Brown Sugar:
Deriving Satisfaction through Data Analysis

On Behalf of

Maryland Government Finance Officers Association
Winter Conference

By: Anirban Basu
Sage Policy Group, Inc.

January 19th, 2018

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Get off of My Cloud

IPSOS Global Confidence Index, December 2017

National Index
December 2017

Canada
54.9/ +0.1
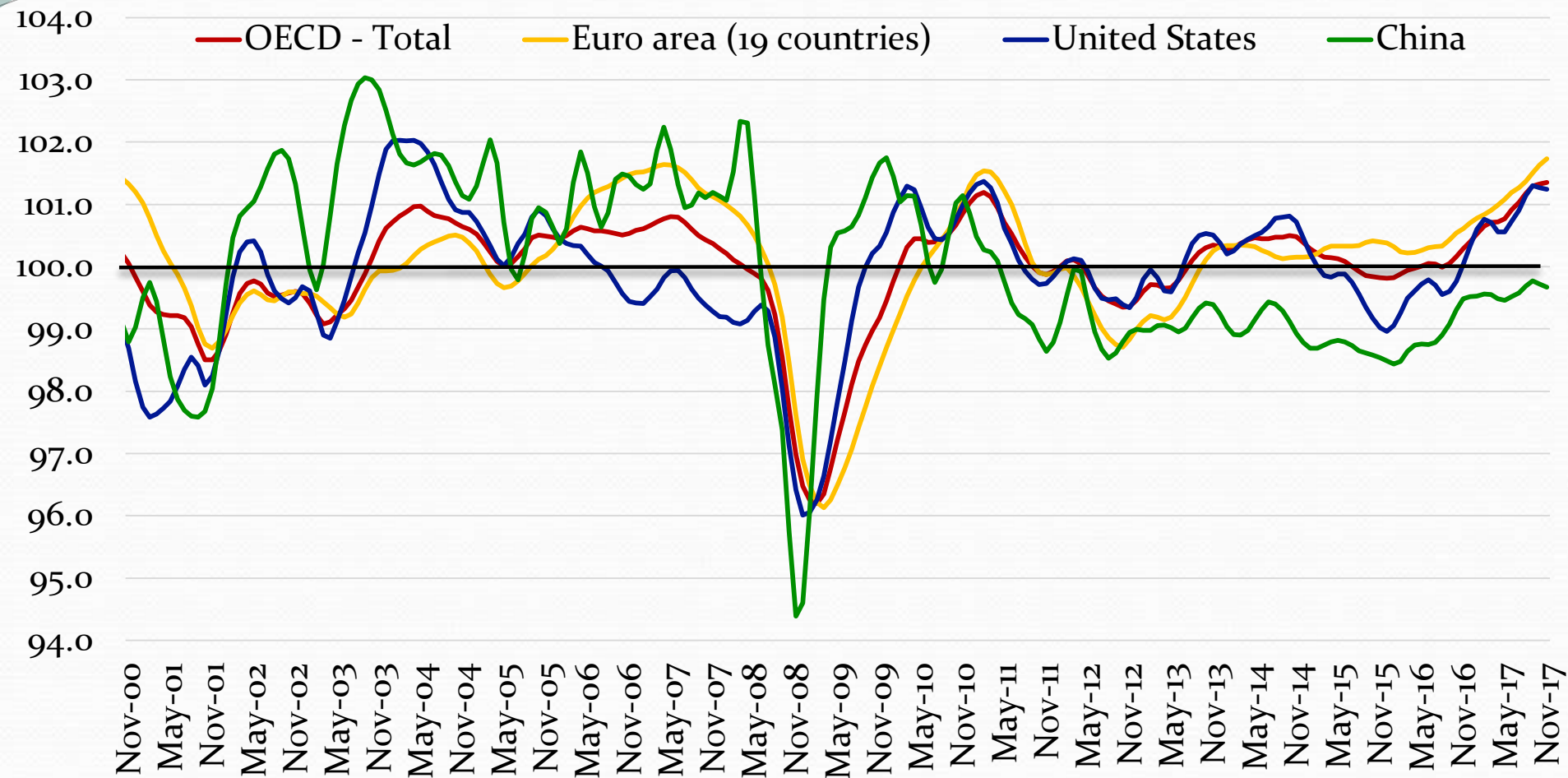
US
60.5/ +0.2

Mexico
45.9 /-0.3

Belgium
48.3/+2.7

Great Britain
49.0/+0.3

Germany
57.0/ +0.1

Poland
50.2/+1.0

Sweden
63.1/ +0.6

Russia
43.0/ +1.7

France
43.4/+0.8

Spain
44.7/-0.6

Hungary
40.8/ -0.3

Italy
37.8/+0.4

Israel
53.5/ +0.6

China
70.7/ +2.4

Japan
45.1/+2.2

South Korea
46.6/ +0.4

Turkey
38.8/-6.0

India
64.3/ -2.4

Saudi Arabia
54.7/ +1.9

Brazil
40.8/ +1.5

Argentina
51.5/ +4.6

South Africa
39.5/ -0.4

Australia
52.9/+1.2

Largest gains
Argentina
Belgium
China

Largest drops
Turkey
India

Country
Index/3-month change

High   Low

Change ⬇ -1.5

Global Average: 50.1
(3-month change: +0.8)

Highest (over 60) in:
China, India, Sweden, U.S.

Lowest (below 40) in:
Italy, Turkey, S. Africa

Up in 7 countries:
Argentina, Belgium, Brazil, China, Japan, Russia, Saudi Arabia

Down in 2 countries:
India, Turkey

OECD Business Confidence Index – Select Regions/Countries 2000-2017

Legend: OECD - Total | Euro area (19 countries) | United States | China

Source OECD

The business confidence index (BCI) is based on enterprises' assessment of production, orders and stocks, as well as its current position and expectations for the immediate future. Opinions compared to a "normal" state are collected and the difference between positive and negative answers provides a qualitative index on economic conditions.

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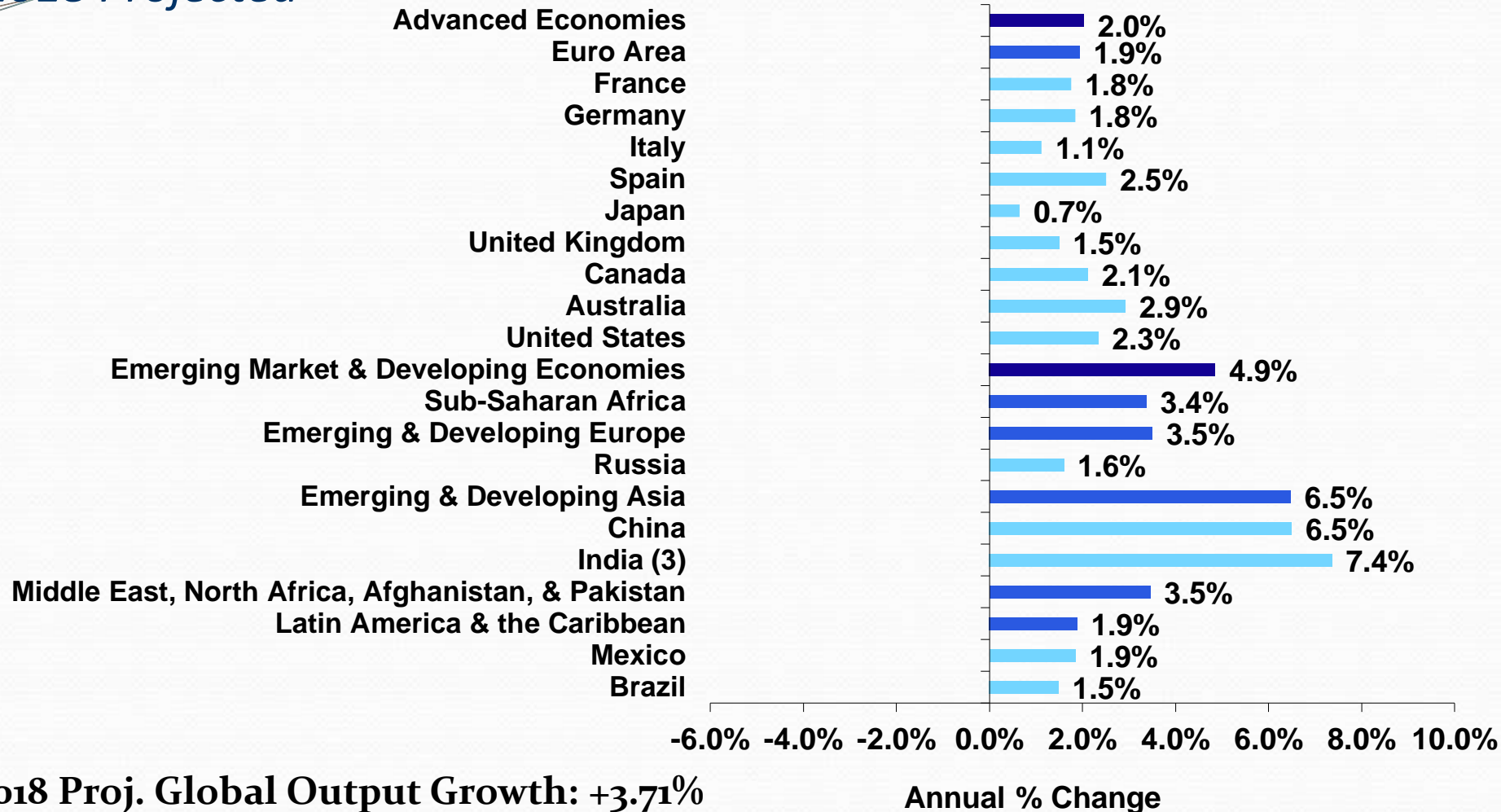# Global Monetary Policy Tightening/Easing

Magnitude of Easing (-) / Tightening (+) (ppt)

-15.00   15.00

As of December 2017
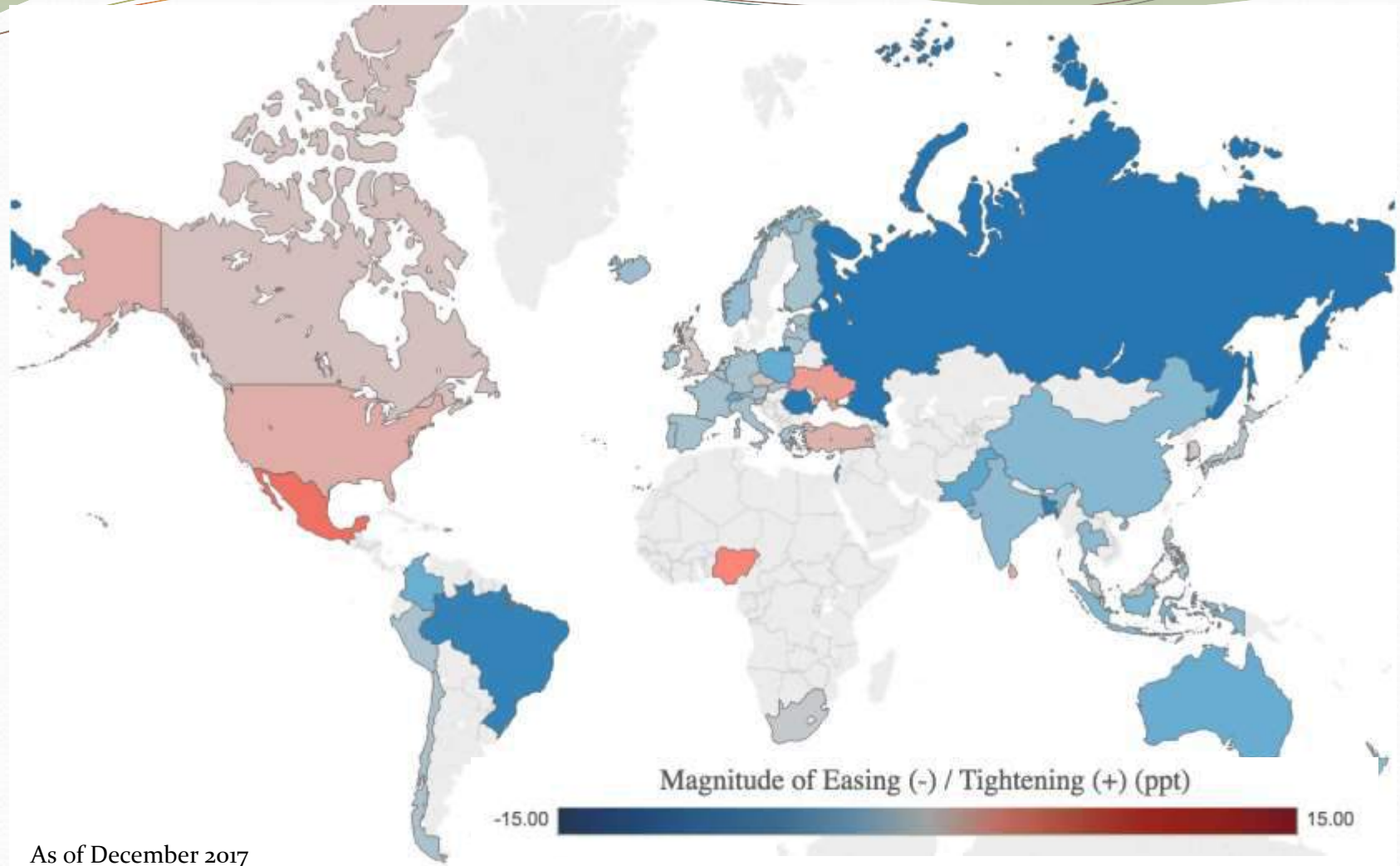
The CFR Global Monetary Policy Tracker covers fifty-four large countries—mainly those that target inflation in some manner. Tightening policy is indicated in red, loosening in blue. The more a country has raised (lowered) rates, in percentage points, from the most recent trough (peak) in its policy rate, the darker the shade of red (blue). Generally, the policy rate target is the overnight interbank rate, with exceptions indicated.

