Markets, He Wrote

On Behalf of

The Mid-Atlantic CIO Forum

By: Anirban Basu
Sage Policy Group, Inc.

December 21st, 2017

Sage Policy
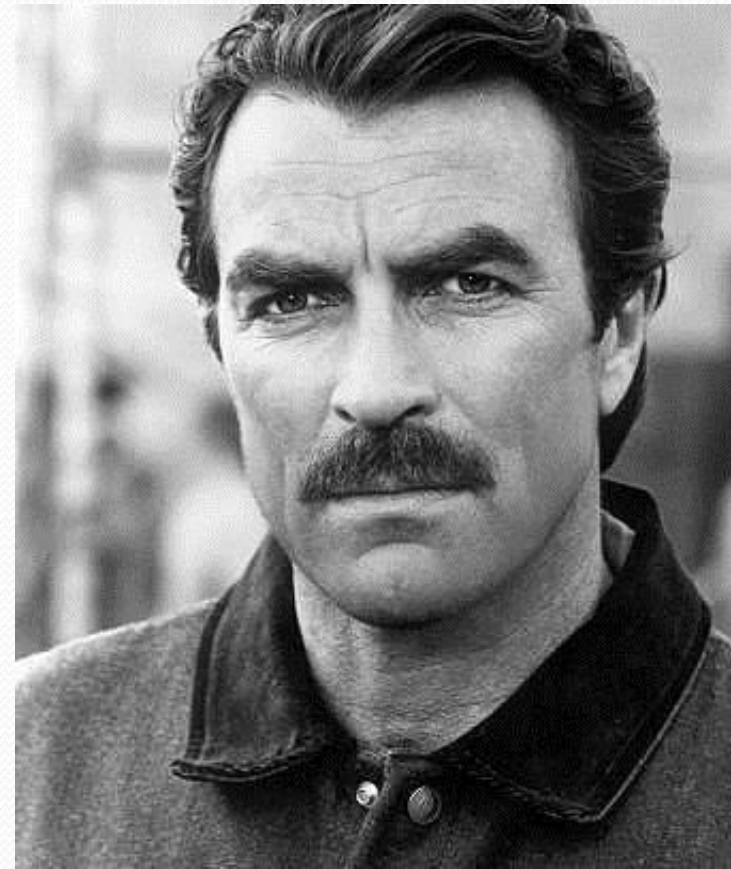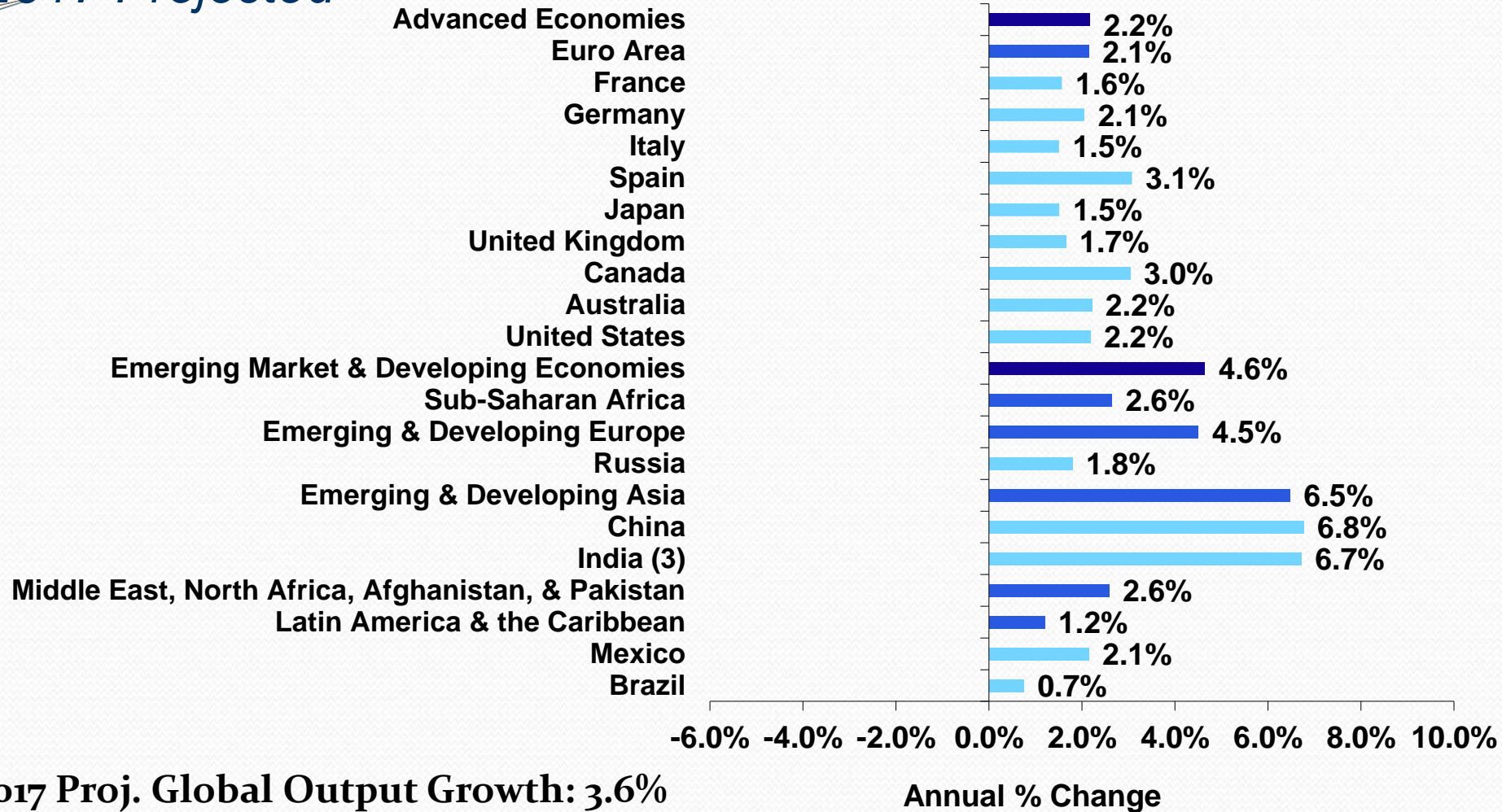Group, Inc.

Macro P.I.

(Just How Hairy is the Global Situation?)

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Estimated Growth in Output by Select Global Areas
2017 Projected

Region	Annual % Change
Advanced Economies	2.2%
Euro Area	2.1%
France	1.6%
Germany	2.1%
Italy	1.5%
Spain	3.1%
Japan	1.5%
United Kingdom	1.7%
Canada	3.0%
Australia	2.2%
United States	2.2%
Emerging Market & Developing Economies	4.6%
Sub-Saharan Africa	2.6%
Emerging & Developing Europe	4.5%
Russia	1.8%
Emerging & Developing Asia	6.5%
China	6.8%
India (3)	6.7%
Middle East, North Africa, Afghanistan, & Pakistan	2.6%
Latin America & the Caribbean	1.2%
Mexico	2.1%
Brazil	0.7%

Annual % Change

2017 Proj. Global Output Growth: 3.6%

2016 Growth (Estimate)	
World: 3.2%	Euro Area: 1.8%
United States: 1.5%	Japan: 1.0%

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International Population Dynamics, 16 Largest Nations

Nation	Population (Millions)			% Change
	2017	2050	Net Change	
Nigeria	190.9	410.6	219.8	115.1%
Ethiopia	105.0	190.9	85.9	81.9%
Egypt	97.6	153.4	55.9	57.3%
Pakistan	197.0	306.9	109.9	55.8%
Philippines	104.9	151.3	46.4	44.2%
Mexico	129.2	164.3	35.1	27.2%
India	1,339.2	1,659.0	319.8	23.9%
Bangladesh	164.7	201.9	37.3	22.6%
Indonesia	264.0	321.6	57.6	21.8%
United States	324.5	389.6	65.1	20.1%
Vietnam	95.5	114.6	19.1	20.0%
Brazil	209.3	232.7	23.4	11.2%
China	1,409.5	1,364.5	-45.1	-3.2%
Germany	82.1	79.2	-2.9	-3.5%
Russian Federation	144.0	132.7	-11.3	-7.8%
Japan	127.5	108.8	-18.7	-14.7%
World	**7.6 billion**	**9.8 billion**	**2.2 billion**	**29.4%**

*For statistical purposes, the data for China do not include Hong Kong and Macao, Special Administrative Regions (SAR) of China, and Taiwan Province of China.

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Niamey Vice
(Fertility Rates by Country, 2015)

Top 15		
Rank*	Country	Fertility Rate
1	Niger	7.29
2	Somalia	6.37
3	Dem. Rep. of the Congo	6.20
4	Mali	6.15
5	Chad	6.05
6	Burundi	5.78
7	Angola	5.77
8	Uganda	5.68
9	Timor-Leste	5.62
10	Nigeria	5.59
11	Gambia, The	5.49
12	Burkina Faso	5.44
13	Mozambique	5.31
14	Tanzania	5.08
15	Benin	5.05

Bottom 15		
Rank*	Country	Fertility Rate
187	Malta	1.42
188	Italy	1.37
188	Slovak Republic	1.37
190	Mauritius	1.36
191	Cyprus	1.35
192	Bosnia and Herzegovina	1.35
193	Poland	1.32
193	Spain	1.32
195	Greece	1.30
196	Macao SAR, China	1.28
197	Moldova	1.25
198	Singapore	1.24
199	Korea, Rep.	1.24
200	Portugal	1.23
201	Hong Kong SAR, China	1.20

*Rank among 201 countries for which data are available for the most recent year (2015)
**Total fertility rate represents the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with age-specific fertility rates of the specified year.*

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Global Debt to Exacerbate Slow Growth?

