

Houston Economic Outlook

Prepared by Patrick Jankowski

SVP Research



GREATER HOUSTON
PARTNERSHIP

Making Houston Greater.



GREATER HOUSTON
PARTNERSHIP



Stock Market Woes Raise a Nagging Fear:
Is a Recession Near?



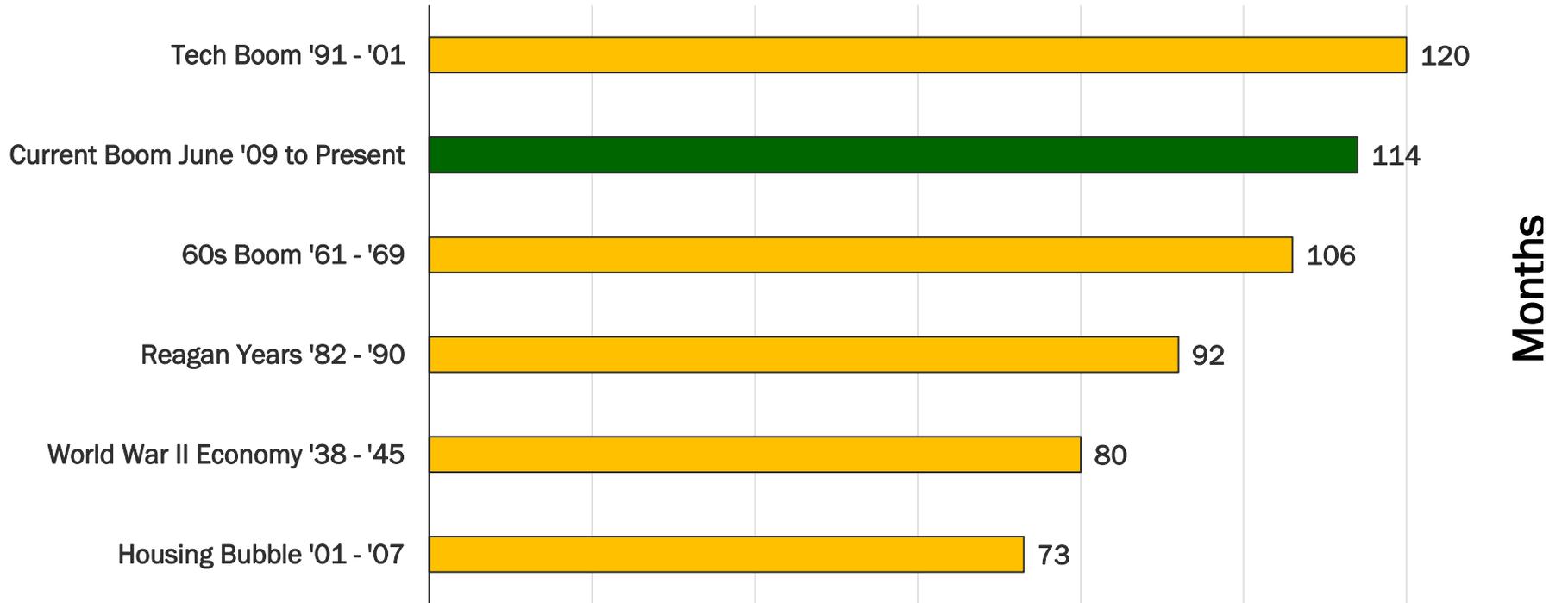
BUSINESS

Nearly half of US CFOs fear a 2019 recession

BARRON'S

People Are Really Worried About a
Recession.

Longest U.S. Expansions



Source: National Bureau for Economic Research



“Expansions don’t
die of old age.”

Janet Yellen

Chair, Board of Governors
U.S. the Federal Reserve System,
2014–2018





Typical Recession Causes

Bursting of an asset bubble

Financial institution failures

Credit crunch

Loss of consumer confidence

Commodity price spikes

Reductions in business investment

Government spending cuts

Loss of business confidence

Debt accumulation

RIISING INTEREST RATES



Six Most Recent Recessions

When?

Cause

'69 – '70	Interest rate hikes, fiscal austerity
'73 – '75	Stock market crash, oil price spike
'80 - '82	Interest rate hikes, oil price spike
'90 – '91	High debt levels, consumer pessimism, oil price spike,
'01 – '02	Dot-com bust, weak business investment, 9/11
'08 – '09	Subprime mortgage crisis



Information on Recessions and Recoveries, the NBER Business Cycle Dating Committee, and related topics

[US Business Cycle Expansions and Contractions](#)

[Register for future Business Cycle announcements](#)

[Statement of the NBER Business Cycle Dating Committee on the Determination of the Dates of Turning Points in the U.S. Economy](#)

[The NBER's Business Cycle Dating Procedure: FREQUENTLY ASKED QUESTIONS](#)

[Members of the Business Cycle Dating Committee](#)

[September 20, 2010 announcement of June 2009 business cycle trough/end of last recession](#)

[April 12, 2010 Memo from the Business Cycle Dating Committee](#)

[December 1, 2008 announcement of December 2007 business cycle peak/beginning of last recession](#)

[January 7, 2008 Memo from the Business Cycle Dating Committee](#)

[October 21, 2003 Memo from the Business Cycle Dating Committee](#)

[July 17, 2003 announcement of November 2001 business cycle trough/end of last recession](#)

[November 26, 2001 announcement of March 2001 business cycle peak/beginning of last recession](#)



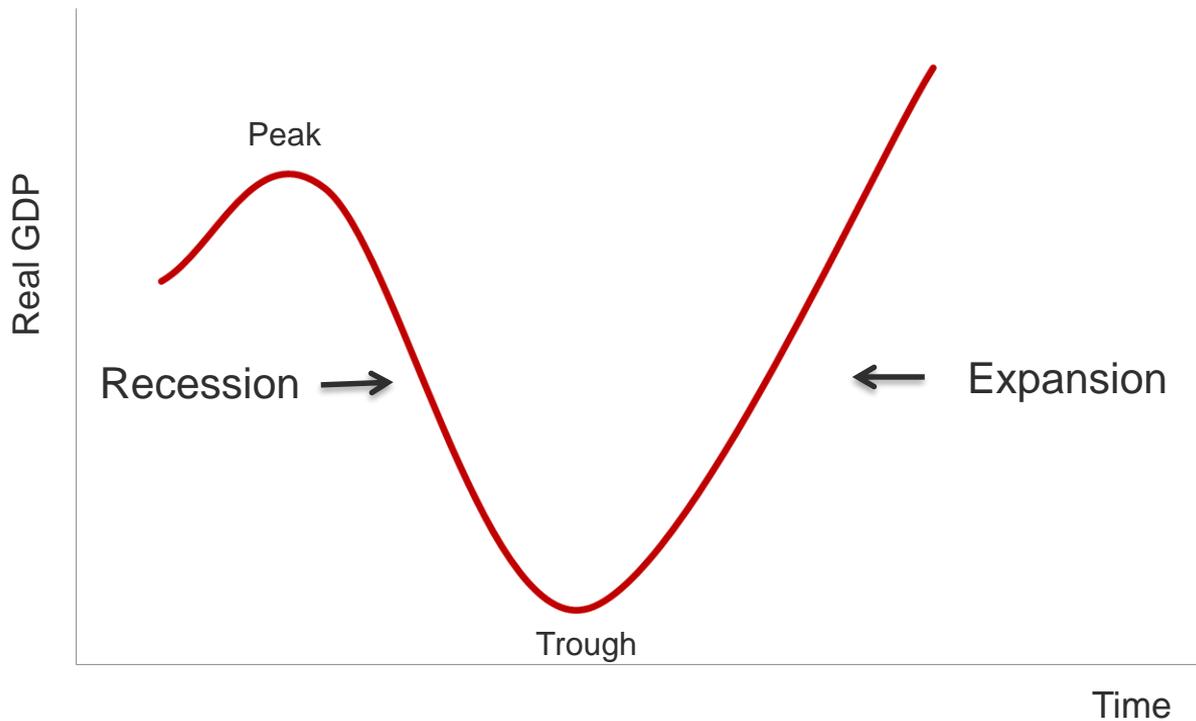


What NBER considers when dating a business cycle

- Real Gross Domestic Product
- Employment
- Real Personal Income
- Real Sales (business and retail)
- Industrial Production

