

Markets, He Wrote

*On Behalf of the
CFMA Puget Sound*

*By: Anirban Basu
Sage Policy Group, Inc.*

February 15th, 2017



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Macro P.I.

(Just How Hairy is the
Global Situation?)

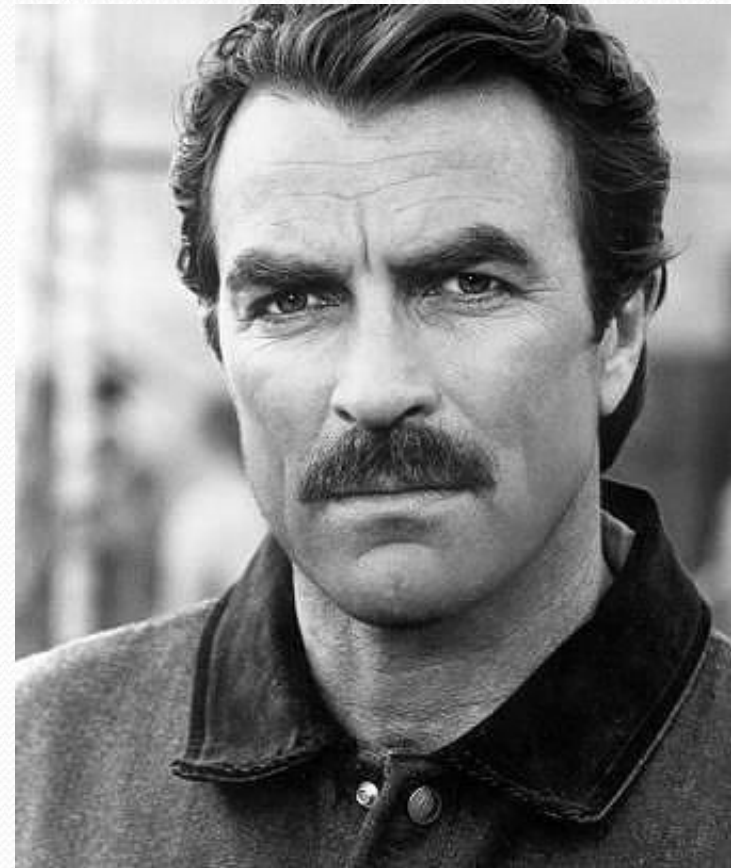


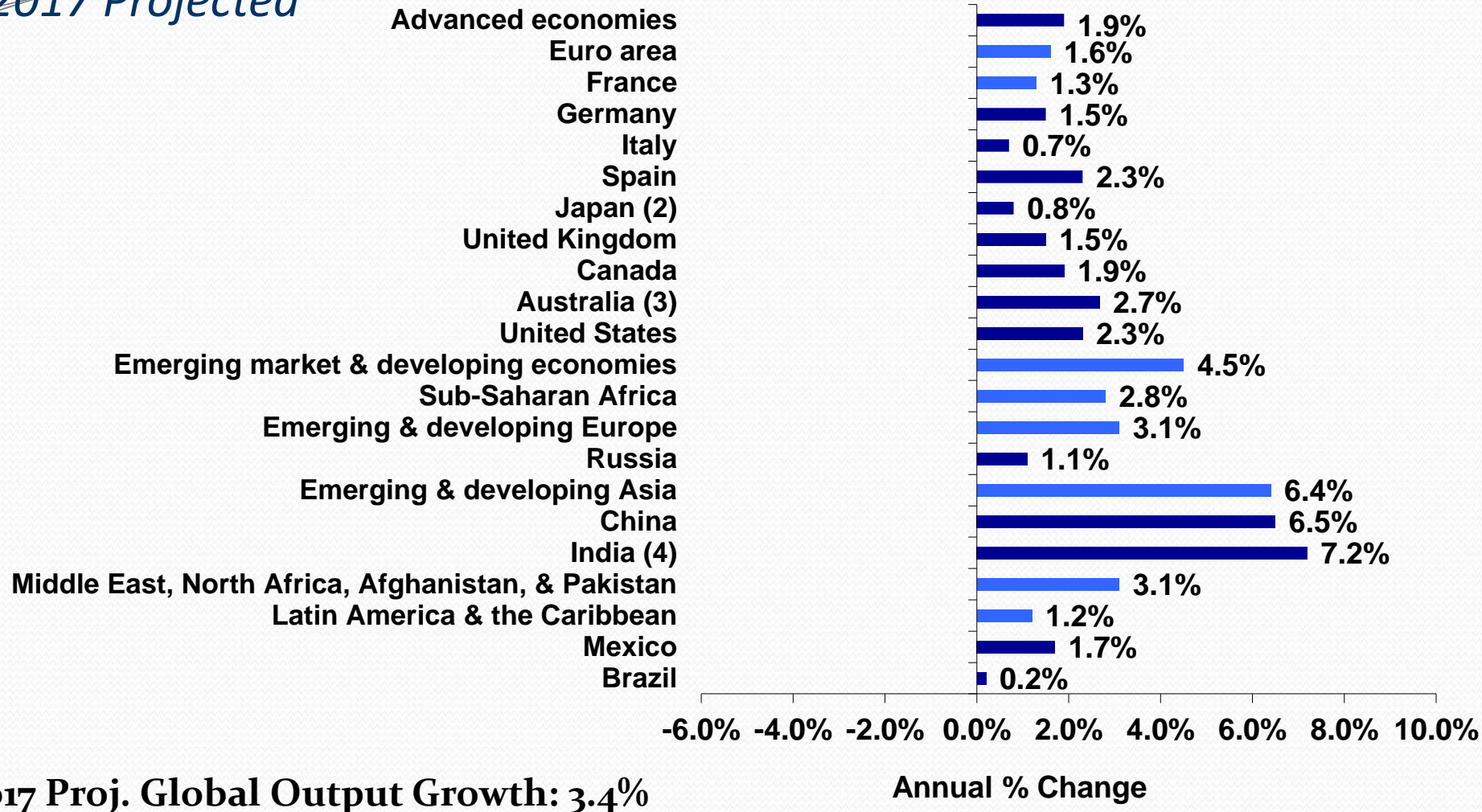
Photo: Flixter.com



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Estimated Growth in Output by Select Global Areas

2017 Projected



Source: International Monetary Fund: World Economic Outlook Update, January 2017; World Economic Outlook Database, October 2016.

Notes: 1. Real effective exchange rates are assumed to remain constant at the levels prevailing during November 4-December 2, 2016. Economies are listed on the basis of economic size. The aggregated quarterly data are seasonally adjusted. 2. Japan's historical national accounts figures reflect a comprehensive revision by the national authorities, released in December 2016. The main revisions are the switch from the System of National Accounts 1993 to the System of National Accounts 2008 and the updating of the benchmark year from 2005 to 2011. 3. Australia's projected output growth is from the IMF's October 2016 WEO Database. 4. For India, data and forecasts are presented on a fiscal year basis and GDP from 2011 onward is based on GDP at market prices with FY2011/12 as a base year.



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International Population Dynamics, 16 Largest Nations

Nation	Population (Millions)			% Change
	2015	2050	Net Change	
Nigeria	182.2	398.5	216.3	118.7%
Ethiopia	99.4	188.5	89.1	89.6%
Egypt	91.5	151.1	59.6	65.1%
Pakistan	188.9	309.6	120.7	63.9%
Philippines	100.7	148.3	47.6	47.2%
India	1,311.1	1,705.3	394.3	30.1%
Mexico	127.0	163.8	36.7	28.9%
Bangladesh	161.0	202.2	41.2	25.6%
Indonesia	257.6	322.2	64.7	25.1%
United States	321.8	388.9	67.1	20.9%
Vietnam	93.4	112.8	19.3	20.7%
Brazil	207.8	238.3	30.4	14.6%
China	1,376.0	1,348.1	-28.0	-2.0%
Germany	80.7	74.5	-6.2	-7.7%
Russian Federation	143.5	128.6	-14.9	-10.4%
Japan	126.6	107.4	-19.2	-15.1%
World	7.3 billion	9.7 billion	2.4 billion	32.3%

Source: United Nations, Department of Economic and Social Affairs, Population Division (2015). World Population Prospects: The 2015 Revision.

*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.

Niamey Vice

(Fertility Rates by Country, 2014)

Top 15		
Rank*	Country	Fertility Rate
1	Niger	7.60
2	Somalia	6.46
3	Mali	6.23
4	Chad	6.16
5	Angola	6.08
6	Congo, Dem. Rep.	6.01
7	Burundi	5.95
8	Uganda	5.78
9	Gambia, The	5.72
10	Nigeria	5.65
11	Burkina Faso	5.52
12	Mozambique	5.36
13	Zambia	5.35
14	Tanzania	5.15
15	Malawi	5.13

Bottom 15		
Rank*	Country	Fertility Rate
186	Germany	1.39
186	Italy	1.39
188	Malta	1.38
189	Hungary	1.35
190	Slovak Republic	1.34
191	Greece	1.30
192	Poland	1.29
193	Spain	1.27
194	Bosnia and Herzegovina	1.26
194	Moldova	1.26
196	Singapore	1.25
197	Macao SAR, China	1.24
198	Hong Kong SAR, China	1.23
200	Portugal	1.21
200	Korea, Rep.	1.21

Source: World Bank, World Development Indicators

*Rank among 200 countries for which data are available for the most recent year (2014)

**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.

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

Sources: 1. International Monetary Fund. October 2016. “World Economic Outlook: Subdued Demand: Symptoms and Remedies.” 2. International Monetary Fund (IMF). October 2016. “Fiscal Monitor: Debt—Use It Wisely.”