- According to the IMF, global debt reached an **all-time high** in 2015;

- At **$152 trillion**, global gross debt of the nonfinancial sector now represents **225% of global GDP**;

- About **2/3** of this debt is in the **private sector**;

- Current low nominal-growth environment is making adjustment difficult, setting the stage for a "**vicious feedback loop**" in which lower growth hampers deleveraging and the debt overhang exacerbates the slowdown.[2]

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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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NYMEX Crude Oil Future Prices in U.S. Dollars
November 2001 through November 2017
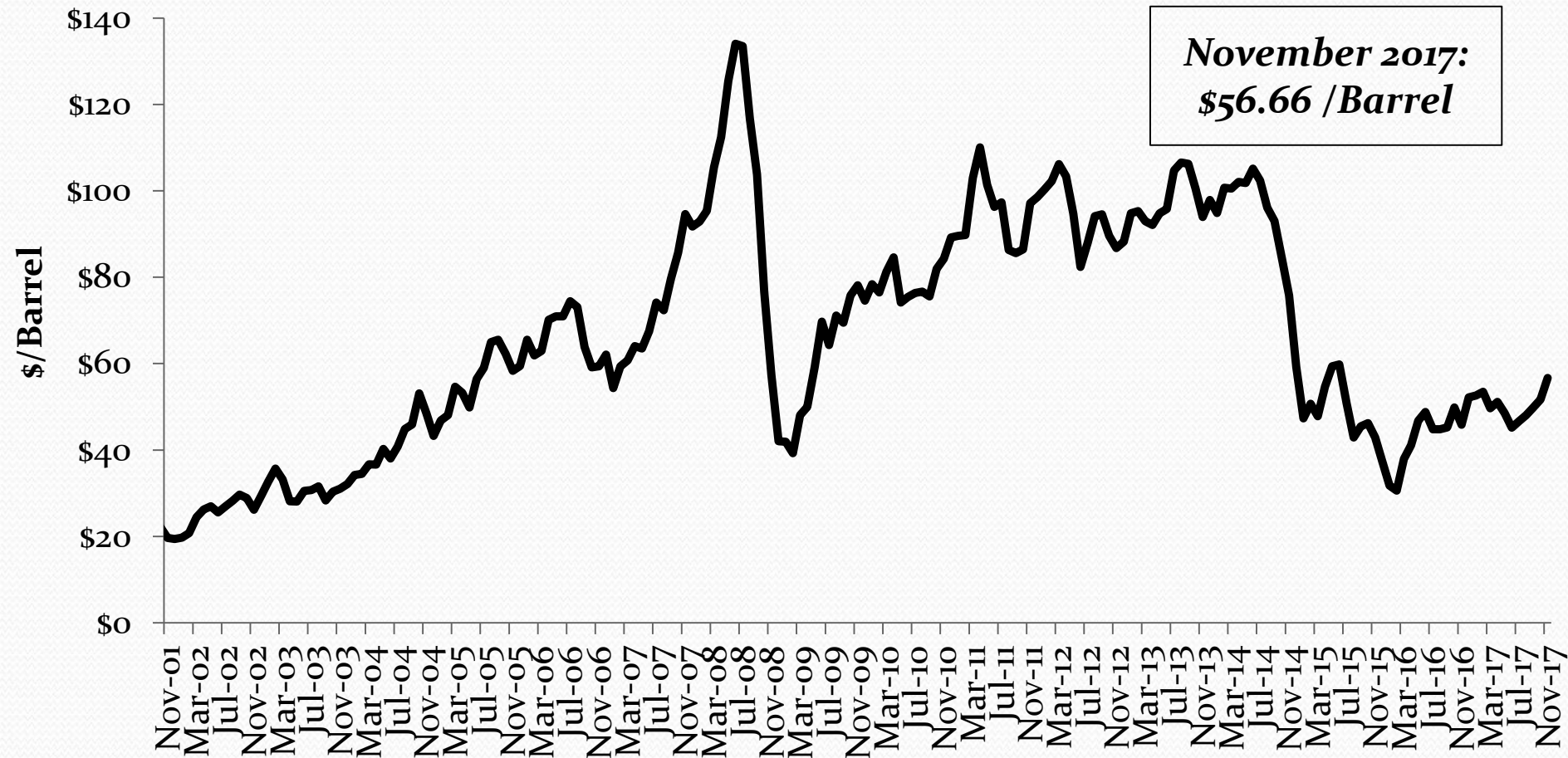
November 2017: $56.66 /Barrel

*Month of November = average of daily prices from 11/1-11/30

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Metal Price Indices
November 2007 through November 2017

Precious Metals

Base Metals

Iron Ore

2010=100
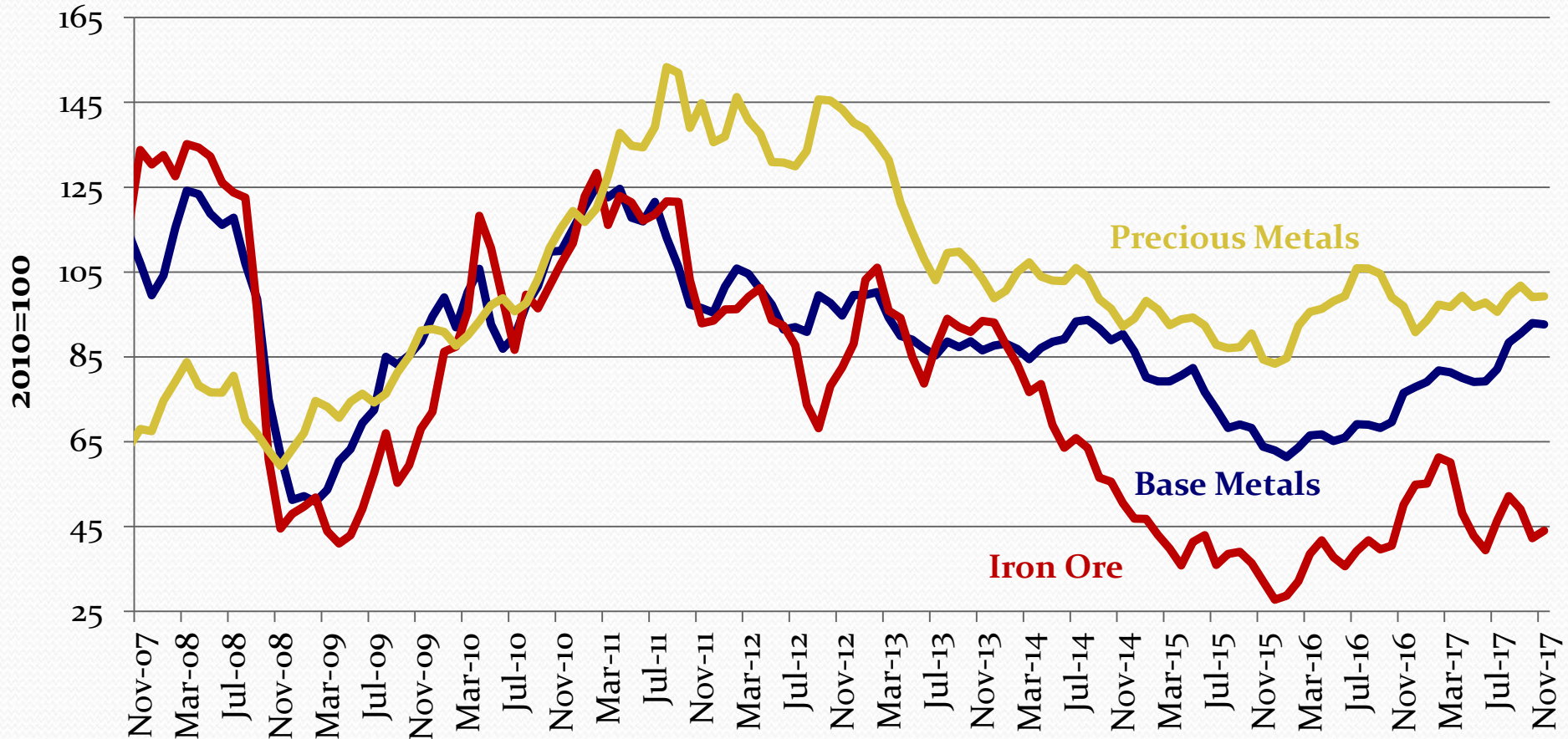
US$ Nominal
Base metals include aluminum, copper, lead, nickel, tin and zinc.
Precious metals include gold, platinum, and silver.

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Baltic Dry Index
December 2009 through December 2017

Jan. 4, 1985: 1,000

December 15th
1,619
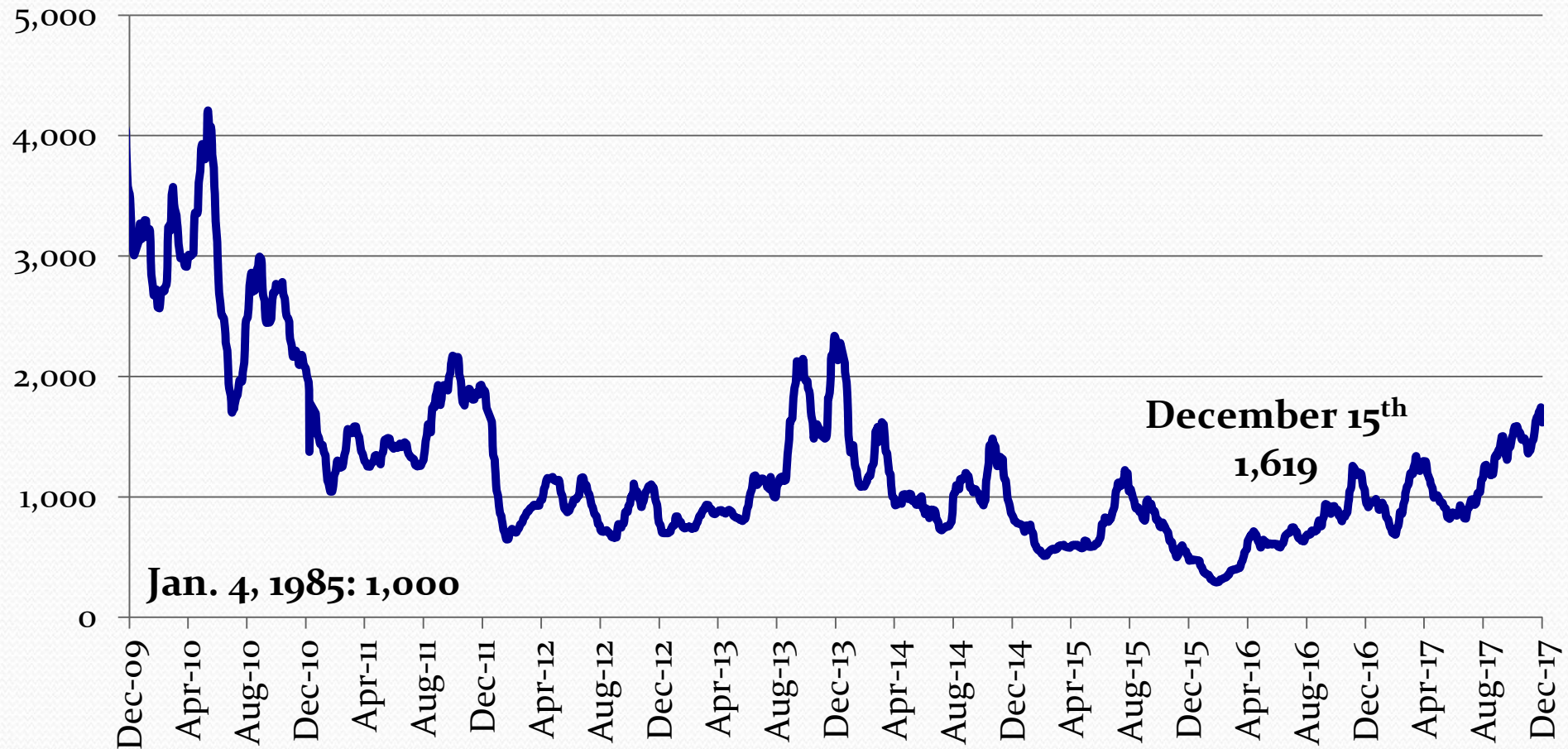
The Baltic Dry Index (BDI) is a measure of the price of shipping major raw materials such as metals, grains, and fossil fuels by sea.
The BDI is a composite of 3 sub-indices, each covering a different carrier size: Capesize, Panamax, and Supramax.