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Estimated Growth in Output by Select Global Areas

2018 Projected

Region	2018 Projected Growth
Advanced Economies	2.0%
Euro Area	1.9%
France	1.8%
Germany	1.8%
Italy	1.1%
Spain	2.5%
Japan	0.7%
United Kingdom	1.5%
Canada	2.1%
Australia	2.9%
United States	2.3%
Emerging Market & Developing Economies	4.9%
Sub-Saharan Africa	3.4%
Emerging & Developing Europe	3.5%
Russia	1.6%
Emerging & Developing Asia	6.5%
China	6.5%
India (3)	7.4%
Middle East, North Africa, Afghanistan, & Pakistan	3.5%
Latin America & the Caribbean	1.9%
Mexico	1.9%
Brazil	1.5%

Annual % Change (−6.0% −4.0% −2.0% 0.0% 2.0% 4.0% 6.0% 8.0% 10.0%)

2018 Proj. Global Output Growth: +3.71%

Source: International Monetary Fund: World Economic Outlook Database, October 2017

2017 Growth (Estimate)	
World: 3.6%	Euro Area: 2.1%
United States: 2.2%	Japan: 1.5%

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Start Me Up

Conference Board Consumer Confidence Index
2005 – November 2017

November 2017 = 129.5
where 1985 = 100
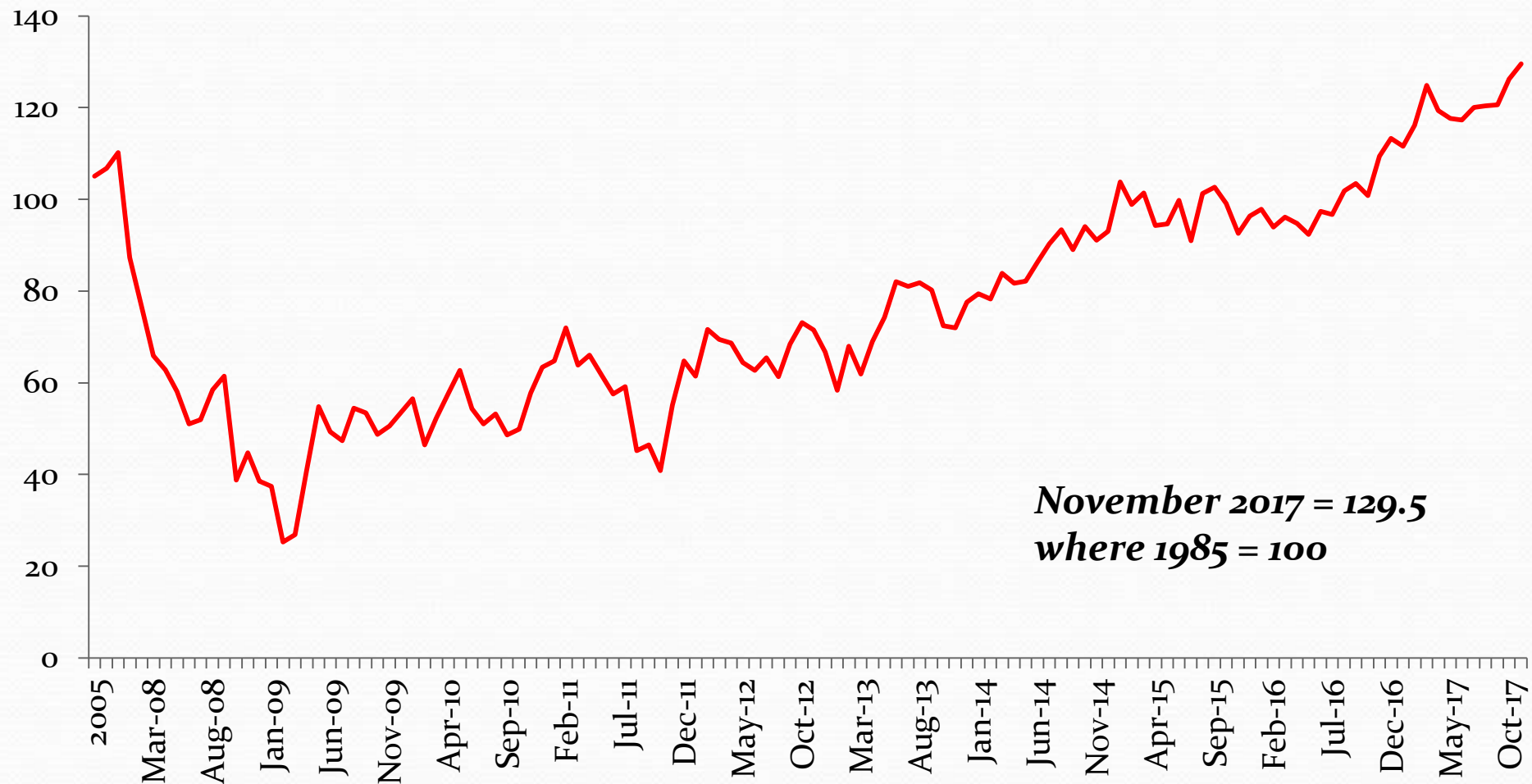
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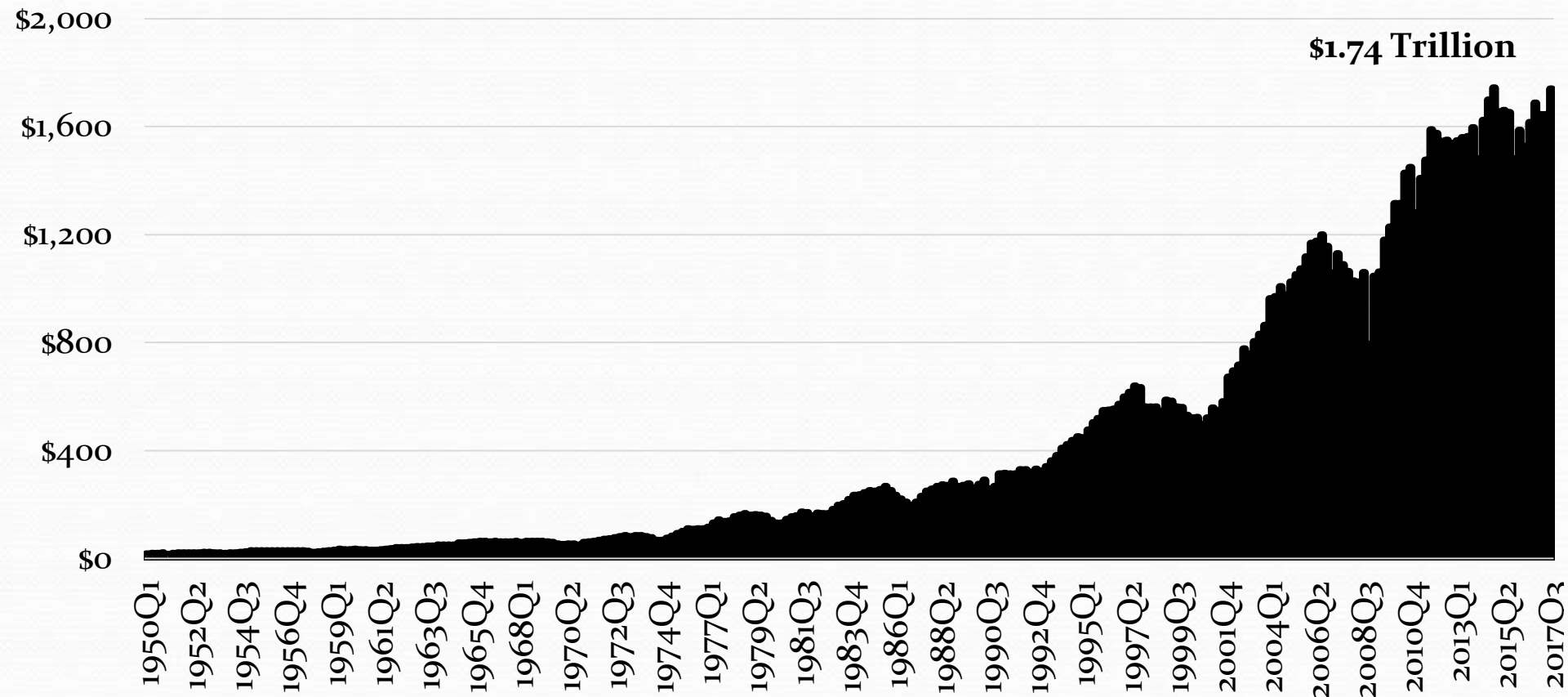# NFIB Index of Small Business Optimism, 1986-2017

Dec. 2017:
104.9

Seasonally Adjusted
1986=100
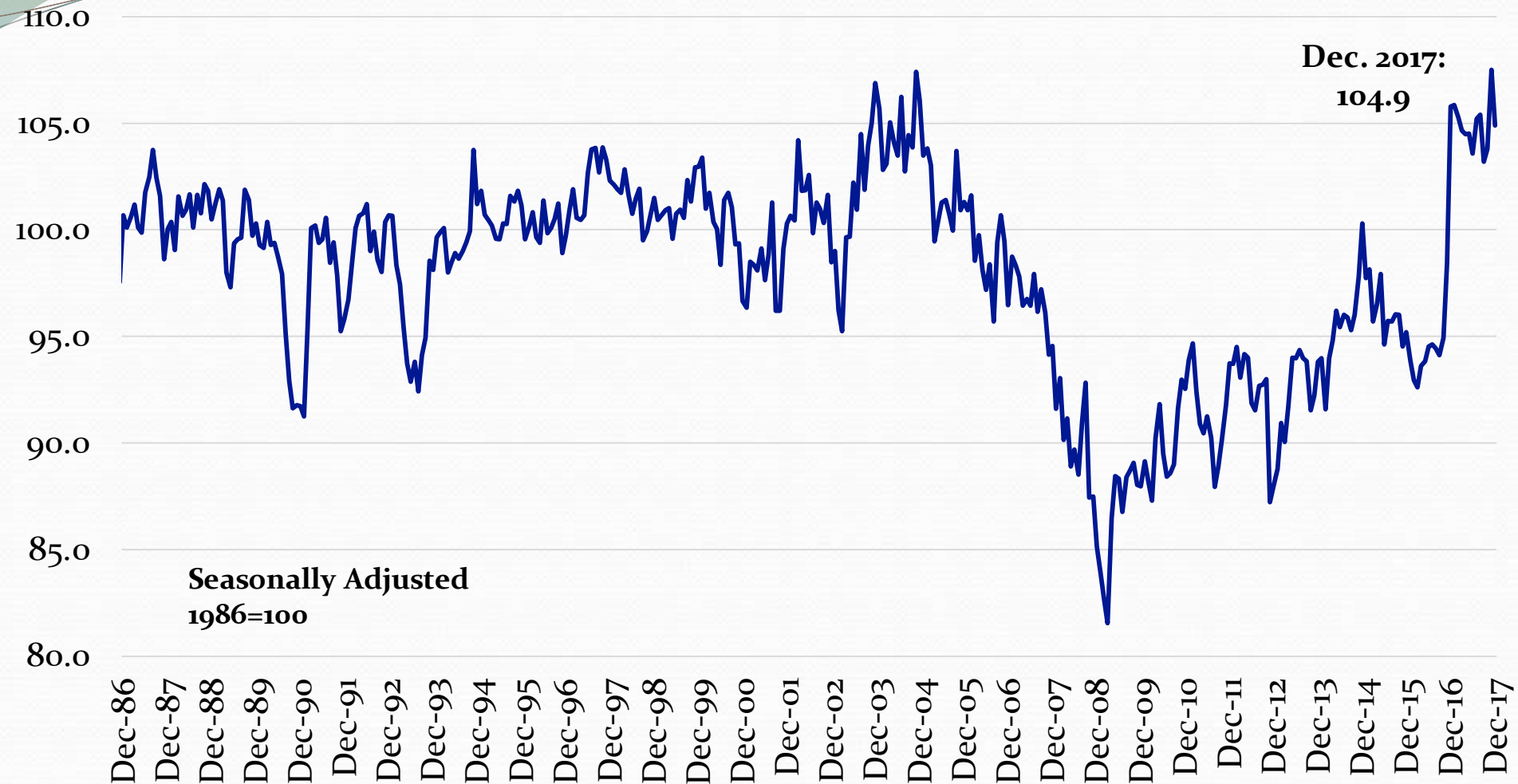
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Paint It Black – Corporate Profits

*U.S. Corporate Profits After Tax**

$ Billions

$1.74 Trillion

Y-axis: $2,000 / $1,600 / $1,200 / $800 / $400 / $0

X-axis: 1950Q1, 1952Q2, 1954Q3, 1956Q4, 1959Q1, 1961Q2, 1963Q3, 1965Q4, 1968Q1, 1970Q2, 1972Q3, 1974Q4, 1977Q1, 1979Q2, 1981Q3, 1983Q4, 1986Q1, 1988Q2, 1990Q3, 1992Q4, 1995Q1, 1997Q2, 1999Q3, 2001Q4, 2004Q1, 2006Q2, 2008Q3, 2010Q4, 2013Q1, 2015Q2, 2017Q3

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U.S. Job Openings
November 2001 through November 2017

Nov. 2017:
5.88M Openings

Y-axis: Job Openings (Millions), ranging from 2.0 to 7.0

X-axis: Nov-01, May-02, Nov-02, May-03, Nov-03, May-04, Nov-04, May-05, Nov-05, May-06, Nov-06, May-07, Nov-07, May-08, Nov-08, May-09, Nov-09, May-10, Nov-10, May-11, Nov-11, May-12, Nov-12, May-13, Nov-13, May-14, Nov-14, May-15, Nov-15, May-16, Nov-16, May-17, Nov-17

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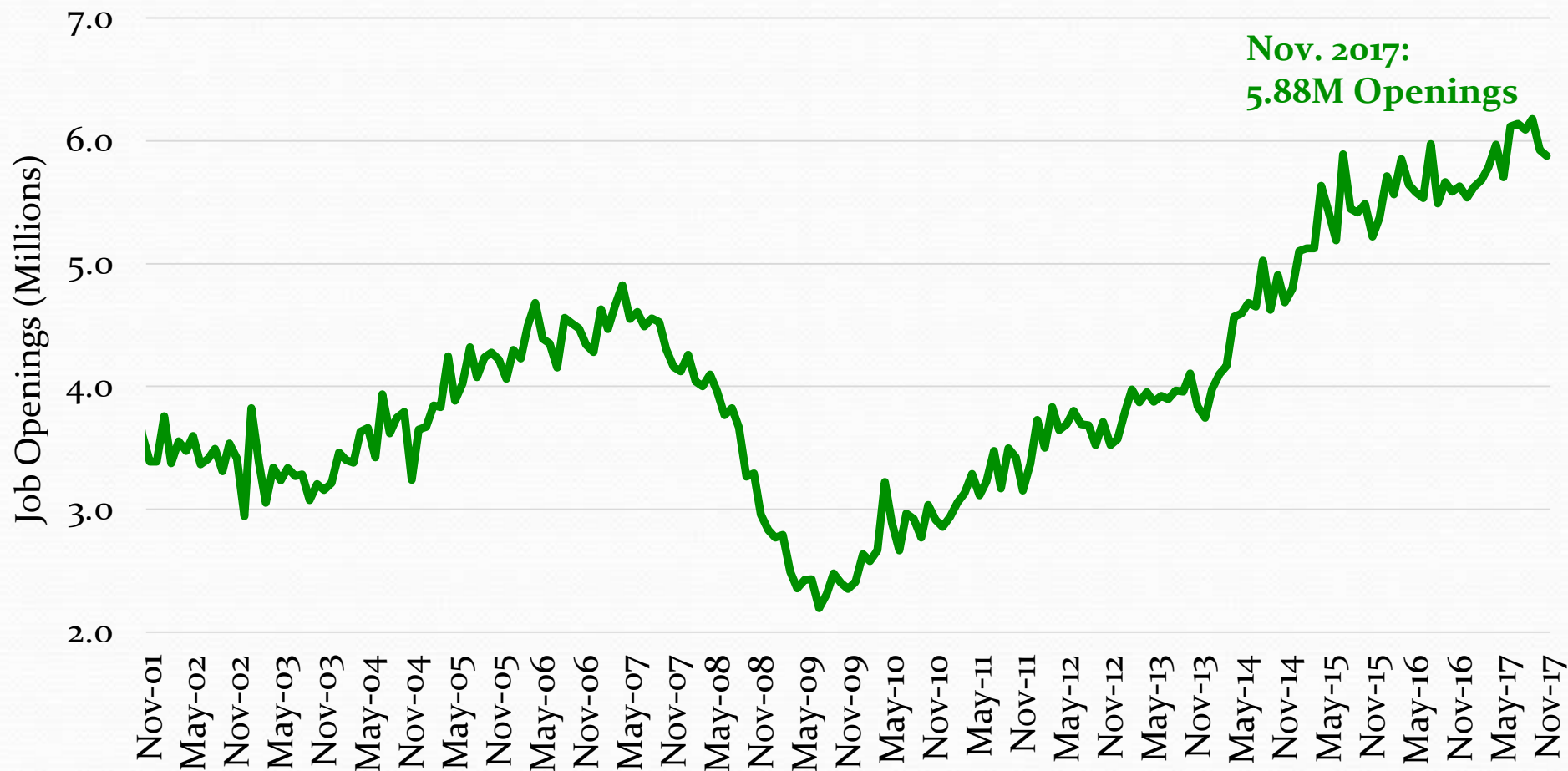
Net Change in U.S. Jobs, BLS
December 2002 through December 2017

