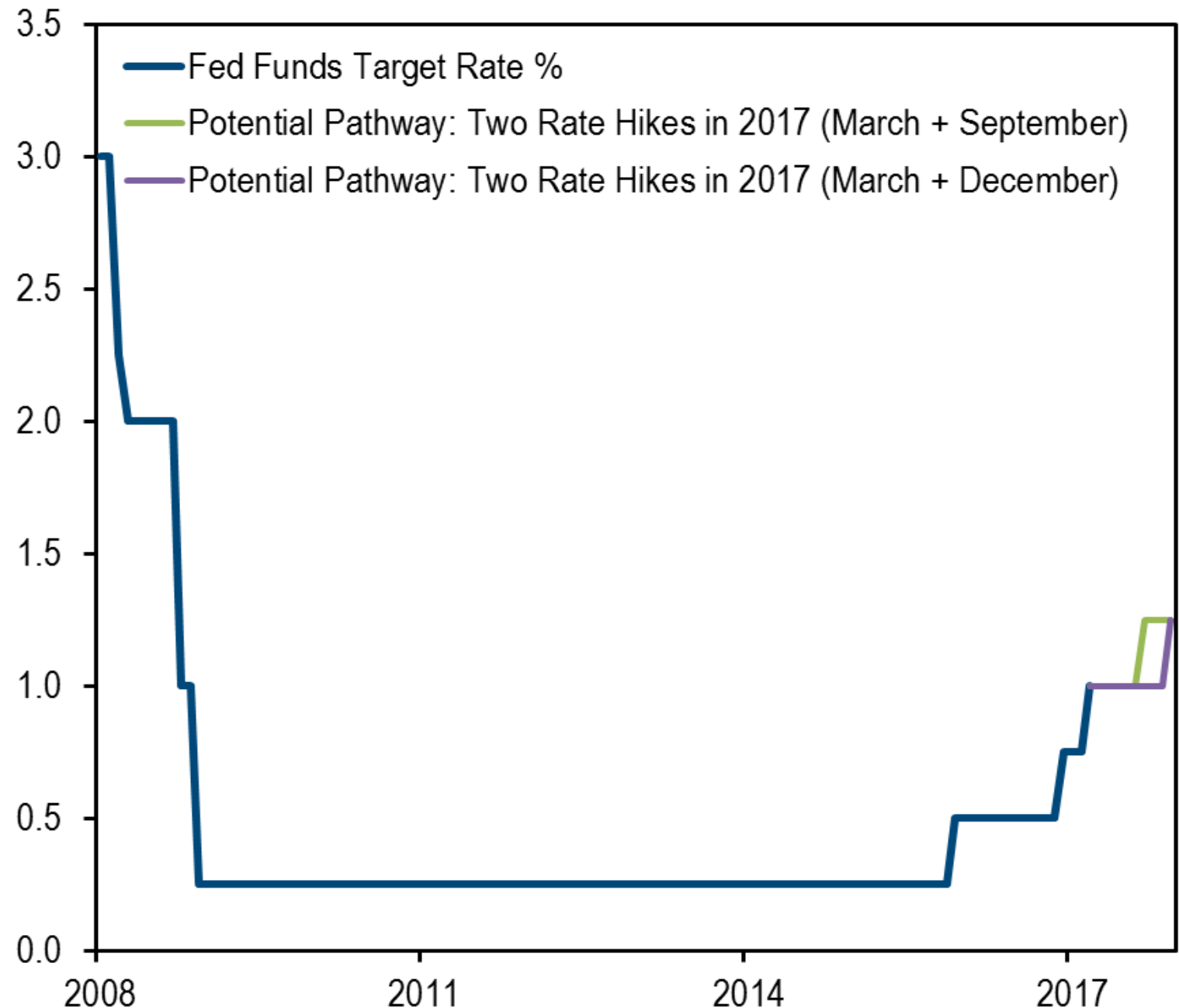
-March 15th FOMC Meeting Minutes

Fed Agrees to “Gradual” Rate Pathway

Lingering “uncertainties” could limit rate hikes over the next two to three years

“...it might be appropriate to raise the federal funds rate again fairly soon if incoming information on the labor market and inflation was in line with or stronger than their current expectations...”