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USA CSI

(Commercial Situation Investigation)

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Gross Domestic Product
1990Q3 through 2017Q3*

2017Q3: +3.3%

*2nd Estimate

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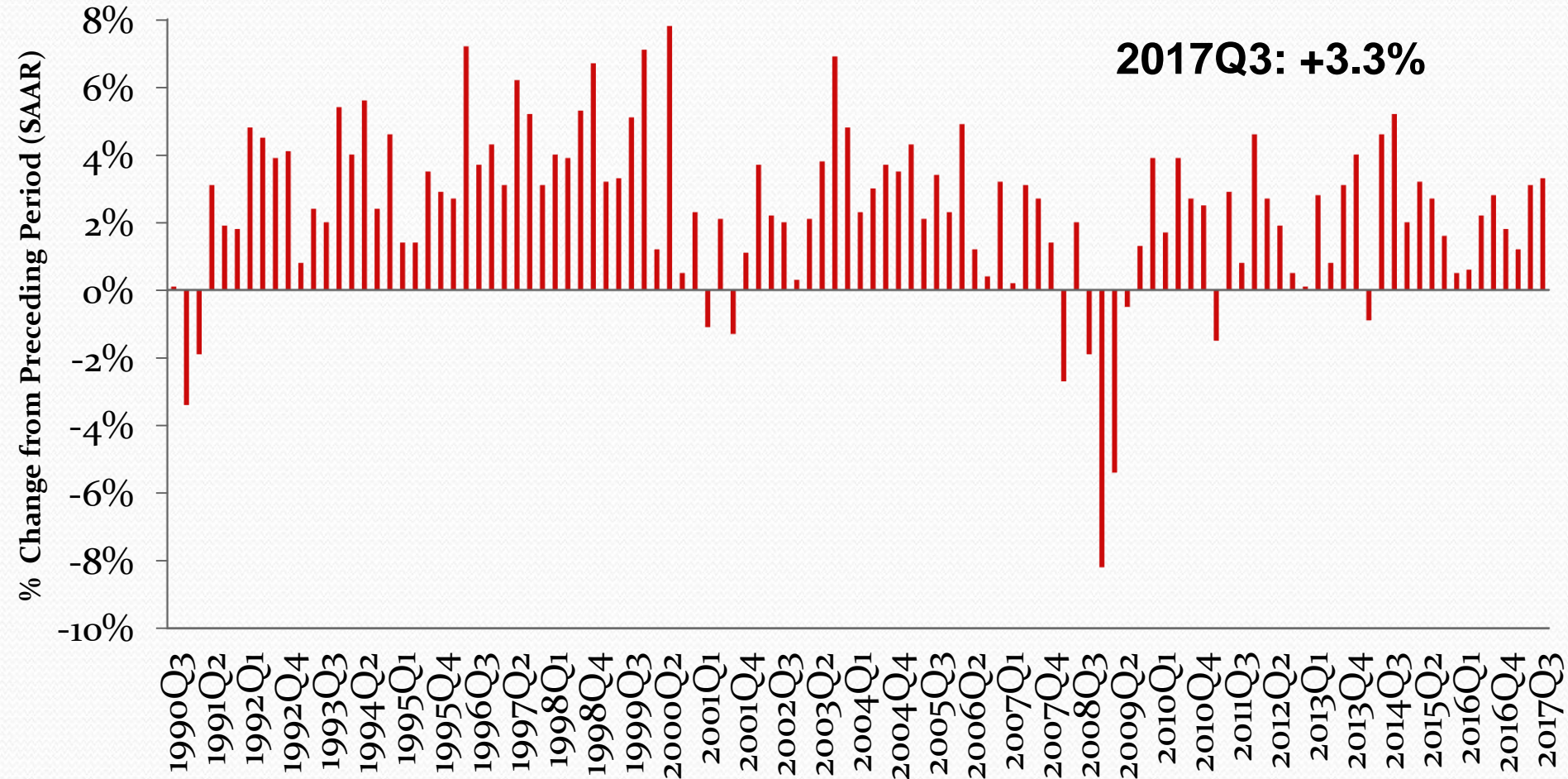
Net Change in U.S. Jobs, BLS
November 2002 through November 2017

November 2017: +228K

Thousands

600, 400, 200, 0, -200, -400, -600, -800, -1000

Nov-02, Mar-03, Jul-03, Nov-03, Mar-04, Jul-04, Nov-04, Mar-05, Jul-05, Nov-05, Mar-06, Jul-06, Nov-06, Mar-07, Jul-07, Nov-07, Mar-08, Jul-08, Nov-08, Mar-09, Jul-09, Nov-09, Mar-10, Jul-10, Nov-10, Mar-11, Jul-11, Nov-11, Mar-12, Jul-12, Nov-12, Mar-13, Jul-13, Nov-13, Mar-14, Jul-14, Nov-14, Mar-15, Jul-15, Nov-15, Mar-16, Jul-16, Nov-16, Mar-17, Jul-17, Nov-17

Source: U.S. Bureau of Labor Statistics

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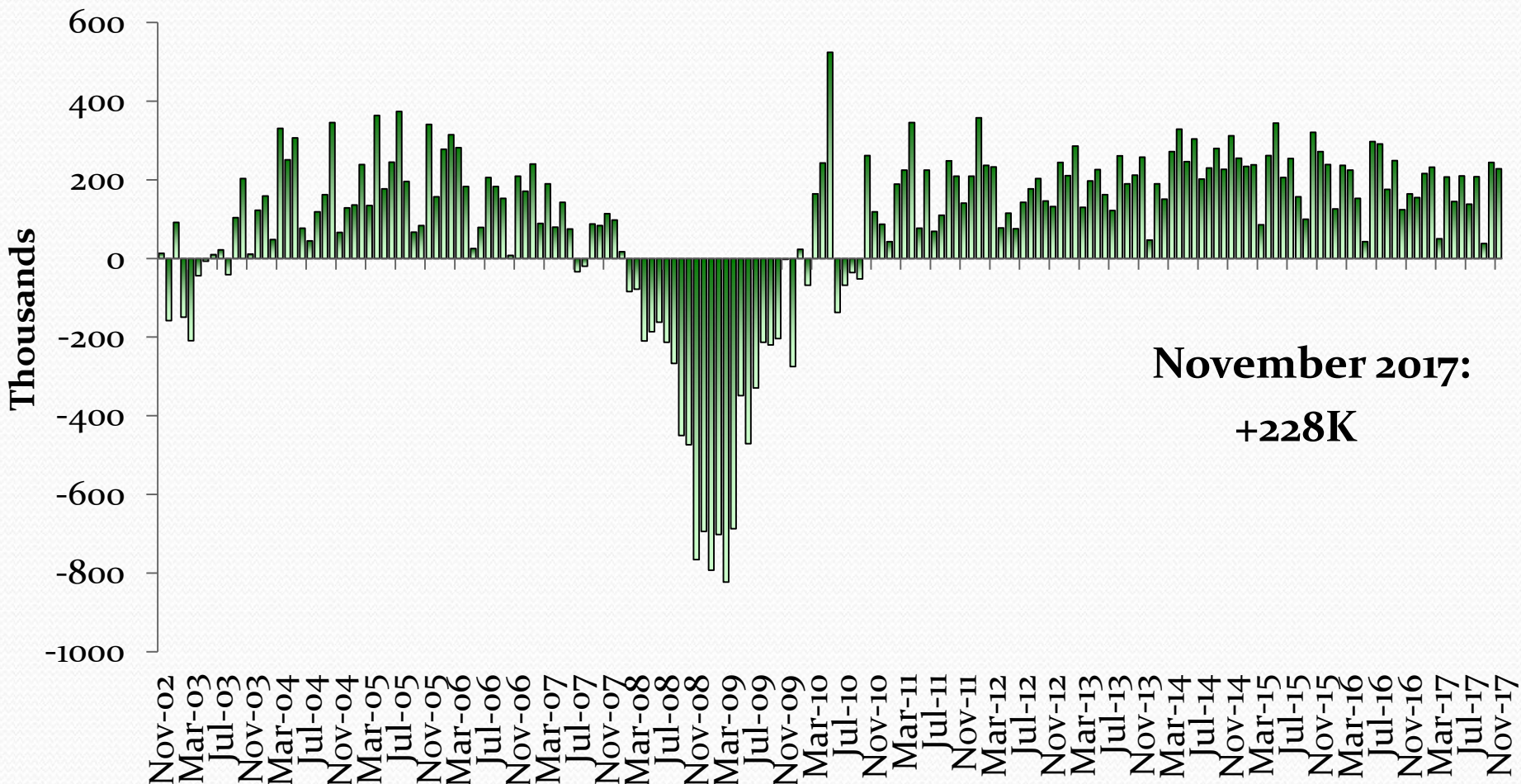
National Nonfarm Employment
by Industry Sector
November 2016 v. November 2017

Industry Sector	Thousands, SA
Professional and Business Services	548
Education and Health Services	471
Leisure and Hospitality	279
Manufacturing	189
Construction	184
Financial Activities	150
Trade, Transportation, and Utilities	124
Other Services	80
Mining and Logging	64
Government	47
Information	-65

All told 2,071K jobs gained

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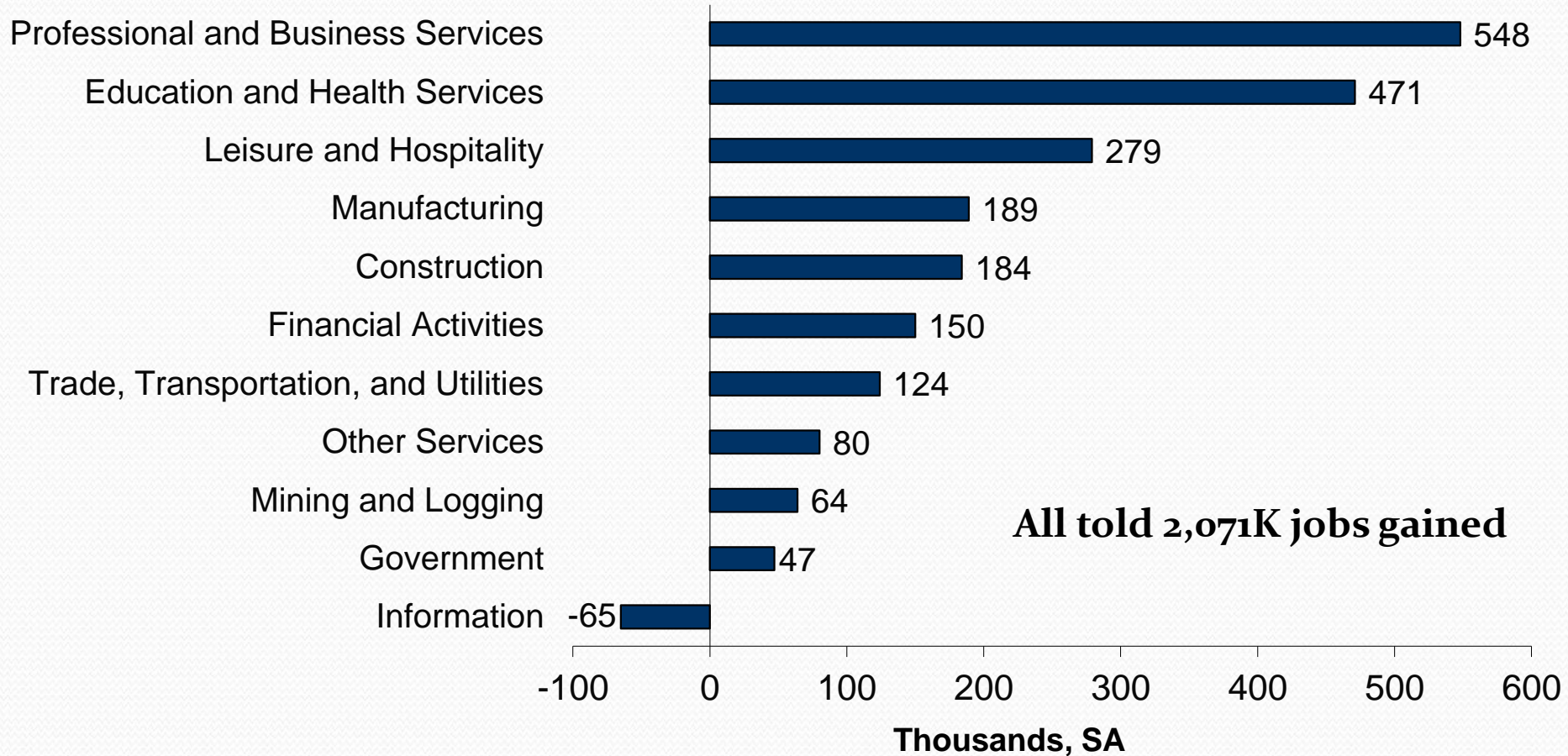
U.S. Employment to Population Ratio
November 2000 – November 2017