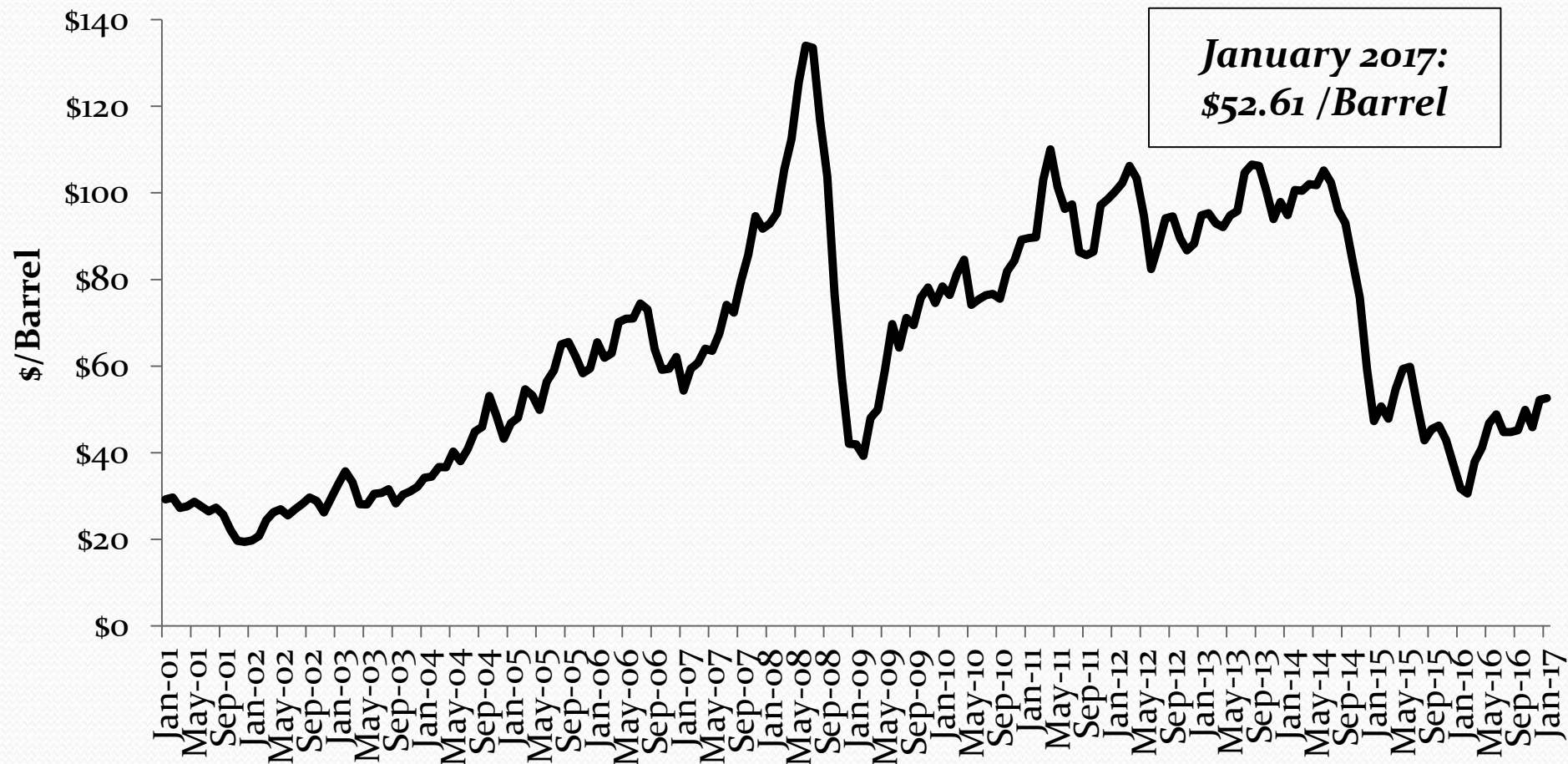
Note: The nonfinancial sector comprises the general government, nonfinancial firms, and households. Gross debt represents the unconsolidated liabilities of the three.



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NYMEX Crude Oil Future Prices in U.S. Dollars

January 2001 through January 2017



*January 2017:
\$52.61 /Barrel*

Source: U.S. Energy Information Administration

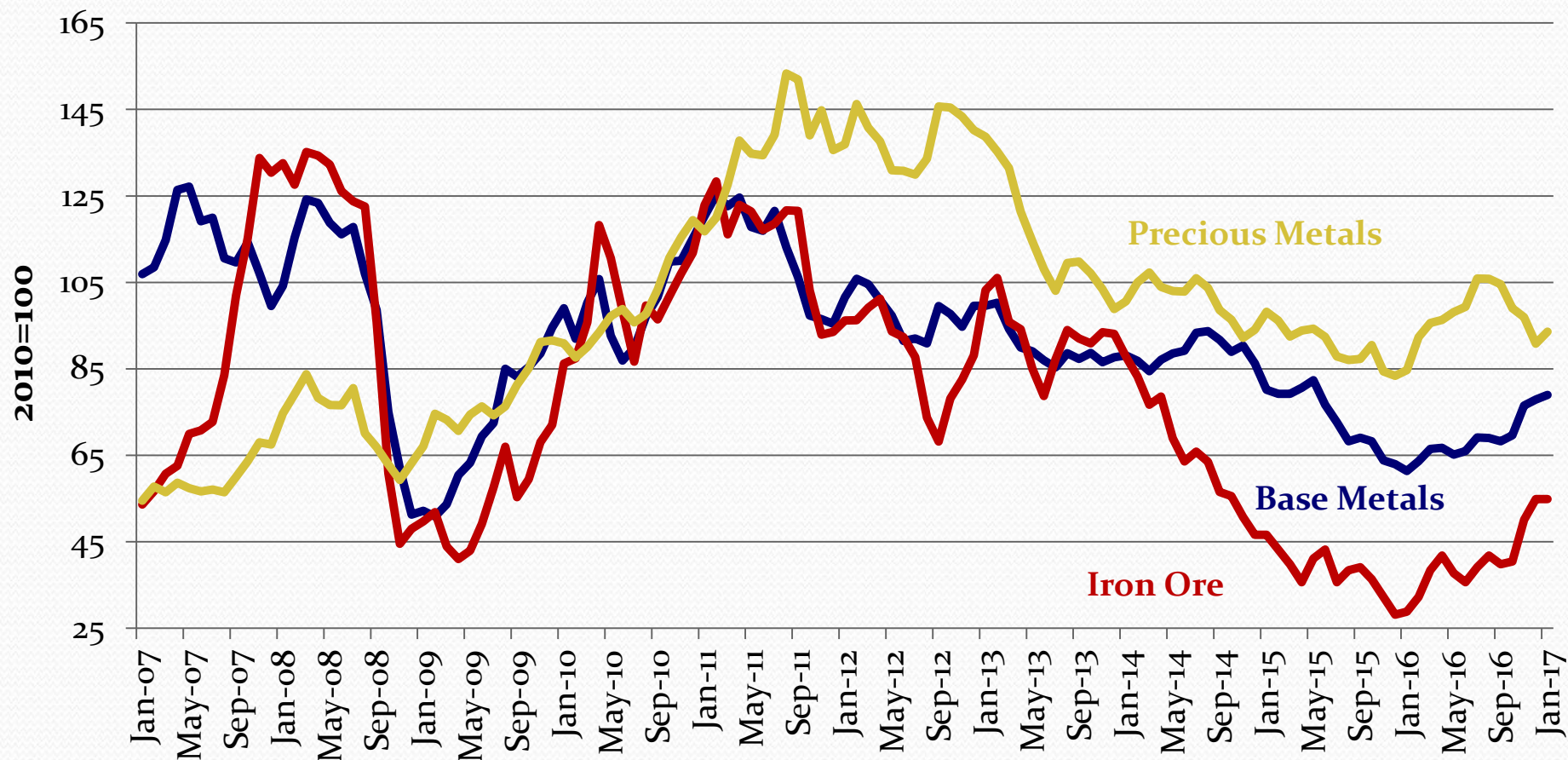
*Month of January = average of daily prices from 1/3-1/31



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Metal Price Indices

January 2007 through January 2017



Source: The World Bank

US\$ Nominal

Base metals include aluminum, copper, lead, nickel, tin and zinc.