-February 1st FOMC Meeting Minutes

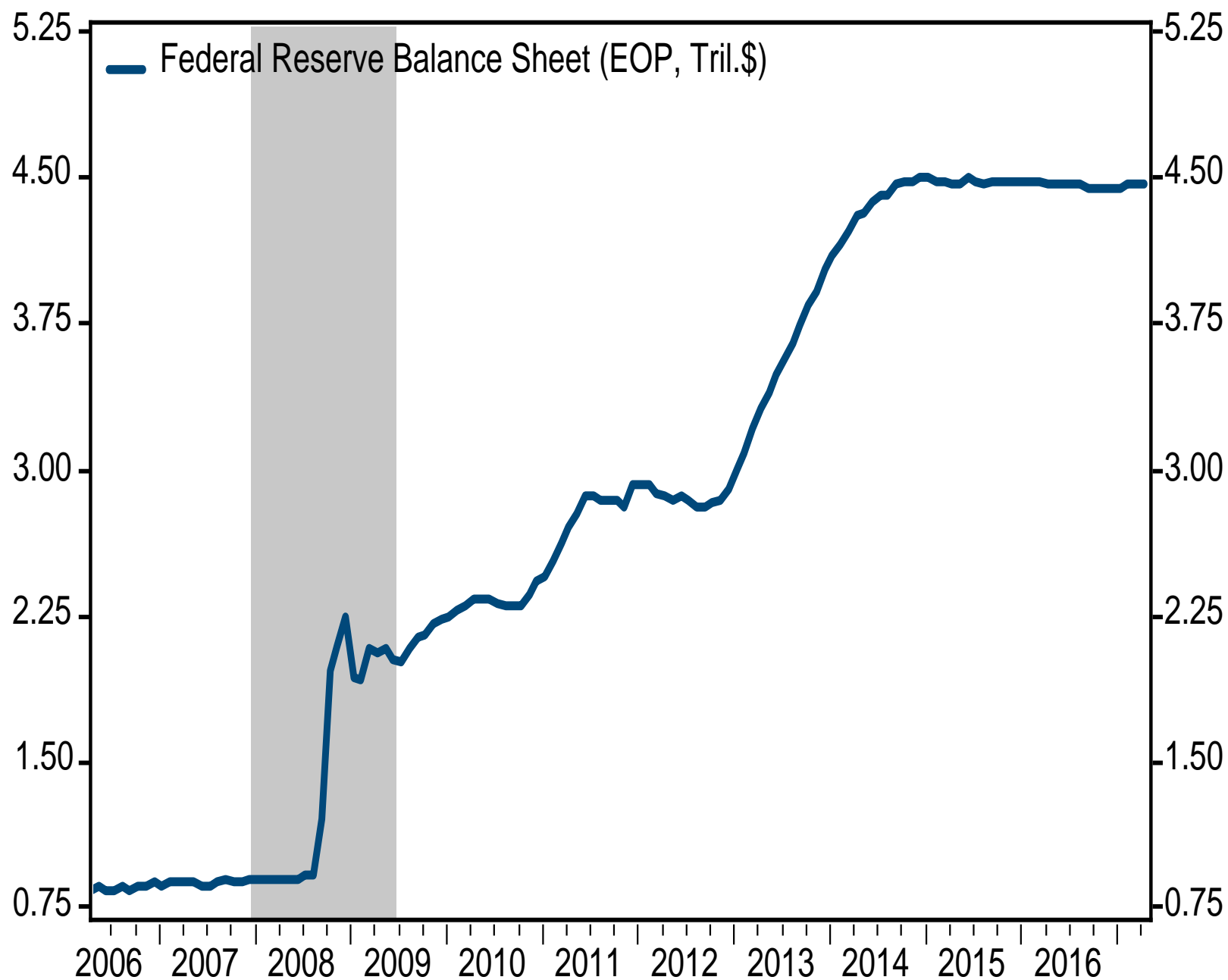


Source: Bloomberg

From less than \$1 trillion in December 2007 prior to the Great Recession, after three rounds of quantitative easing plus Operation Twist, the Fed’s balance sheet now stands at \$4.5 trillion

Policymakers “judged that a change to the committee’s reinvestment policy would likely be appropriate later this year...”