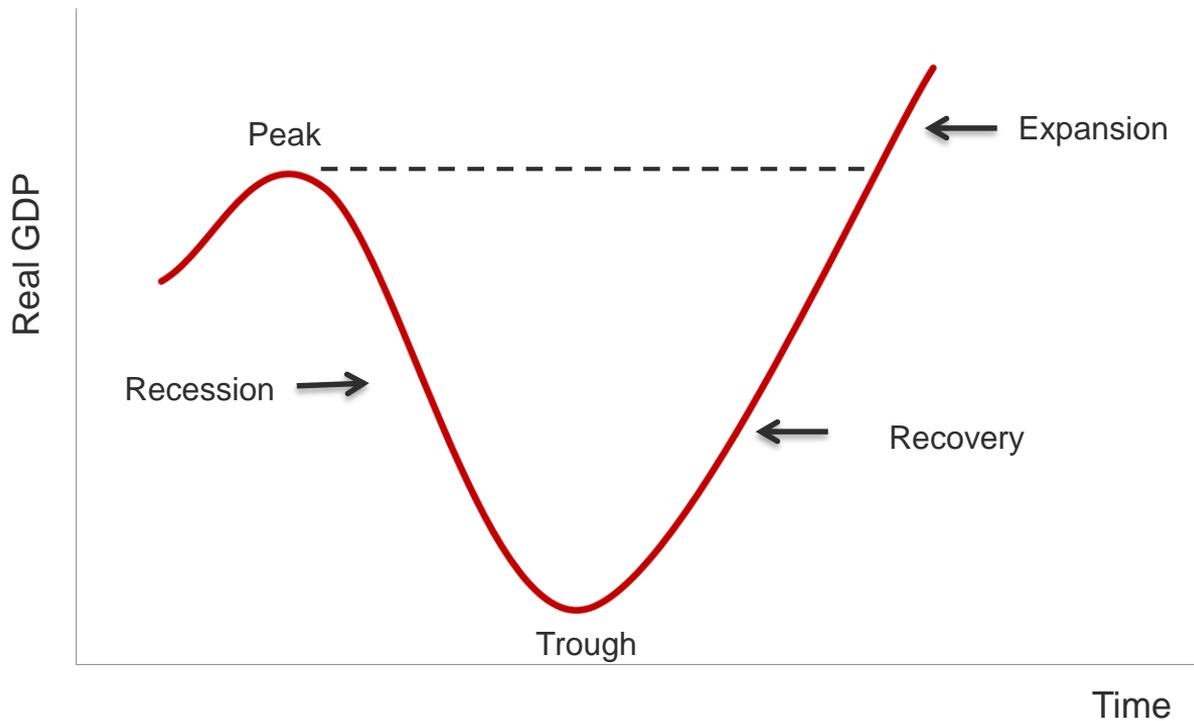


NBER Business Cycle



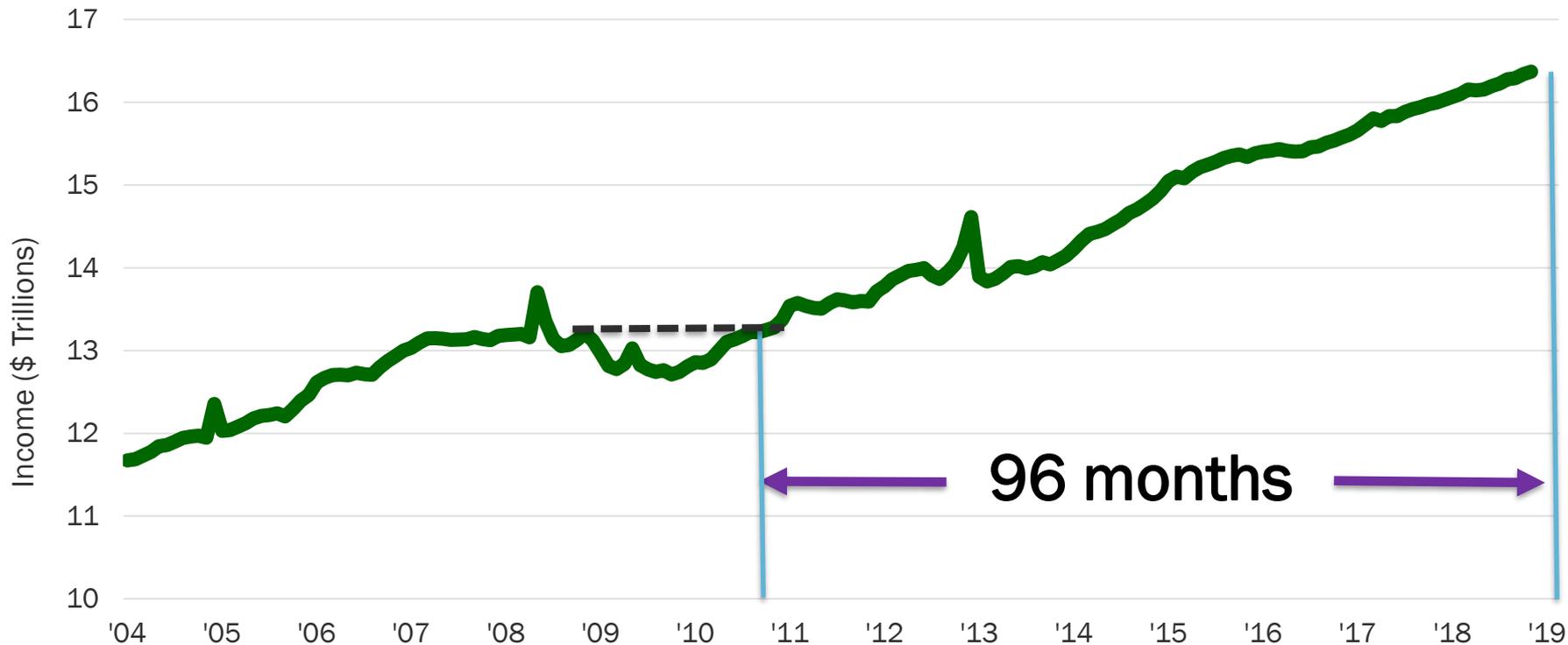


Jankowski Business Cycle





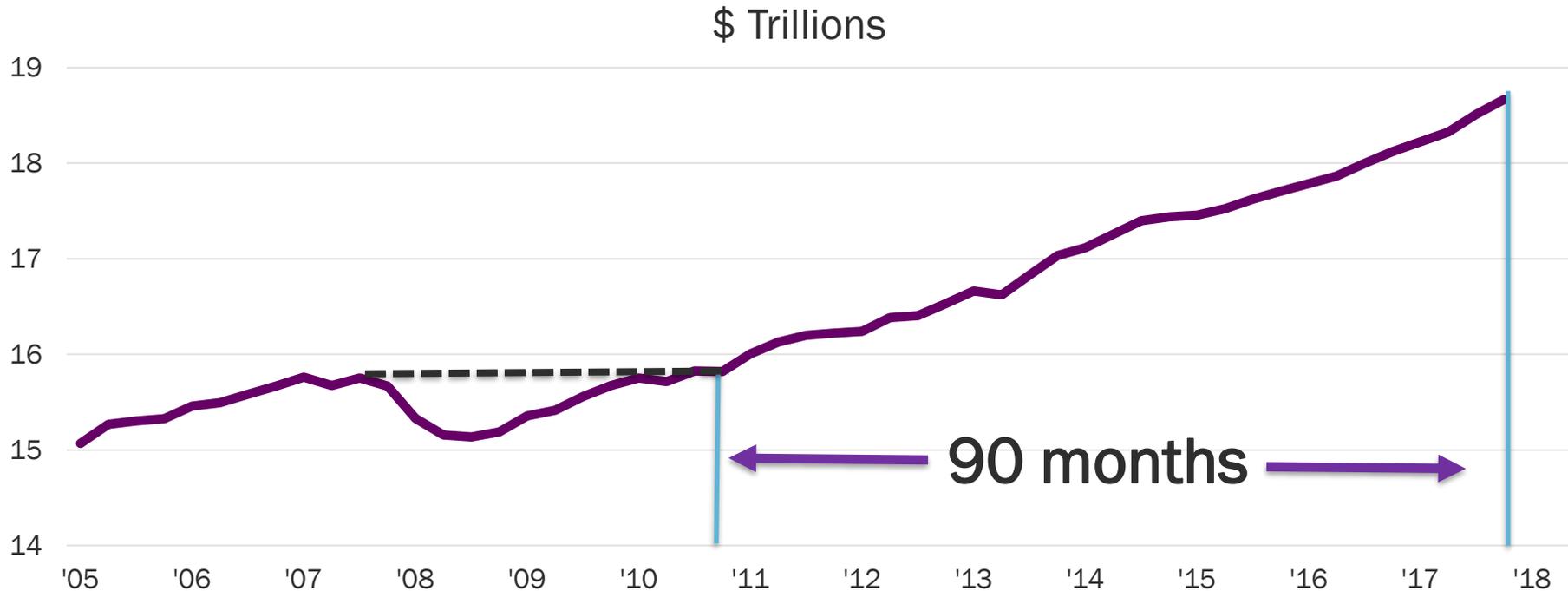
U.S. Real Personal Income



Source: U.S. Bureau of Economic Analysis



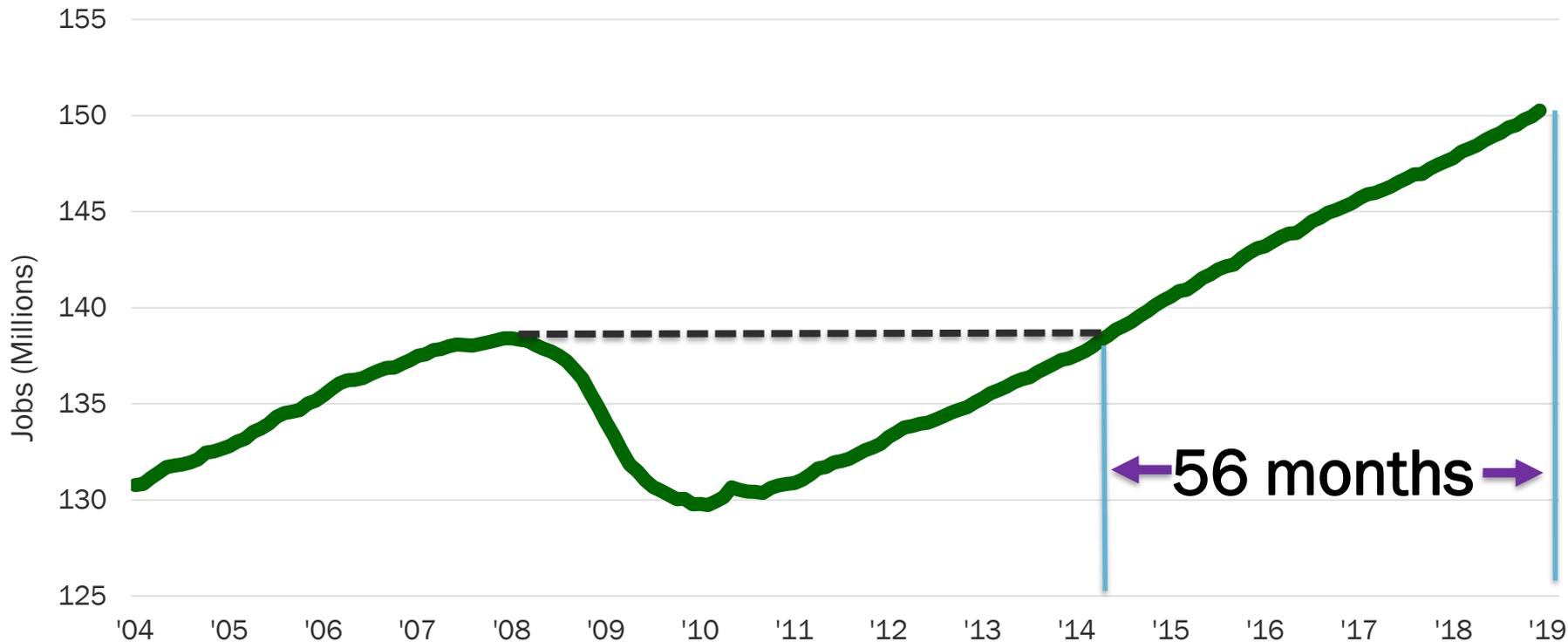
U.S. Real Gross Domestic Product



Source: U.S. Bureau of Economic Analysis



U.S. Payroll Employment



Source: U.S. Bureau of Labor Statistics



U.S. Industrial Production Index



Source: Board of Governors of the Federal Reserve System



What the current data tells us about the economy.





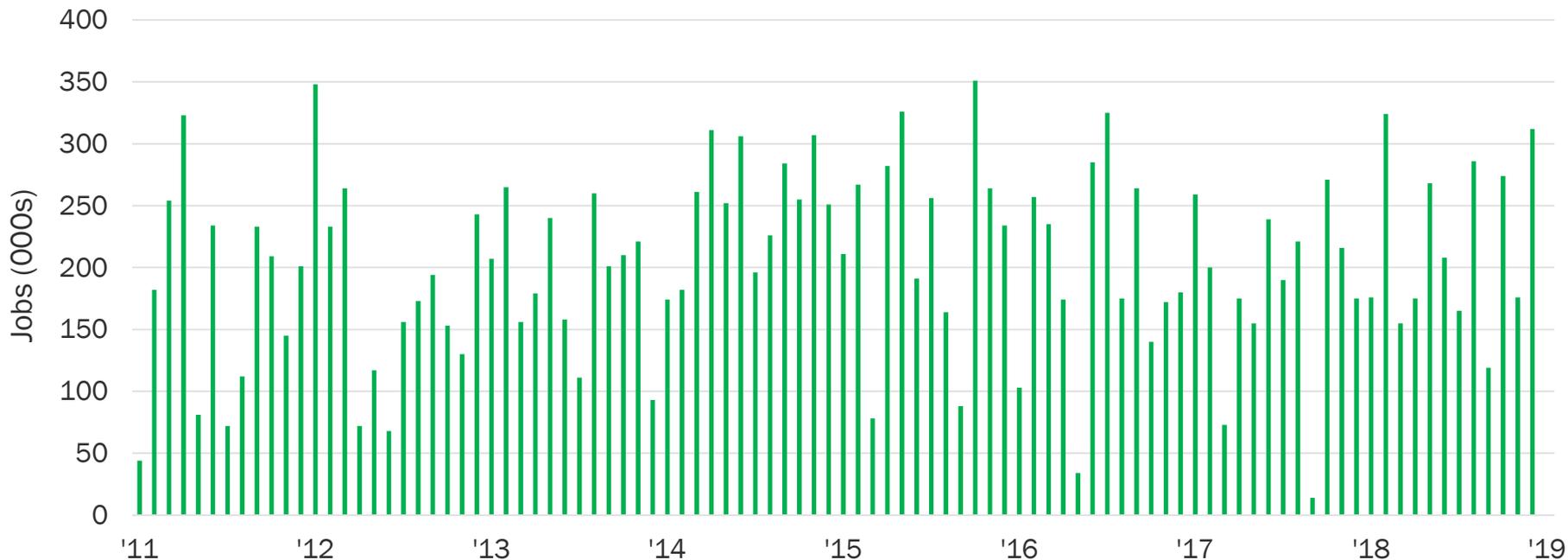
The Consumer Side of the Economy





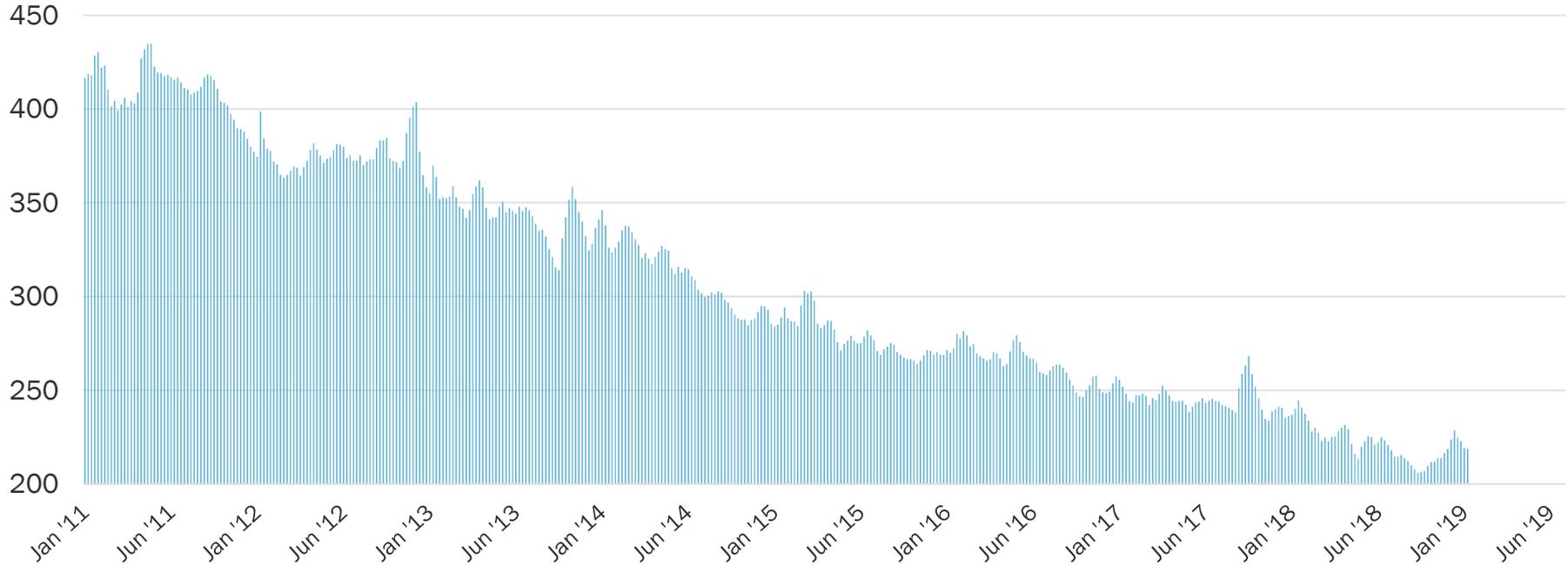
U.S. Job Growth

1-Month Net Change



Source: U.S. Bureau of Labor Statistics

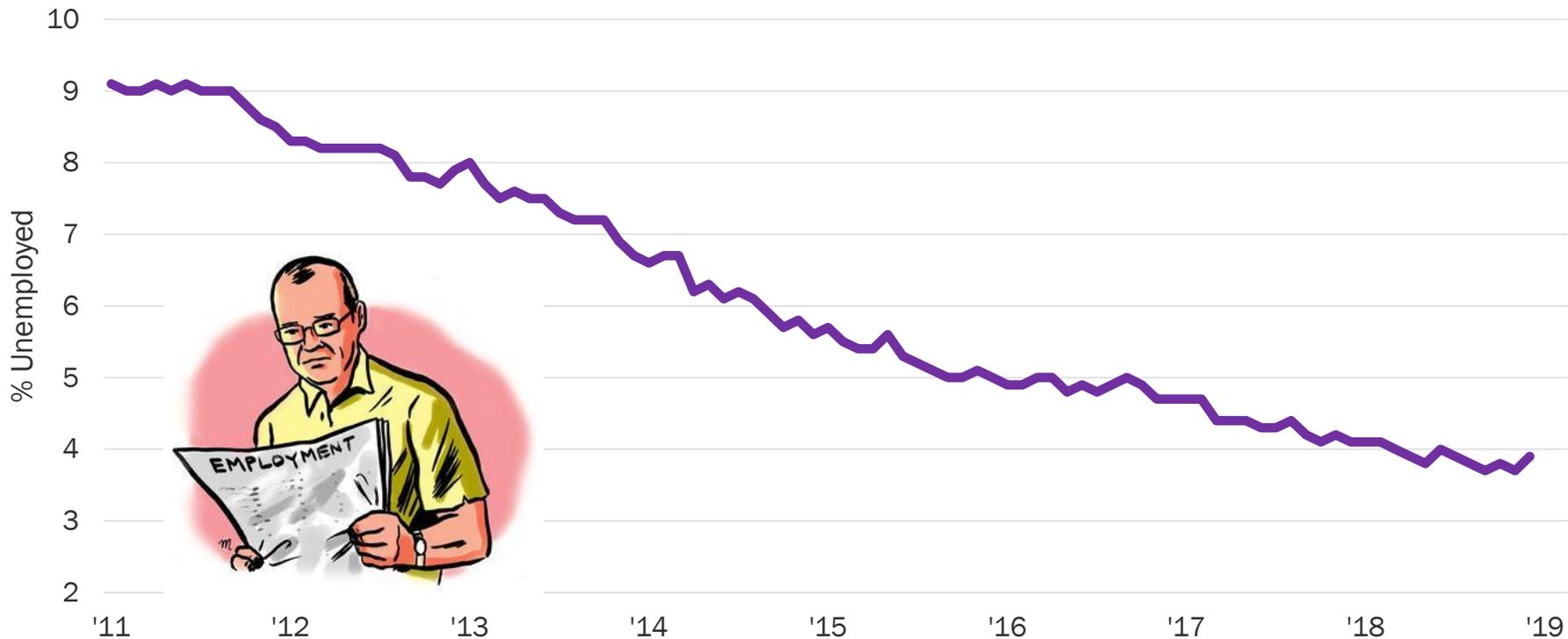
4-Week Moving Average, Seasonally Adjusted, 000s