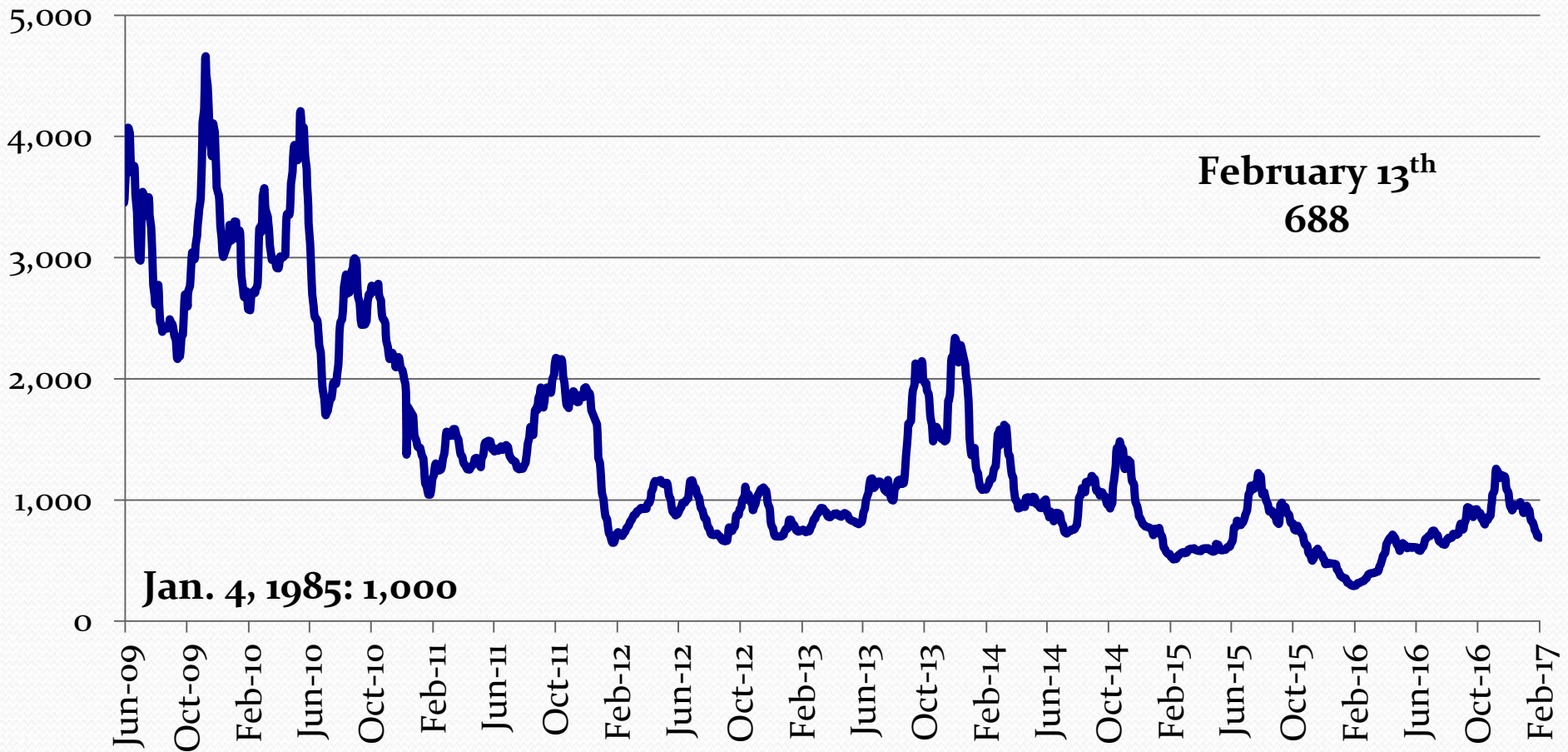
Precious metals include gold, platinum, and silver.



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Baltic Dry Index

June 2009 through February 2017



Source: Quandl.com

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

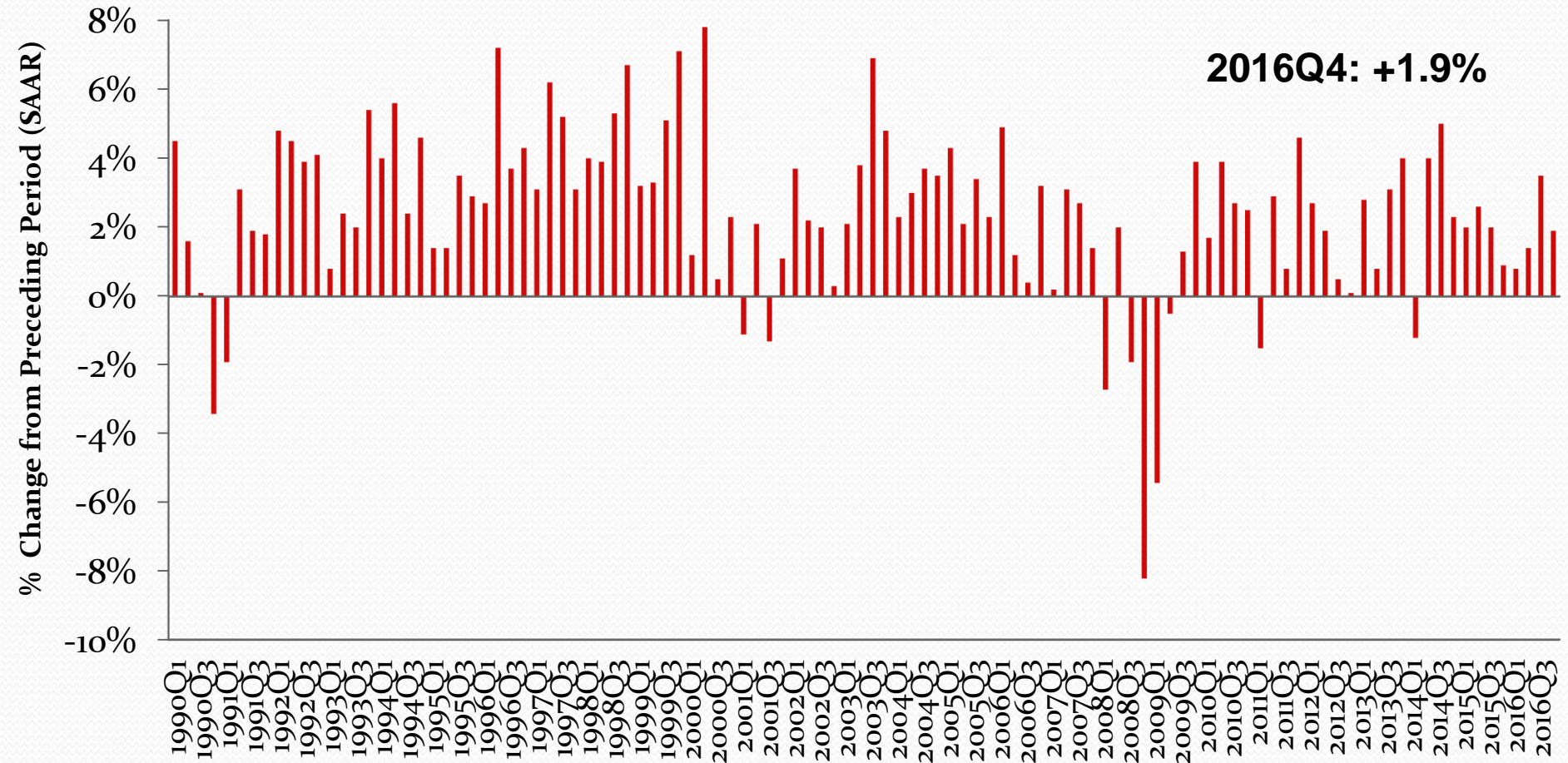


(Commercial Situation Investigation)

Photo: AMCNetworks.com

Gross Domestic Product

1990Q1 through 2016Q4*



Source: Bureau of Economic Analysis

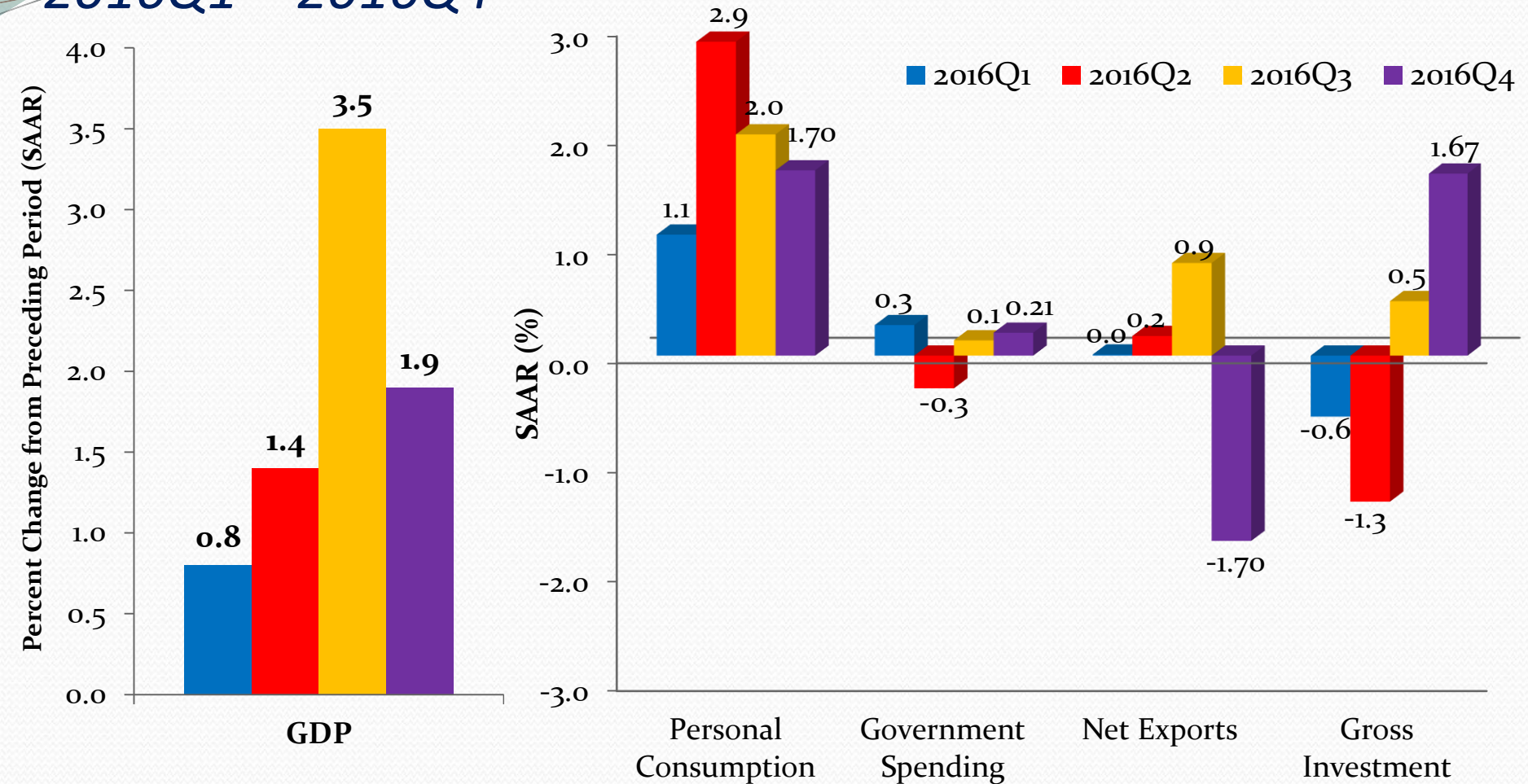
*1st (Advance) Estimate



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Contributions to GDP Growth by Component