December 2017: +148K

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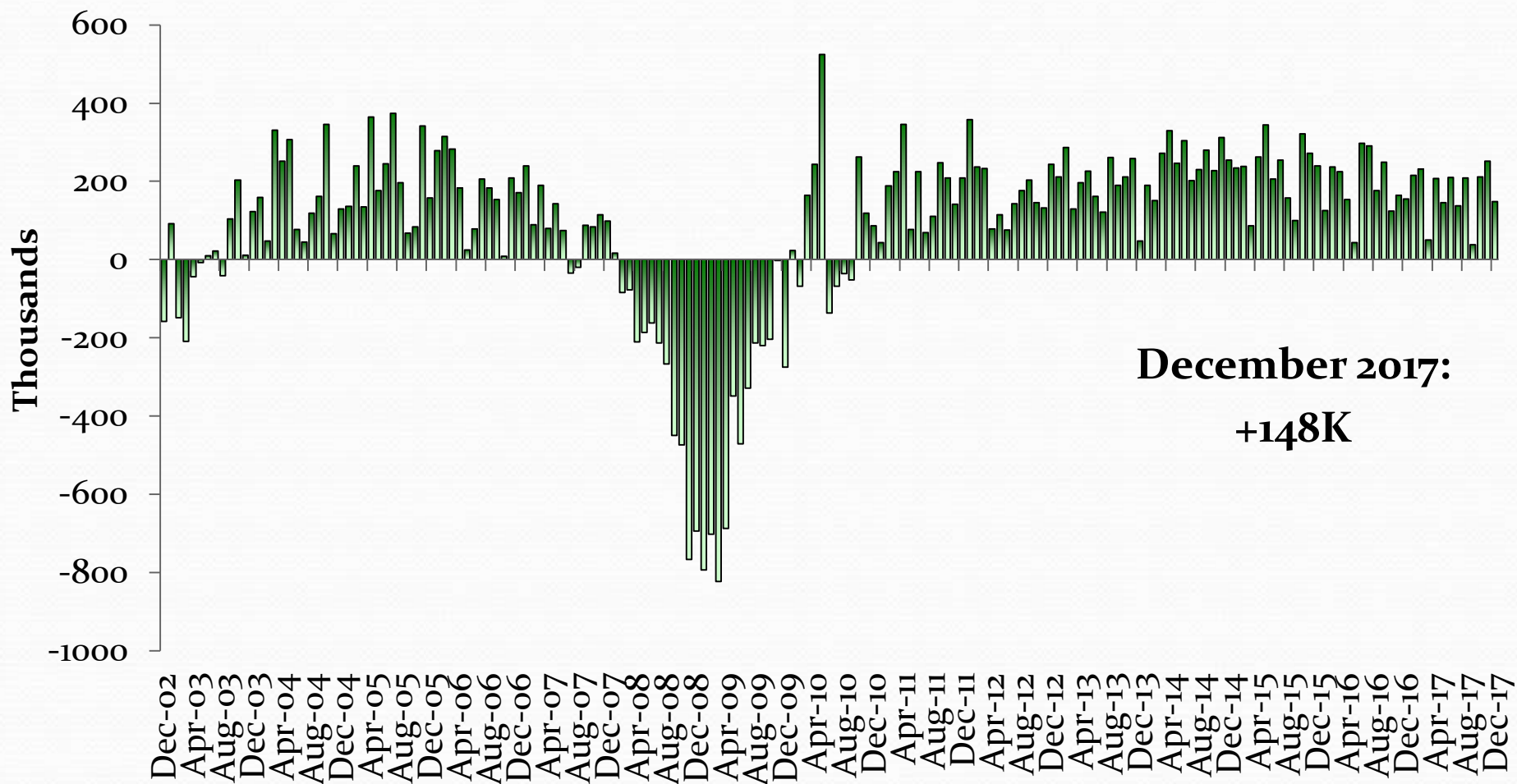
National Nonfarm Employment
by Industry Sector
December 2016 v. December 2017

All told 2,055K jobs gained

Industry Sector	Thousands, SA
Professional and Business Services	527
Education and Health Services	438
Leisure and Hospitality	306
Construction	210
Manufacturing	196
Financial Activities	134
Other Services	109
Trade, Transportation, and Utilities	74
Mining and Logging	59
Government	42
Information	-40

Thousands, SA

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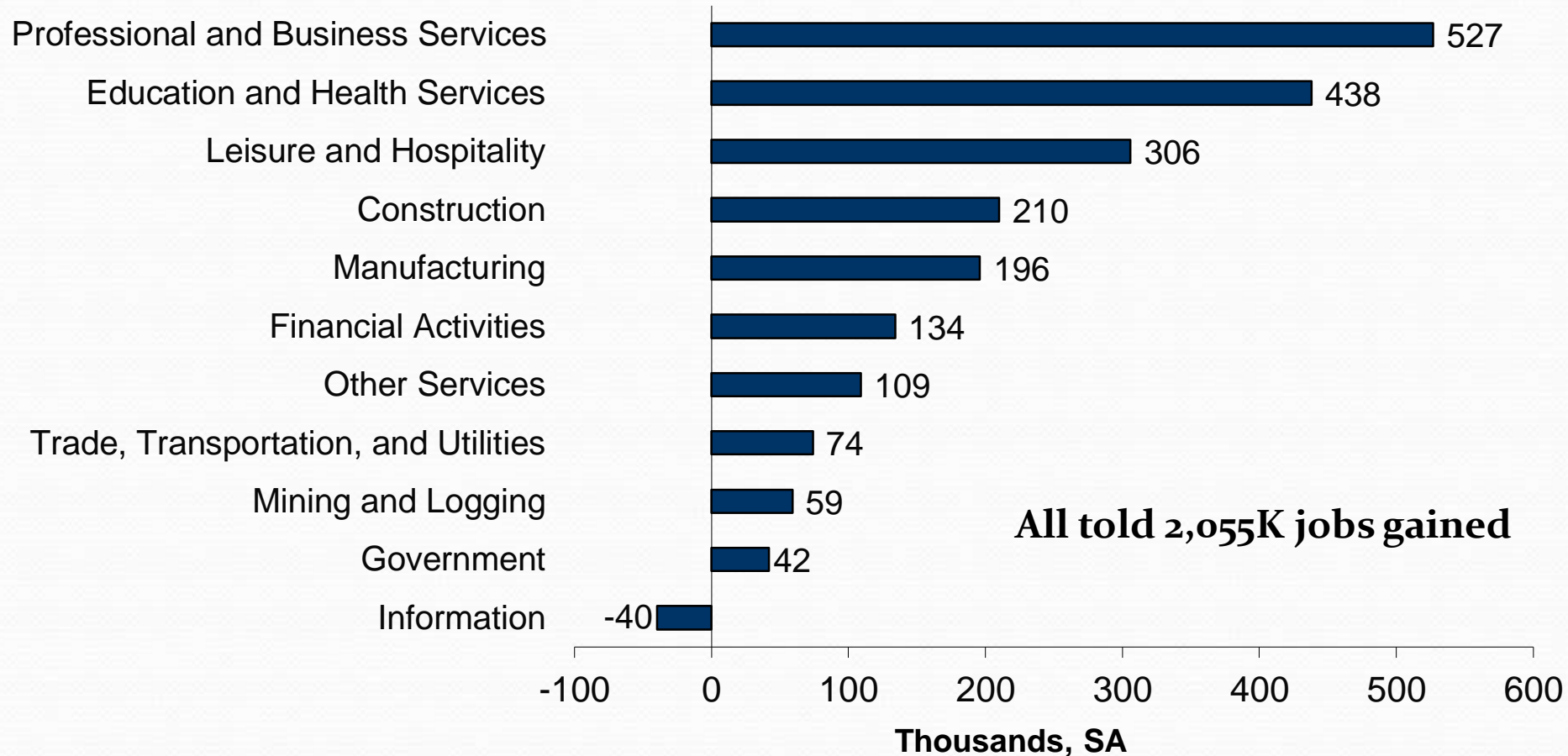
U.S. Labor Force Participation: Men Ages 25-34
2000 – 2017

88.7%

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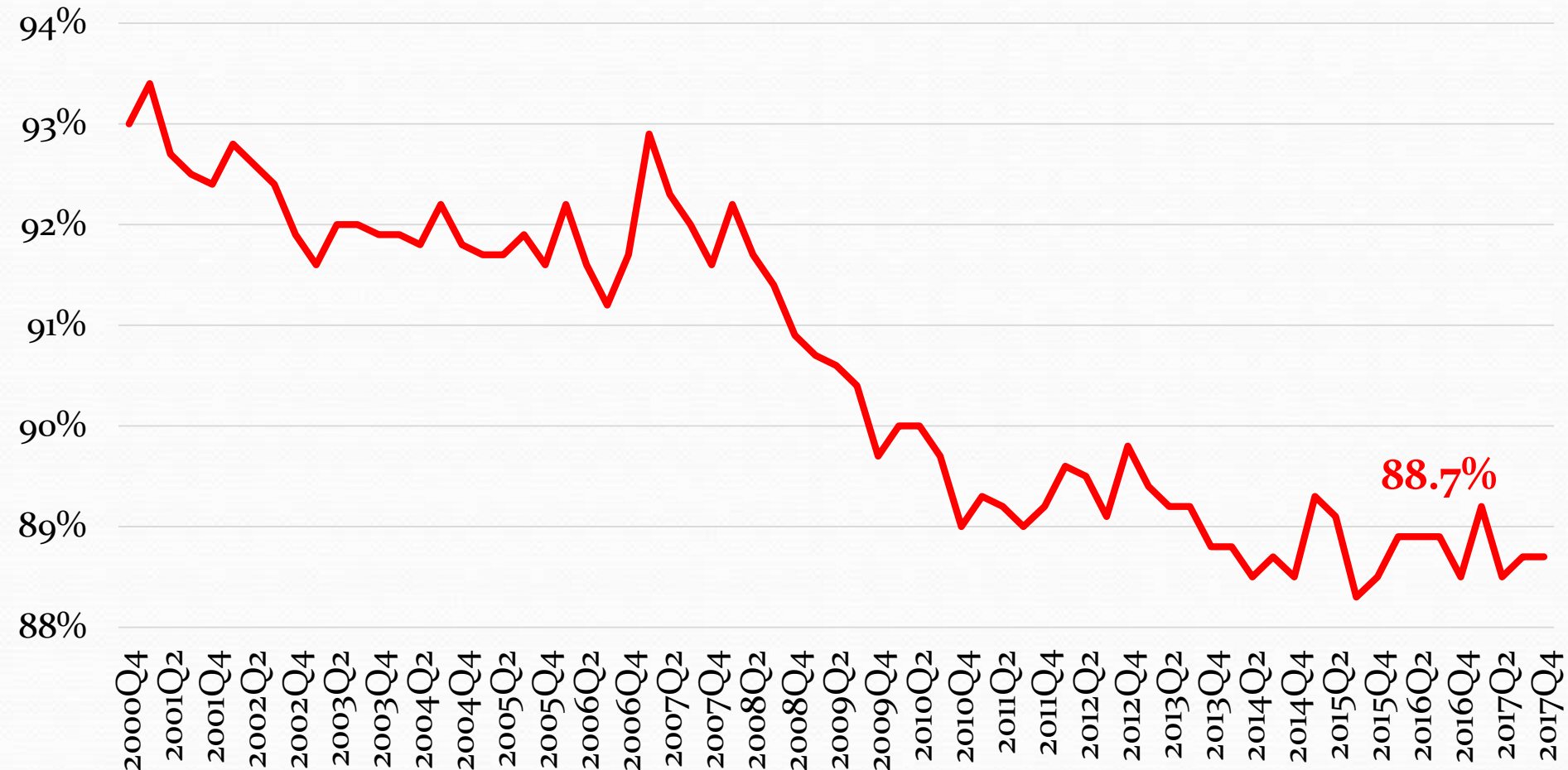
Maryland Nonfarm Employment
by Industry Sector Groups (SA)
November 2016 v. November 2017 Absolute Change

Industry Sector	Absolute Change
Professional and Business Services	20,500
Education and Health Services	14,000
Government	9,200
Mining, Logging, and Construction	7,500
Trade, Transportation, and Utilities	6,300
Other Services	2,600
Leisure and Hospitality	2,200
Financial Activities	400
Manufacturing	-100
Information	-1,900

**MD Total:
+60.7K; +2.2%**

**US Total (SA):
+2,062K; +1.4%**
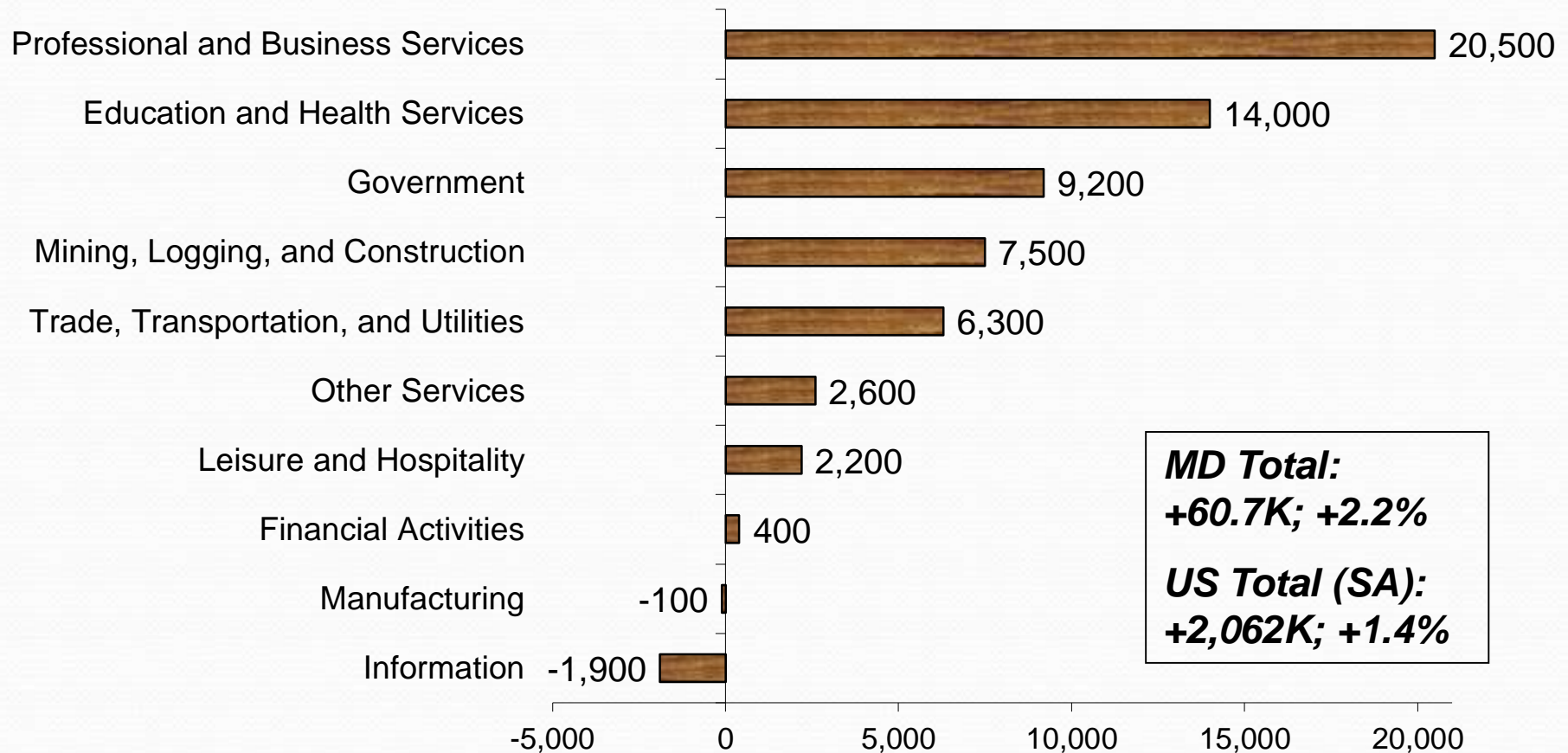
Source: U.S. Bureau of Labor Statistics

*According to the Local Area Unemployment Statistics (LAUS) series MD added 71,952 jobs between November 2016 and November 2017.