Source: U.S. Employment and Training Administration



U.S. Unemployment Rate*



Source: U.S. Bureau of Labor Statistics

* seasonally adjusted

Percent Population 16 and Older in the Workforce

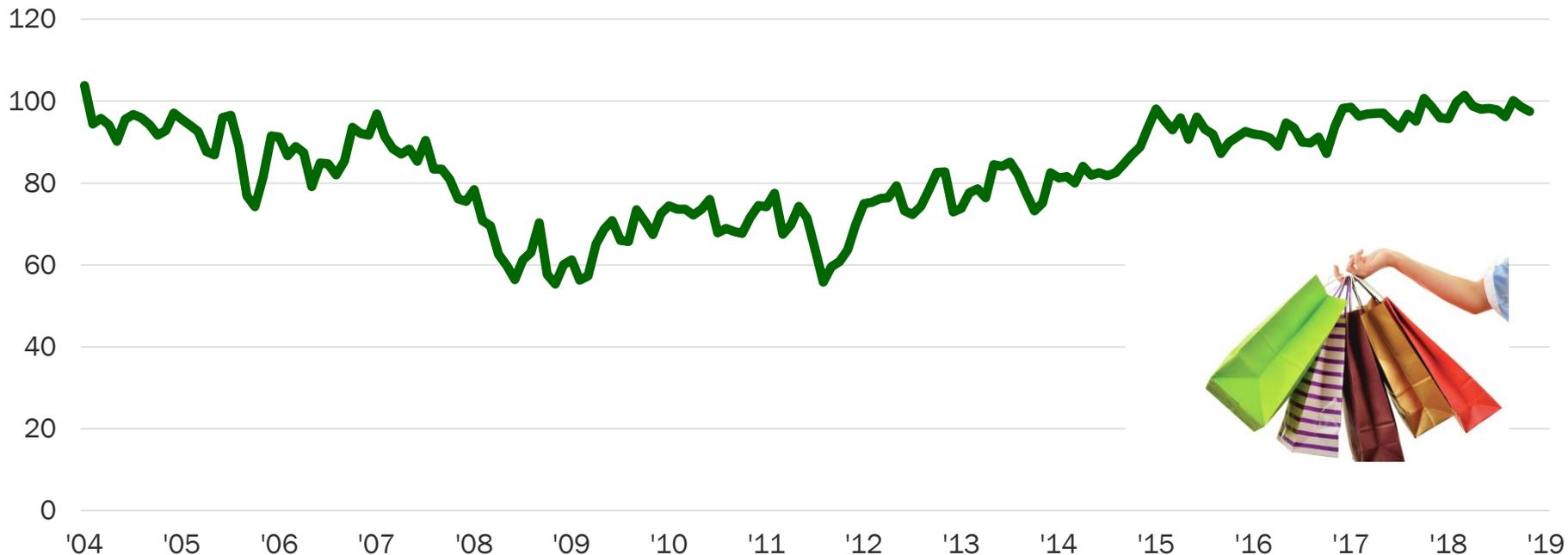


Source: U.S. Bureau of Labor Statistics



Consumer Confidence

1966:Q1=100, Not Seasonally Adjusted



Source: University of Michigan



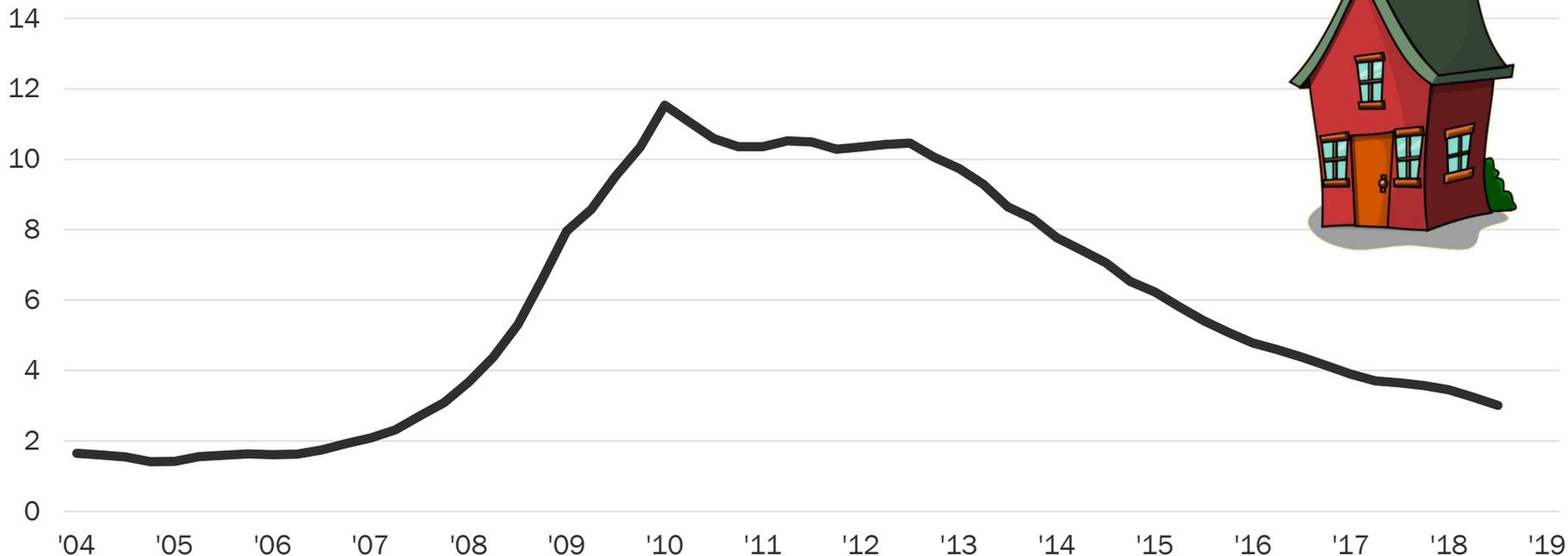
The Financial Side of the Economy





Delinquencies Single-Family Mortgages

Percent, Quarterly, Seasonally Adjusted

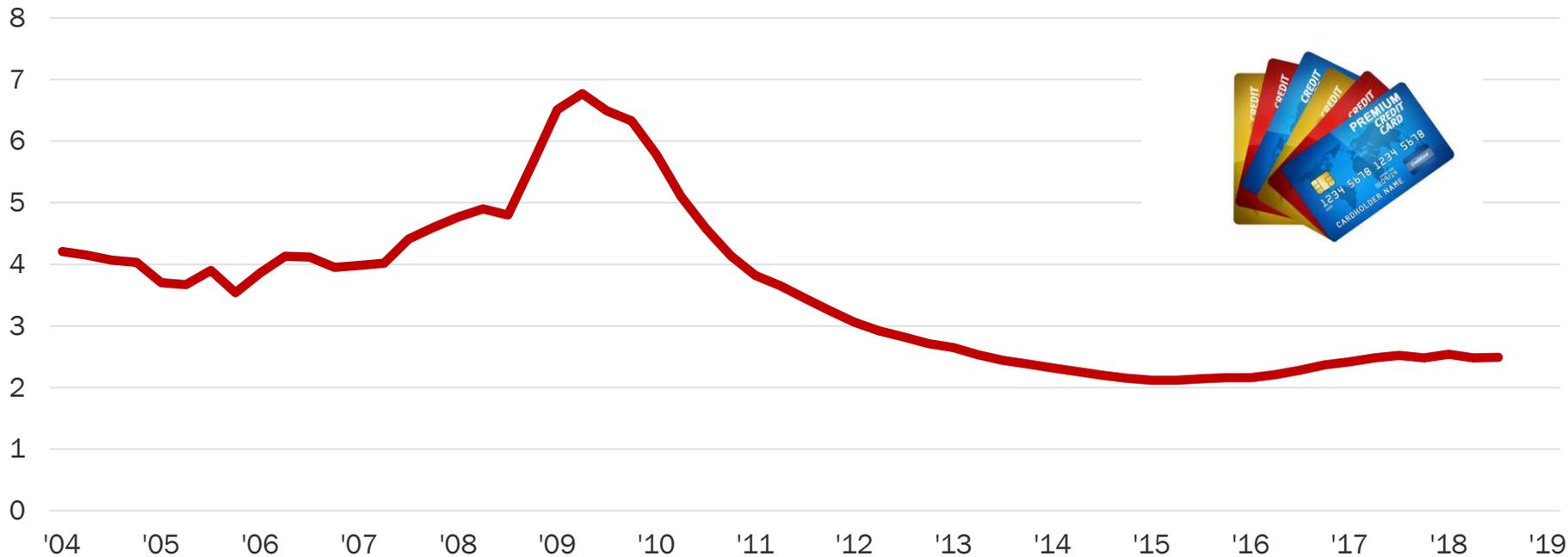


Source: Board of Governors of the Federal Reserve System



Credit Card Delinquencies

Percent, Quarterly, Seasonally Adjusted



Source: Board of Governors of the Federal Reserve System

Percent, Quarterly, Seasonally Adjusted

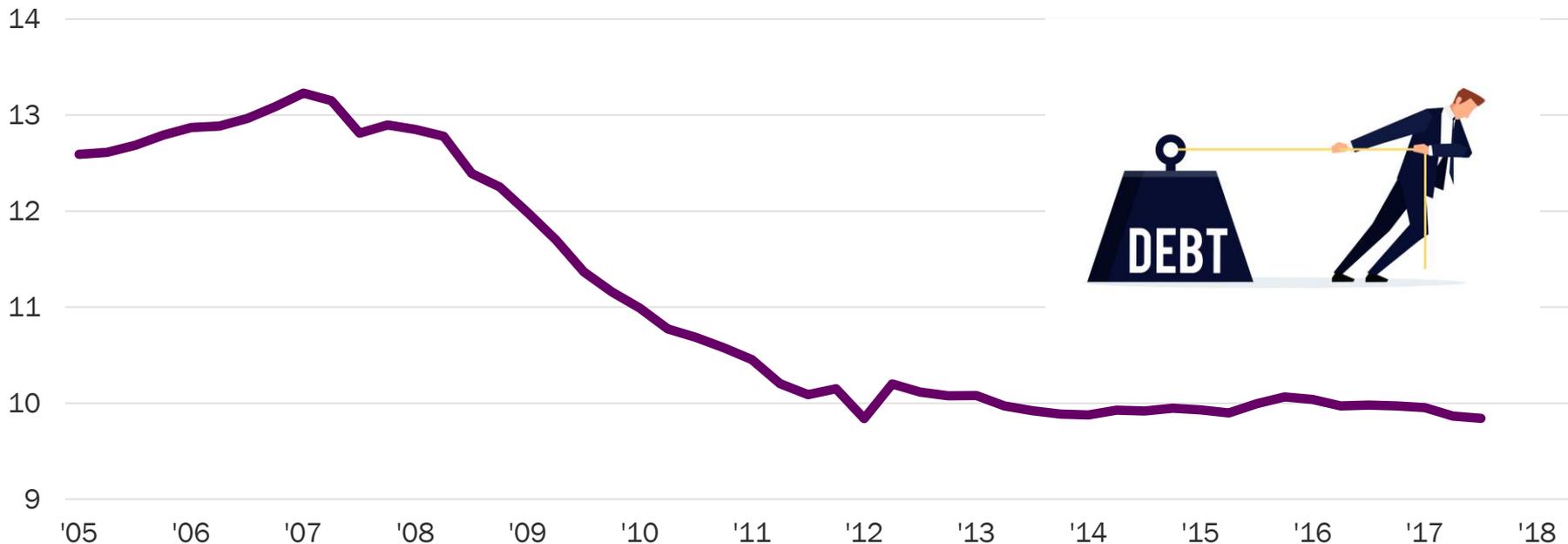


Source: Board of Governors of the Federal Reserve System



Household Debt as Percent of Personal Income

Percent, Quarterly, Seasonally Adjusted



Source: Board of Governors of the Federal Reserve System (US)

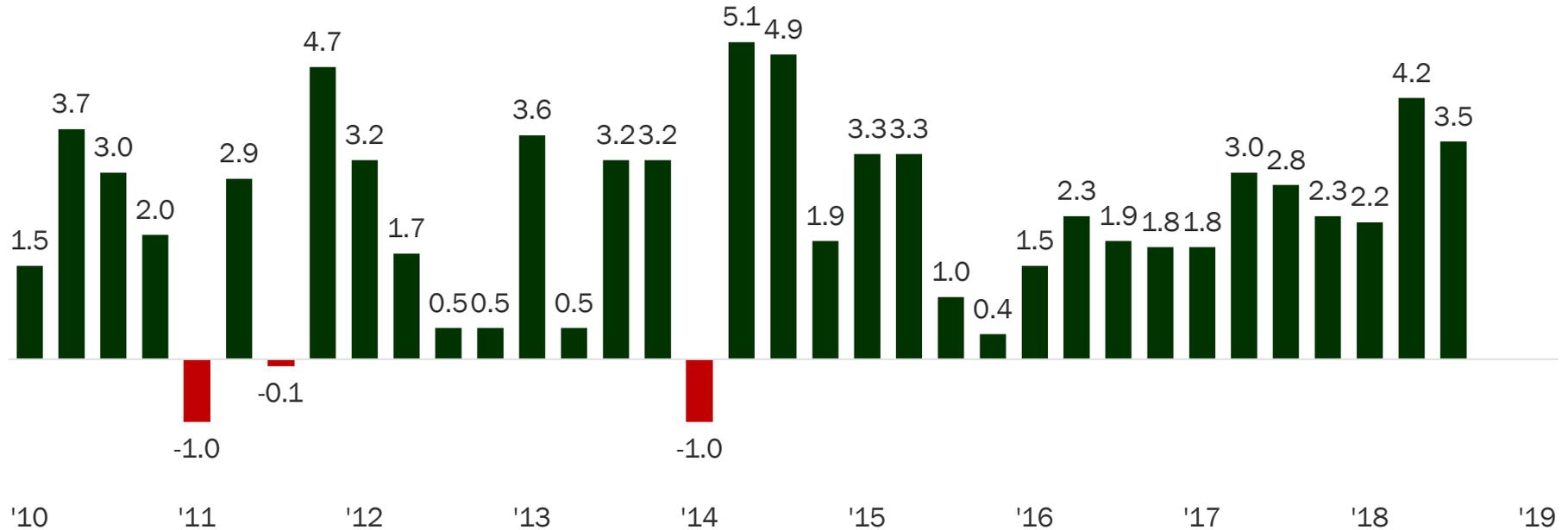


The Business Side of the Economy



U.S. Real Gross Domestic Product

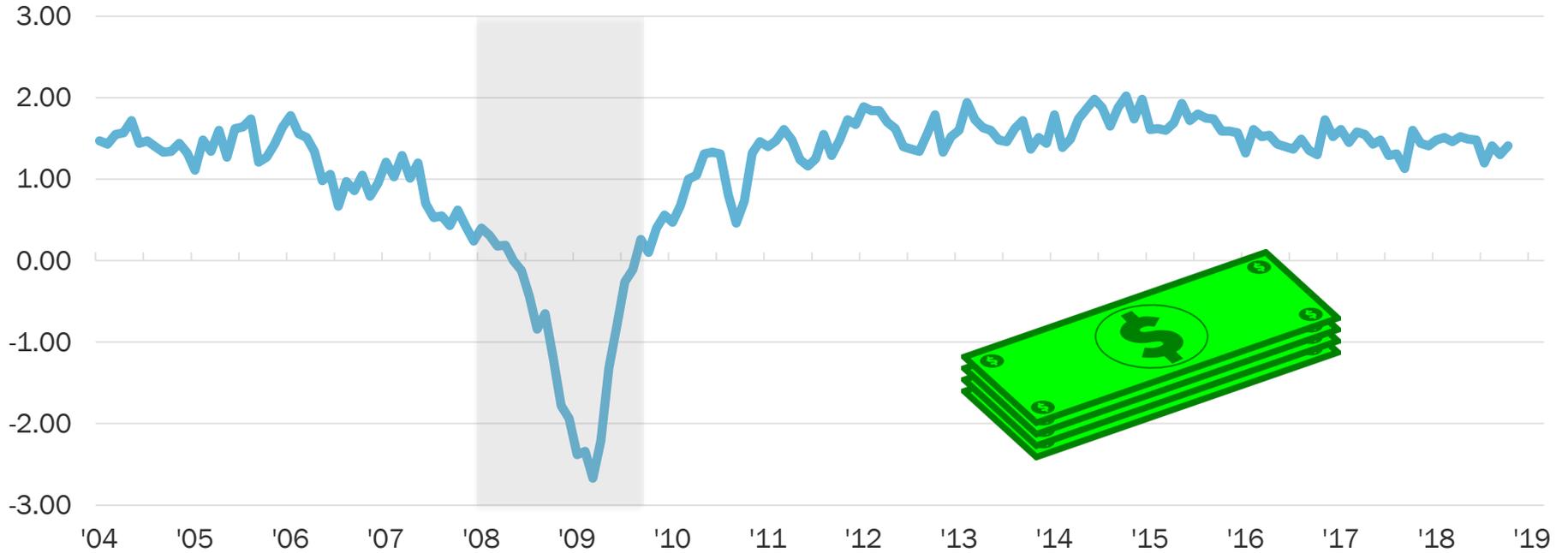
Growth Rate, % Change from Previous Quarter