November 2017: 60.1%
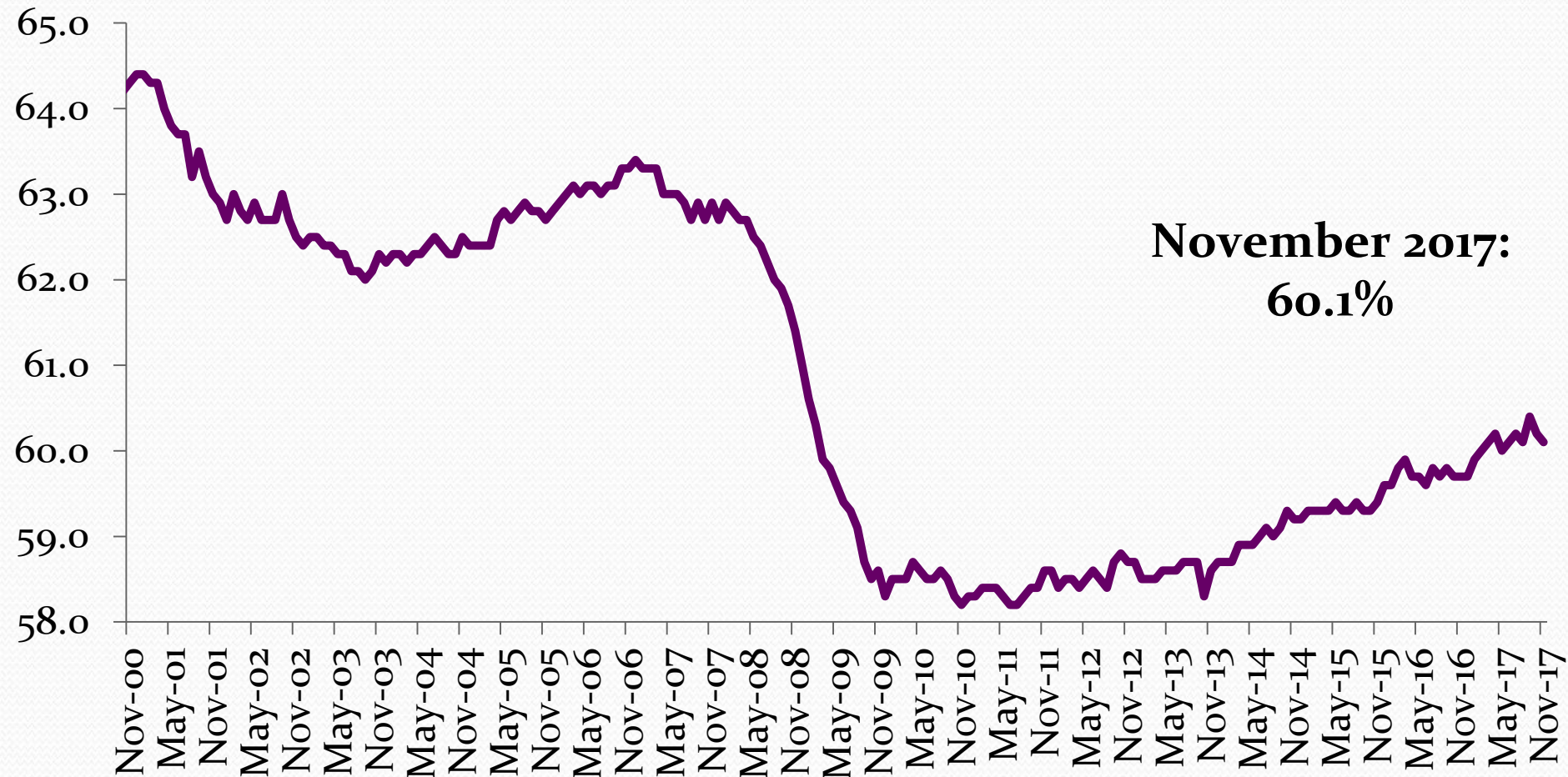
Note: Civilian employment-population ratio, population 16 years and over, seasonally adjusted (SA).

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New York-Newark-Jersey City, NY-NJ-PA MSA Nonfarm Employment
by Industry Sector Groups (NSA)
October 2016 v. October 2017 Absolute Change

Industry Sector	Change
Education and Health Services	46,600
Leisure and Hospitality	17,800
Financial Activities	16,700
Professional and Business Services	8,900
Mining, Logging, and Construction	8,000
Other Services	7,700
Manufacturing	1,800
Government	900
Information	-6,700
Trade, Transportation, and Utilities	-10,400

NY MSA Total: +91.3K; +0.9%

NY Total (SA): +102.6K; +1.1%

US Total (SA): +2,007K; +1.4%

Source: U.S. Bureau of Labor Statistics

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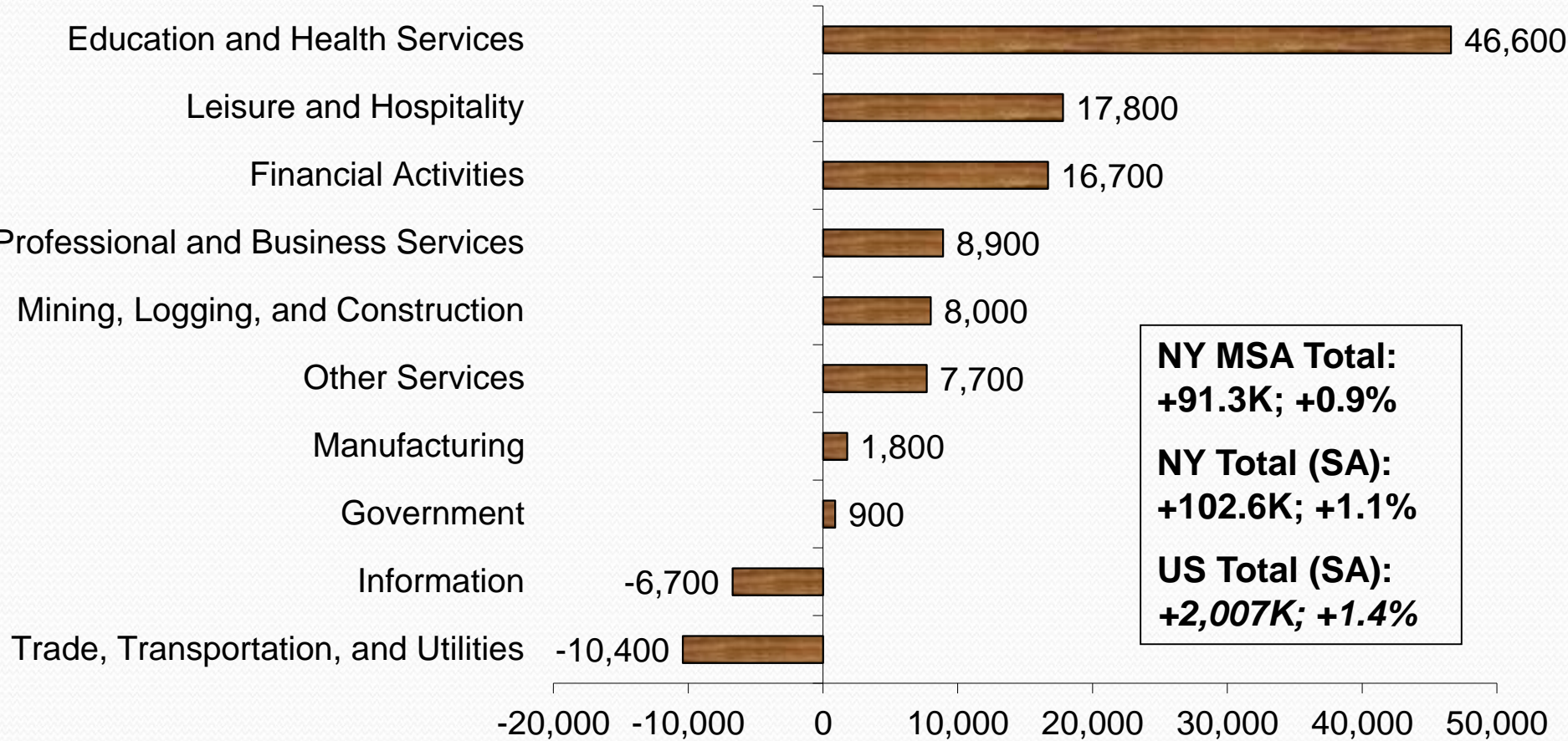
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA Nonfarm Emp.
by Industry Sector Groups (NSA)
October 2016 v. October 2017 Absolute Change

Industry Sector	Change
Education & Health Services	15,500
Professional & Business Services	14,400
Leisure & Hospitality	7,700
Financial Activities	4,100
Mining, Logging, & Construction	2,400
Manufacturing	900
Information	-300
Government	-1,200
Other Services	-2,200
Trade, Transportation & Utilities	-2,500