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Employment Growth, U.S. States (SA)
November 2016 v. November 2017 Percent Change

Rank	State	%	Rank	State	%	Rank	State	%
1	UTAH	2.8	18	ARIZONA	1.5	33	NEW JERSEY	1.0
2	NEVADA	2.7	19	IOWA	1.4	36	VIRGINIA	0.9
2	TEXAS	2.7	19	WISCONSIN	1.4	37	HAWAII	0.8
4	FLORIDA	2.3	21	KENTUCKY	1.3	37	MONTANA	0.8
4	IDAHO	2.3	21	NEW HAMPSHIRE	1.3	39	INDIANA	0.7
6	**MARYLAND**	**2.2**	23	NEW MEXICO	1.2	39	OHIO	0.7
6	SOUTH CAROLINA	2.2	23	NEW YORK	1.2	41	LOUISIANA	0.5
8	WASHINGTON	2.1	23	OKLAHOMA	1.2	42	ILLINOIS	0.4
9	OREGON	2.0	23	TENNESSEE	1.2	42	NORTH DAKOTA	0.4
10	GEORGIA	1.9	27	MICHIGAN	1.1	44	MAINE	0.3
11	MASSACHUSETTS	1.8	27	MINNESOTA	1.1	45	KANSAS	0.2
12	ALABAMA	1.7	27	MISSISSIPPI	1.1	45	SOUTH DAKOTA	0.2
12	ARKANSAS	1.7	27	MISSOURI	1.1	47	DELAWARE	0.1
12	CALIFORNIA	1.7	27	PENNSYLVANIA	1.1	48	CONNECTICUT	0.0
12	COLORADO	1.7	27	RHODE ISLAND	1.1	49	WYOMING	-0.6
16	NORTH CAROLINA	1.6	33	DISTRICT OF COLUMBIA	1.0	50	ALASKA	-0.8
16	VERMONT	1.6	33	NEBRASKA	1.0	50	WEST VIRGINIA	-0.8

Source: U.S. Bureau of Labor Statistics

U.S. Year-over-year Percent Change: +1.4%

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Baltimore-Columbia-Towson MSA Nonfarm Employment
by Industry Sector Groups (NSA)
November 2016 v. November 2017 Absolute Change

Industry Sector	Change
Education and Health Services	10,900
Professional and Business Services	5,400
Government	4,000
Mining, Logging, and Construction	3,000
Other Services	600
Manufacturing	300
Information	-300
Financial Activities	-1,600
Trade, Transportation, and Utilities	-1,900
Leisure and Hospitality	-2,800

**Baltimore MSA Total:
+17.6K; +1.2%**

**MD Total (SA):
+60.7K; +2.2%**

**US Total (SA):
+2,062K; +1.4%**

Source: U.S. Bureau of Labor Statistics

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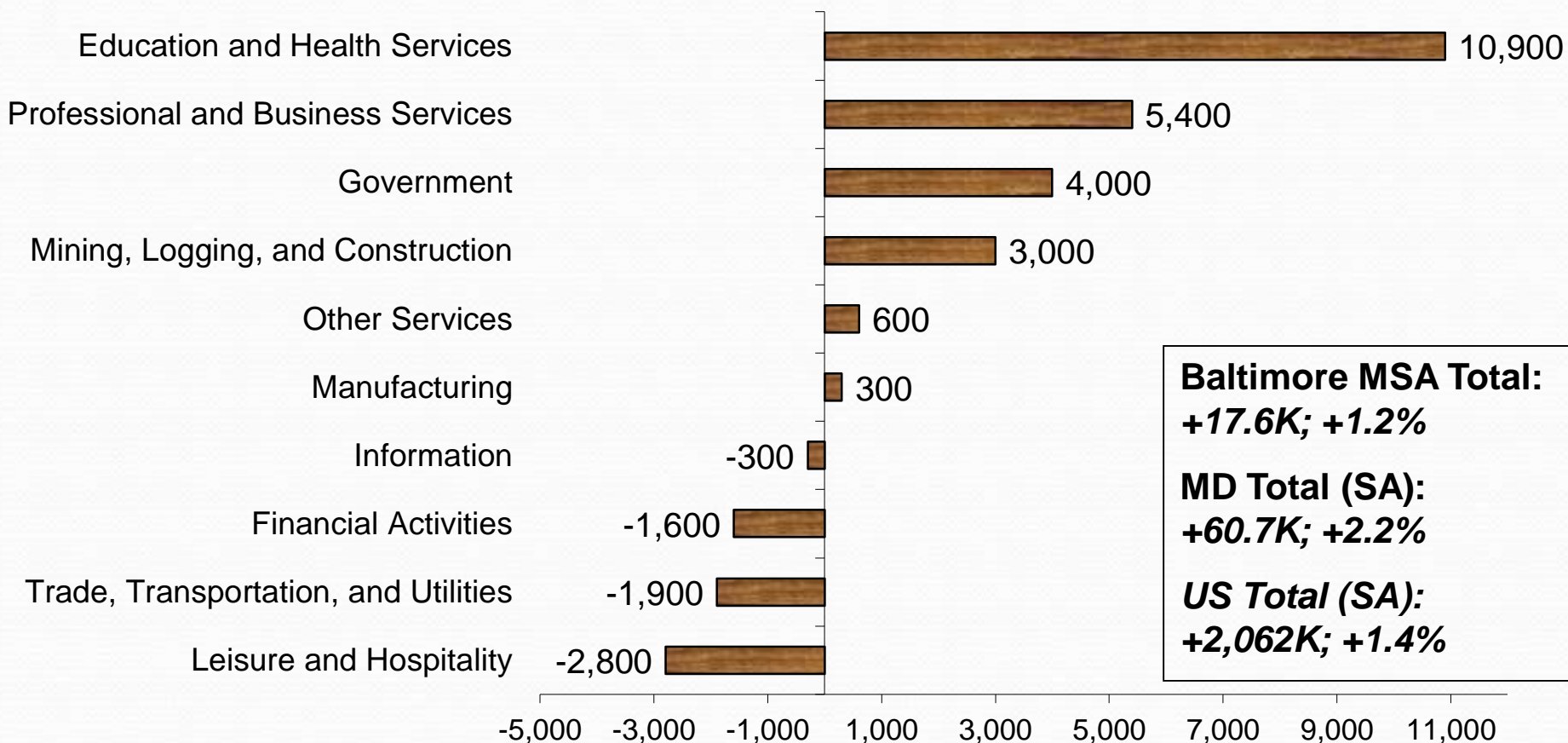
Washington, DC-Arlington-Alexandria MSA Nonfarm Employment
by Industry Sector Groups (NSA)
November 2016 v. November 2017 Absolute Change

Industry Sector	Change
Education and Health Services	15,900
Professional and Business Services	13,600
Leisure and Hospitality	9,500
Trade, Transportation, and Utilities	5,100
Other Services	4,000
Mining, Logging, and Construction	4,000
Financial Activities	800
Manufacturing	-300
Government	-1,400
Information	-2,300

**DC MSA Total:
+48.9K; +1.5%**

**US Total (SA):
+2,062K; +1.4%**

Source: U.S. Bureau of Labor Statistics

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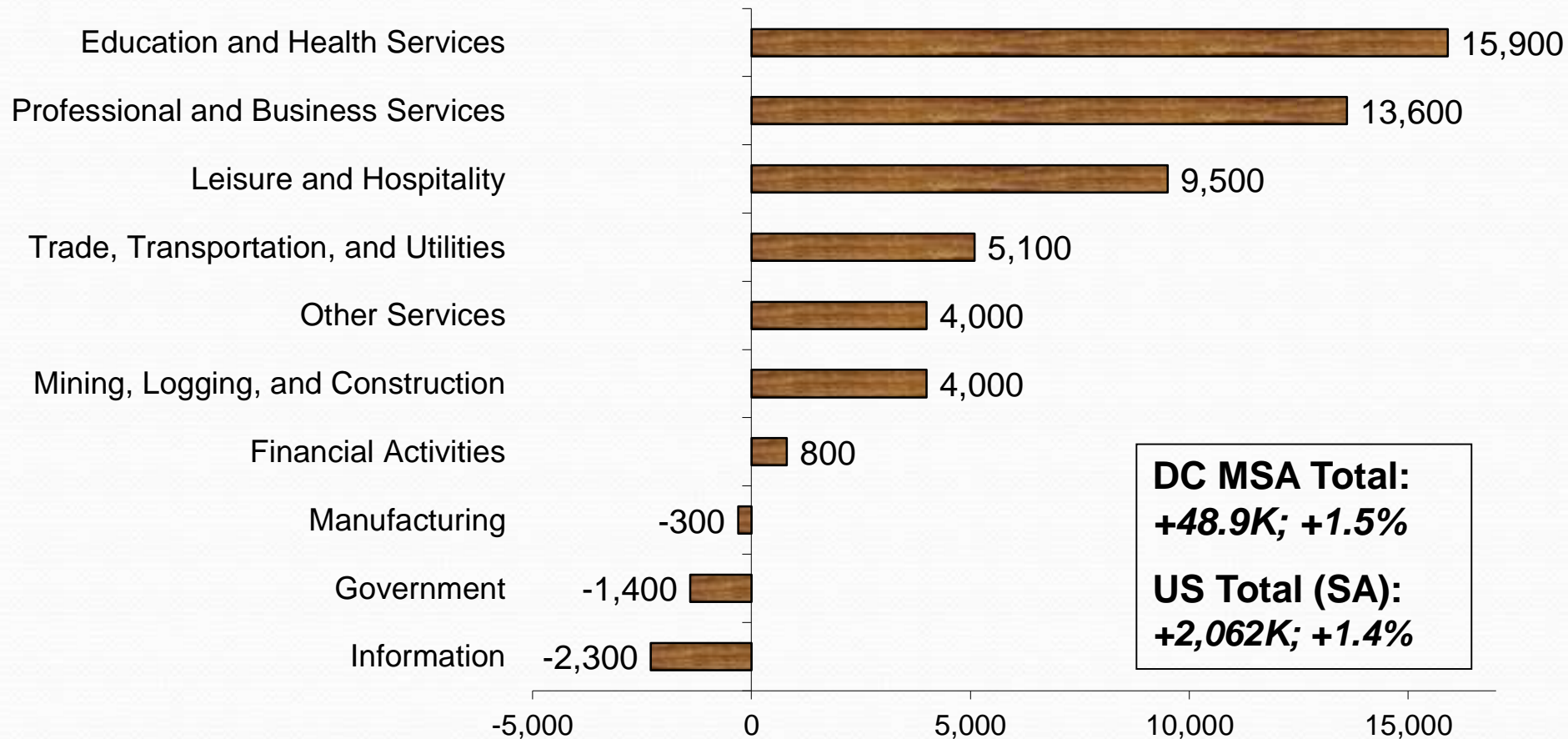
Unemployment Rates, 25 Largest Metros (NSA)
November 2017

Rank	MSA	UR	Rank	MSA	UR
1	Minneapolis-St. Paul-Bloomington, MN-WI MSA	2.4	13	Phoenix-Mesa-Scottsdale, AZ MSA	3.7
2	San Francisco-Oakland-Hayward, CA MSA	2.6	15	Los Angeles-Long Beach-Anaheim, CA MSA	3.8
3	Denver-Aurora-Lakewood, CO MSA	2.8	**16**	**Baltimore-Columbia-Towson, MD MSA**	**4.1**
4	Boston-Cambridge-Nashua, MA-NH Metro NECTA	3.0	16	Miami-Fort Lauderdale-West Palm Beach, FL MSA	4.1
4	San Antonio-New Braunfels, TX Metro Area	3.0	16	Riverside-San Bernardino-Ontario, CA MSA	4.1
6	Dallas-Fort Worth-Arlington, TX MSA	3.2	16	Seattle-Tacoma-Bellevue, WA MSA	4.1
7	San Diego-Carlsbad, CA MSA	3.3	20	Atlanta-Sandy Springs-Roswell, GA MSA	4.2
8	St. Louis, MO-IL MSA (1)	3.4	20	Charlotte-Concord-Gastonia, NC-SC MSA	4.2
9	Orlando-Kissimmee-Sanford, FL MSA	3.5	22	Houston-The Woodlands-Sugar Land, TX MSA	4.3
10	**Washington-Arlington-Alexandria, DC-VA-MD-WV MSA**	**3.6**	22	New York-Newark-Jersey City, NY-NJ-PA MSA	4.3
10	Portland-Vancouver-Hillsboro, OR-WA MSA	3.6	24	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA	4.4
10	Tampa-St. Petersburg-Clearwater, FL MSA	3.6			
13	Detroit-Warren-Dearborn, MI MSA	3.7	25	Chicago-Naperville-Elgin, IL-IN-WI MSA	4.7

U.S. Unemployment Rate: 4.1%

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MD County Unemployment Rates, November 2017

Rank	Jurisdiction	UR	Rank	Jurisdiction	UR
1	Howard County	3.1	12	Talbot County	4.1
2	Carroll County	3.3	14	Kent County	4.2
2	Montgomery County	3.3	14	Prince George's County	4.2
4	Anne Arundel County	3.5	14	Washington County	4.2
4	Frederick County	3.5	17	Cecil County	4.4
4	Queen Anne's County	3.5	18	Garrett County	4.5
7	Calvert County	3.6	19	Allegany County	5.2
7	Harford County	3.6	20	Dorchester County	5.4
9	Charles County	3.9	21	Baltimore City	5.7
9	St. Mary's County	3.9	22	Wicomico County	5.8
11	Caroline County	4.0	23	Somerset County	6.8
12	Baltimore County	4.1	24	Worcester County	9.5

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Montgomery County Revenues
Fiscal Years 2007 – 2017 ($ millions)

Legend:
- Total GF Revenue
- Income Tax Revenue
- Income Tax as a Percentage of Revenue

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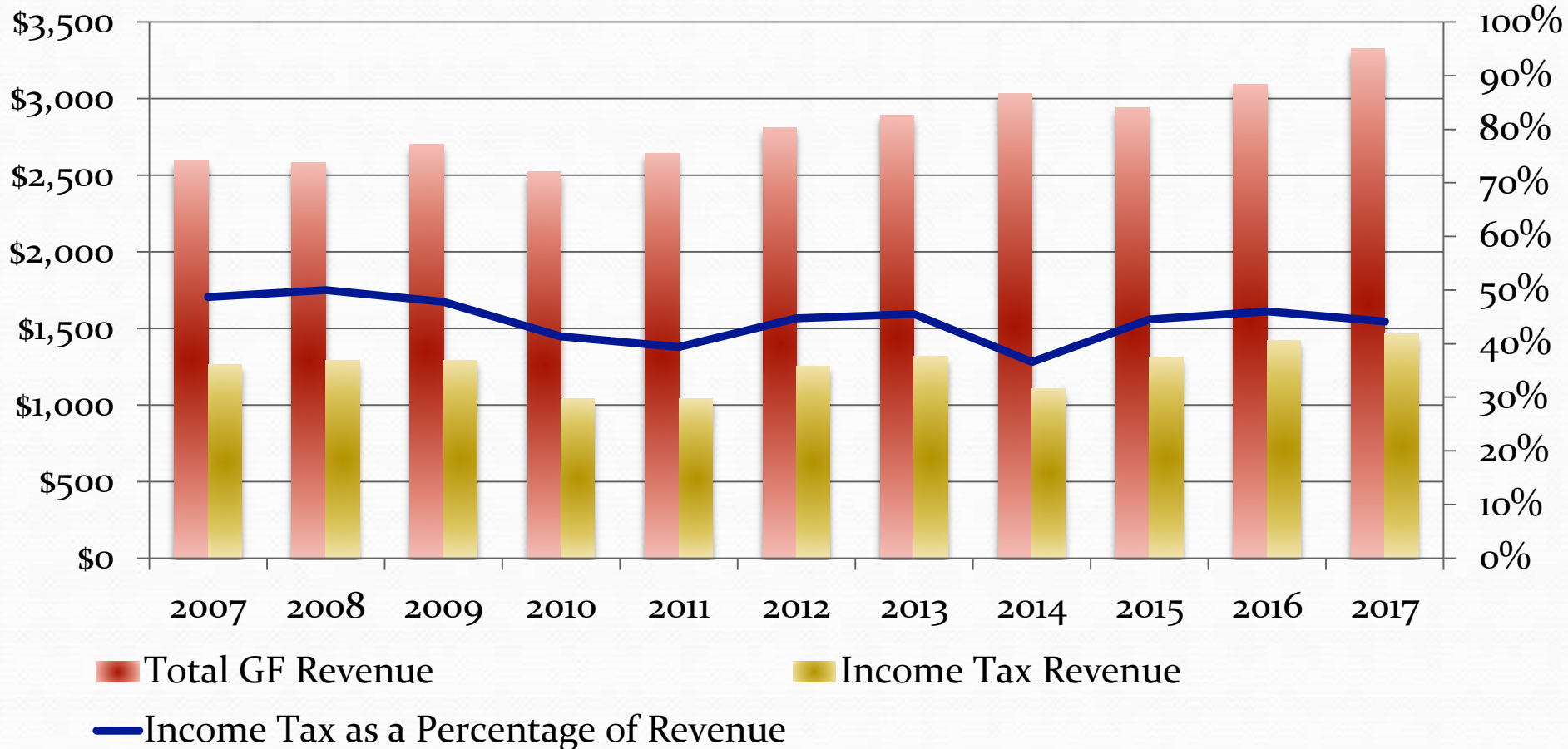
Baltimore County Revenues
Fiscal Years 2007 – 2016 ($ millions)