Source: U.S. Bureau of Economic Analysis

U.S. Leading Economic Index

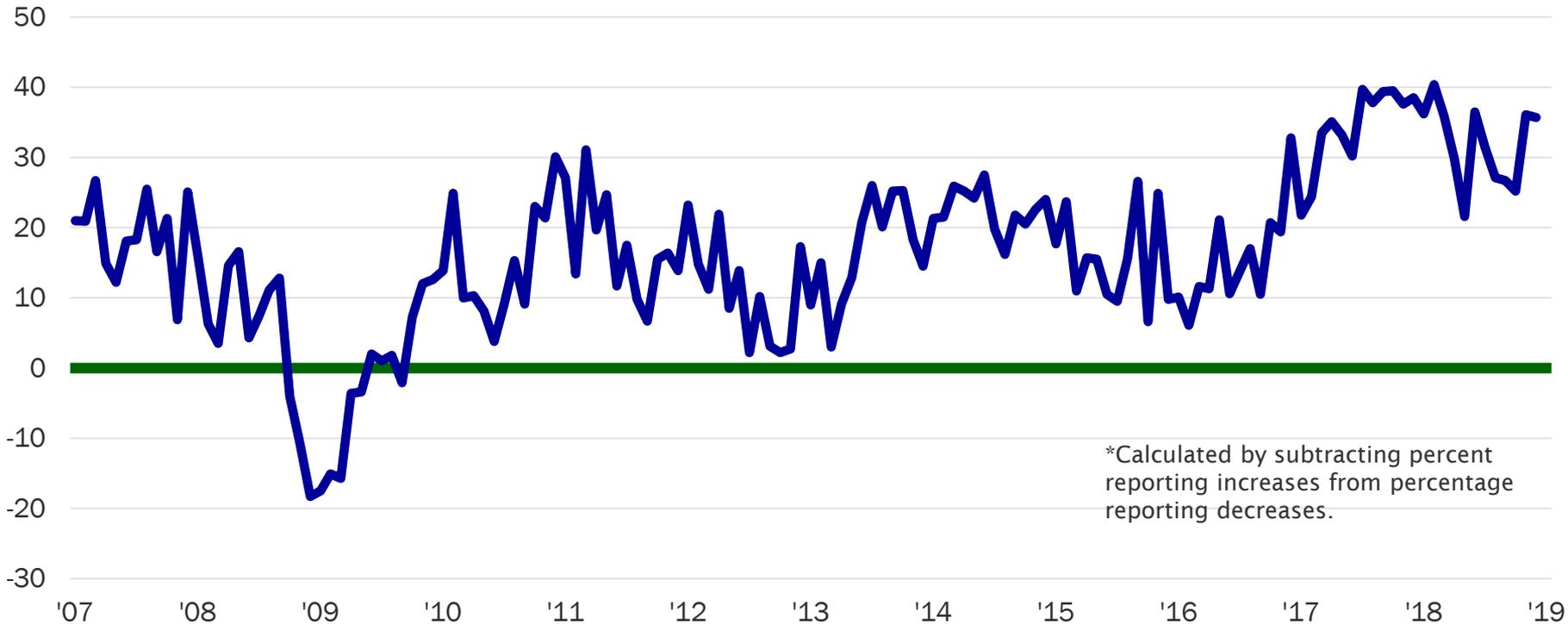
Percent, Monthly, Seasonally Adjusted



Source: Federal Reserve Bank of Philadelphia



Future Capital Expenditures Index*

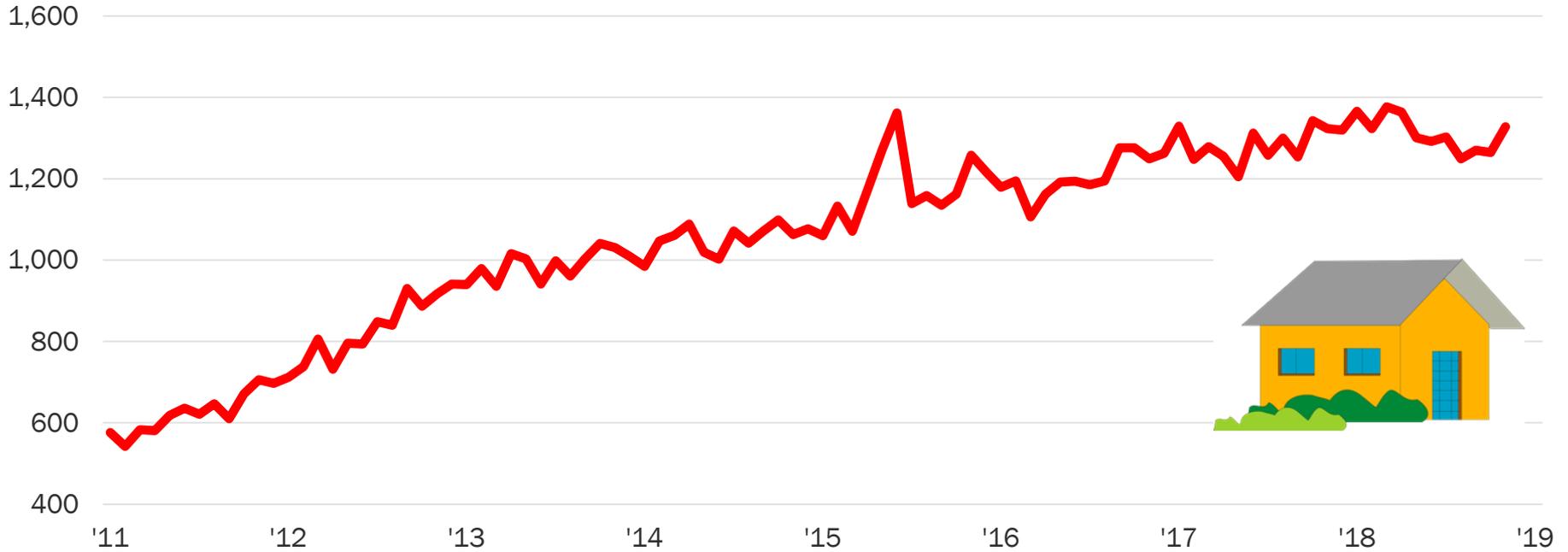


*Calculated by subtracting percent reporting increases from percentage reporting decreases.

Source: Federal Reserve Bank of Philadelphia

U.S. Housing Permits

Seasonally Adjusted Annual Rate

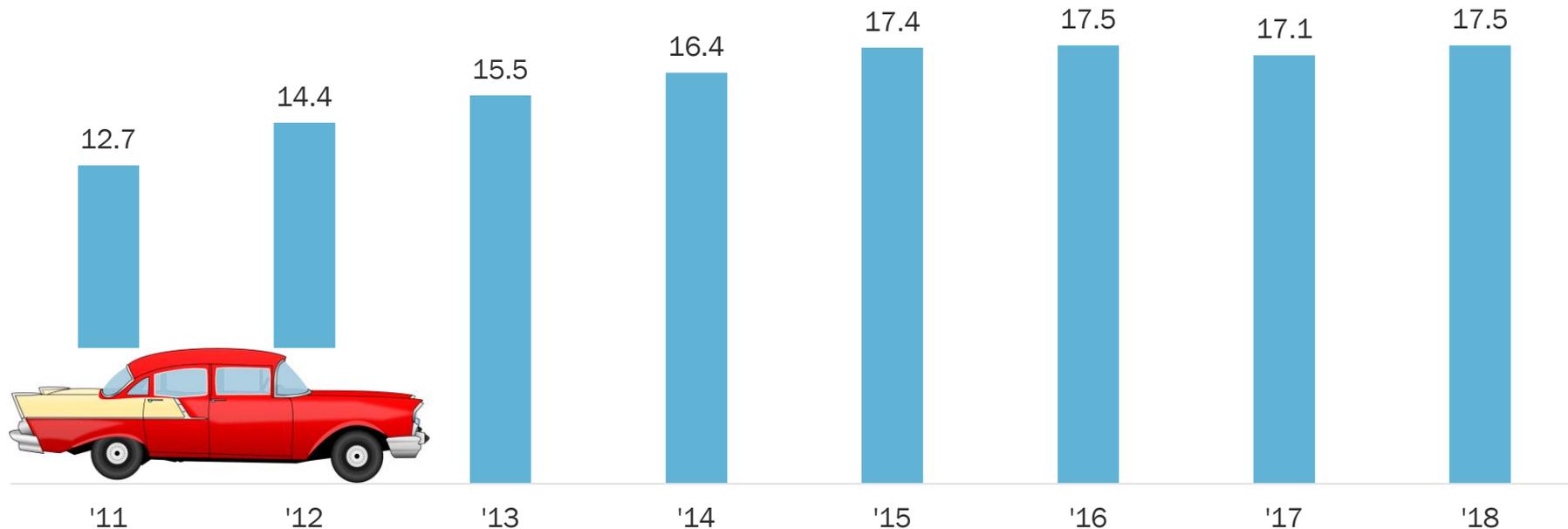


Source: U.S. Census Bureau



U.S. Vehicle Sales

New, Light-Duty Vehicles, Millions

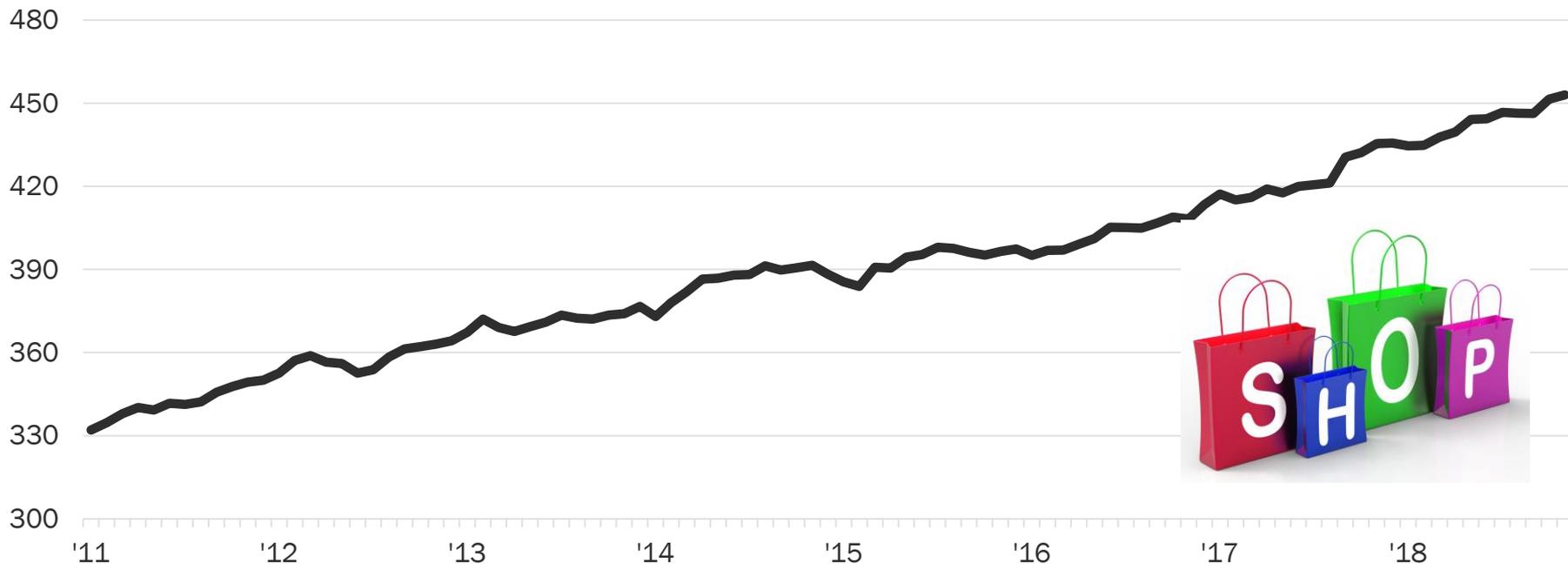


Source: National Automobile Dealers Association



U.S. Retail Sales

Billions of Dollars, Monthly, Seasonally Adjusted*



Source: U.S. Bureau of the Census

* excludes food services

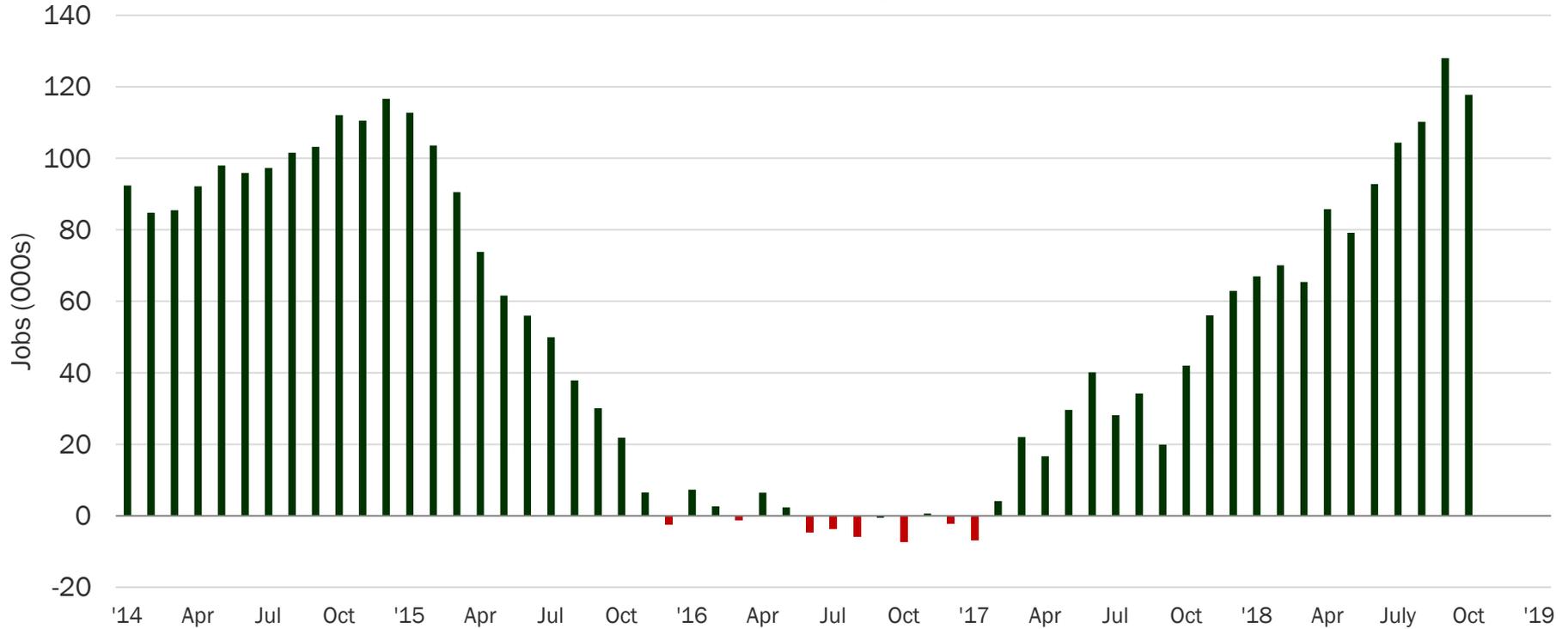


So, what about
Houston?



Payroll Employment

12-Month Running Totals



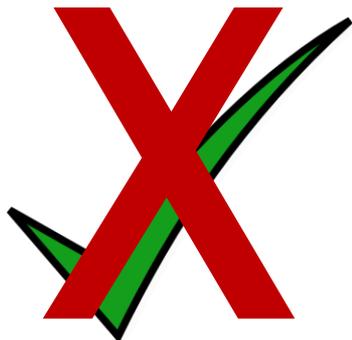
Source: Texas Workforce Commission



In my 2016 forecast . . .



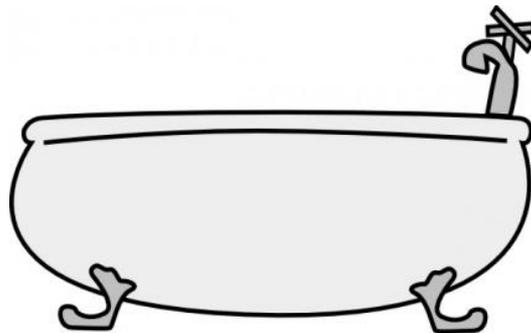
What Will the Recovery Look Like?