2016Q1 – 2016Q4*



Source: Bureau of Economic Analysis

*1st (Advance) Estimate

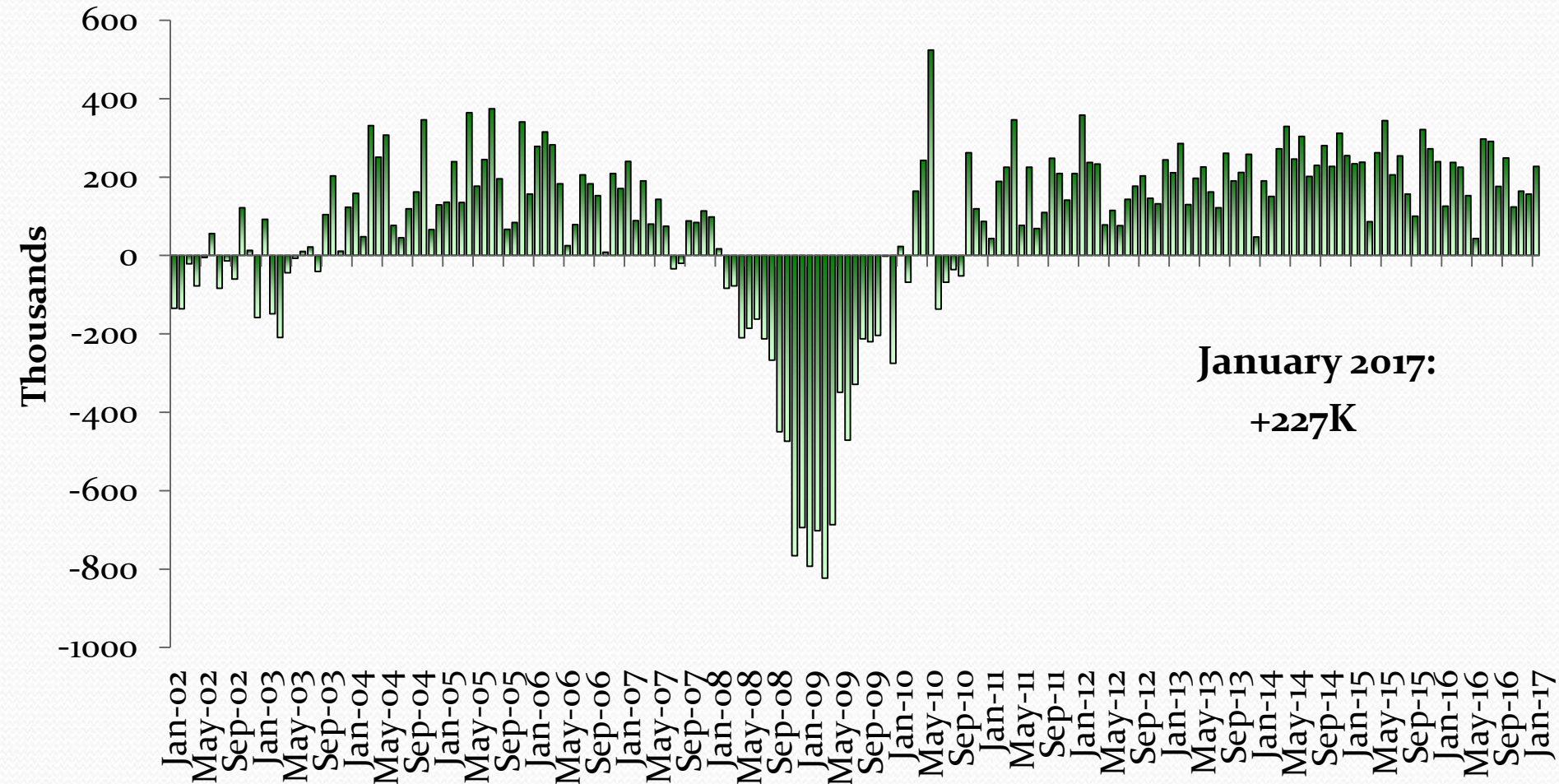
2016Q4: +1.9%



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Net Change in U.S. Jobs, BLS