Philly MSA Total: +38.8K; +1.3%

PA Total (SA): +65.8K; +1.1%

US Total (SA): +2,007K; +1.4%

Source: U.S. Bureau of Labor Statistics

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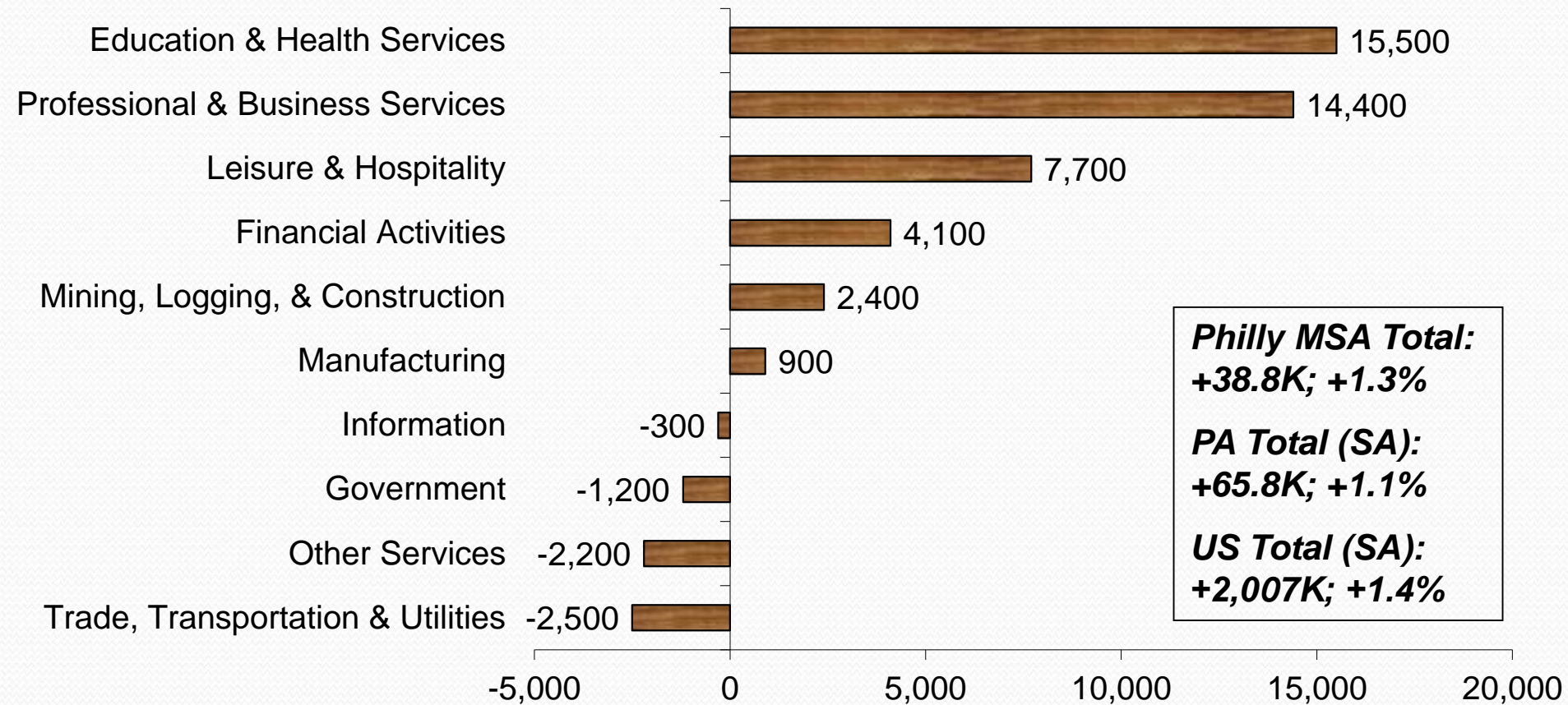
Baltimore-Columbia-Towson MSA Nonfarm Employment

by Industry Sector Groups (NSA)

October 2016 v. October 2017 Absolute Change

Industry Sector	Change
Education and Health Services	8,800
Professional and Business Services	5,100
Government	3,100
Mining, Logging, and Construction	2,100
Manufacturing	900
Other Services	-200
Information	-200
Leisure and Hospitality	-500
Financial Activities	-2,100
Trade, Transportation, and Utilities	-6,400

Baltimore MSA Total:
+10.6K; +0.8%

MD Total (SA):
+54.4K; +2.0%

US Total (SA):
+2,007K; +1.4%

Source: U.S. Bureau of Labor Statistics

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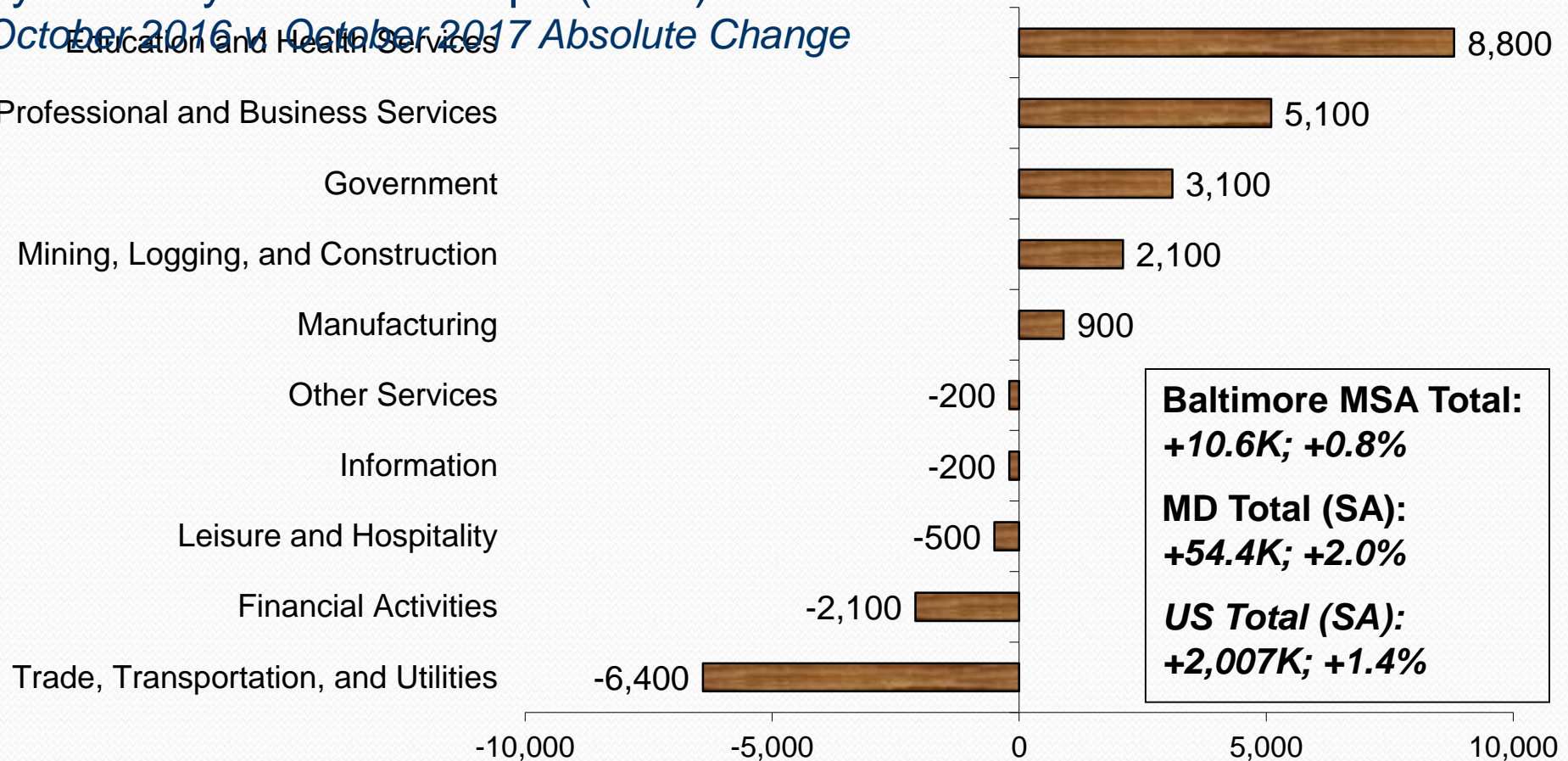
Washington, DC-Arlington-Alexandria MSA Nonfarm Employment
by Industry Sector Groups (NSA)
October 2016 v. October 2017 Absolute Change

Industry Sector	Change
Professional and Business Services	13,300
Education and Health Services	11,200
Leisure and Hospitality	8,800
Mining, Logging, and Construction	5,300
Trade, Transportation, and Utilities	4,900
Other Services	3,600
Financial Activities	1,400
Government	300
Manufacturing	-300
Information	-2,100

DC MSA Total: +46.4K; +1.4%

US Total (SA): +2,007K; +1.4%

Source: U.S. Bureau of Labor Statistics

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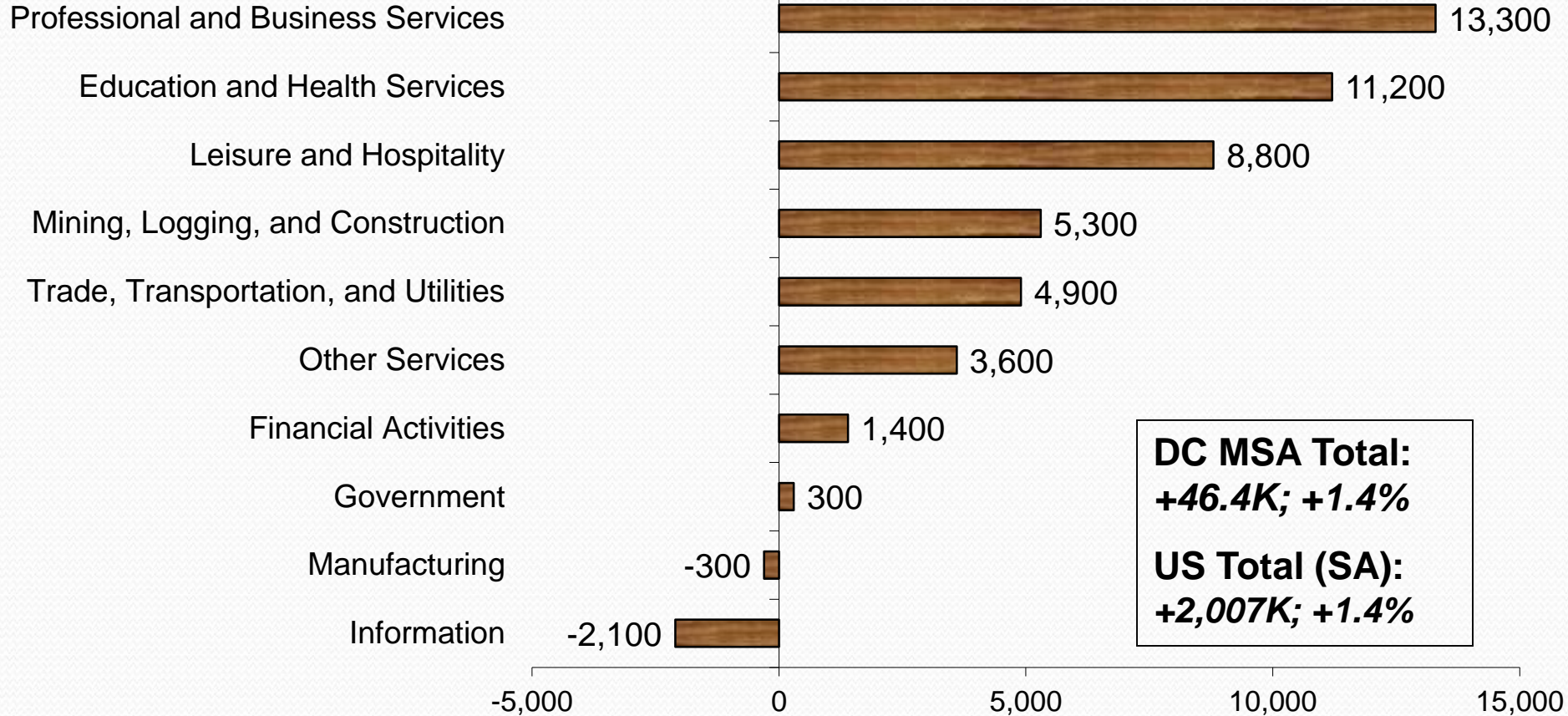
Employment Growth, U.S. States (SA)
October 2016 v. October 2017 Percent Change