Quick Rebound



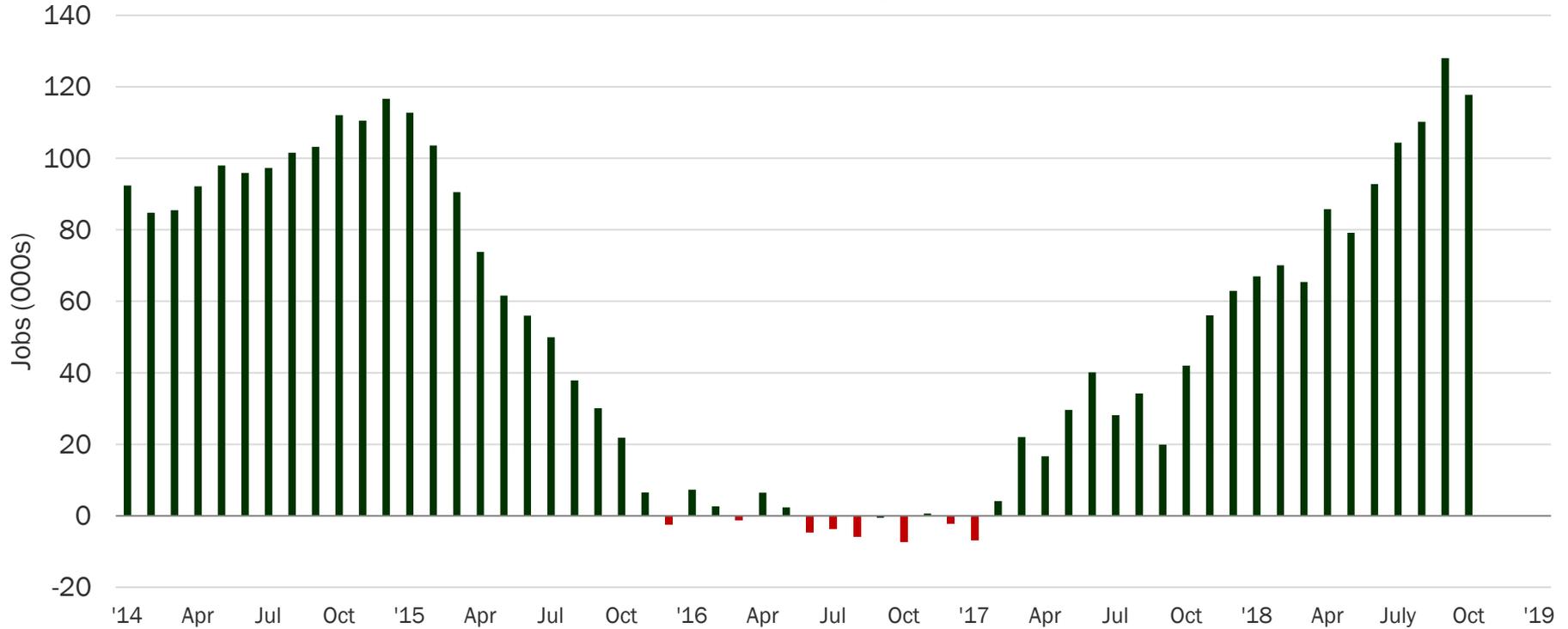
Slow, Gradual Rebound



Wide Bottom, Then Quick Rebound

Payroll Employment

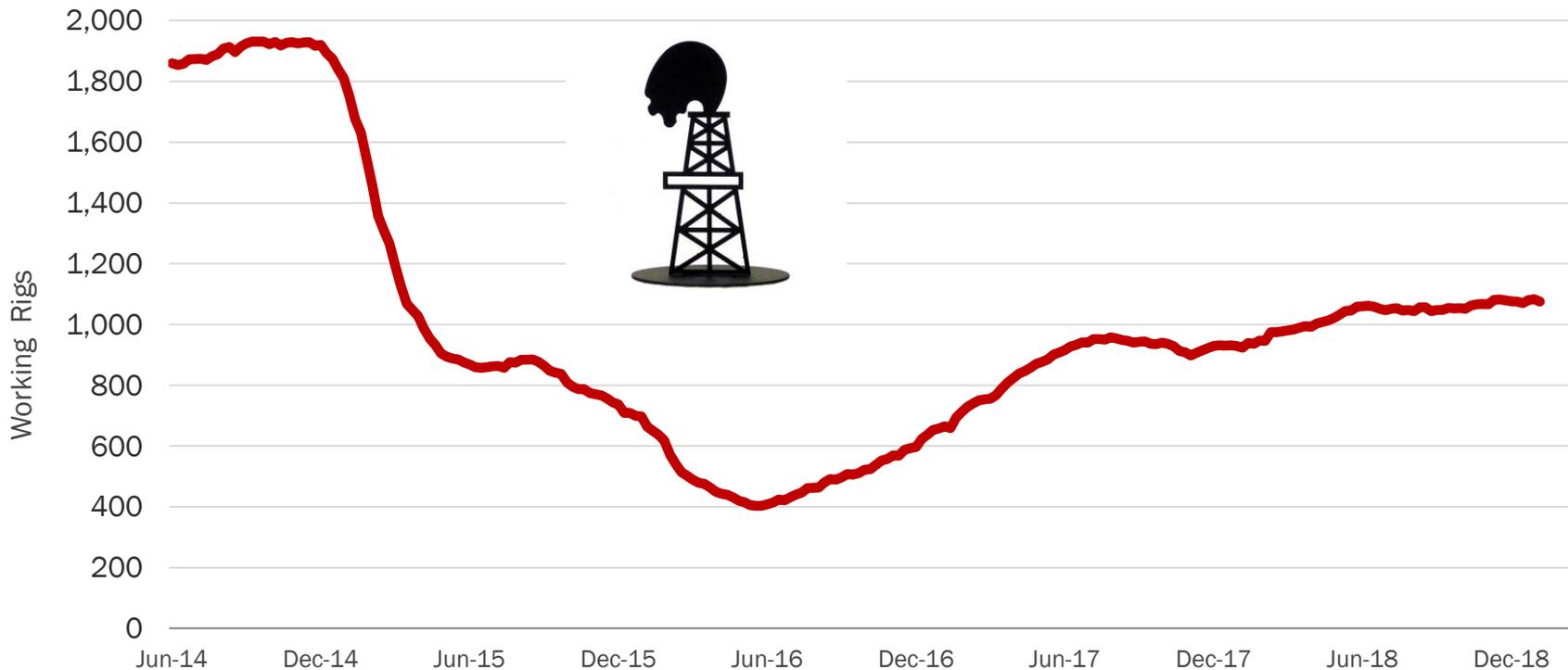
12-Month Running Totals



Source: Texas Workforce Commission



U.S. Rig Count



Source: Baker Hughes



Energy Employment in Houston

	Jobs Lost Peak to Trough*	Recouped To Date	% Recouped
Exploration & Production	-22,300	500	2.2
Oilfield Services	-20,800	9,200	41.8
Oilfield Equipment Mfg	18,000	5,100	22.9
Fab Metal Products	-20,800	8,700	44.2
Engineering	-11,200	5,300	47.3

* Peaks and troughs vary by sector

Source: Greater Houston Partnership calculations based on Texas Workforce Commission data



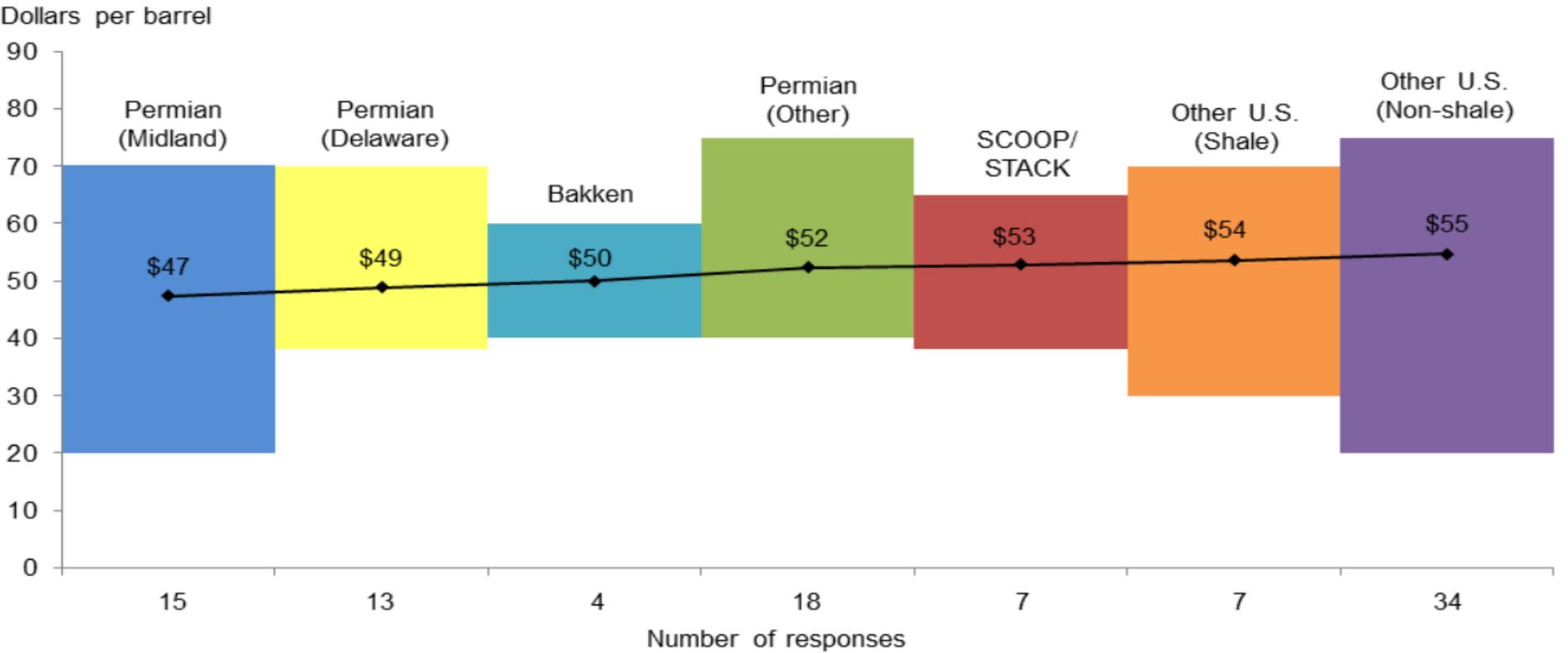
West Texas Intermediate

Crude Spot Price, Weekly Average



Source: U.S Energy Information Administration

In the top two areas in which your firm is active: What WTI oil price does your firm need to profitably drill a new well?



NOTES: Lines show the mean, and bars show the range of responses. Executives from 65 exploration and production firms answered this question during the survey collection period, March 14–22, 2018.
SOURCE: Federal Reserve Bank of Dallas.



Q3 2018 | HOUSTON

OFFICE MARKET



Office Market Shows Signs of Improvement

Absorption Turns Positive on Strong Job Growth

OVERVIEW

Office Market Returning One Step at a Time

The third quarter saw the Houston office market record positive absorption for the first time in 2018 and only the second time over the previous two years. Leasing activity increased significantly, fueled by strong job growth in the office-using sector. After struggling through several years following the energy downturn, office-using job growth is returning to form with 37,800 jobs created in the 12 months ending in August. Even more impressive, vacancy for the market declined for the first time

TRENDLINES

5-YEAR TREND

CURRENT QUARTER

JOB GROWTH



37.8k JOBS

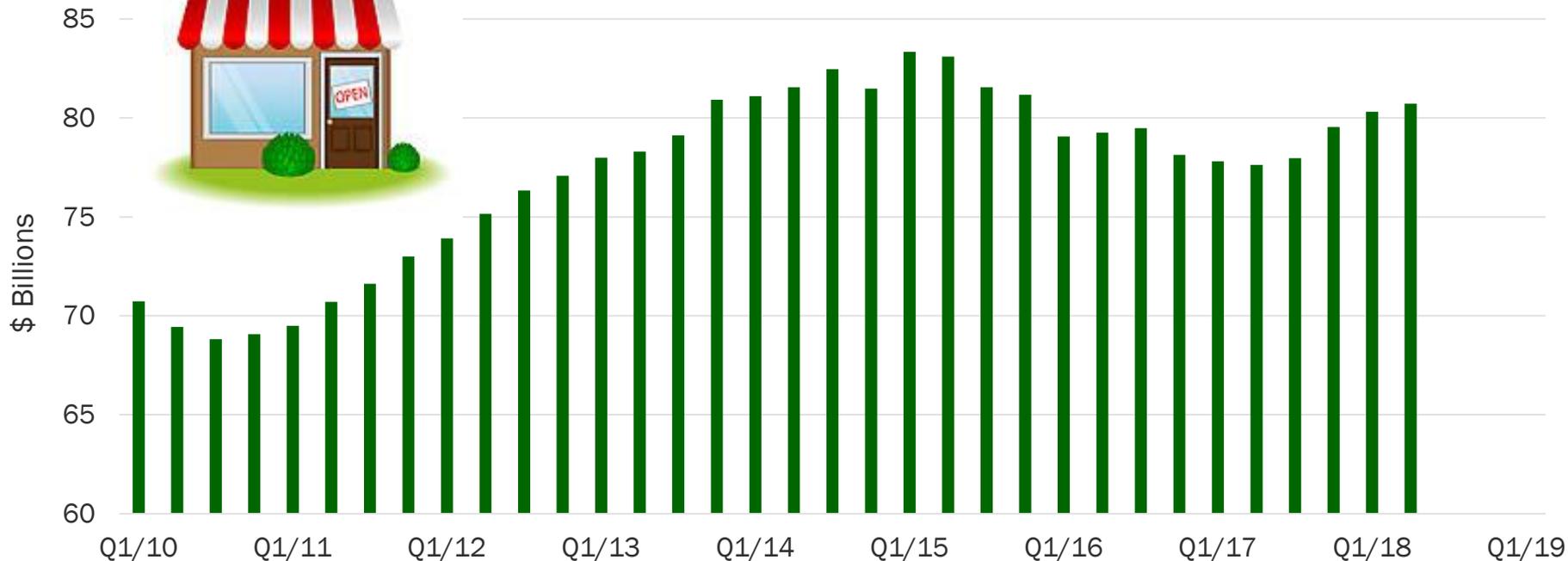
Office-using* jobs
gained year-over-year



Houston Retail Sales*



4-Quarter Moving Total



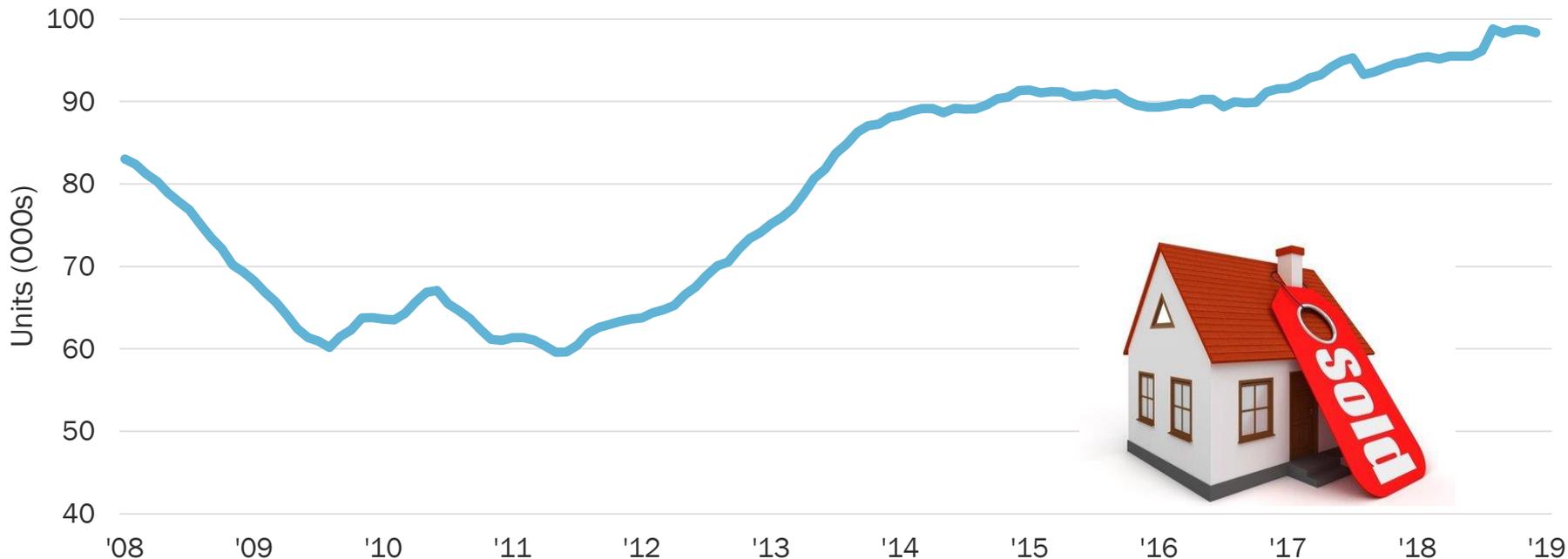
Source: Texas Comptroller of Public Accounts