- March 15th FOMC Meeting Minutes



Source: Federal Reserve Board /Haver Analytics

Improved Forecast of Continued Moderation

Q1 GDP rose **1.2%**, the slowest pace of growth since Q1 2016

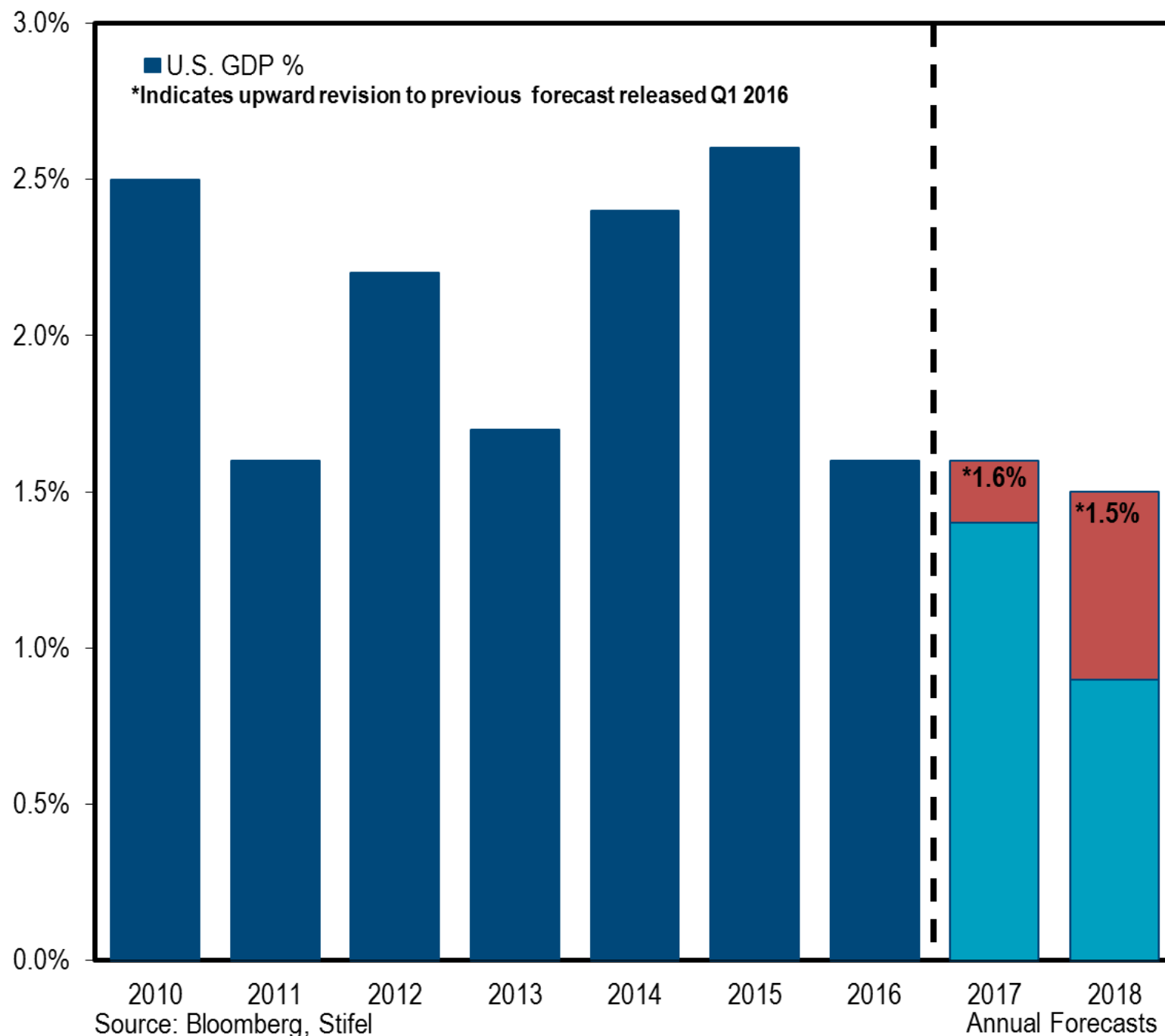
Average growth since Recession: **2.1%**