Rank	State	%	Rank	State	%	Rank	State	%
1	NEVADA	2.8	15	MINNESOTA	1.5	33	IOWA	0.9
2	UTAH	2.7	19	COLORADO	1.4	33	NEW HAMPSHIRE	0.9
3	TEXAS	2.6	19	WISCONSIN	1.4	33	RHODE ISLAND	0.9
4	OREGON	2.5	21	ARIZONA	1.2	**33**	**VIRGINIA**	**0.9**
5	IDAHO	2.4	21	MONTANA	1.2	39	MAINE	0.8
6	FLORIDA	2.3	21	OKLAHOMA	1.2	**40**	**DELAWARE**	**0.7**
7	SOUTH CAROLINA	2.1	21	TENNESSEE	1.2	**40**	**NEW JERSEY**	**0.7**
7	WASHINGTON	2.1	25	HAWAII	1.1	42	MISSISSIPPI	0.6
9	**MARYLAND**	**2.0**	25	MISSOURI	1.1	42	NORTH DAKOTA	0.6
9	GEORGIA	2.0	**25**	**NEW YORK**	**1.1**	44	LOUISIANA	0.4
11	ARKANSAS	1.9	25	OHIO	1.1	**44**	**WEST VIRGINIA**	**0.4**
11	MASSACHUSETTS	1.9	**25**	**PENNSYLVANIA**	**1.1**	46	ILLINOIS	0.3
13	NORTH CAROLINA	1.7	30	MICHIGAN	1.0	47	ALASKA	0.1
14	NEW MEXICO	1.6	30	NEBRASKA	1.0	47	CONNECTICUT	0.1
15	ALABAMA	1.5	30	VERMONT	1.0	47	SOUTH DAKOTA	0.1
15	CALIFORNIA	1.5	**33**	**DISTRICT OF COLUMBIA**	**0.9**	50	KANSAS	-0.4
15	KENTUCKY	1.5	33	INDIANA	0.9	51	WYOMING	-0.5

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

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Employment Growth, 24 Largest Metros (NSA)
October 2016 v. October 2017 Percent Change

Rank	MSA	%
1	Orlando-Kissimmee-Sanford, FL MSA	3.0
1	Riverside-San Bernardino-Ontario, CA MSA	3.0
3	Dallas-Fort Worth-Arlington, TX MSA	2.7
4	Atlanta-Sandy Springs-Roswell, GA MSA	2.4
4	Miami-Fort Lauderdale-West Palm Beach, FL MSA	2.4
4	Minneapolis-St. Paul-Bloomington, MN-WI MSA	2.4
4	Seattle-Tacoma-Bellevue, WA MSA	2.4
8	Boston-Cambridge-Nashua, MA-NH Metro NECTA	2.3
9	Tampa-St. Petersburg-Clearwater, FL MSA	2.2
10	Charlotte-Concord-Gastonia, NC-SC MSA	2.0
11	Portland-Vancouver-Hillsboro, OR-WA MSA	1.9
12	Phoenix-Mesa-Scottsdale, AZ MSA	1.7

Rank	MSA	%
13	Houston-The Woodlands-Sugar Land, TX MSA	1.6
14	Detroit-Warren-Dearborn, MI MSA	1.5
15	**Washington-Arlington-Alexandria, DC-VA-MD-WV MSA**	**1.4**
16	**Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA**	**1.3**
17	San Diego-Carlsbad, CA MSA	1.2
17	San Francisco-Oakland-Hayward, CA MSA	1.2
19	Denver-Aurora-Lakewood, CO MSA	1.0
20	**New York-Newark-Jersey City, NY-NJ-PA MSA**	**0.9**
20	St. Louis, MO-IL MSA	0.9
22	**Baltimore-Columbia-Towson, MD MSA**	**0.8**
22	Los Angeles-Long Beach-Anaheim, CA MSA	0.8
24	Chicago-Naperville-Elgin, IL-IN-WI MSA	0.5

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Unemployment Rates, 24 Largest Metros (NSA)
October 2017

Rank	MSA	UR	Rank	MSA	UR
1	Minneapolis-St. Paul-Bloomington, MN-WI MSA	2.3	12	Charlotte-Concord-Gastonia, NC-SC MSA	3.9
2	Denver-Aurora-Lakewood, CO MSA	2.6	12	Miami-Fort Lauderdale-West Palm Beach, FL MSA	3.9
3	St. Louis, MO-IL MSA (1)	2.7	12	Portland-Vancouver-Hillsboro, OR-WA MSA	3.9
4	Dallas-Fort Worth-Arlington, TX MSA	3.0	16	Seattle-Tacoma-Bellevue, WA MSA	4.0
4	San Francisco-Oakland-Hayward, CA MSA	3.0	17	Atlanta-Sandy Springs-Roswell, GA MSA	4.1
6	Boston-Cambridge-Nashua, MA-NH Metro NECTA	3.1	17	Houston-The Woodlands-Sugar Land, TX MSA	4.1
7	Orlando-Kissimmee-Sanford, FL MSA	3.2	17	Los Angeles-Long Beach-Anaheim, CA MSA	4.1
8	Tampa-St. Petersburg-Clearwater, FL MSA	3.3	20	Detroit-Warren-Dearborn, MI MSA	4.2
9	**Washington-Arlington-Alexandria, DC-VA-MD-WV MSA**	**3.6**	**21**	**Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA**	**4.4**
10	Phoenix-Mesa-Scottsdale, AZ MSA	3.7	**22**	**New York-Newark-Jersey City, NY-NJ-PA MSA**	**4.6**
10	San Diego-Carlsbad, CA MSA	3.7	23	Chicago-Naperville-Elgin, IL-IN-WI MSA	4.7
12	**Baltimore-Columbia-Towson, MD MSA**	**3.9**	24	Riverside-San Bernardino-Ontario, CA MSA	4.8

U.S. Unemployment Rate: 4.1%

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21 Jump Street

(And Other Addresses of Interest)

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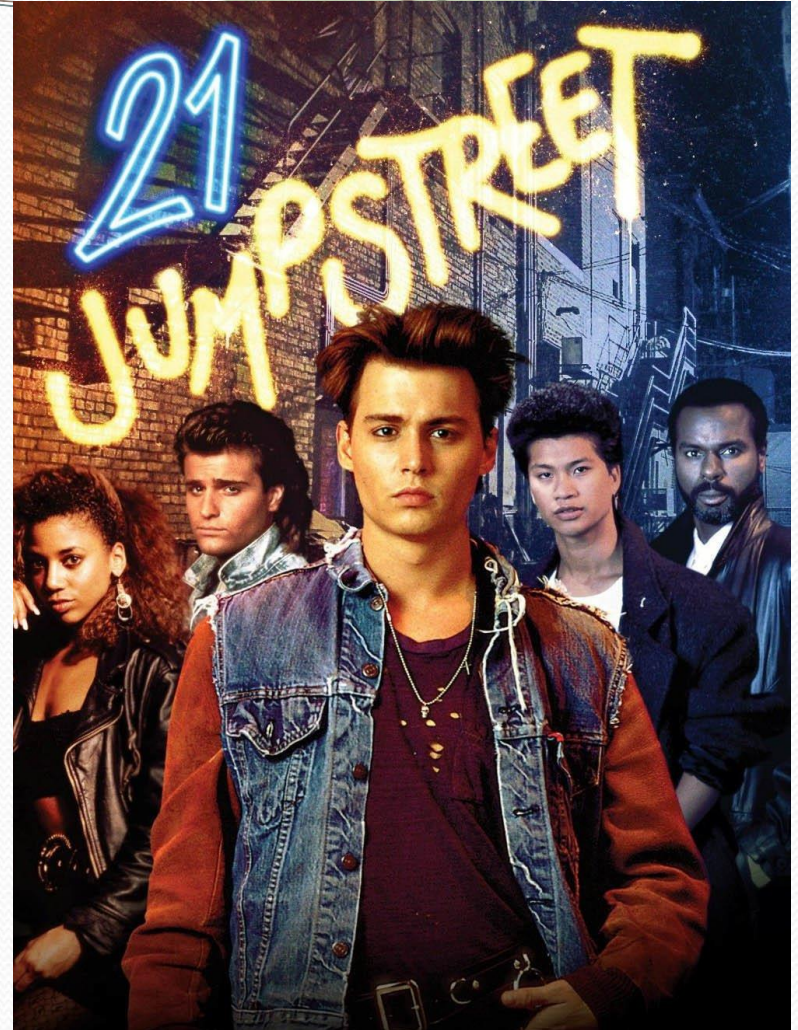
National Nonresidential Construction Spending by Subsector
October 2014 v. October 2017

Subsector	3-year % Change
Lodging	61.7%
Office	41.4%
Communication	37.1%
Amusement and recreation	31.9%
Educational	24.4%
Commercial	22.8%
Transportation	7.0%
Health care	6.0%
Power	1.8%
Highway and street	-2.1%
Conservation and development	-3.9%
Manufacturing	-10.3%
Religious	-10.5%
Public safety	-13.5%
Water supply	-14.6%
Sewage and waste disposal	-20.0%

Total Nonresidential Construction: +$68.3B; +10.5%

3-year % Change

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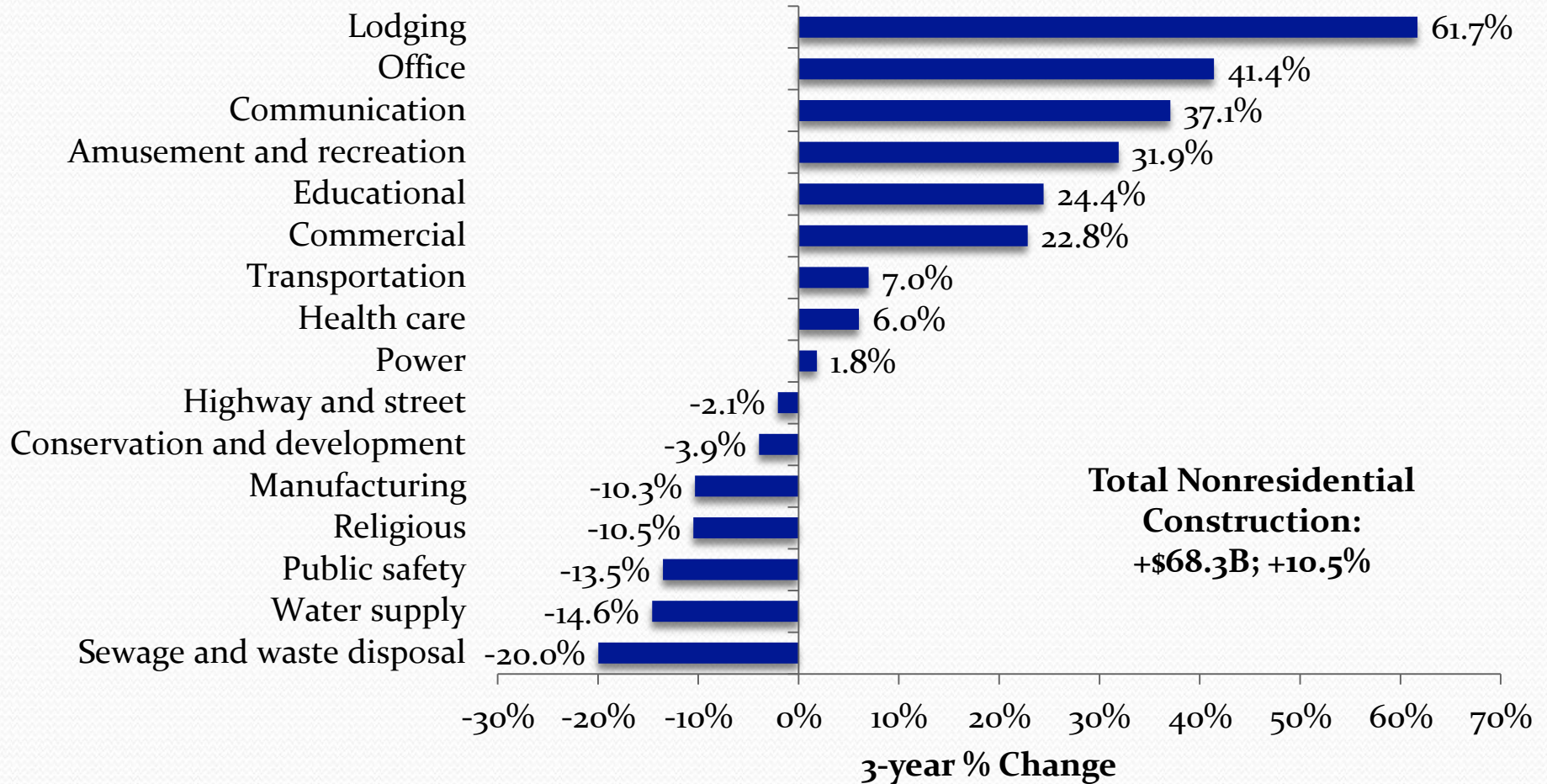
Commercial/Multifamily Offshore Investment Sales Volumes Reach New Heights in 2015/16