* excludes gasoline purchases



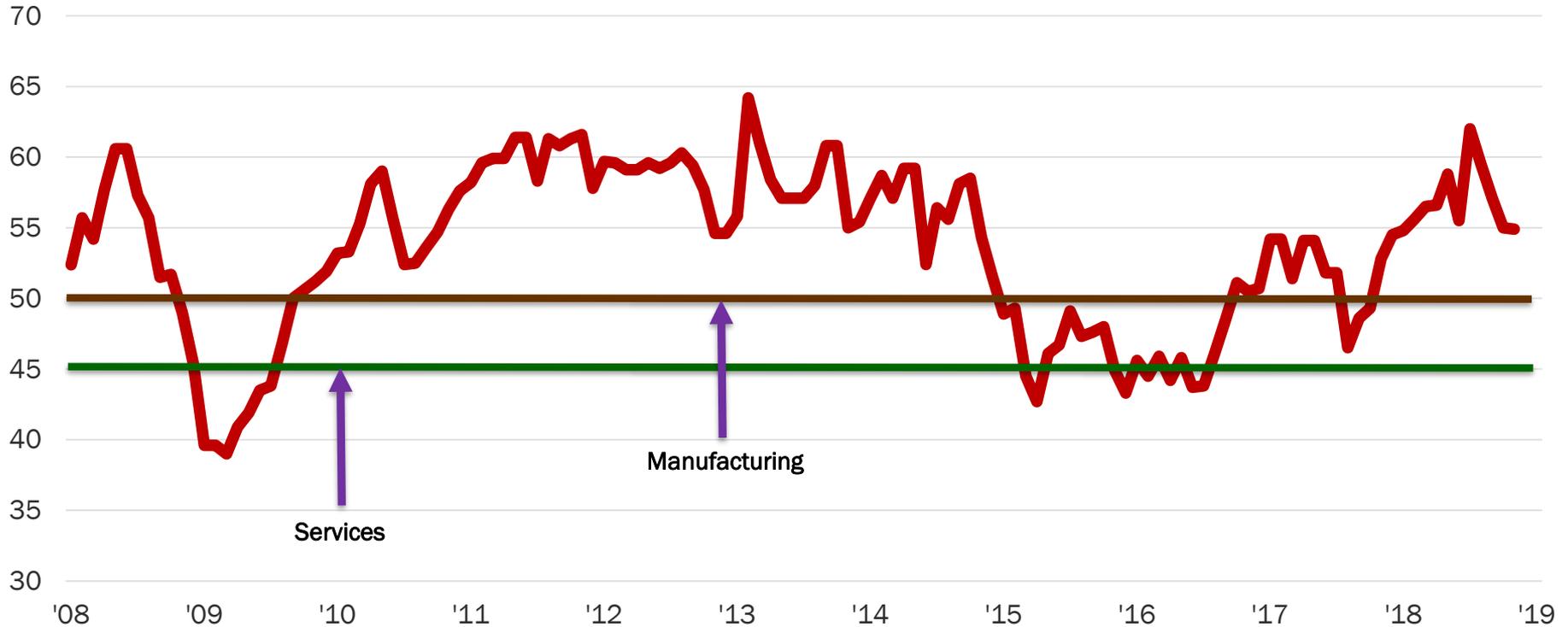
Houston Home Sales

12-Month Moving Total



Source: Houston Association of Realtors

Houston Purchasing Managers Index



Source: Institute for Supply Management - Houston



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What's driving Houston's Economy?





**The energy business
is profitable again.**



Financial Performance in Q3/16

Lost Money



NEWPARK



HALLIBURTON



Earned a Profit



Shell





Financial Performance in Q3/18

Lost Money

OCEANEERING

Swn
Southwestern Energy®

Weatherford®

Oil States®

Earned a Profit

Anadarko®

HALLIBURTON

bp

Apache

ConocoPhillips



eog resources

BAKER
HUGHES

Chevron

NOV

HESS

Schlumberger

MarathonOil

ExxonMobil



FMC



Shell

OXY

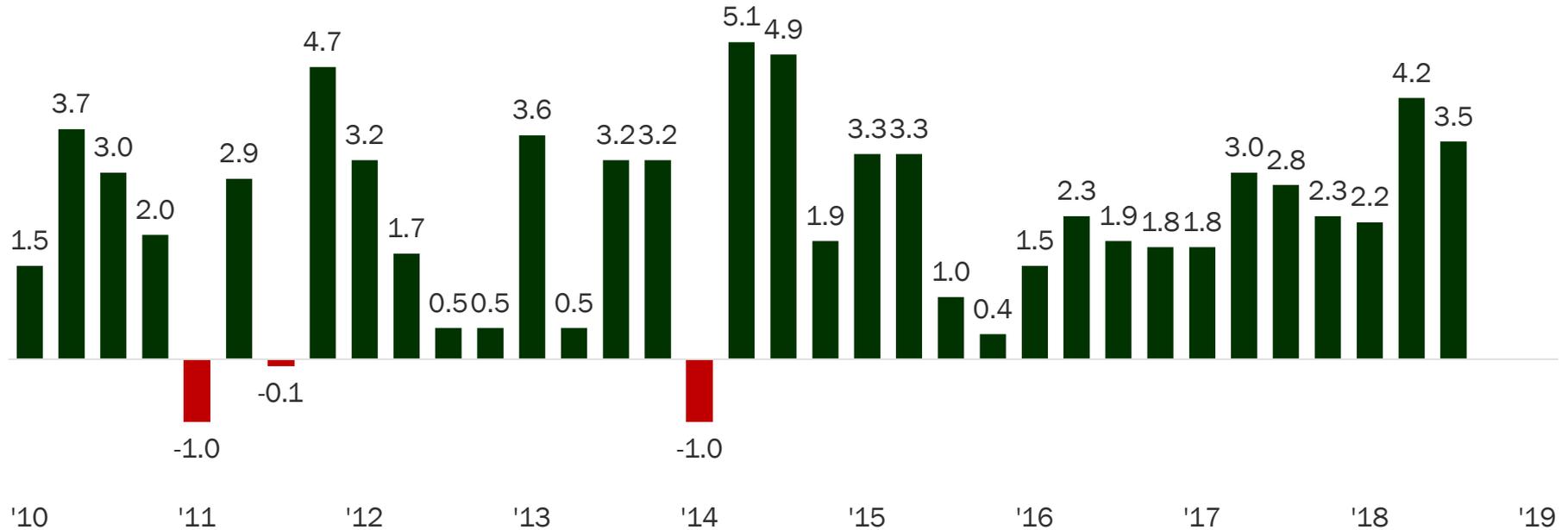
NEWPARK



**Strongest U.S.
growth since
Q4/14.**

U.S. Real Gross Domestic Product

Growth Rate, % Change from Previous Quarter



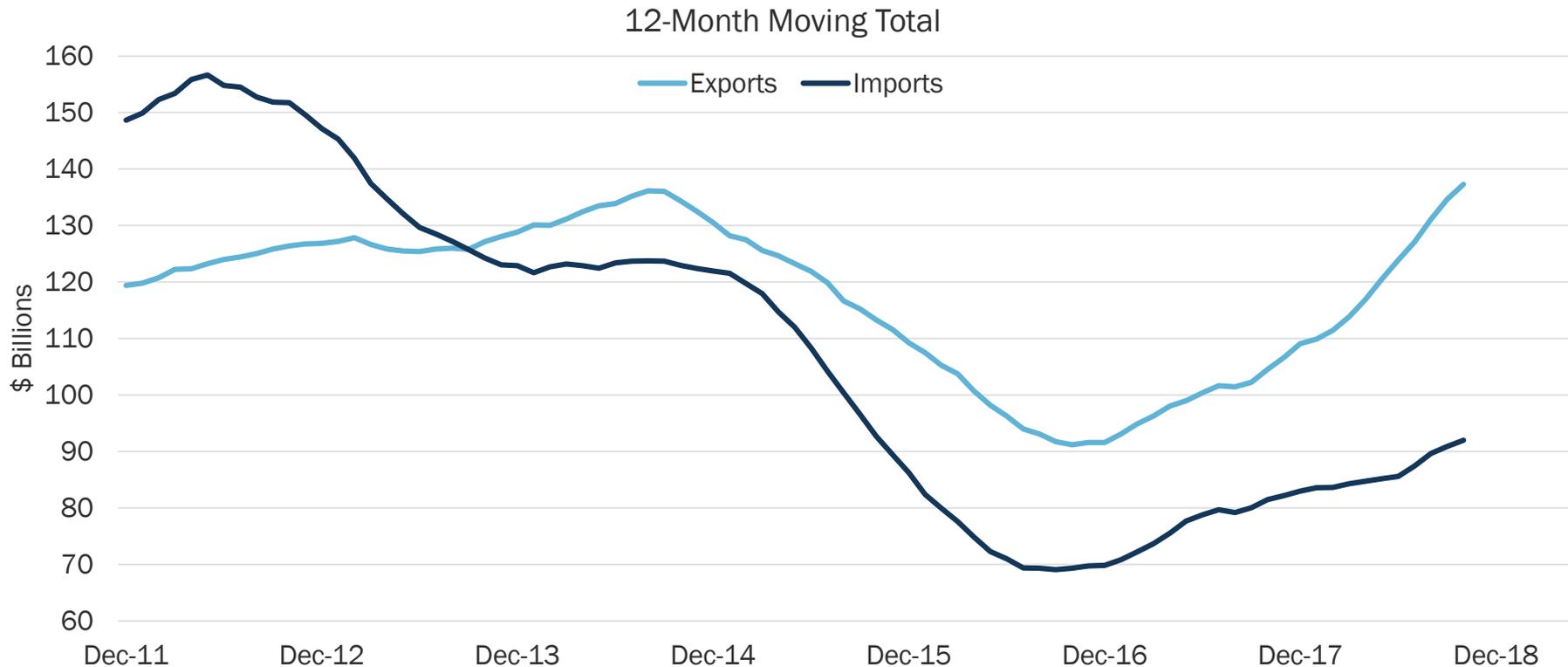
Source: U.S. Bureau of Economic Analysis



Trade remains
robust.



Houston Customs District Traffic

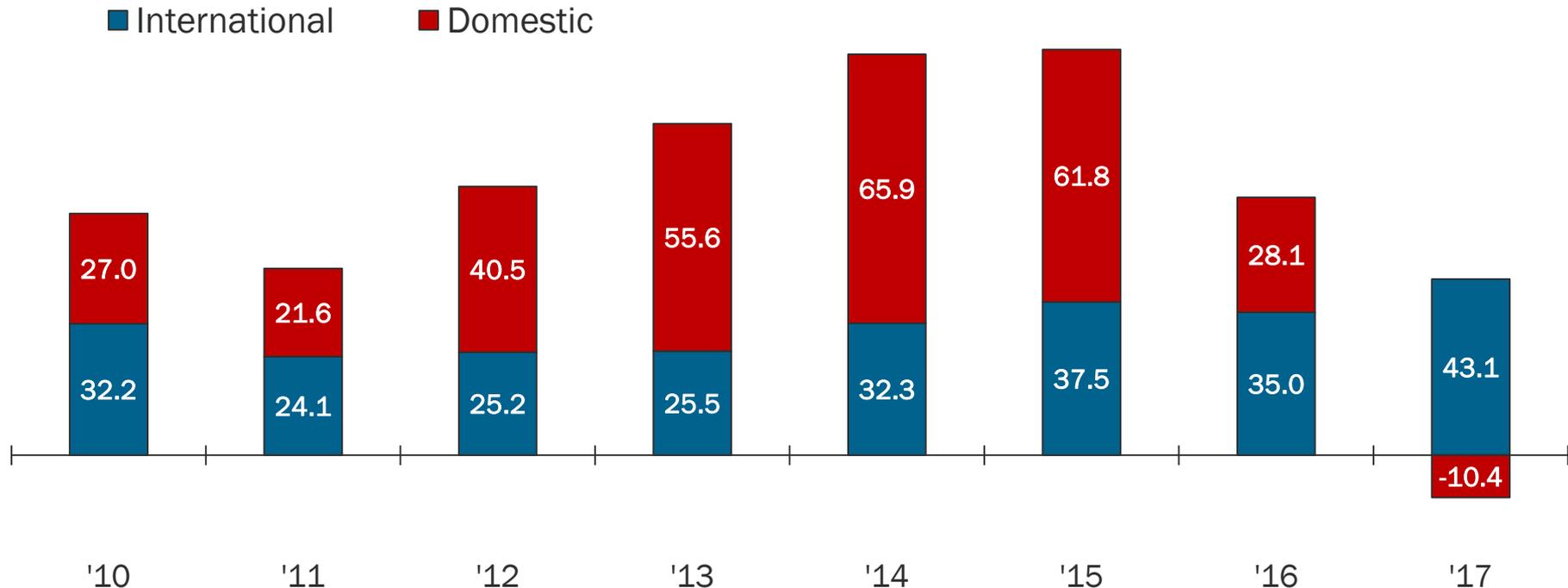




**People continue to
move to Houston.**



Net Migration (000s)



Source: U.S. Census Bureau



**Companies continue
to move to Houston.**

Significant Relocations and Expansions



MAN Diesel & Turbo

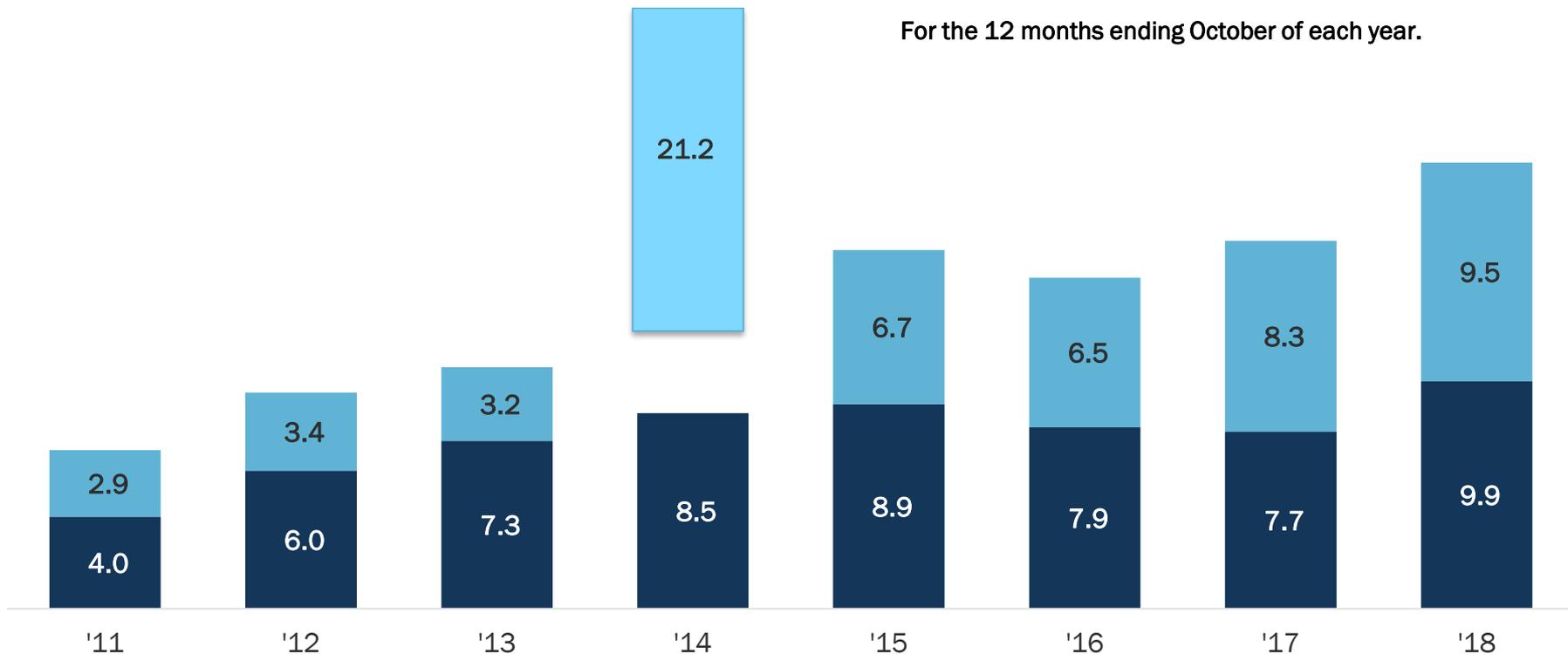






Construction Contracts (\$ Billions)

For the 12 months ending October of each year.