January 2002 through January 2017



Source: U.S. Bureau of Labor Statistics

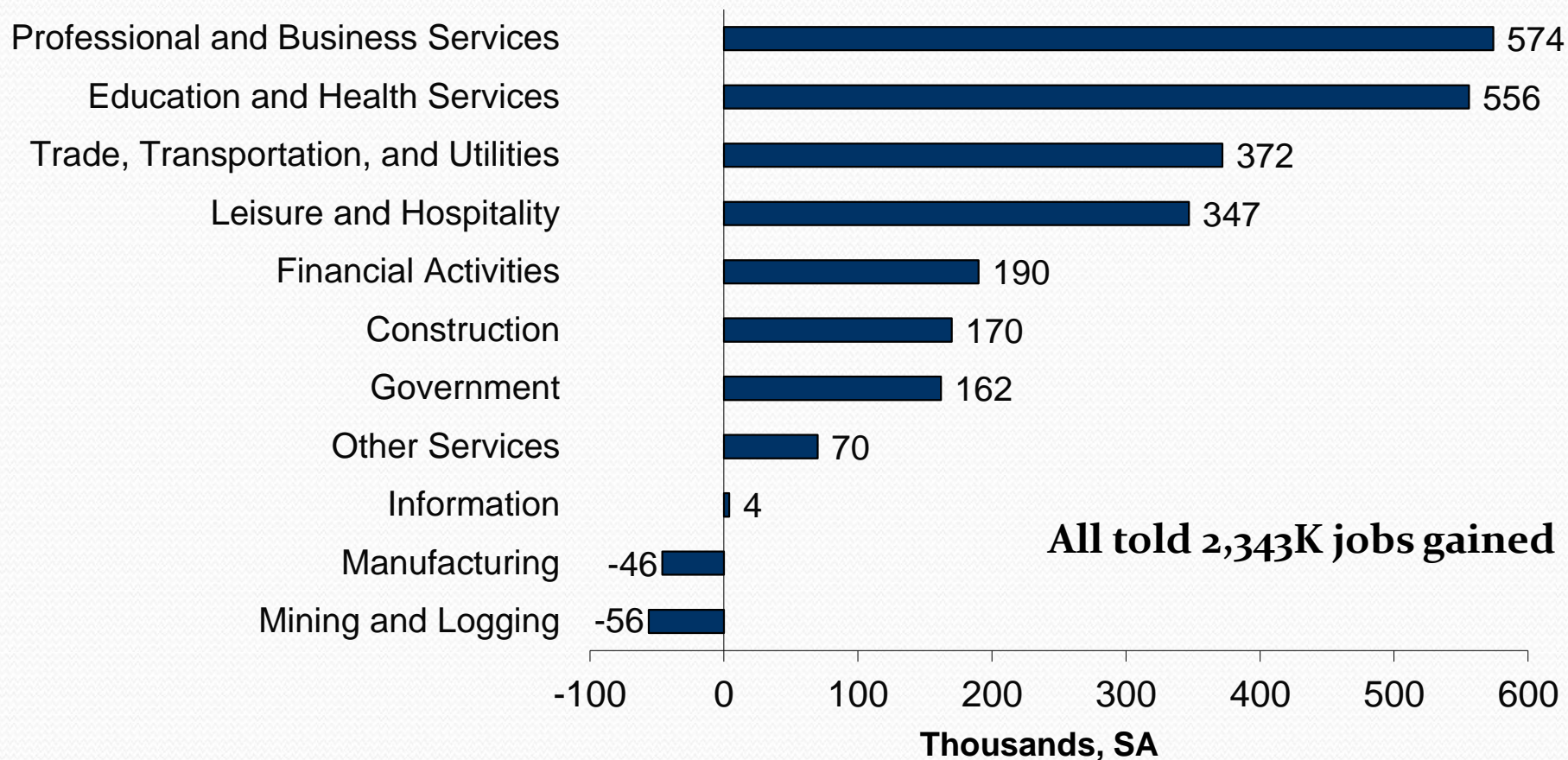


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National Nonfarm Employment

by Industry Sector

January 2016 v. January 2017



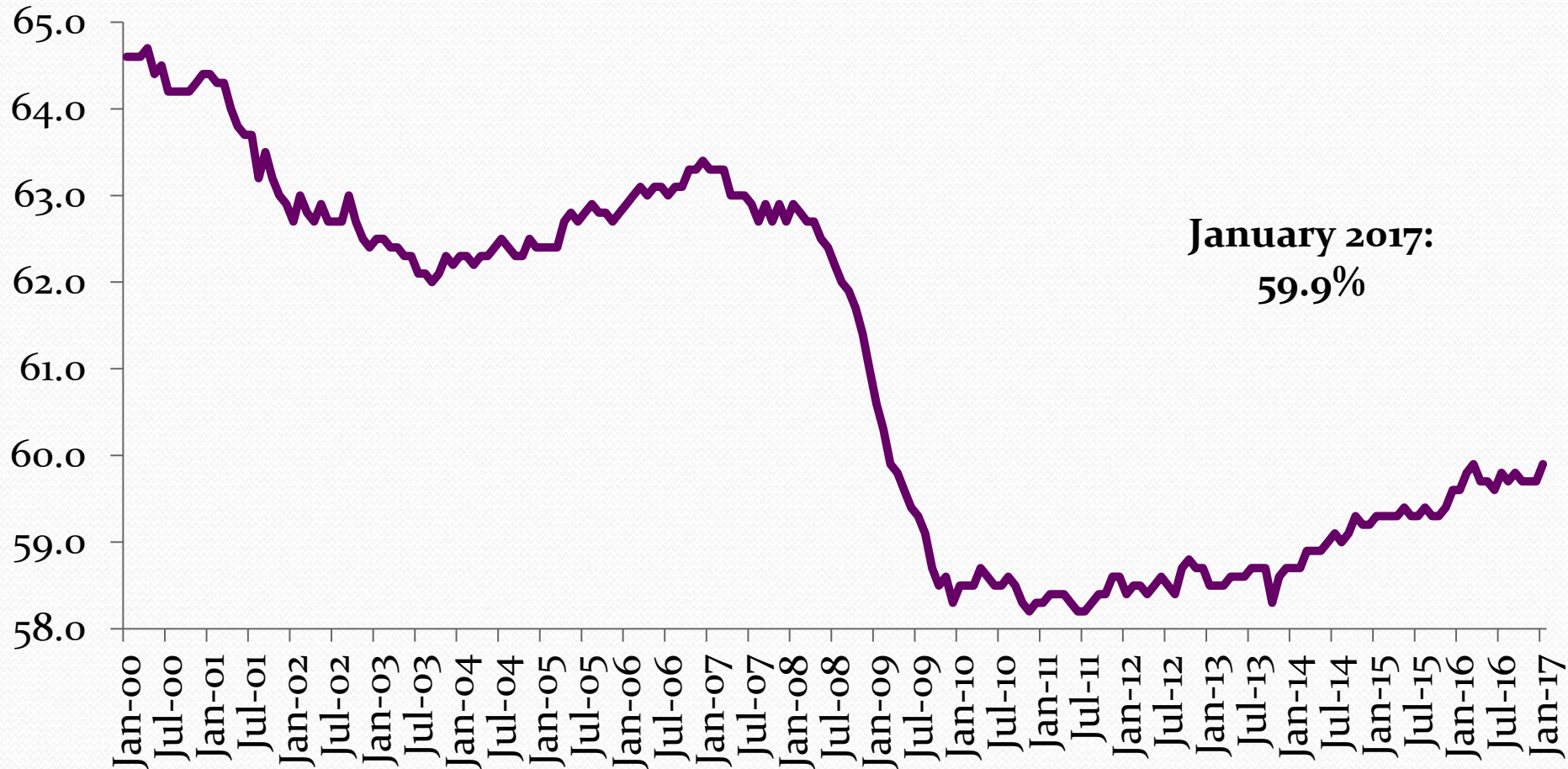
Source: U.S. Bureau of Labor Statistics



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U.S. Employment to Population Ratio

January 2000 – January 2017



Source: U.S. Bureau of Labor Statistics

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

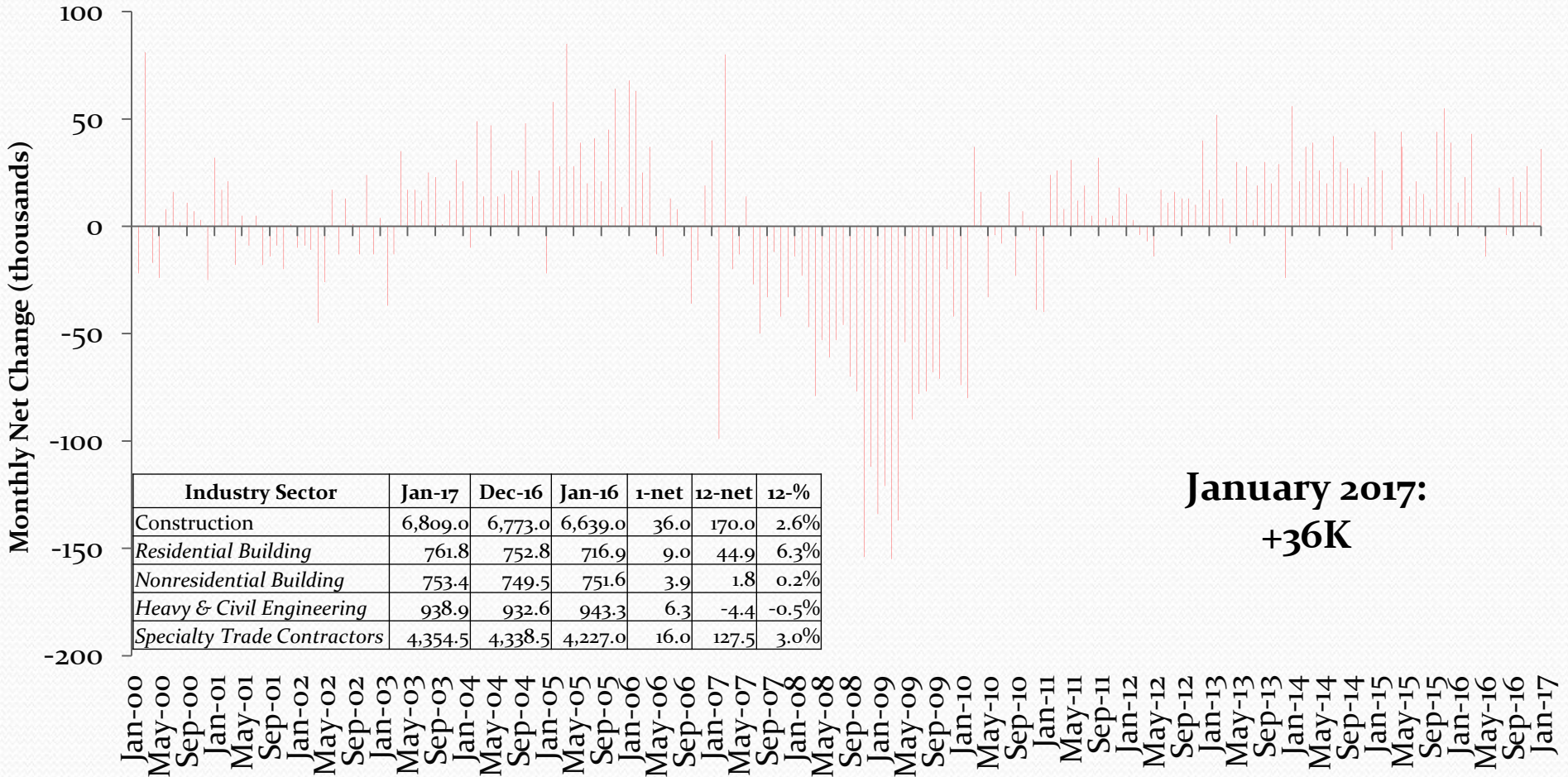


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National Construction Employment

Monthly Net Change

January 2000 through January 2017



Source: U.S. Bureau of Labor Statistics



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State-by-state Growth in Construction Jobs

December 2015 v. December 2016

STATE	Year-over-year Ch. (‘000)	STATE	Year-over-year Ch. (‘000)	STATE	Year-over-year Ch. (‘000)
FLORIDA	22.3	MISSOURI	3.5	MARYLAND*	-0.3
CALIFORNIA	20.9	NEW JERSEY	3.2	ALASKA	-0.3
WASHINGTON	13.5	SOUTH CAROLINA	2.7	MAINE	-0.7
COLORADO	11.0	OHIO	1.9	NEBRASKA*	-0.9
NEVADA	11.0	WEST VIRGINIA	1.6	DELAWARE*	-1.0
MINNESOTA	9.3	NEW MEXICO	1.4	WYOMING	-1.1
MASSACHUSETTS	8.8	HAWAII*	1.3	ARKANSAS	-1.2
ARIZONA	8.3	NEW HAMPSHIRE	1.0	MONTANA	-1.2
OREGON	7.6	INDIANA	0.8	CONNECTICUT	-1.9
IOWA	6.9	SOUTH DAKOTA*	0.7	MISSISSIPPI	-2.3
GEORGIA	6.5	VIRGINIA	0.6	NORTH DAKOTA	-2.4
TENNESSEE*	6.4	IDAHO	0.5	KANSAS	-4.2
NORTH CAROLINA	6.0	LOUISIANA	0.5	TEXAS	-4.5
WISCONSIN	4.0	OKLAHOMA	0.3	KENTUCKY	-5.0
MICHIGAN	3.9	VERMONT	0.2	ALABAMA	-6.1
PENNSYLVANIA	3.9	DISTRICT OF COLUMBIA*	-0.1	NEW YORK	-7.8
UTAH	3.8	RHODE ISLAND	-0.2	ILLINOIS	-9.7

Source: U.S. Bureau of Labor Statistics

*Construction, Mining, and Logging are included in one industry.