Legend:
- Total GF Revenue
- Income Tax Revenue
- Income Tax as a Percentage of Revenue
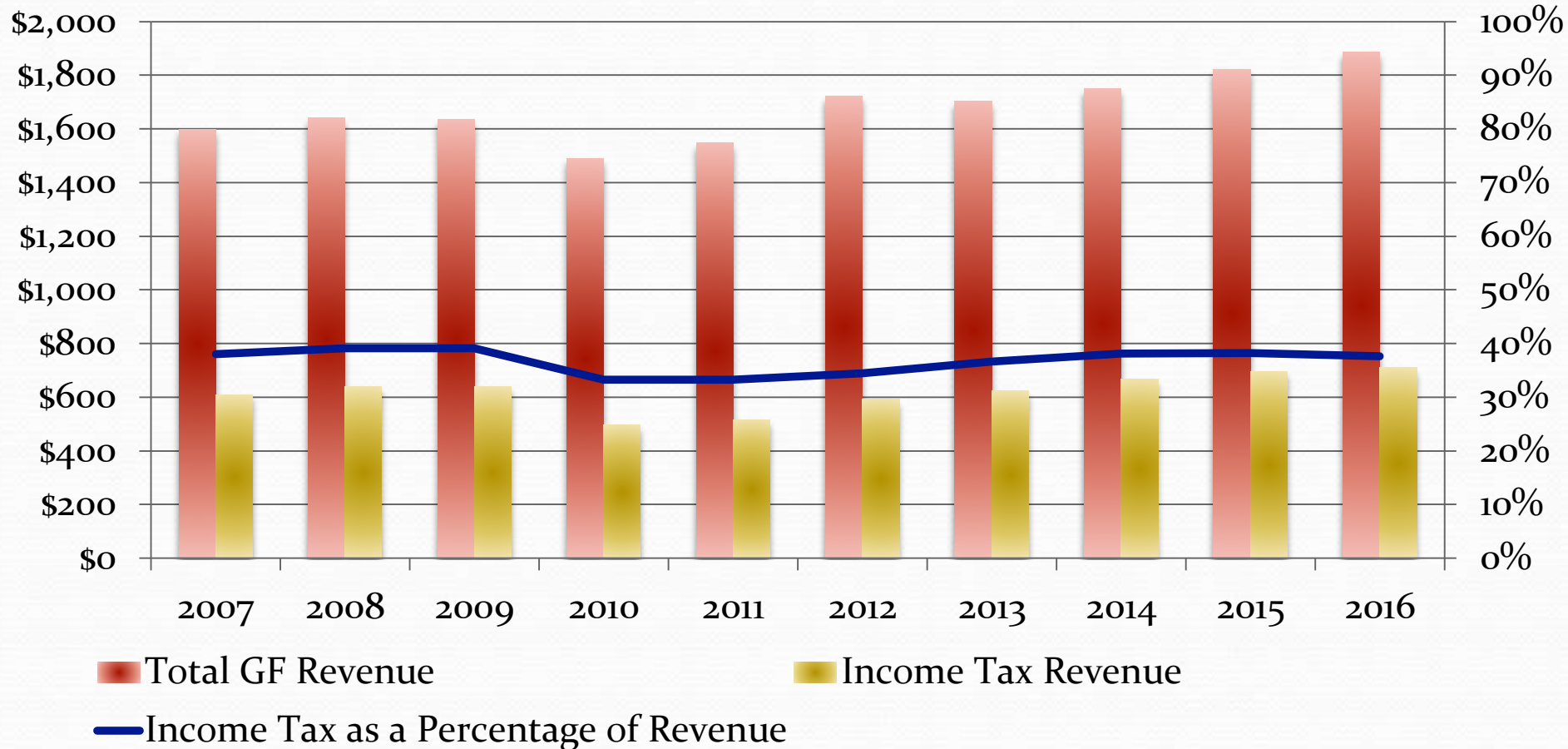
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Baltimore City Revenues
Fiscal Years 2007 – 2016 ($ millions)
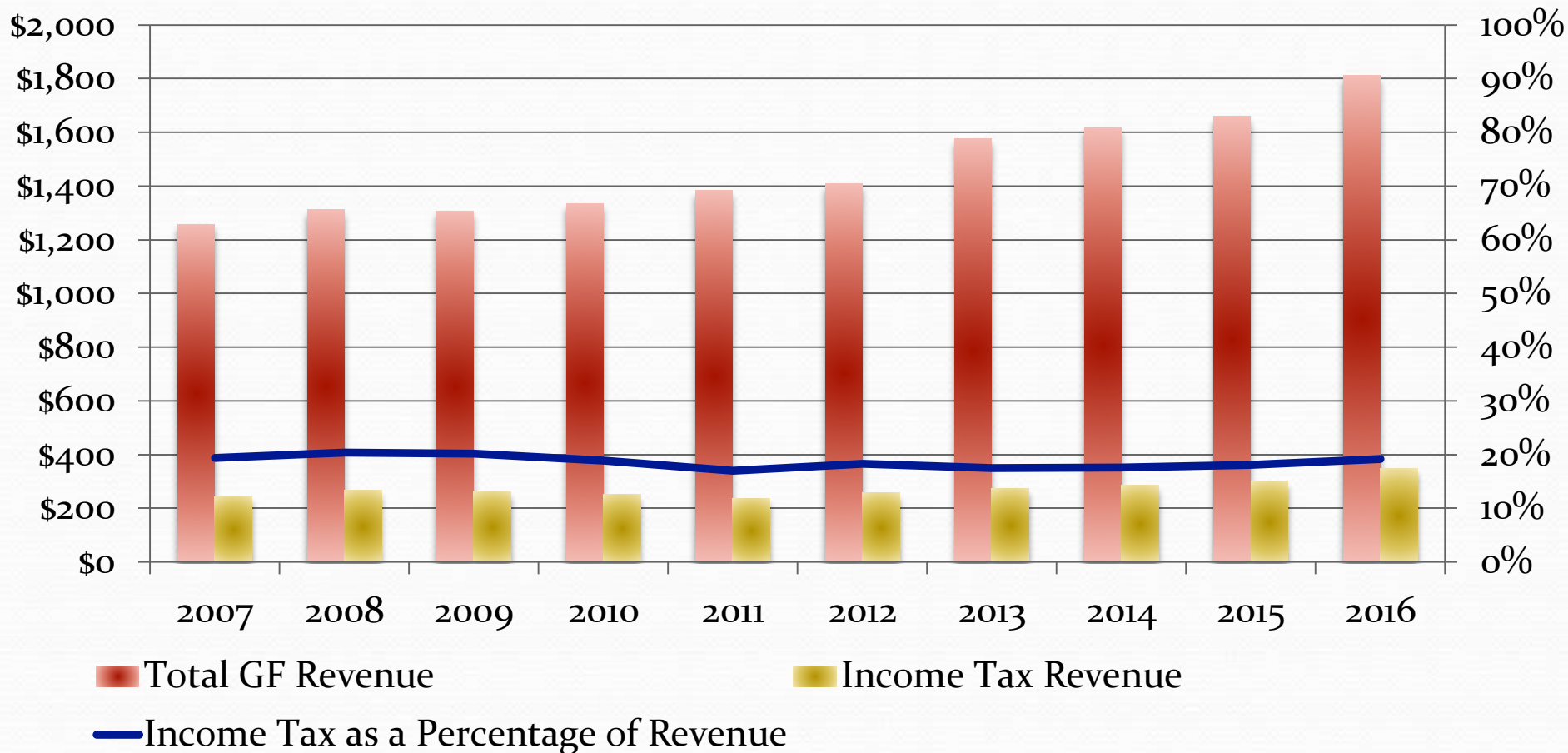
Legend:
- Total GF Revenue
- Income Tax Revenue
- Income Tax as a Percentage of Revenue

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Gimme Shelter

15-Year & 30-Year Fixed Mortgage Rates
*January 1995 through January 2018**
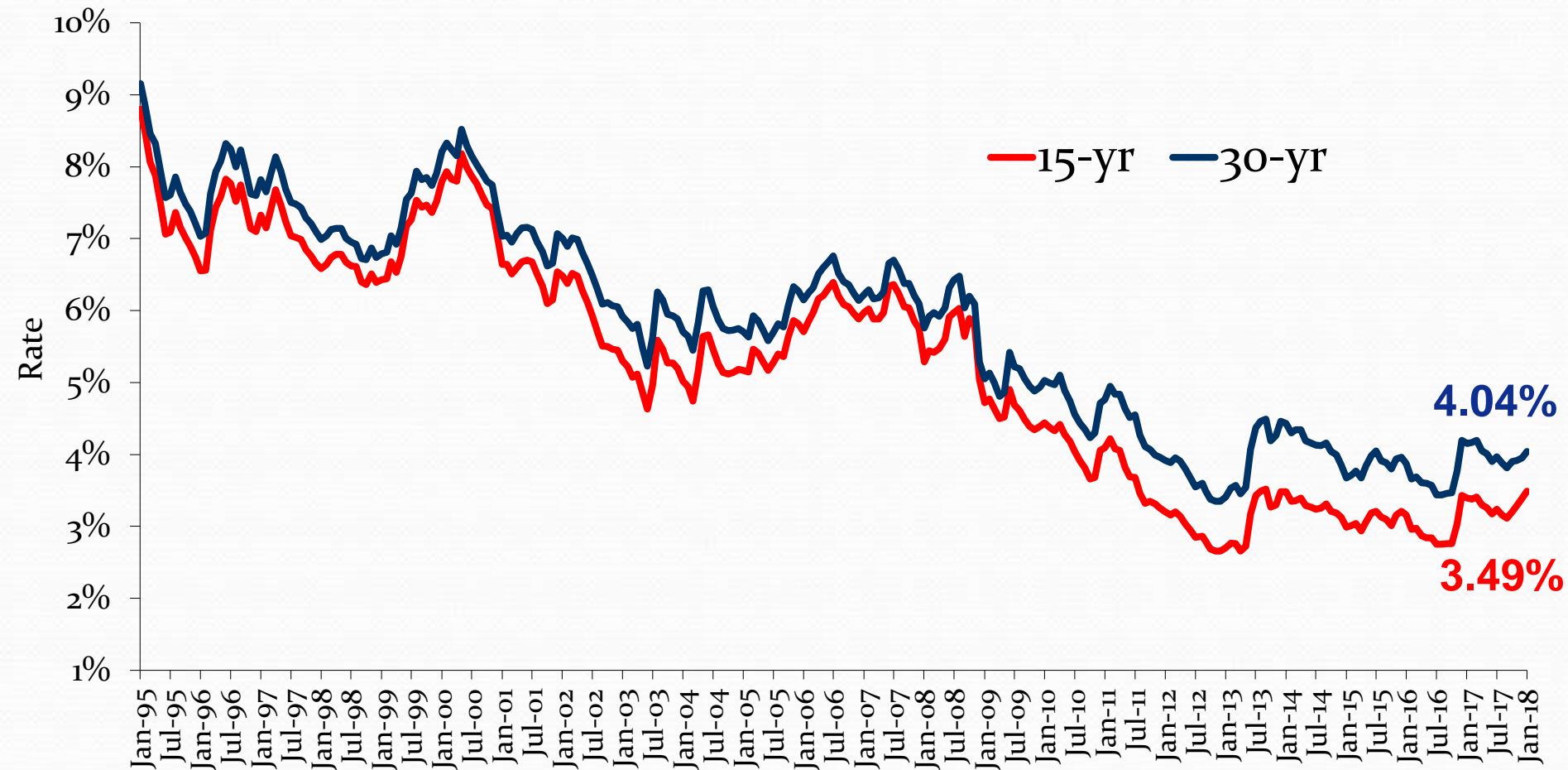
Source: Freddie Mac

Week ending 1/18/2018

U.S. Households: Owner v. Renter Occupied, 1965-2016

- From 2006-2016 the number of households headed by owners remained relatively flat.

- At the same time, the number of households renting their home increased significantly (+26.5%).

- The share of renter households also increased—from 31.2% of households in 2006 to 36.6% in 2016.