Source: Dodge Data & Analytics

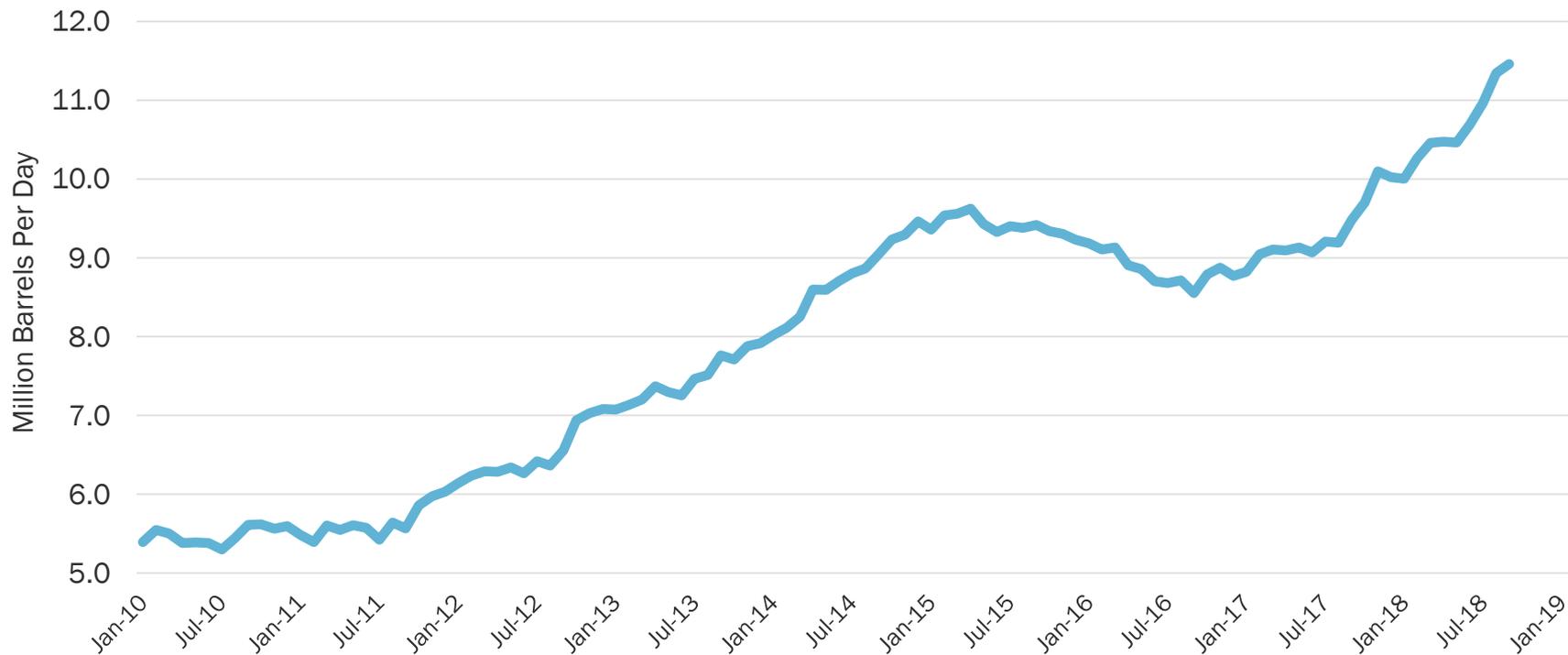


What, Me Worry?



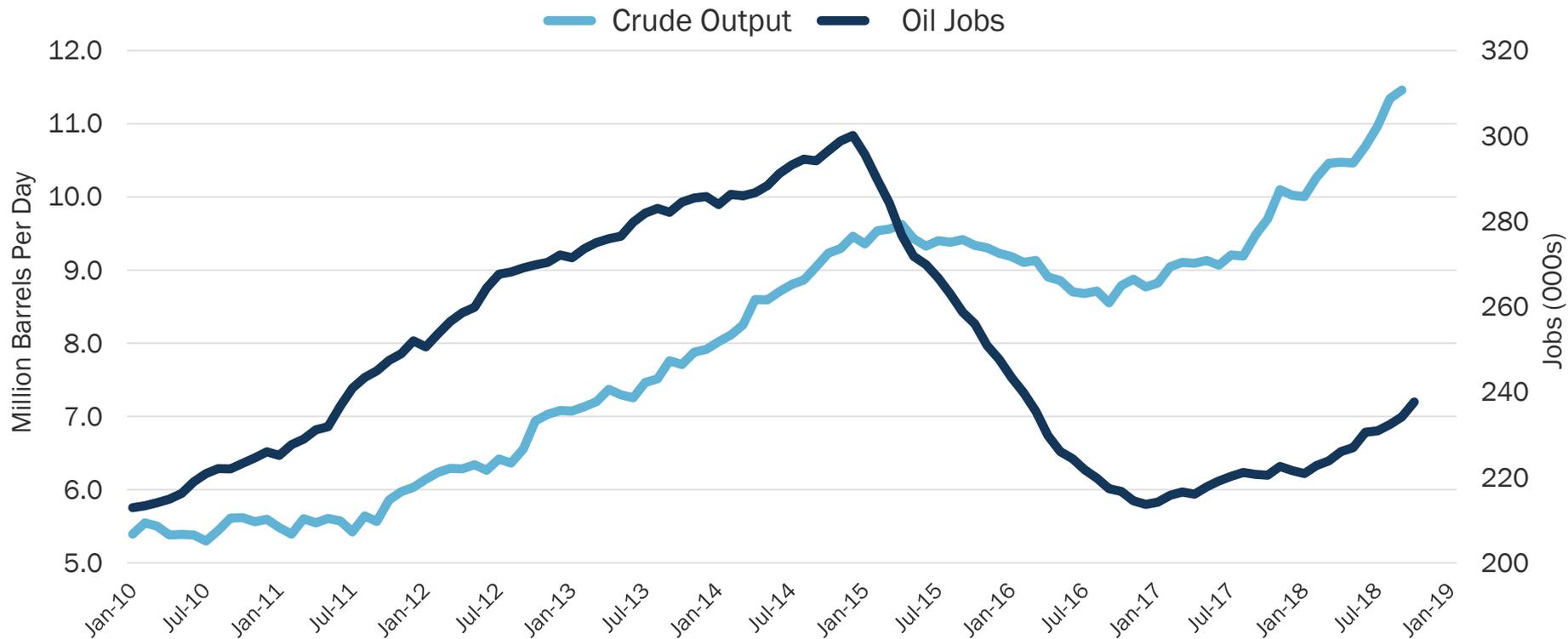


U.S. Crude Output



Source: U.S. Energy Information Administration (E.I.A.)

U.S. Crude Output vs. Houston Oil Jobs*

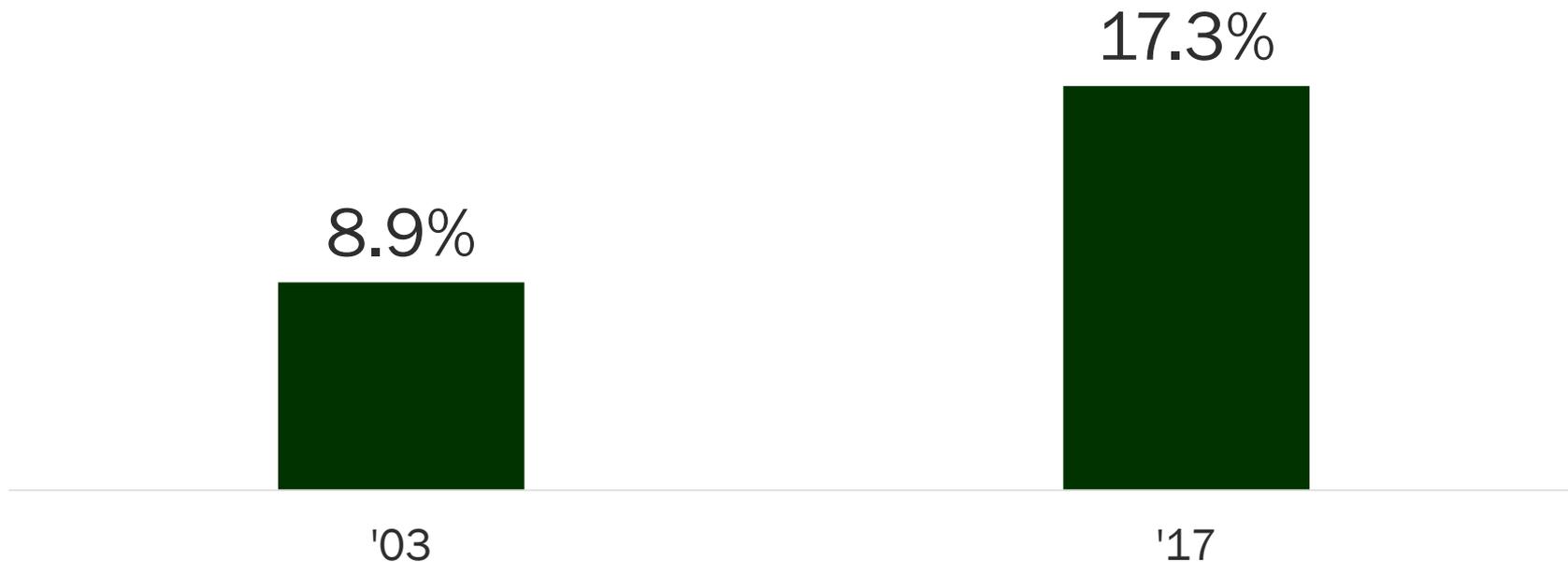


Source: U.S. E.I.A., Texas Workforce Commission

* Exploration, oil field services, related manufacturing, engineering



Exports Share of Houston GDP



Source: The Brookings Institution



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The Washington Post

US-China trade war could soon pose a serious economic threat



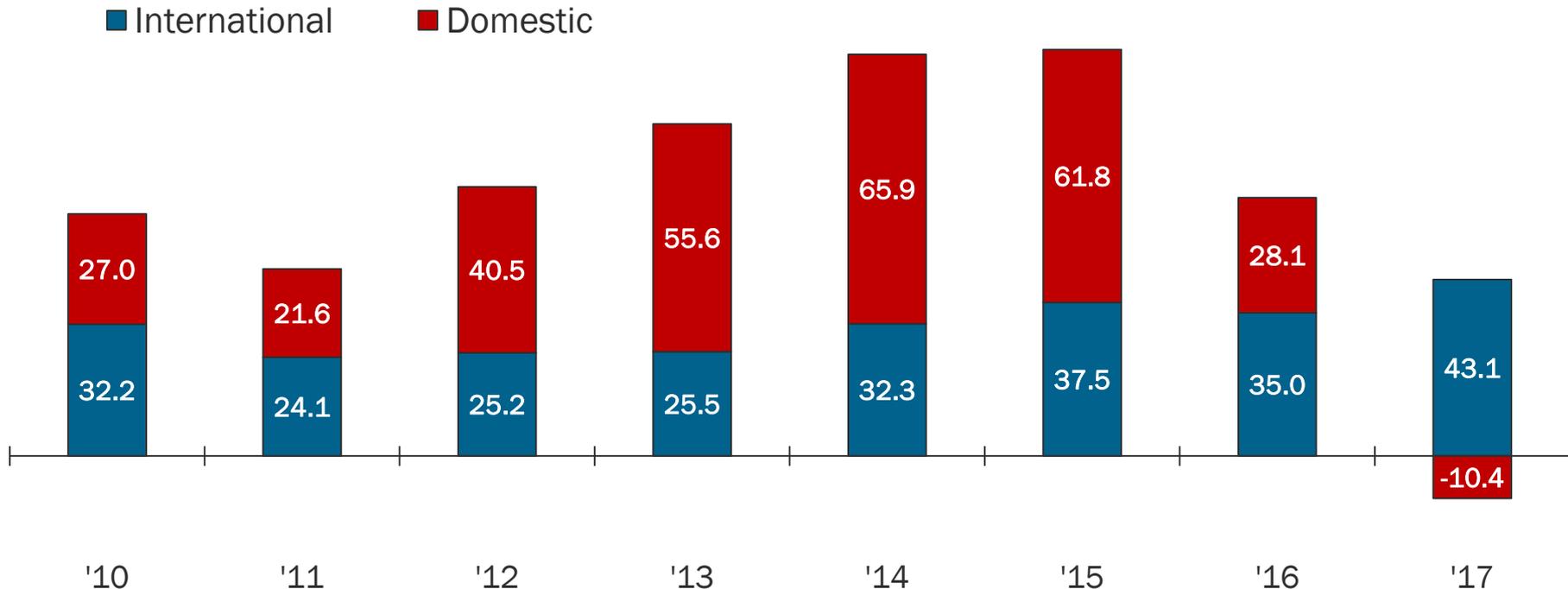
Twelve executives break down how the US-China tariffs are hurting their US companies



- Executive Order 13678
 - ▶ Enhancing Public Safety in the Interior of the United States
- Executive Order 13769, 13780
 - ▶ Protecting the Nation from Foreign Terrorist Entry into the United States
- Executive Order 13767
 - ▶ Border Security and Immigration Enforcement Improvements
- Reforming American Immigration for Strong Employment Act
- Deferred Action for Childhood Arrivals
- Immigrant Investor Program (EB-5)
- H1-B Visas



Net Migration (000s)

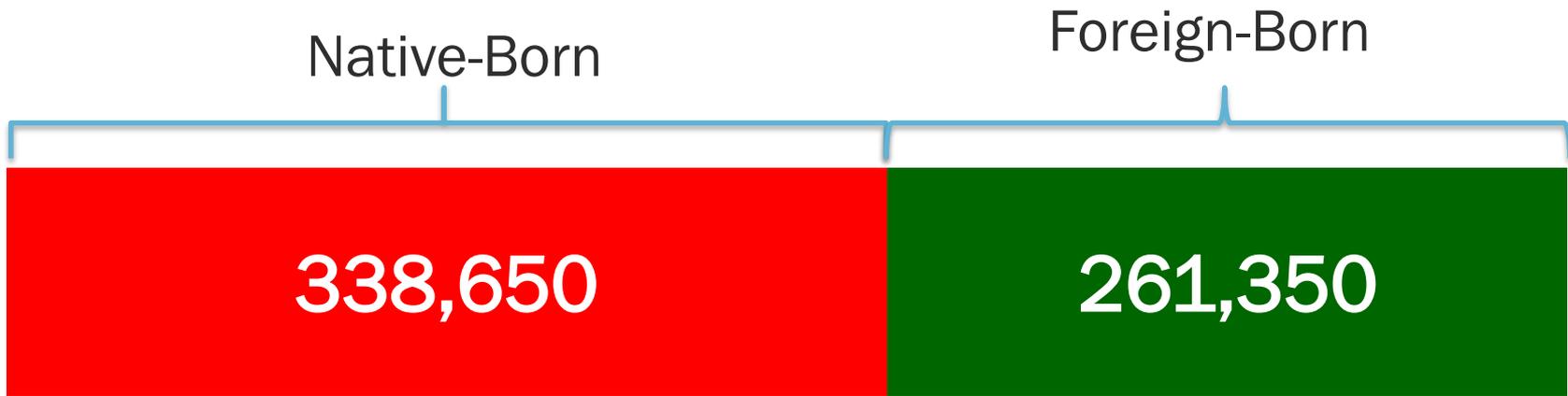


Source: U.S. Census Bureau



Houston Workforce Growth

Approx. 600,000 residents joined local workforce ('06 - '16)



Source: Partnership calculations based on U.S. Census Bureau data



A self-fulfilling
prophecy?





Global growth has peaked and will slow in 2019 according to OECD

The Telegraph

OECD Sees Trade Tensions Hindering Global Growth

THE WALL STREET JOURNAL.



Trade Tariffs, Higher Interest Rates
Slowing Global Growth, OECD Says



OECD Economic Outlook projections

Real GDP growth revised down

Year-on-year, %. Arrows for 2018 and 2019 indicate the direction of revisions since September 2018.*

	2018	2019	2020		2018	2019	2020
World	3.7	3.5	3.5				
G-20	3.8	3.7	3.7				
Australia	3.1	2.9	2.6	Argentina	-2.8	-1.9	2.3
Canada	2.1	2.2	1.9	Brazil	1.2	2.1	2.4
Euro area	1.9	1.8	1.6	China	6.6	6.3	6.0
Germany	1.6	1.6	1.4	India ¹	7.5	7.3	7.4
France	1.6	1.6	1.5	Indonesia	5.2	5.2	5.1
Italy	1.0	0.9	0.9	Mexico	2.2	2.5	2.8
Japan	0.9	1.0	0.7	Russia	1.6	1.5	1.8
Korea	2.7	2.8	2.9	Saudi Arabia	1.7	2.6	2.5
United Kingdom	1.3	1.4	1.1	South Africa	0.7	1.7	1.8
United States	2.9	2.7	2.1	Turkey	3.3	-0.4	2.7



OECD Economic Outlook projections

Year-on-year, %. Arrows for 2018 and 2019

World
G-20

Austr
Cana
Euro

G
Fr
It

Japa

Korea

United Kingdom

United States

World
G-20

2.7

2.8

2.9

1.3

1.4



1.1

2.9

2.7

2.1

2018

3.7

3.8

2019

3.5

3.7

Saudi Arabia

1.7

2.6

2.5

South Africa

0.7



1.7



1.8

Turkey

3.3



-0.4



2.7



NABE Outlook

Economic Growth Continuing in 2019, But with Trade Tensions Adding to Downside Risk

“NABE Outlook panelists continue to view the economy as having solid momentum entering 2019, but they foresee GDP growth cooling from 2.9% this year to 2.7% in 2019,” said NABE President **Kevin Swift** . . .