U.S. Year-over-year Net Change
December 2016: +145K
January 2017: +170K

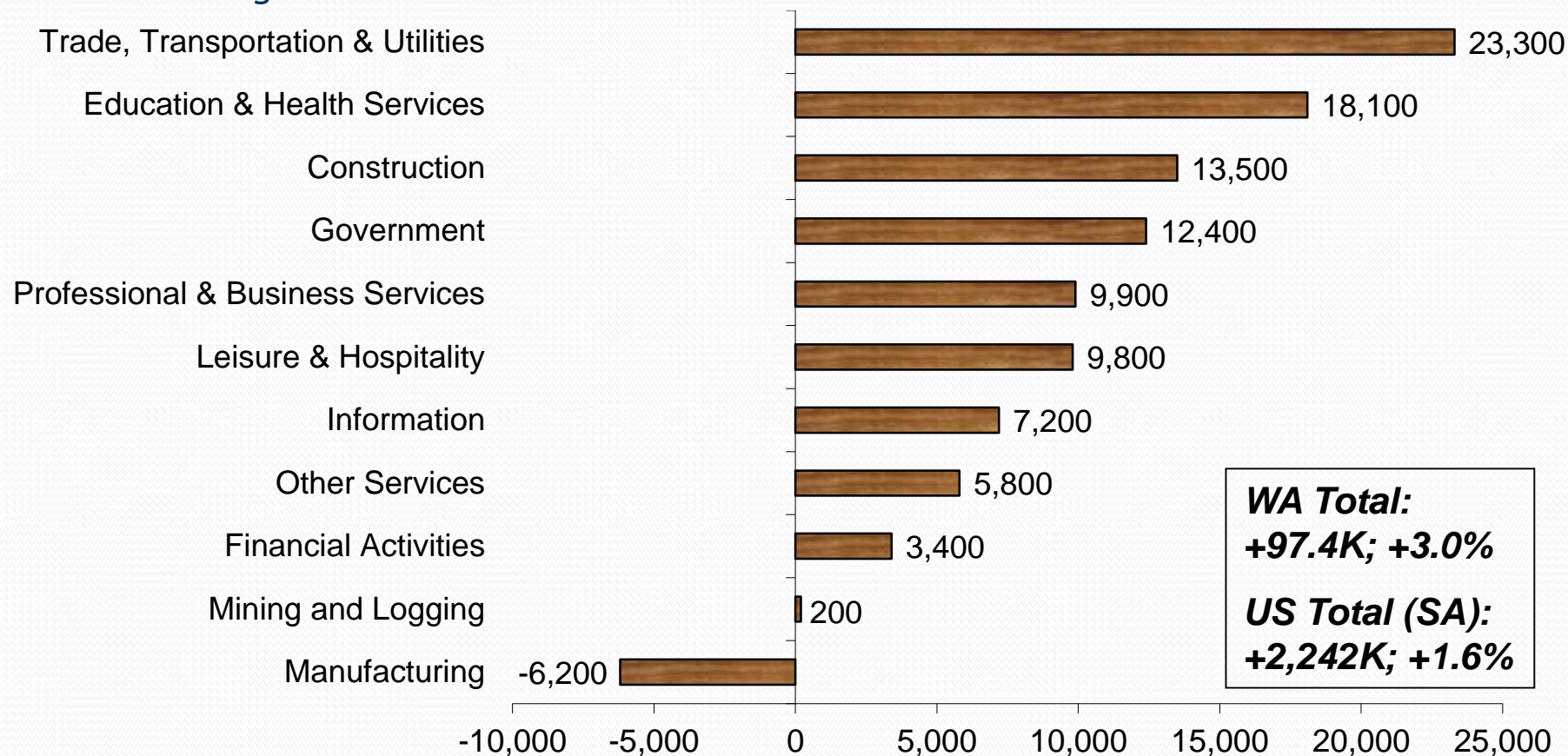


Washington Nonfarm Employment

by Industry Sector Groups (SA)

December 2015 v. December 2016

Absolute Change



Source: U.S. Bureau of Labor Statistics

*According to the Local Area Unemployment Statistics (LAUS) series WA added 136,681 jobs between December 2015 and December 2016.



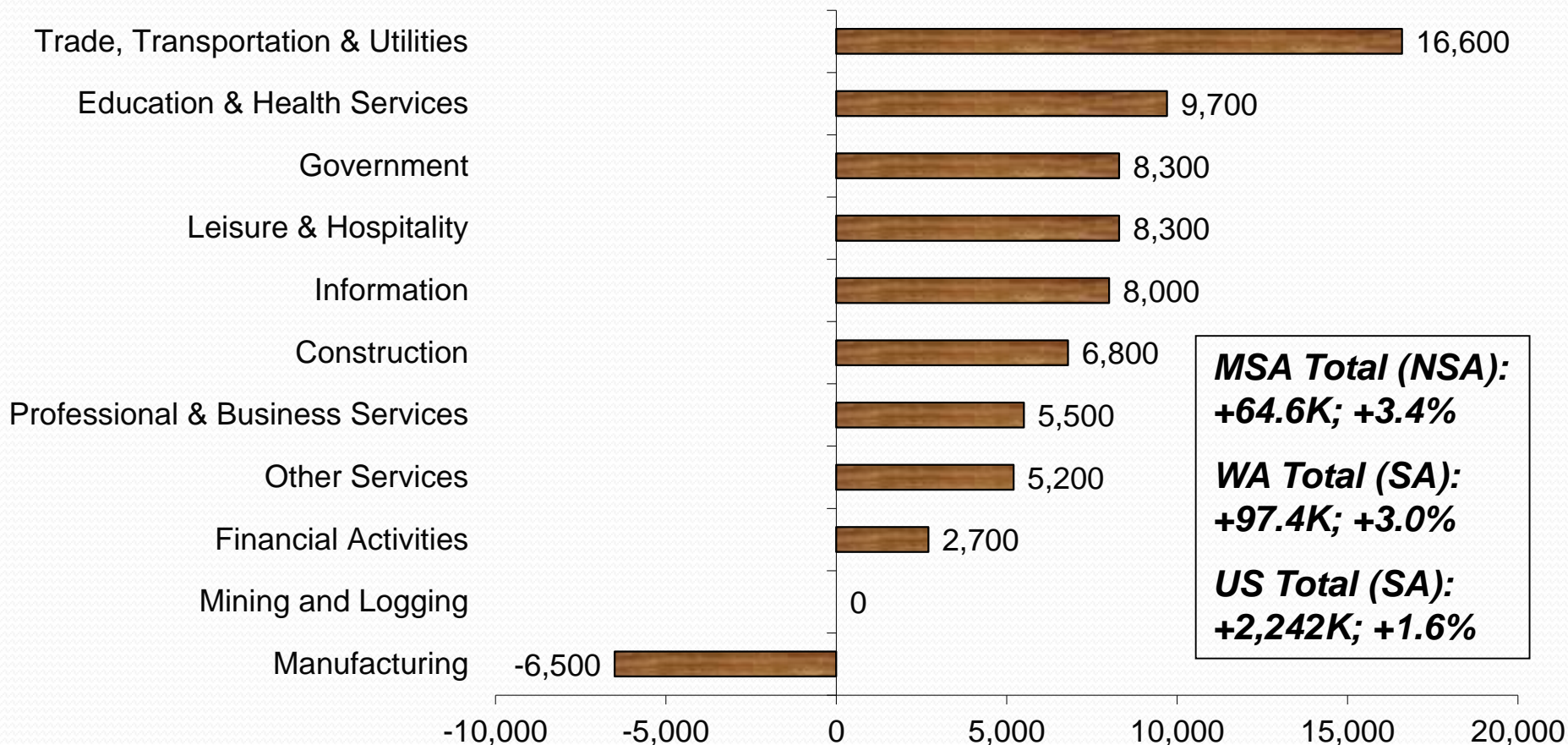
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Seattle-Tacoma-Bellevue, WA MSA Nonfarm Employment

by Industry Sector Groups (NSA)

December 2015 v. December 2016

Absolute Change



Source: U.S. Bureau of Labor Statistics



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Employment Growth, U.S. States (SA)

December 2015 v. December 2016 Percent Change

RANK	STATE	%	RANK	STATE	%	RANK	STATE	%
1	OREGON	3.3	16	SOUTH CAROLINA	1.7	35	DELAWARE	0.5
2	FLORIDA	3.1	19	TENNESSEE	1.6	35	ILLINOIS	0.5
3	NEVADA	3.0	20	MINNESOTA	1.5	35	IOWA	0.5
3	WASHINGTON	3.0	21	SOUTH DAKOTA	1.4	35	PENNSYLVANIA	0.5
5	UTAH	2.8	22	ARIZONA	1.3	39	ARKANSAS	0.4
6	GEORGIA	2.4	22	VIRGINIA	1.3	40	NEW JERSEY	0.3
7	DISTRICT OF COLUMBIA	2.3	24	NEW YORK	1.2	40	NEW MEXICO	0.3
7	MISSOURI	2.3	25	MARYLAND	1.1	40	WEST VIRGINIA	0.3
9	HAWAII	2.1	26	ALABAMA	1.0	43	MAINE	0.0
9	MASSACHUSETTS	2.1	26	WISCONSIN	1.0	44	CONNECTICUT	-0.1
11	CALIFORNIA	2.0	28	MONTANA	0.9	45	LOUISIANA	-0.2
11	NORTH CAROLINA	2.0	29	INDIANA	0.8	46	OKLAHOMA	-0.3
13	COLORADO	1.9	29	OHIO	0.8	47	KANSAS	-0.7
13	IDAHO	1.9	31	NEBRASKA	0.7	48	MISSISSIPPI	-1.0
15	TEXAS	1.8	31	RHODE ISLAND	0.7	49	ALASKA	-1.4
16	MICHIGAN	1.7	31	VERMONT	0.7	50	NORTH DAKOTA	-1.8
16	NEW HAMPSHIRE	1.7	34	KENTUCKY	0.6	51	WYOMING	-2.8