# of Household Heads (Millions)

Homeowners

Renters

36.2

21.3

75.4

75.0

43.3

34.2
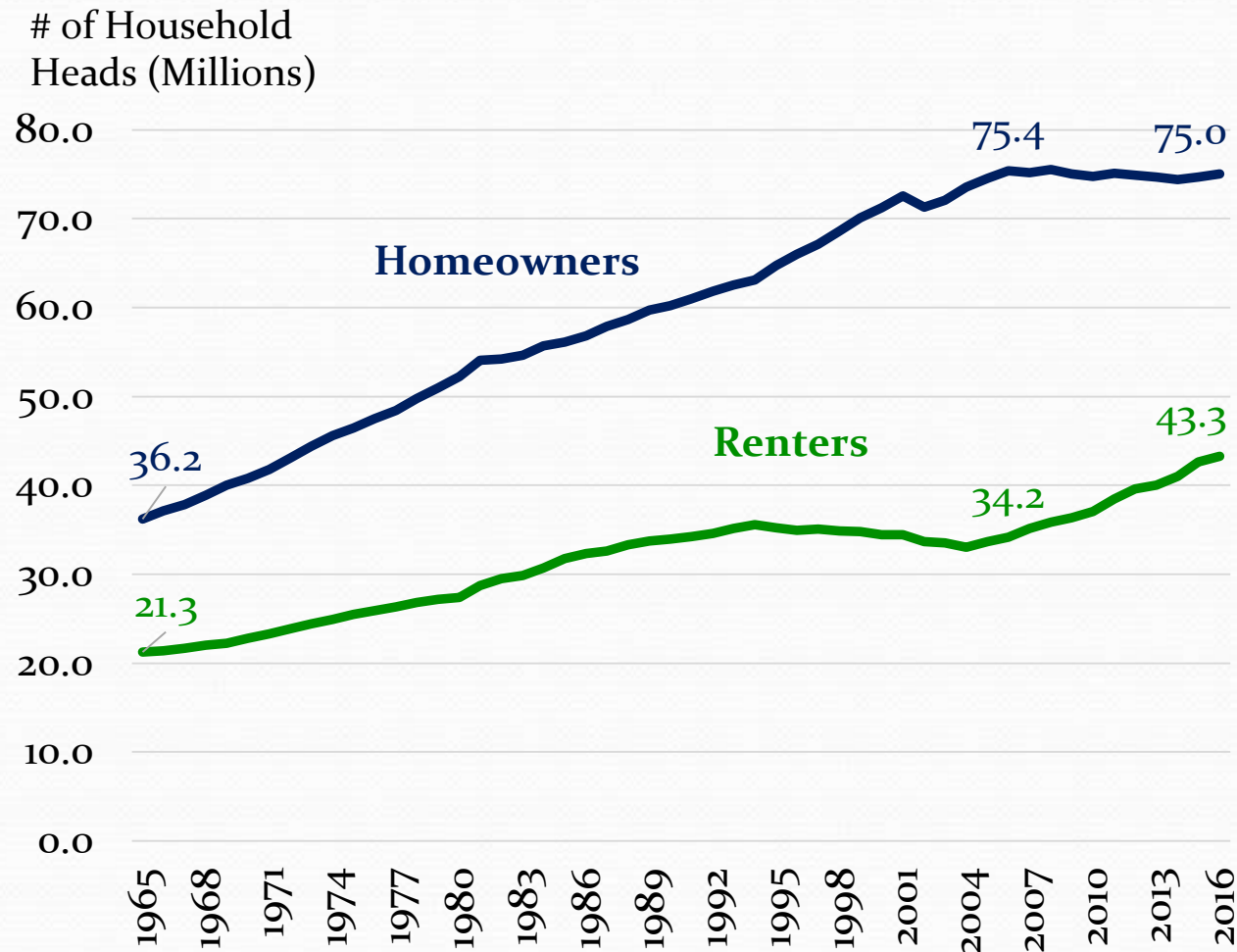
Source: U.S. Census Bureau; Pew Research Center

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U.S. Homeownership (NSA)
1980Q3-2017Q3
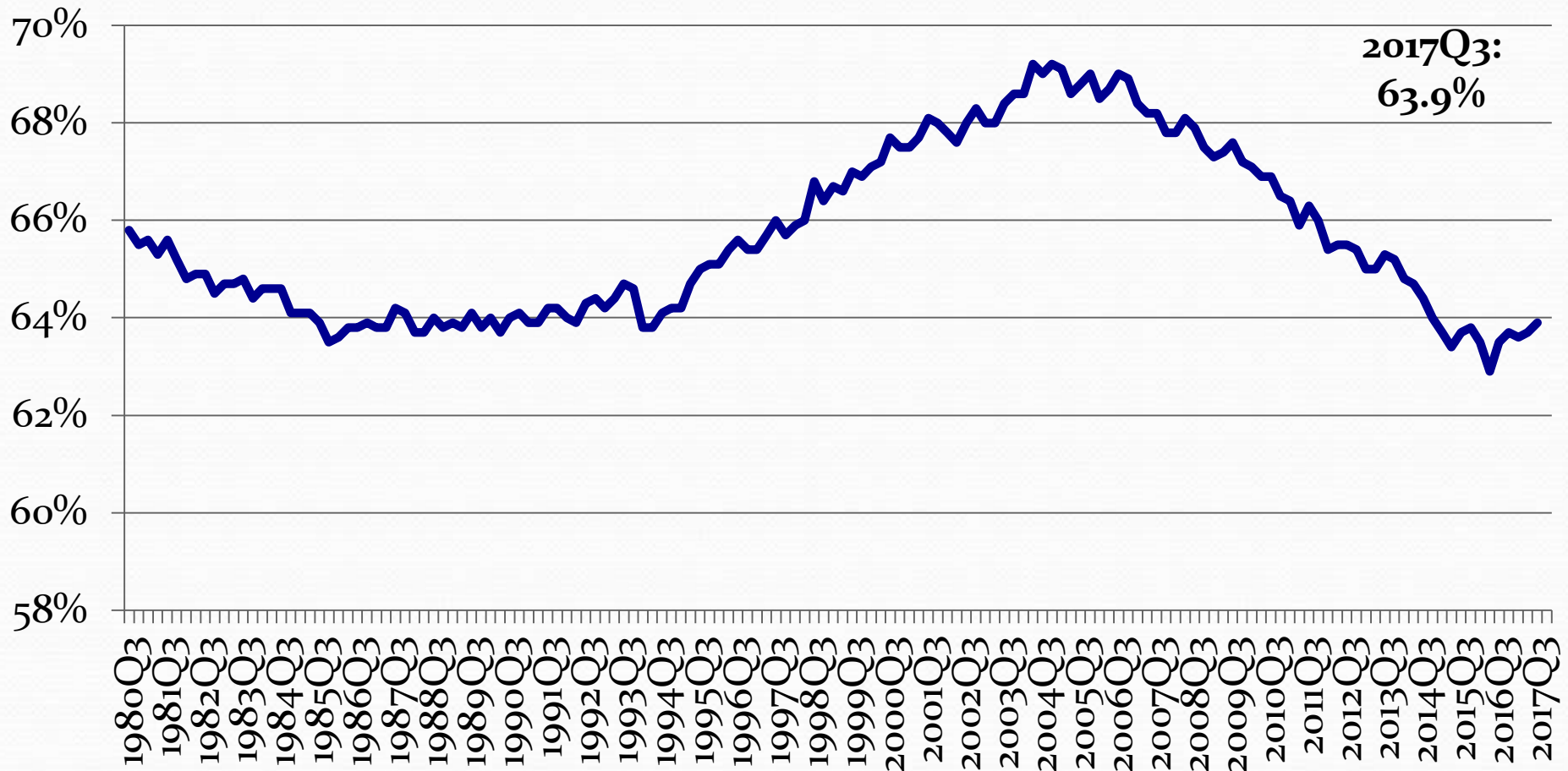
2017Q3: 63.9%

*NSA: not seasonally adjusted

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U.S. Private New Multifamily Construction
November 1993 through November 2017

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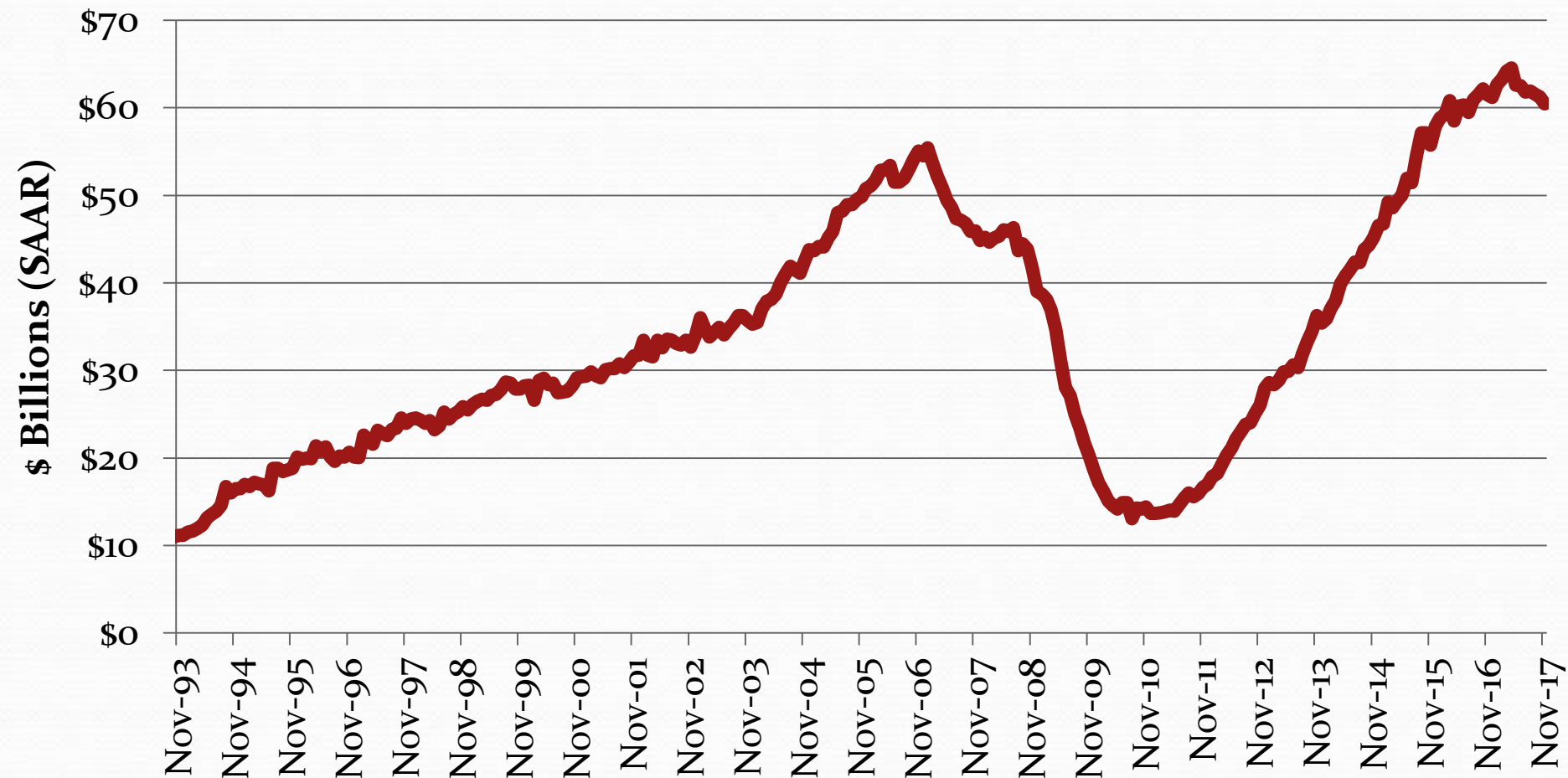
U.S. Single-Family Housing Starts
December 1999 through December 2017

December 2017: 836K
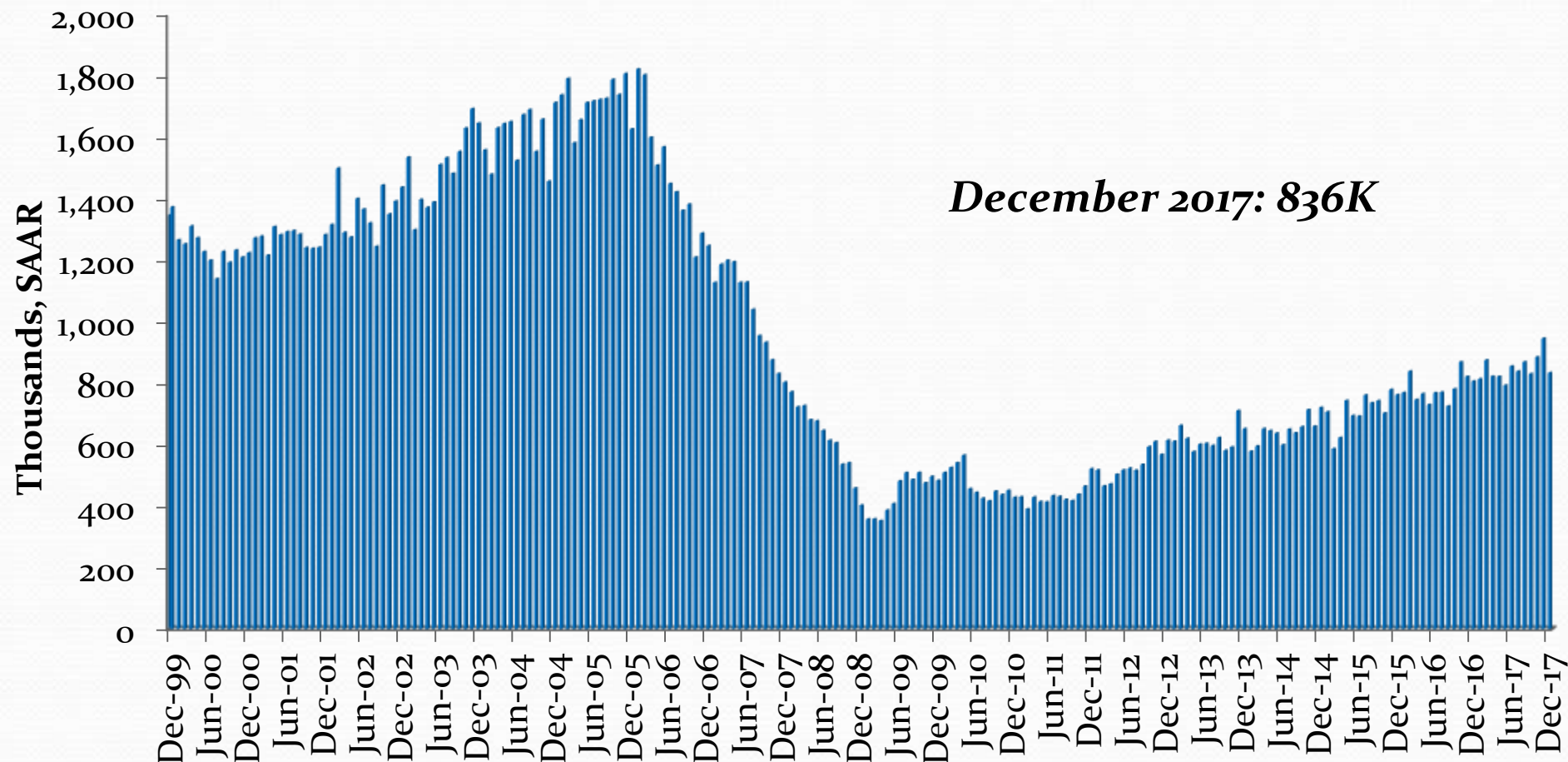
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S&P/Case-Shiller Home Price Indices for Select Metros
October 2017, 12-Month Percentage Change

Bar chart, 12-Month % Change:

- Washington D.C.: 3.1%
- Chicago: 4.1%
- Miami: 4.4%
- Atlanta: 5.0%
- New York: 5.9%
- Composite-20: 6.4%
- Los Angeles: 6.5%
- Boston: 6.9%
- Dallas: 7.1%
- Detroit: 7.1%
- Denver: 7.2%
- San Francisco: 7.7%
- Las Vegas: 10.2%
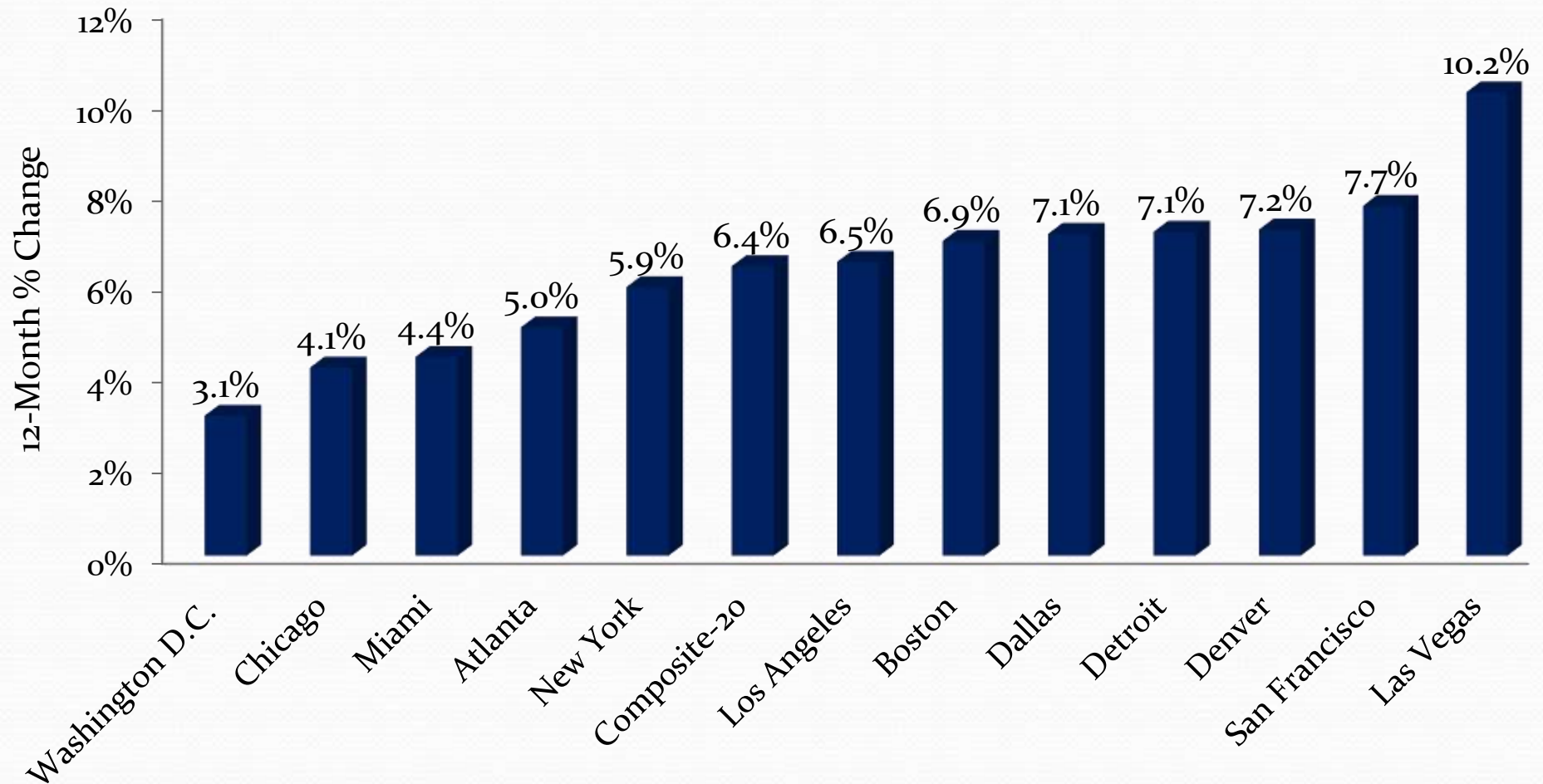
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National Nonresidential Construction Spending by Subsector
November 2014 v. November 2017