2014: **2.4%**

2015: **2.6%**

2016 : **1.6%**

2017: **1.2%**



Interest Rate Forecast Grid

End of Quarter Figures

Average Annual Figures

	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	2015	2016	2017	2018
Growth indicators														
GDP, QoQ %	0.8%	1.4%	3.5%	2.1%	1.2%	2.1%	1.8%	1.6%	0.9%	1.1%	1.9%	2.0%	1.7%	1.5%
Fixed Investment, %	-0.9%	-1.1%	0.1%	2.9%	11.9%	1.3%	2.2%	2.8%	2.6%	1.8%	3.5%	0.3%	4.6%	2.1%
Housing Starts, k	1,113	1,195	1,052	1,275	1,215	1,225	1,190	1,185	1,120	1,115	1,129	1,159	1,204	1,118
Car Sales, M	16.73	16.69	17.65	18.29	16.53	17.20	17.35	16.90	16.85	17.05	17.39	17.34	17.00	16.95
Unemployment Rate, %	5.0%	4.9%	4.9%	4.7%	4.7%	4.9%	5.0%	5.0%	5.0%	5.1%	5.2%	4.9%	4.9%	5.1%
Participation Rate, %	63.0%	62.7%	62.9%	62.7%	63.0%	62.8%	62.9%	62.9%	62.7%	62.6%	62.6%	62.8%	62.9%	62.7%
Savings Rate, %	6.1%	5.9%	5.9%	5.5%	5.2%	6.2%	6.1%	5.9%	6.3%	6.5%	5.8%	5.9%	5.9%	6.4%
Inflation indicators, YoY%														
CPI	0.9%	1.0%	1.5%	2.1%	2.4%	1.8%	1.5%	1.3%	1.2%	1.2%	0.2%	1.5%	1.8%	1.2%
PCE	0.8%	0.9%	1.2%	1.6%	1.8%	1.5%	1.3%	1.1%	1.0%	1.0%	0.4%	1.1%	1.4%	1.0%
Core PCE	1.6%	1.6%	1.7%	1.7%	1.6%	1.6%	1.5%	1.2%	1.2%	1.2%	1.4%	1.7%	1.5%	1.2%
Interest rate, %														
FF	0.50	0.50	0.50	0.75	1.00	1.00	1.00	1.25	1.25	1.25	0.31	0.56	1.06	1.38
3month UST bills	0.20	0.26	0.28	0.50	0.75	0.50	0.54	0.75	0.72	0.70	0.05	0.31	0.64	0.71
2yr UST notes	0.72	0.58	0.76	1.19	1.23	1.22	1.28	1.43	1.39	1.35	0.72	0.81	1.29	1.37
5yr UST notes	1.21	1.00	1.15	1.93	1.92	1.83	1.90	1.85	1.73	1.70	1.54	1.32	1.88	1.72
10yr UST notes	1.77	1.47	1.60	2.45	2.39	2.25	1.95	1.90	1.89	1.81	2.15	1.82	2.12	1.85
30yr UST bonds	2.61	2.29	2.32	3.07	3.01	3.00	2.95	2.85	2.65	2.55	2.88	2.57	2.95	2.60
2s to 10s Spread bps	105	89	84	126	116	103	67	47	50	46	143	101	83	48

Lindsey Piegza, Ph.D. - Chief Economist

Source: Bloomberg, Stifel

****Stronger economic conditions beyond fiscal policymakers' expectations would warrant a second rate increase in the second half of 2017**

Please see Economic Insight, "Politics and Policy: An Improved Forecast of Continued Moderation," for further forecast analysis

Questions?

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