Source: U.S. Bureau of Labor Statistics

U.S. Year-over-year Percent Change: +1.6%

Employment Growth, 24 Largest Metros (NSA)

December 2015 v. December 2016 Percent Change

Rank	MSA	%	Rank	MSA	%
1	Orlando-Kissimmee-Sanford, FL MSA	4.2	12	San Diego-Carlsbad, CA MSA	2.0
2	Seattle-Tacoma-Bellevue, WA MSA	3.4	12	San Francisco-Oakland-Hayward, CA MSA	2.0
3	Dallas-Fort Worth-Arlington, TX MSA	3.3	15	Charlotte-Concord-Gastonia, NC-SC MSA	1.7
4	Denver-Aurora-Lakewood, CO MSA	3.2	15	Detroit-Warren-Dearborn, MI MSA	1.7
5	Riverside-San Bernardino-Ontario, CA MSA	2.9	17	Baltimore-Columbia-Towson, MD MSA	1.6
6	Atlanta-Sandy Springs-Roswell, GA MSA	2.7	18	Los Angeles-Long Beach-Anaheim, CA MSA	1.5
7	St. Louis, MO-IL MSA (1)	2.5	19	Minneapolis-St. Paul-Bloomington, MN-WI MSA	1.4
8	Miami-Fort Lauderdale-West Palm Beach, FL MSA	2.4	19	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA	1.4
9	Portland-Vancouver-Hillsboro, OR-WA MSA	2.2	19	Phoenix-Mesa-Scottsdale, AZ MSA	1.4
9	Tampa-St. Petersburg-Clearwater, FL MSA	2.2	22	New York-Newark-Jersey City, NY-NJ-PA MSA	1.3
11	Washington-Arlington-Alexandria, DC-VA-MD-WV MSA	2.1	23	Chicago-Naperville-Elgin, IL-IN-WI MSA	0.7
12	Boston-Cambridge-Nashua, MA-NH Metro NECTA	2.0	24	Houston-The Woodlands-Sugar Land, TX MSA	0.5

Source: U.S. Bureau of Labor Statistics

*CES Survey

Unemployment Rates, 24 Largest Metros (NSA)

December 2016

Rank	MSA	UR	Rank	MSA	UR
1	Boston-Cambridge-Nashua, MA-NH Metro NECTA	2.5	13	Orlando-Kissimmee-Sanford, FL MSA	4.2
2	Denver-Aurora-Lakewood, CO MSA	2.6	13	San Diego-Carlsbad, CA MSA	4.2
3	Washington-Arlington-Alexandria, DC-VA-MD-WV MSA	3.4	15	Los Angeles-Long Beach-Anaheim, CA MSA	4.4
3	San Francisco-Oakland-Hayward, CA MSA	3.4	15	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA	4.4
5	Minneapolis-St. Paul-Bloomington, MN-WI MSA	3.6	17	Tampa-St. Petersburg-Clearwater, FL MSA	4.5
6	Dallas-Fort Worth-Arlington, TX MSA	3.7	18	Charlotte-Concord-Gastonia, NC-SC MSA	4.6
7	Baltimore-Columbia-Towson, MD MSA	4.0	19	Detroit-Warren-Dearborn, MI MSA	4.8
7	Portland-Vancouver-Hillsboro, OR-WA MSA	4.0	20	Miami-Fort Lauderdale-West Palm Beach, FL MSA	4.9
7	Seattle-Tacoma-Bellevue, WA MSA	4.0	21	Atlanta-Sandy Springs-Roswell, GA MSA	5.0
7	St. Louis, MO-IL MSA (1)	4.0	22	Riverside-San Bernardino-Ontario, CA MSA	5.2
11	New York-Newark-Jersey City, NY-NJ-PA MSA	4.1	23	Houston-The Woodlands-Sugar Land, TX MSA	5.3
11	Phoenix-Mesa-Scottsdale, AZ MSA	4.1	24	Chicago-Naperville-Elgin, IL-IN-WI MSA	5.4

Source: U.S. Bureau of Labor Statistics

1. Area boundaries do not reflect official OMB definitions.

U.S. Unemployment Rate
December 2016: 4.7%
January 2017: 4.8%



21 Jump Street

(And Other Addresses of Interest)