Subsector	3-year % Change
Lodging	58.9%
Office	45.2%
Communication	33.9%
Commercial	29.6%
Amusement and recreation	29.1%
Educational	26.5%
Health care	7.7%
Transportation	7.2%
Power	7.1%
Highway and street	2.4%
Conservation and development	-5.6%
Public safety	-8.3%
Religious	-8.4%
Manufacturing	-14.2%
Sewage and waste disposal	-14.9%
Water supply	-18.4%

Total Nonresidential Construction: +$81.5B; +12.8%

3-year % Change
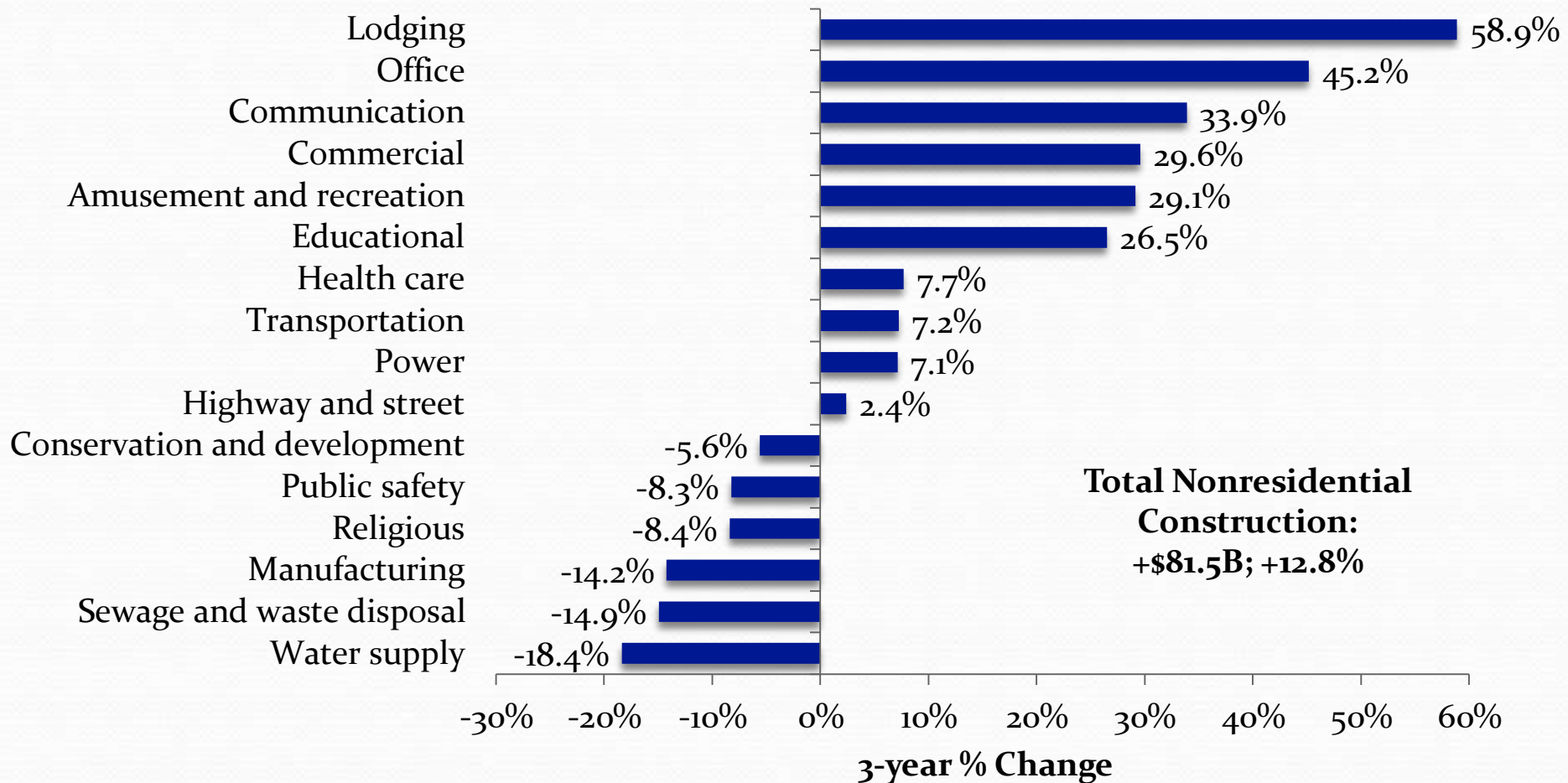
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Commercial/Multifamily Offshore Investment Sales Volumes Reach New Heights in 2015/16

Foreign investment increases 85.1% in 2015
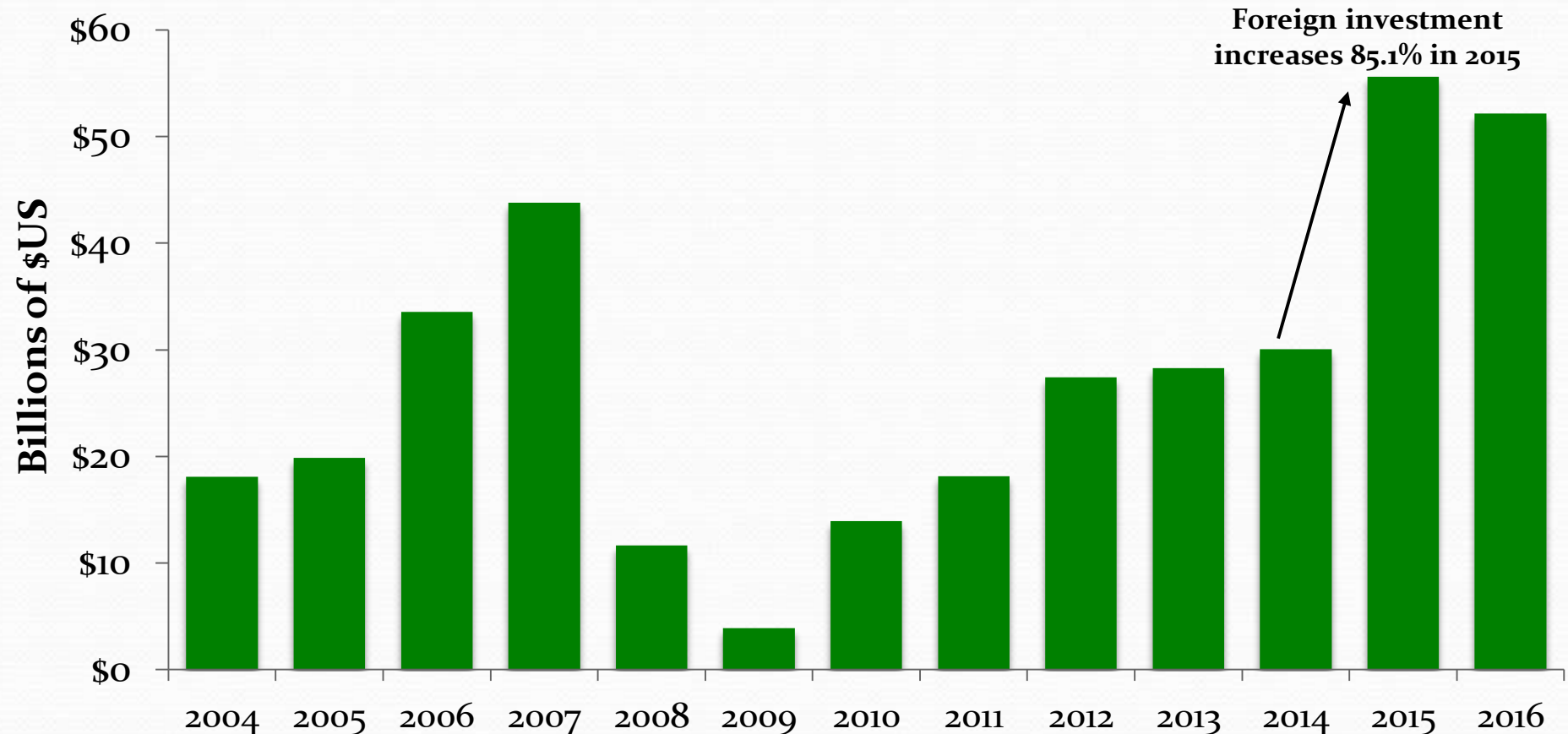
Billions of $US

Note: Among transactions larger than $5.0 million

Cross-border investment remained elevated in 2016:
Although down relative to a record 2015, offshore investment levels still exceeded the pre-2015 high in 2007.

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Foreign Investment in U.S. Commercial Real Estate
Top Destination Markets, 2017H1

Foreign Investment by Destination Market (as a % of Total)

Market	%
New York	17.4%
Washington, D.C.	9.7%
Boston	7.6%
Los Angeles	6.9%
San Francisco	4.2%
Chicago	3.4%
Dallas-Ft. Worth	3.0%
Seattle-Bellevue	2.6%
Houston	2.3%
Austin	2.2%