Houston's 2019 Economic Outlook.



All align in Houston's favor

- Energy
- U.S. Expansion
- Global Growth*
- Net Migration
- Construction
- Consumer Confidence





Employment Forecast for '19

Adding Jobs



Losing Jobs





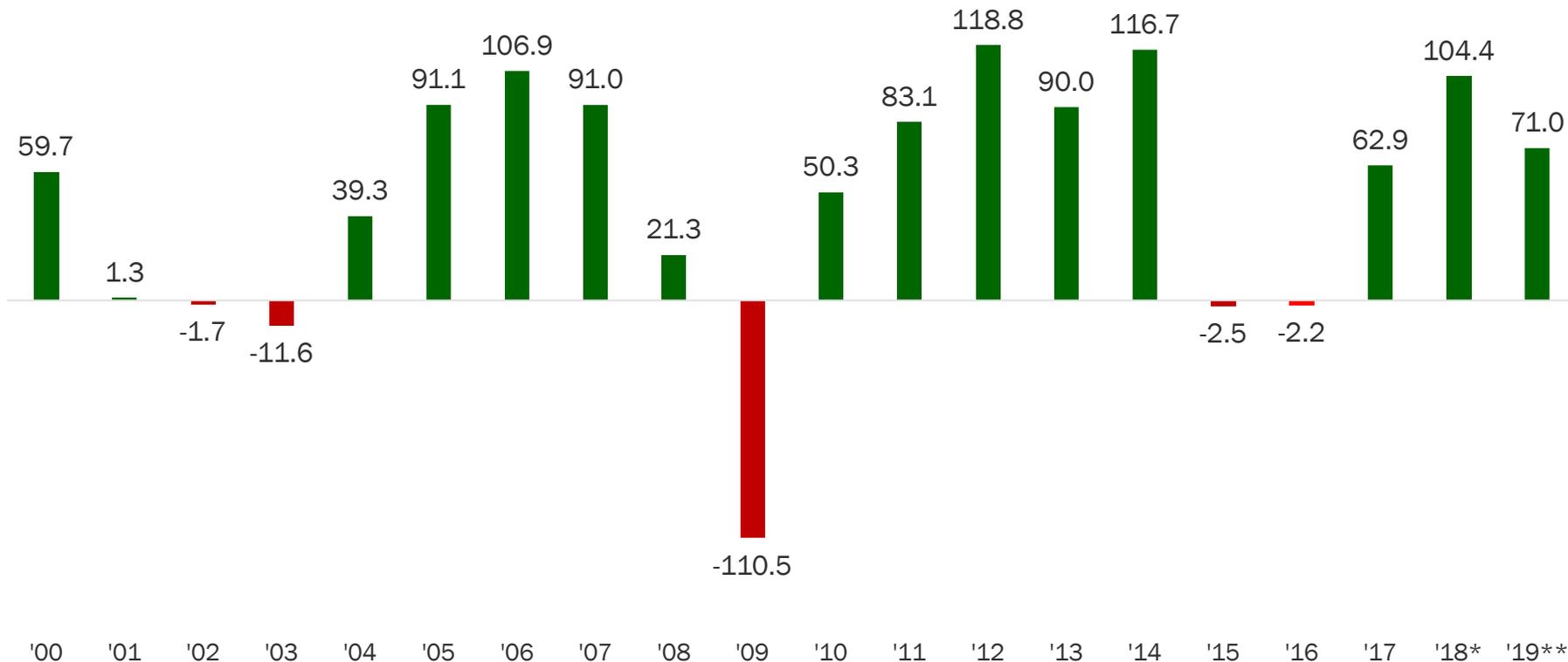
- + Health Care
- + Construction
- + Administrative Support
- + Professional Services
- + Manufacturing
- + Restaurants
- + Retail
- + Government
- + Transportation
- + Wholesale
- + Oil and Gas
- + Real Estate
- + Other Services
- + Educational Services
- + Finance and Insurance
- + Arts & Entertainment
- + Hotels
- + Information



71,000 Jobs



Houston Job Growth, 000s

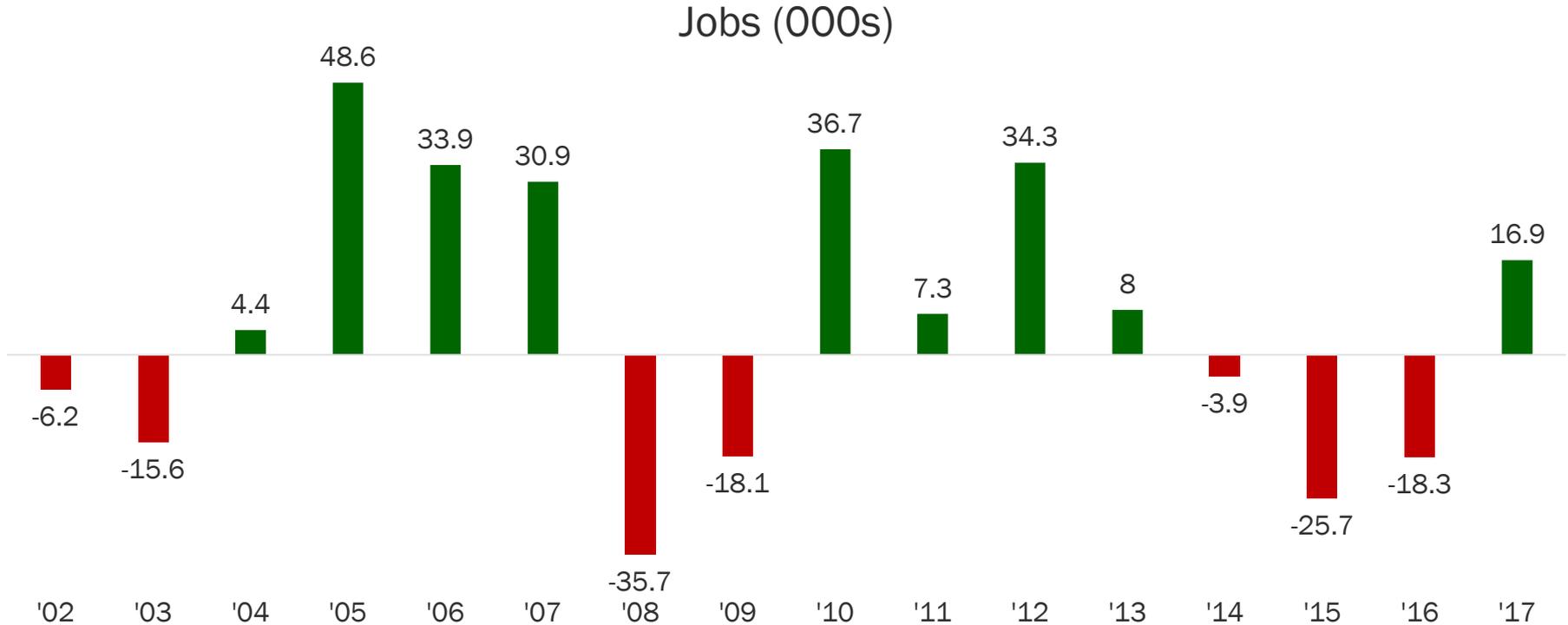


Source: U.S. Bureau Labor Statistics

* Though November '18

** Partnership forecast

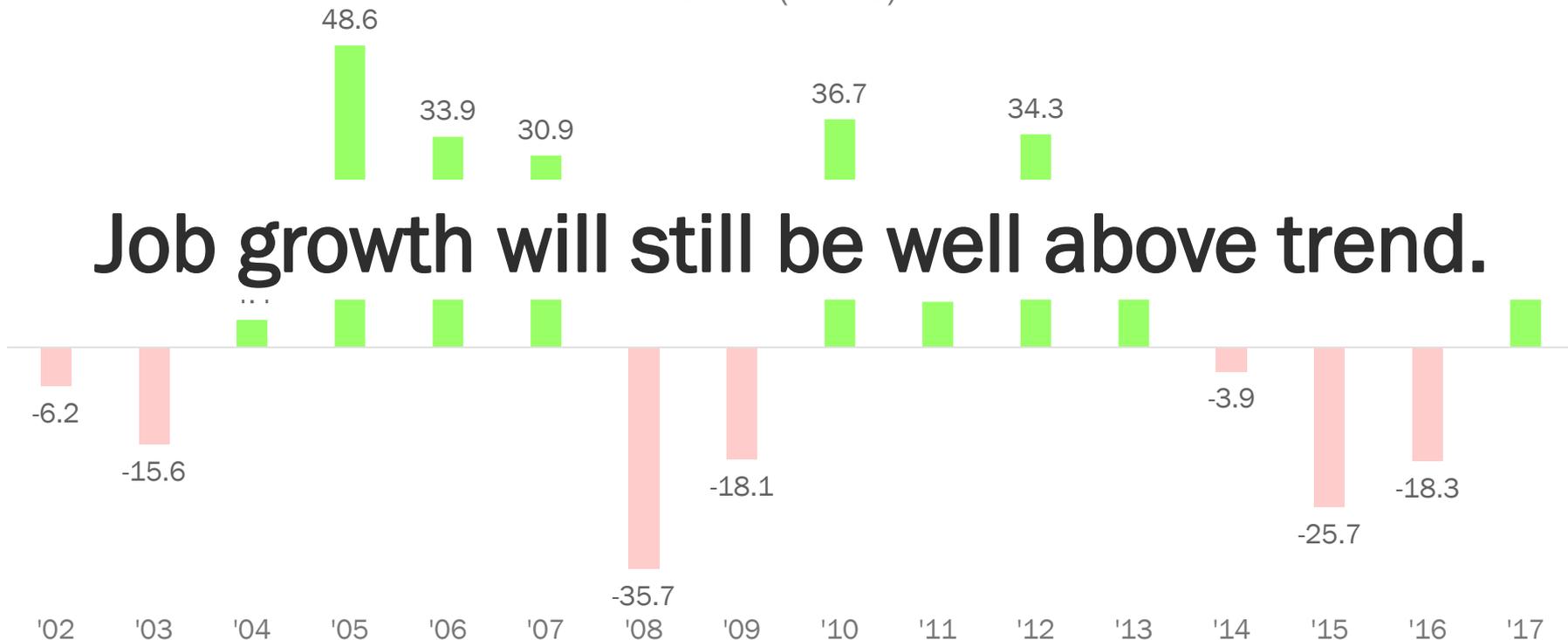
Extent of Revisions



Source: Partnership calculations based on U.S. Bureau of Labor Statistics data

Extent of Revisions

Jobs (000s)

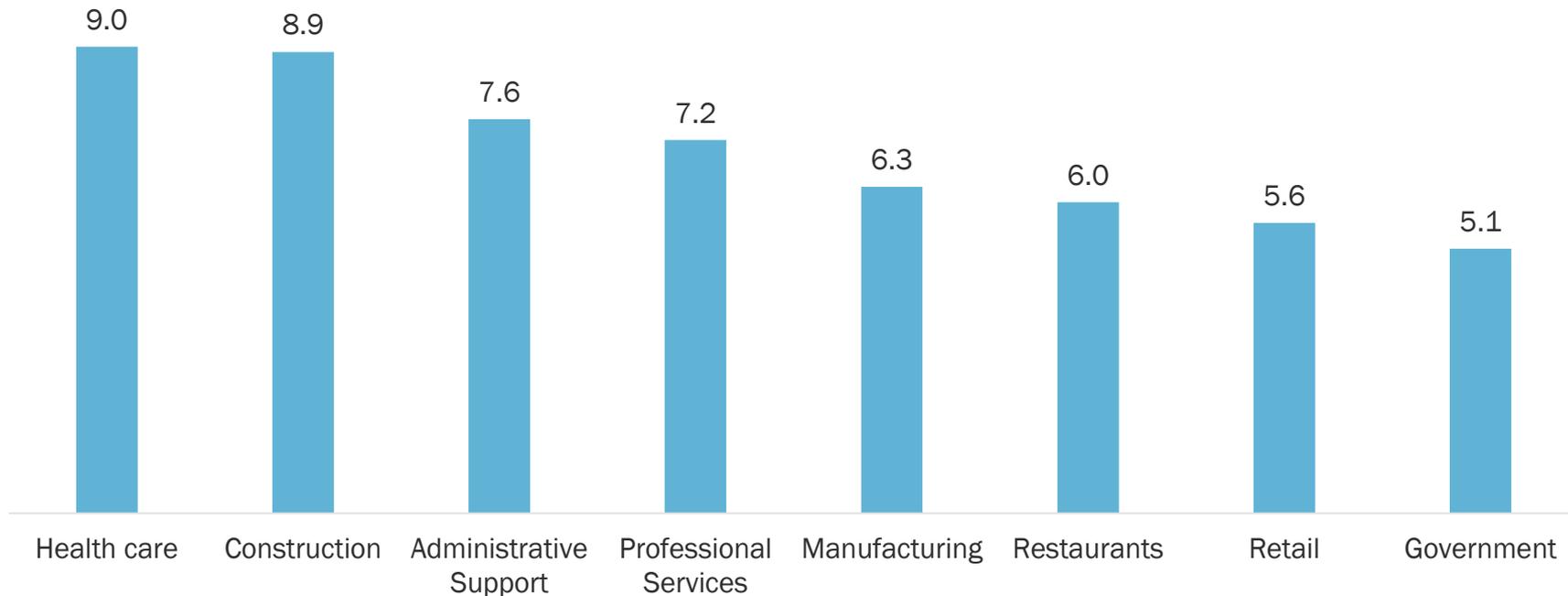


Job growth will still be well above trend.



Employment Forecast for '19

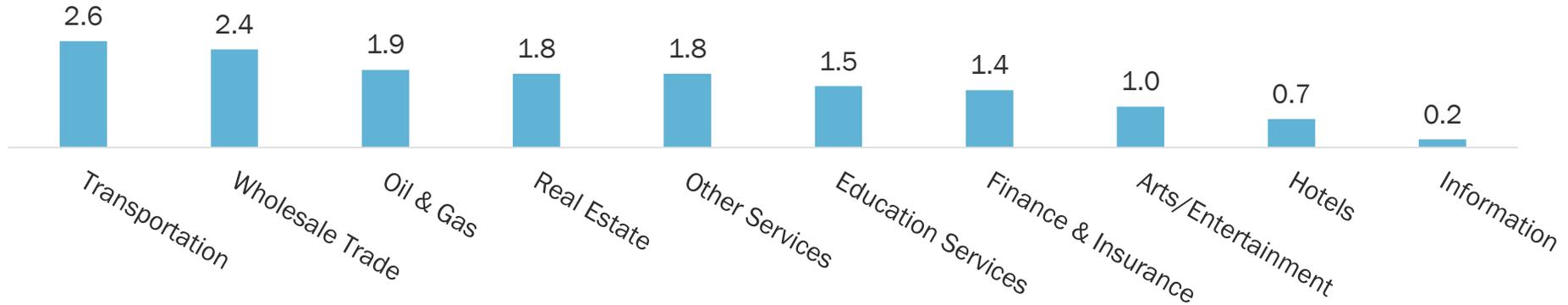
Jobs Added (000s)



Source: Greater Houston Partnership Forecast

Employment Forecast for '19

Jobs Added (000s)



Source: Greater Houston Partnership Forecast



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Thank you

Houston Economic Outlook

Prepared by Patrick Jankowski

SVP Research



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Making Houston Greater.