Foreign investment increases 85.1% in 2015
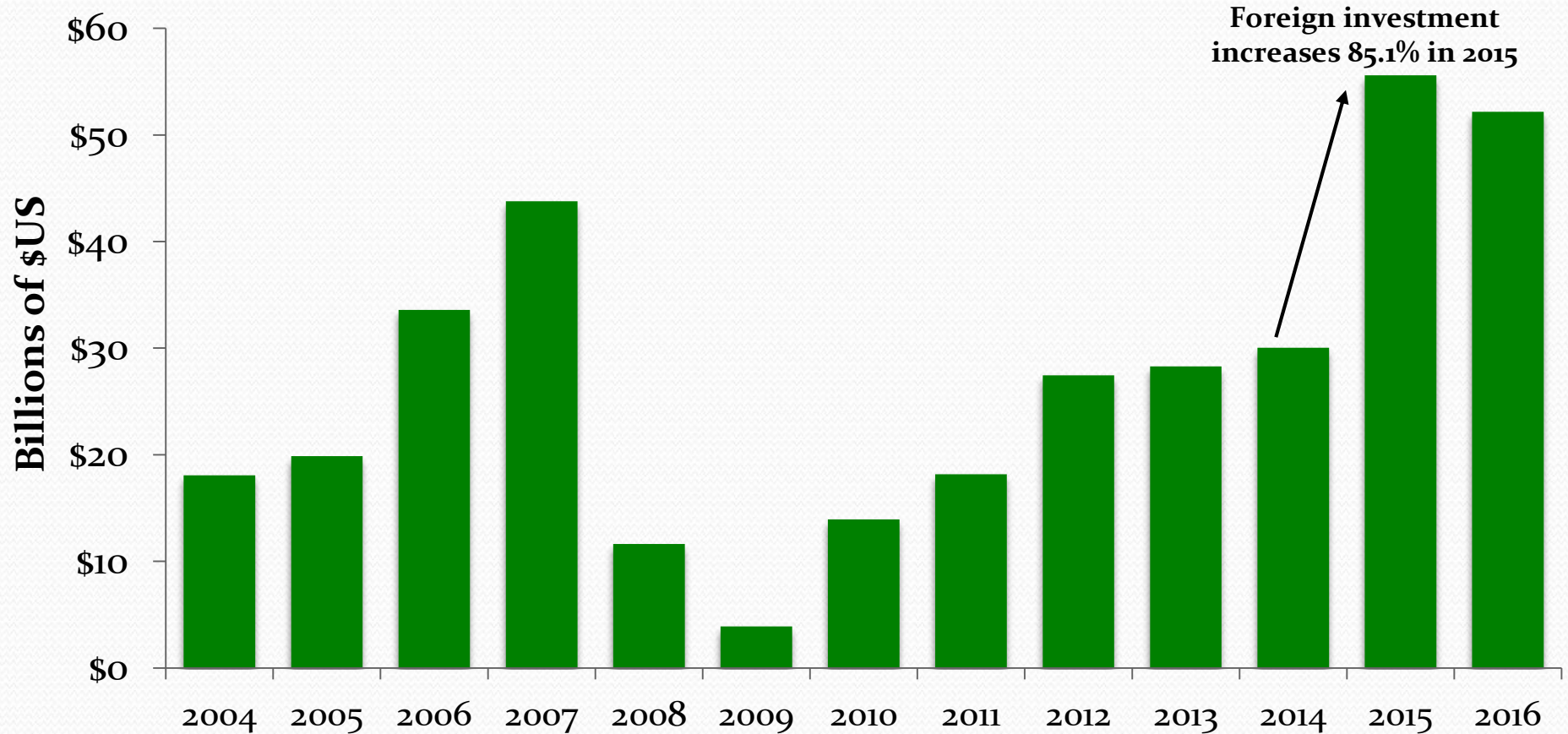
Billions of $US

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 Office Investment Activity, as of 2016Q3

Foreign Participation as a % of Total Office Volume

14.9%

Year	
2003	10.5%
2004	11.8%
2005	7.4%
2006	8.5%
2007	5.3%
2008	11.0%
2009	8.4%
2010	11.2%
2011	13.5%
2012	10.6%
2013	13.6%
2014	11.0%
2015	15.6%
2016YTD	14.9%

Foreign Office Investment by Destination Market (as a % of Total, 2016YTD)

Market	%
New York	45.5%
San Francisco	8.4%
Boston	7.1%
Washington, DC	6.8%
Dallas-Fort Worth	5.6%
Los Angeles	4.8%
Seattle-Bellevue	4.8%
Miami	2.8%
Northern New Jersey	2.1%
Chicago	1.9%
Atlanta	1.6%
Austin	1.4%
Philadelphia	1.1%
San Diego	1.1%

Primary markets continue to capture the lion's share of inbound capital, receiving 78.2% of this capital YTD.

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Down to "The Wire"

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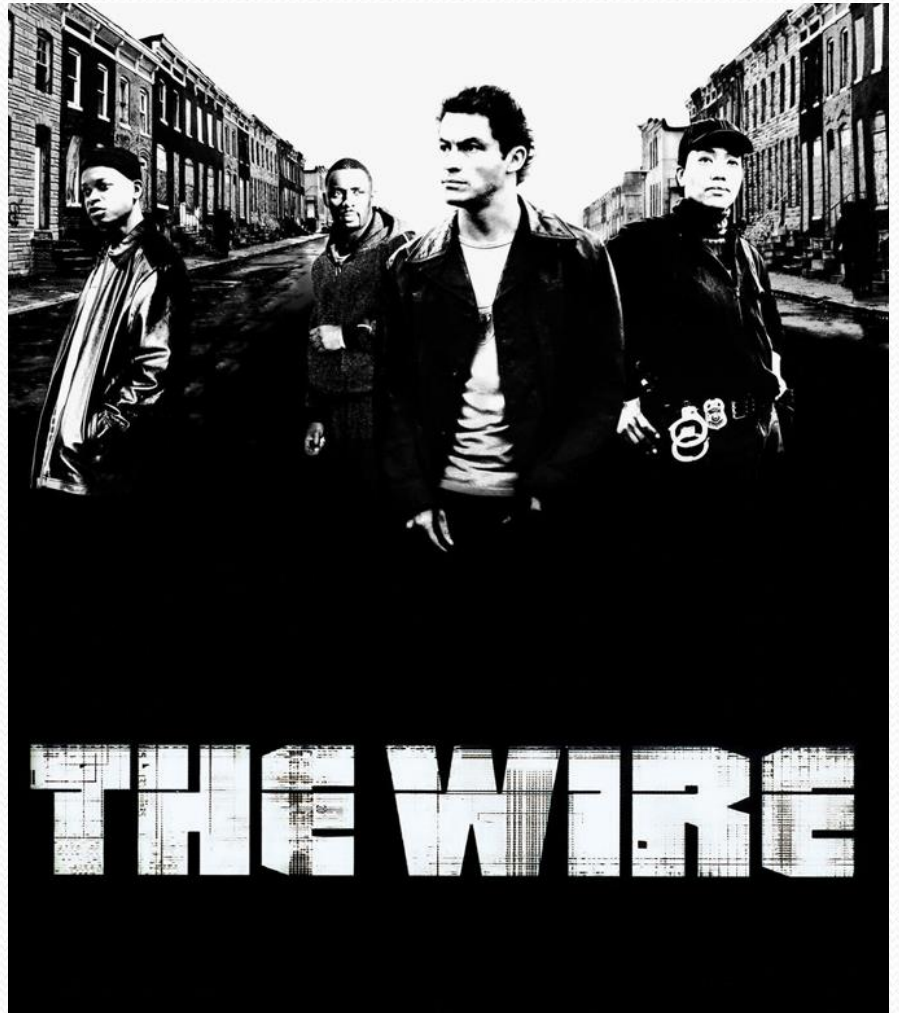
Sales Growth by Type of Business
November 2016 v. November 2017*

Type of Business	12-month % change
Gasoline Stations	12.2%
Building Material & Garden Supplies Dealers	10.7%
Internet, etc. Retailers	10.4%
Furniture & Home Furn. Stores	8.4%
Electronics & Appliance Stores	6.4%
Motor Vehicle & Parts Dealers	6.3%
General Merchandise Stores	3.6%
Food & Beverage Stores	3.2%
Health & Personal Care Stores	3.1%
Sporting Goods, Hobby, Book & Music Stores	2.9%
Clothing & Clothing Accessories Stores	2.8%
Food Services & Drinking Places	2.2%
Miscellaneous Store Retailers	2.1%