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19th Nervous Breakdown

Gross Domestic Product
*1990Q3 through 2017Q3**

2017Q3: +3.2%
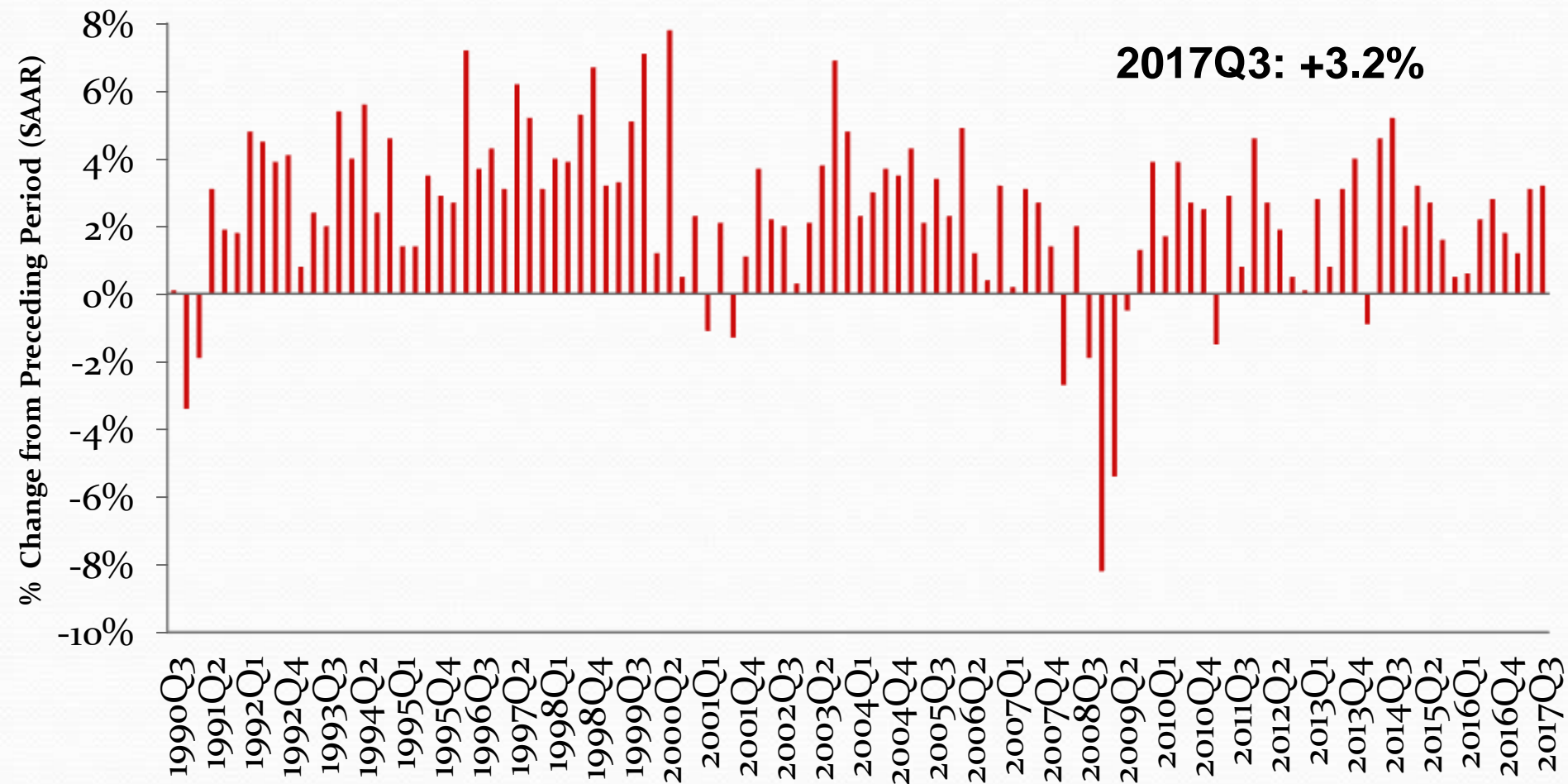
3rd (Final) Estimate

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Conference Board Leading Economic Indicators Index
August 2007 through November 2017
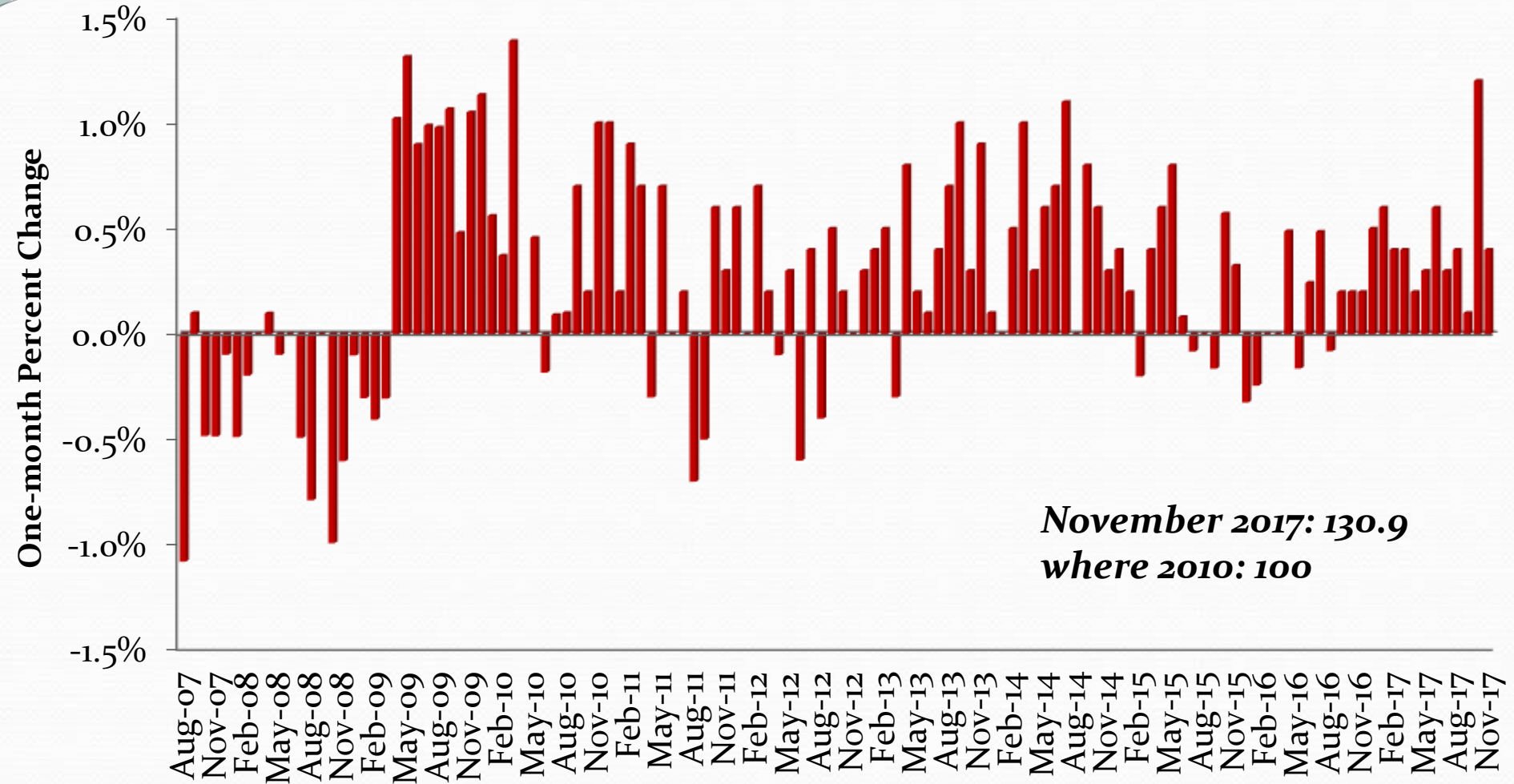
November 2017: 130.9
where 2010: 100

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U.S. Saving Rate, November 2005 – November 2017
## *(Savings as Percentage of Personal Disposable Income)*

November 2017: 2.9%

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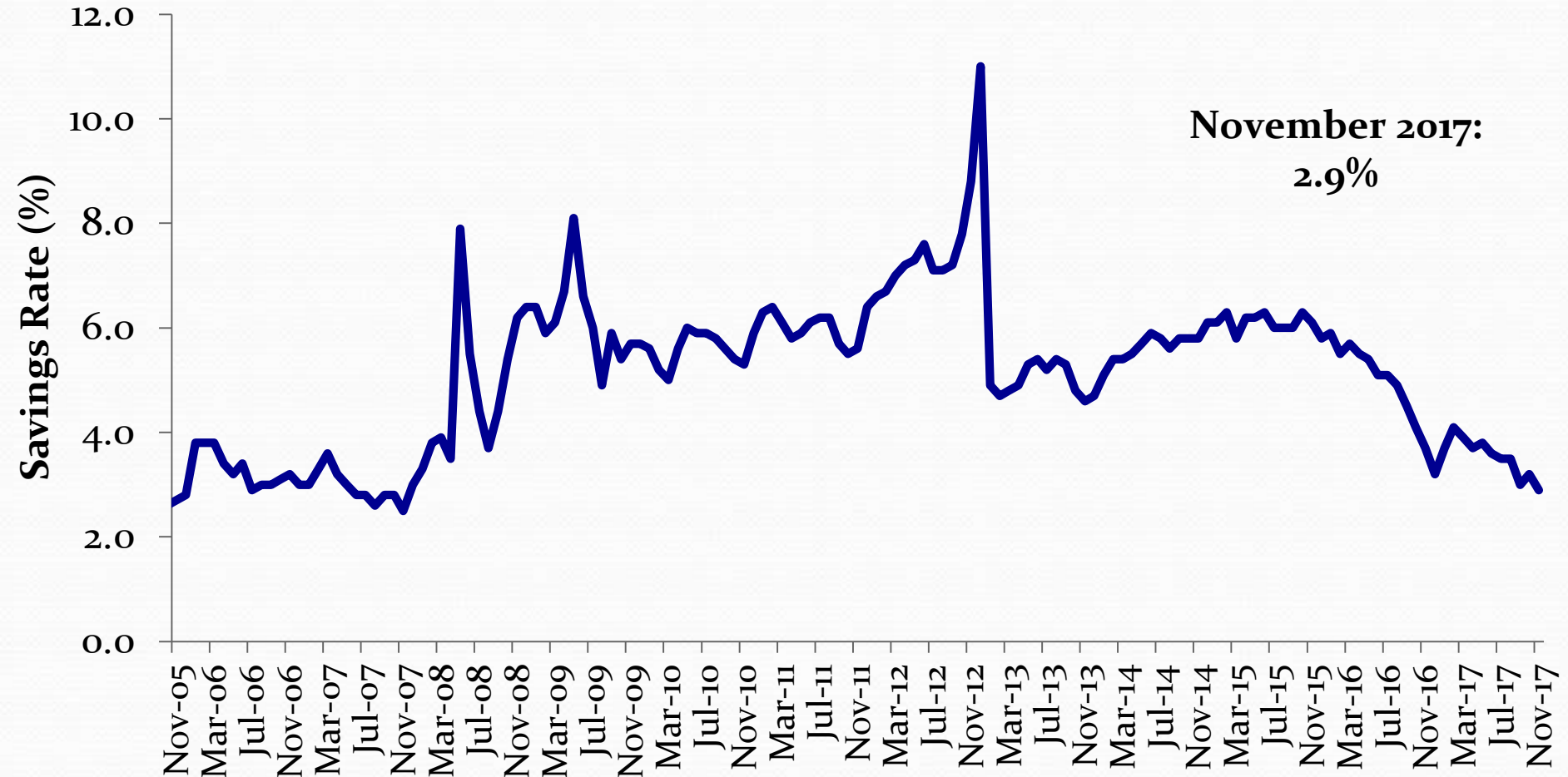
Global Debt Reaches All Time Highs (IIF)

- According to the International Institute of Finance (IIF), global debt has reached an all-time high in 2016;

- At **$215 trillion**, global debt—including household, government, and corporate—now represents **325% of global GDP**;

- Last year the IMF warned of risks to the global economy:
  - *"sheer size of debt could set the stage for an unprecedented private deleveraging process that could thwart the fragile economic recovery"*
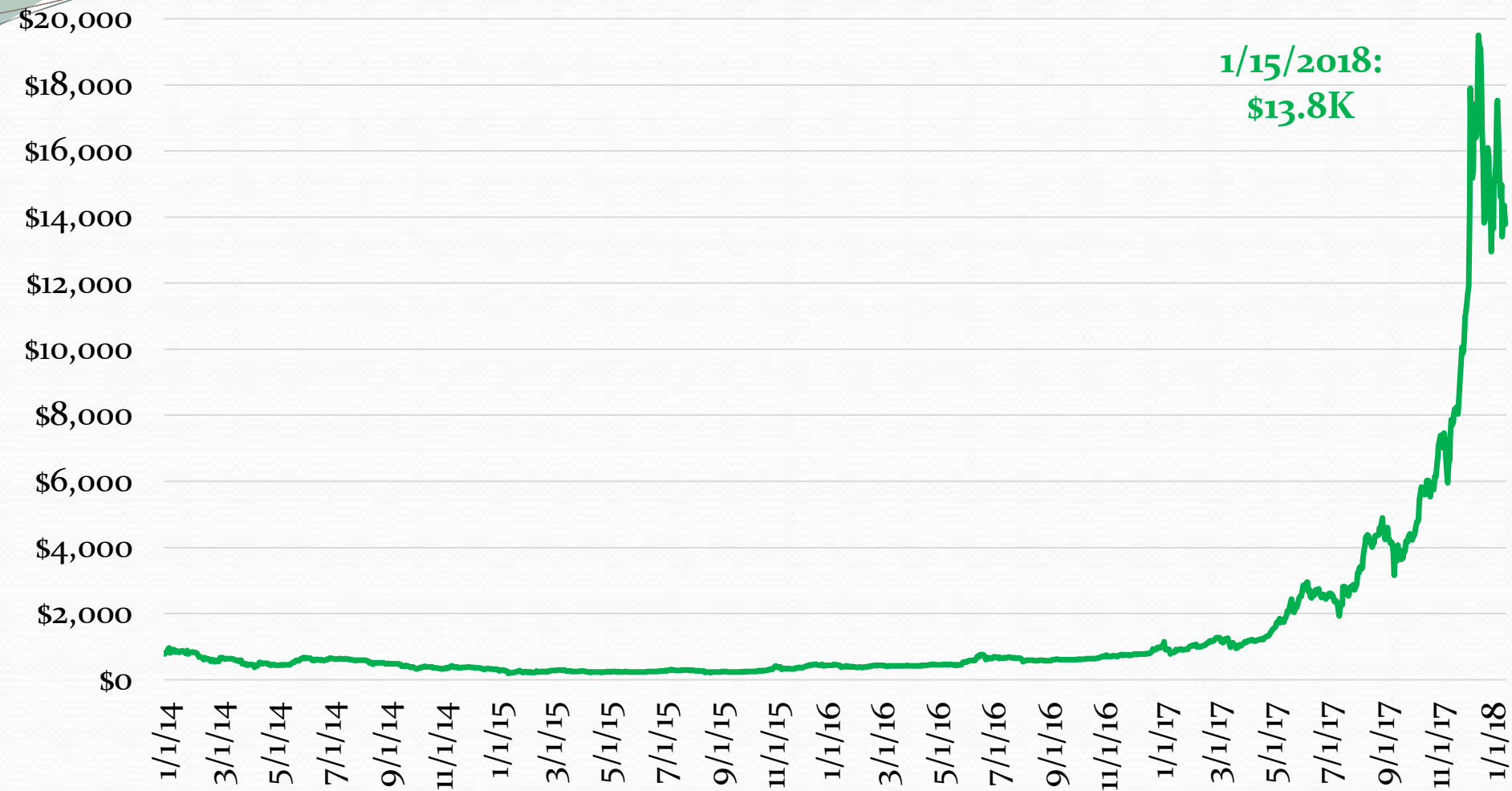
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Shiller Price-Earnings Ratio, 1980-2017
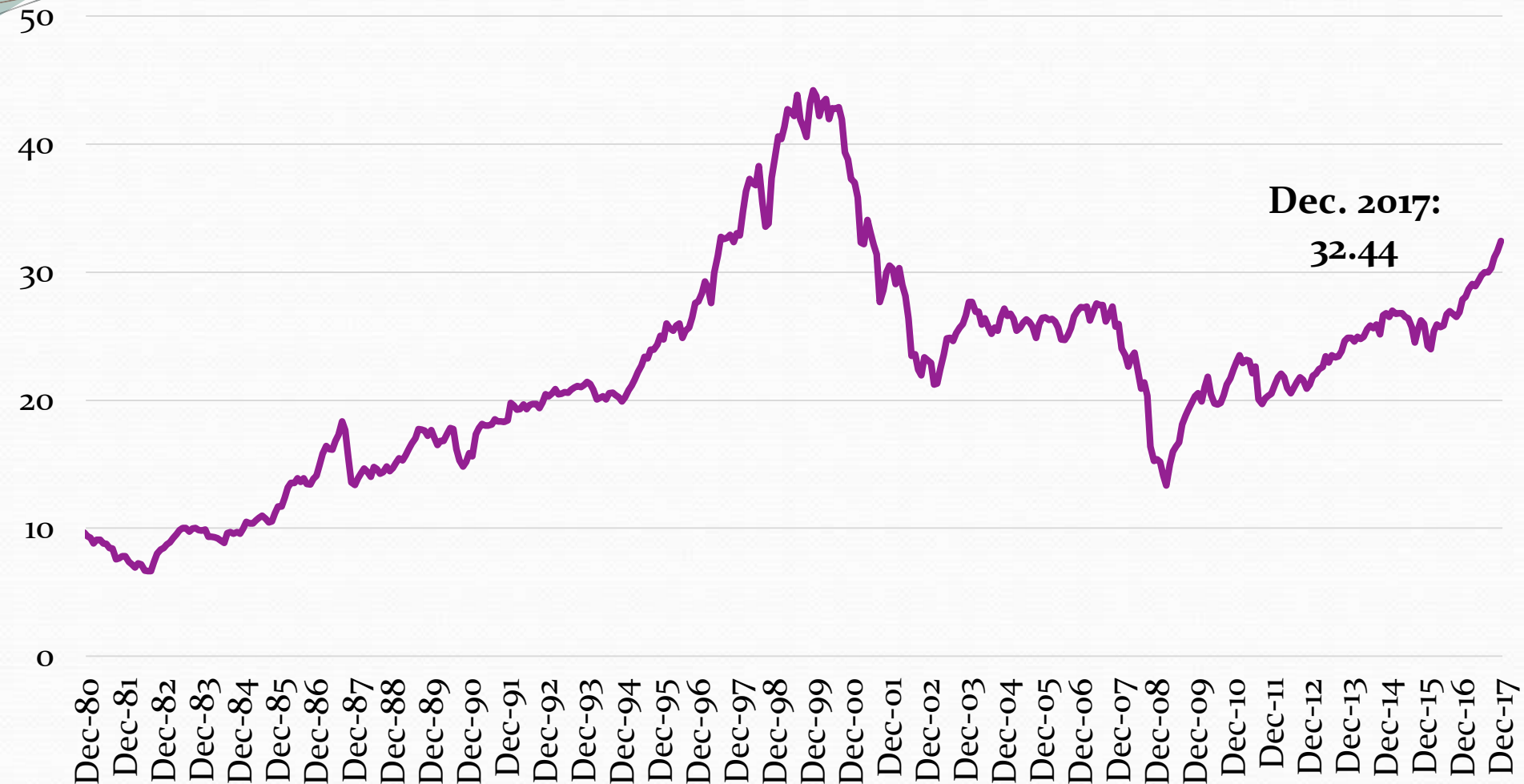
Dec. 2017: 32.44

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Shattered! --- Bitcoin Price, 2014-2018

1/15/2018: $13.8K

Source: CoinMarketCap.com

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Time is on My Side, at least in the Near-Term

- U.S. setting up for best year since '05. . .;

- Global economy also picking up momentum, in large measure due to policymaking;

- Job opportunities are abundant;

- Corporate profitability elevated;

- Consumer and business confidence has been surging. . .;

- And now tax cuts, including major reductions in corporate taxes . . . What could go wrong?;

- A lot can go wrong – that's always true – first there are the Black Swan threats:

- "I'm forever blowing bubbles, pretty bubbles in the air, they fly so high, nearly reach the sky, and like my dreams, they fade and die";

- Equity markets? U.S. bond market? Commercial real estate? Bitcoin? Where are all the pretty bubbles?

- 2018 will be fine – better than fine – 2019 might be, too, but beyond that, potential deleveraging cycle prompted by a repricing of assets – Bad!!!!

Thank You

- Please follow me on Twitter -- @sageanirban

- Please look for updates of information at www.sagepolicy.com.

- Please contact us when you require economic research & policy analysis.

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