12-month % change

*November 2017 advanced estimate

Total Retail Sales: +5.8% YOY

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U.S. Saving Rate, October 2005 – October 2017
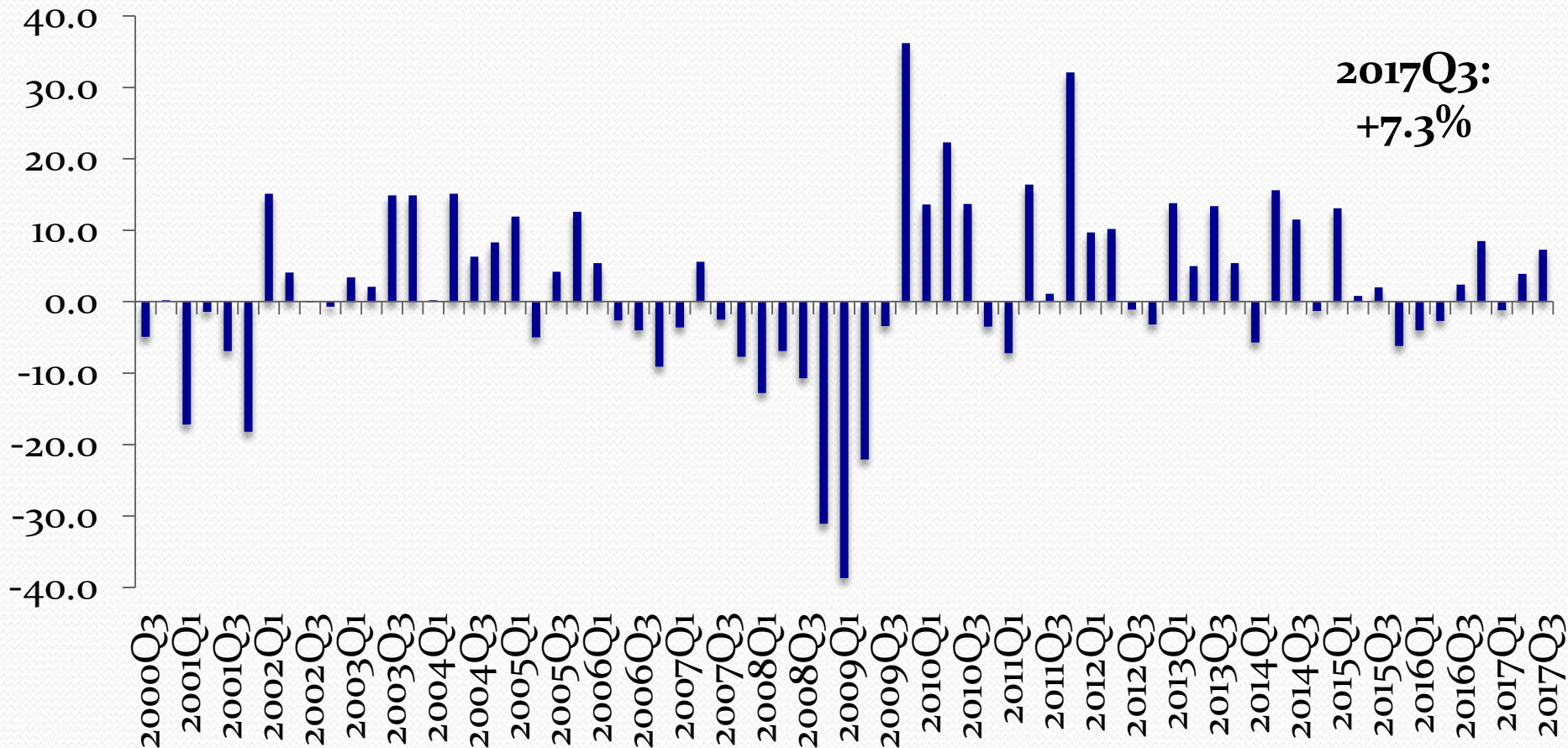## *(Savings as Percentage of Personal Disposable Income)*
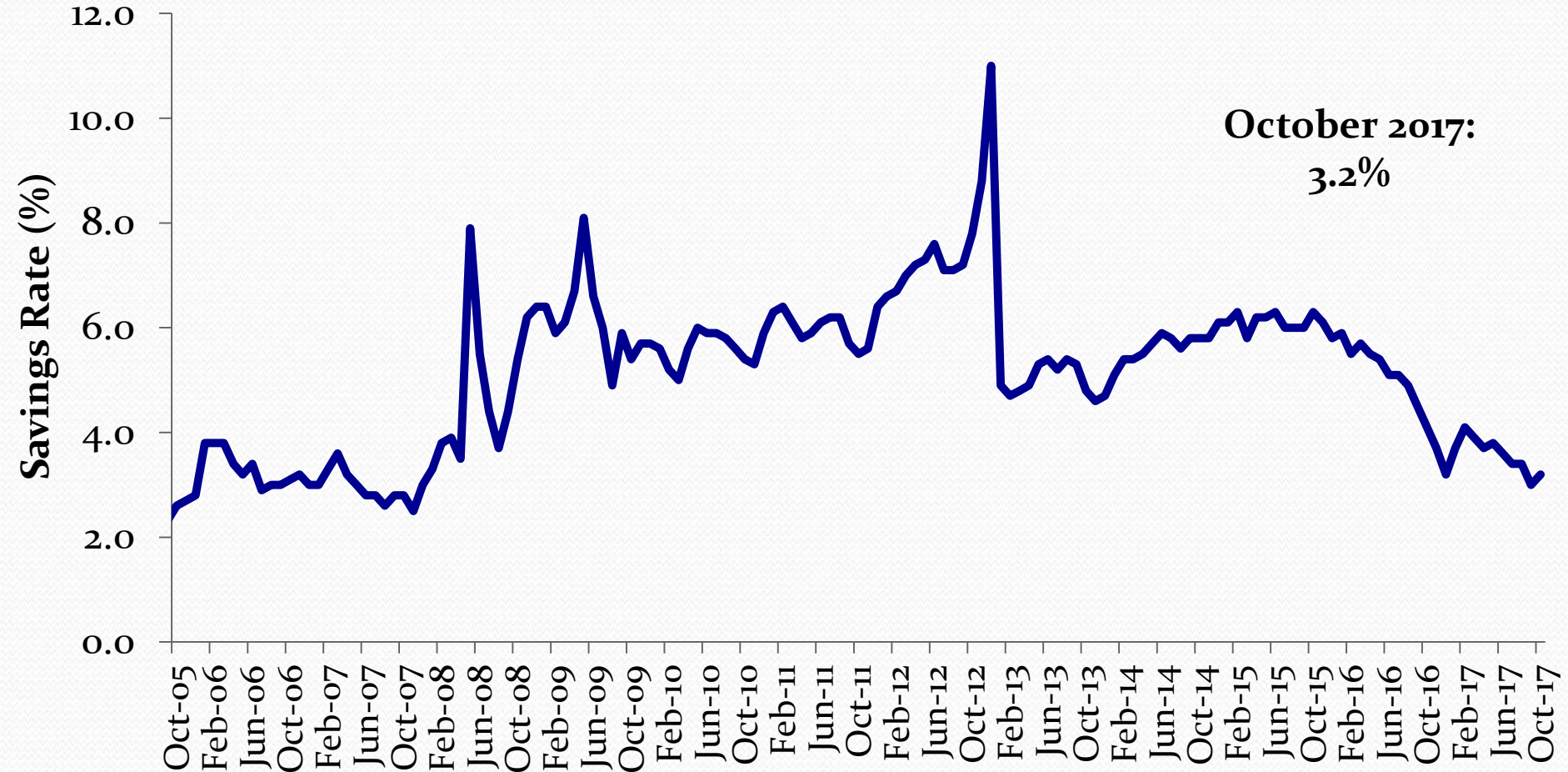
October 2017: 3.2%

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U.S. Gross Private Domestic Investment (SAAR)
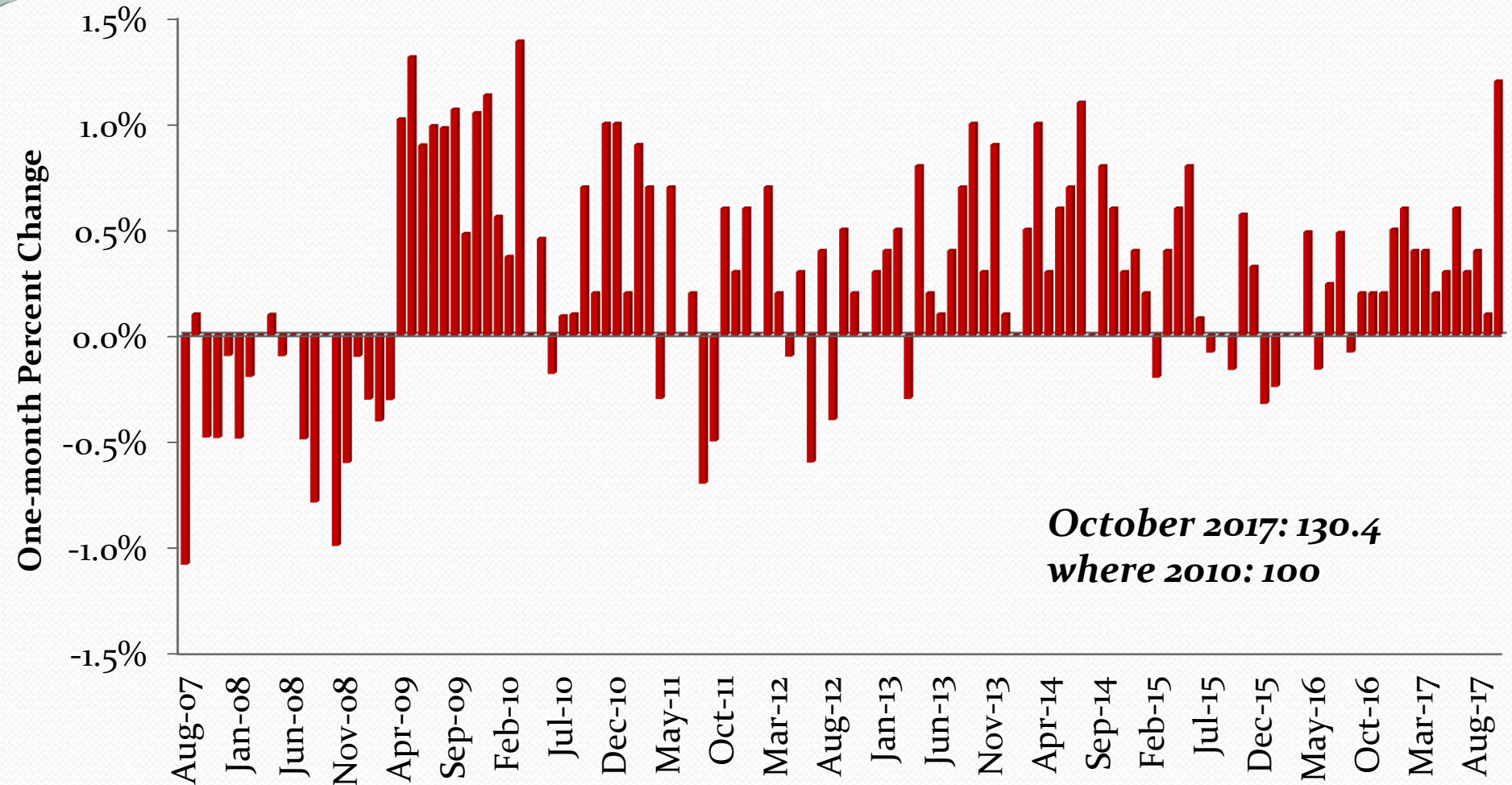## % Change from Previous Quarter, 2000Q3 – 2017Q3*

2017Q3: +7.3%

*2nd Estimate

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Conference Board Leading Economic Indicators Index
August 2007 through October 2017

October 2017: 130.4
where 2010: 100

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The Closer

- Global economy remains fragile, and correspondingly . . . ;

- Global money has continued to pour into America in search of yield and safety, including into commercial real estate – that was particularly true in 2015, only a bit less true in 2016;

- Inflationary pressures are on the rise – so, too, are interest rates – eventually -- that could begin to squeeze asset prices in 2018, triggering negative wealth effects and sentiment in the process;

- There are indications of mini-bubbles forming in commercial real estate, particularly in office, lodging and multifamily segments;

- There are also longer-term structural considerations, including the national debt and pending insolvencies of Medicare and Social Security – the longer-term outlook may be deteriorating even as the short-run improves;

- Momentum should see us through 2018 (tax cuts should supercharge economy next year), but tighter monetary policy combined with a heavy dose of political intrigue could render 2018 different from an asset price perspective;

- By this time in 2020, the economy could be in a different place and likely will be.

Photo: Google

*Kyra Sedgwick as Brenda Leigh Johnson

Thank You

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