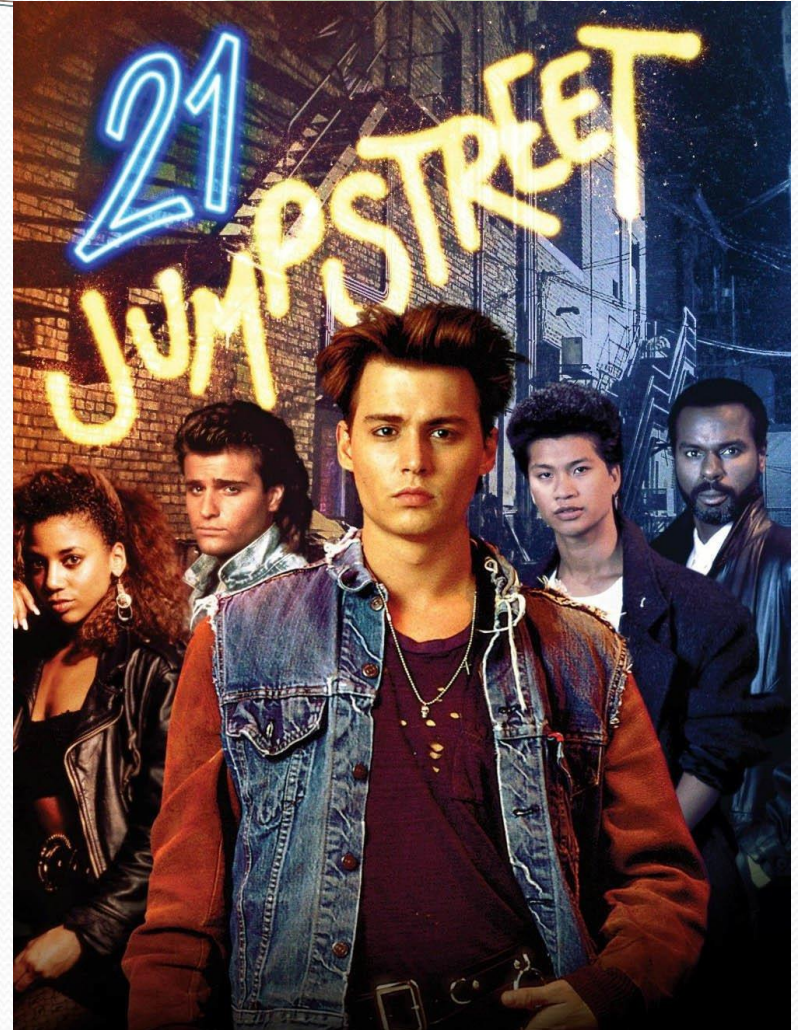


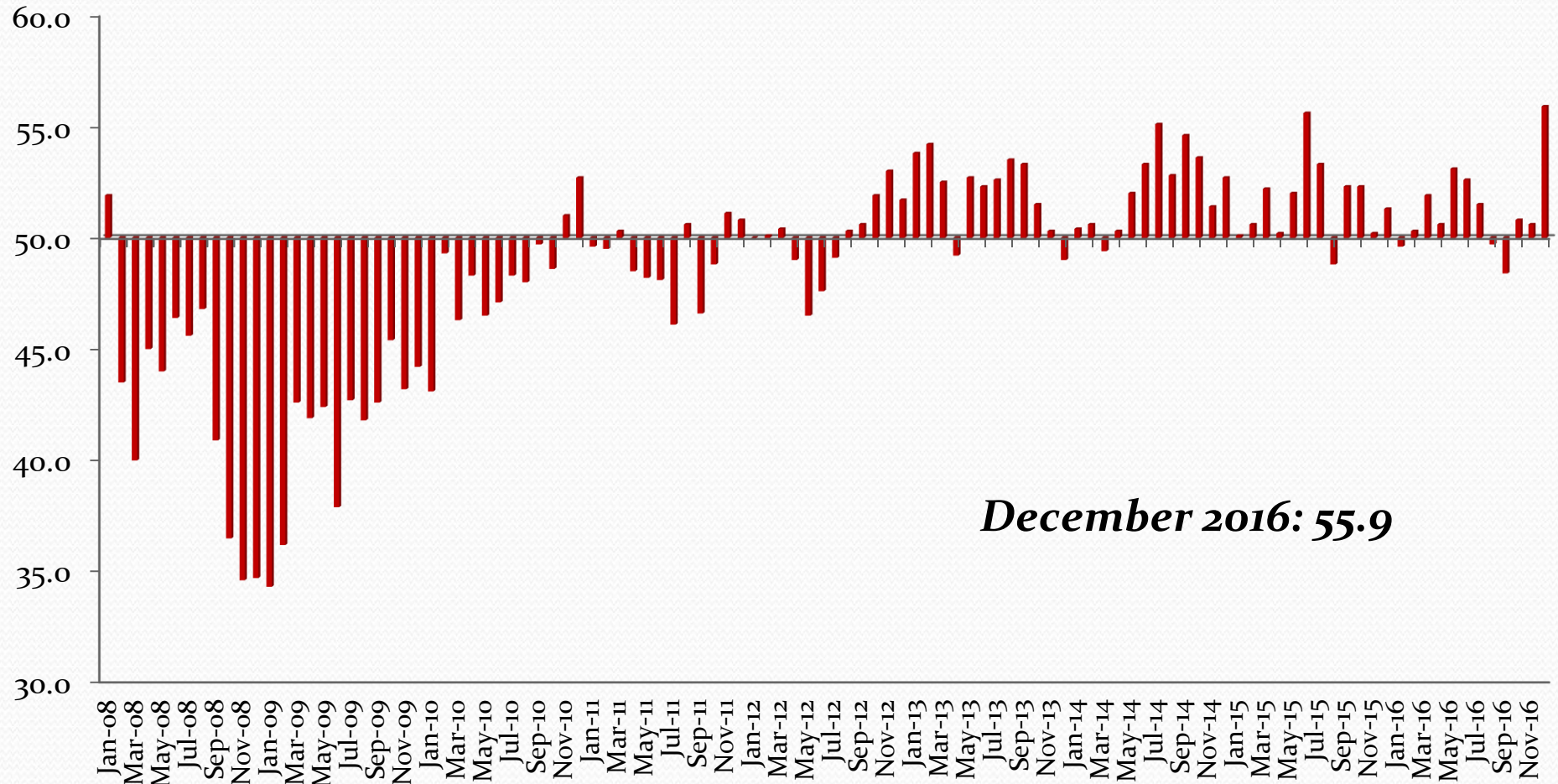
Photo: TheMoveDatabase.org



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Architecture Billings Index

January 2008 through December 2016

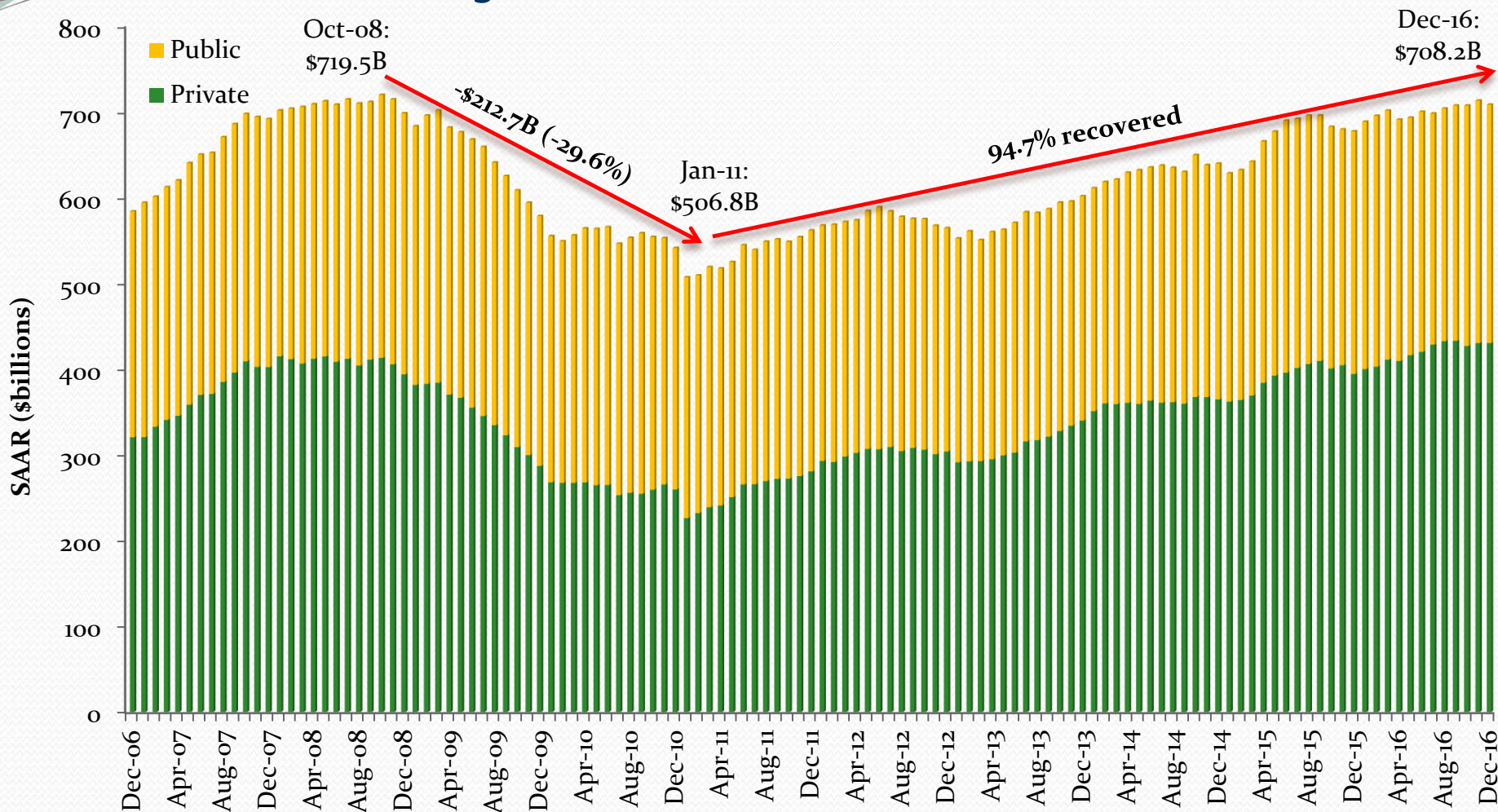


December 2016: 55.9

Source: The American Institute of Architects

Nonresidential Construction Put-in-Place

December 2006 through December 2016



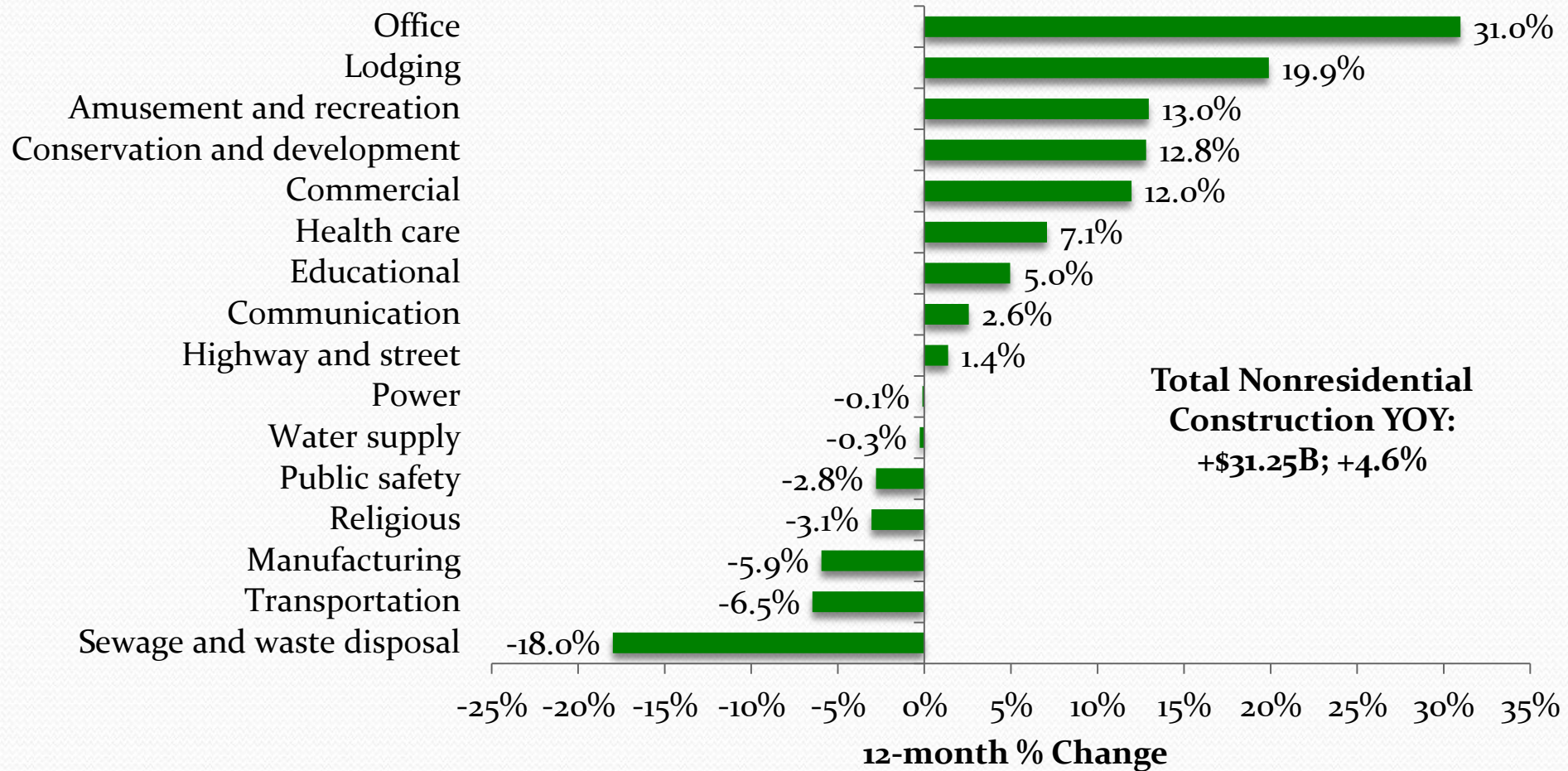
Source: U.S. Census Bureau



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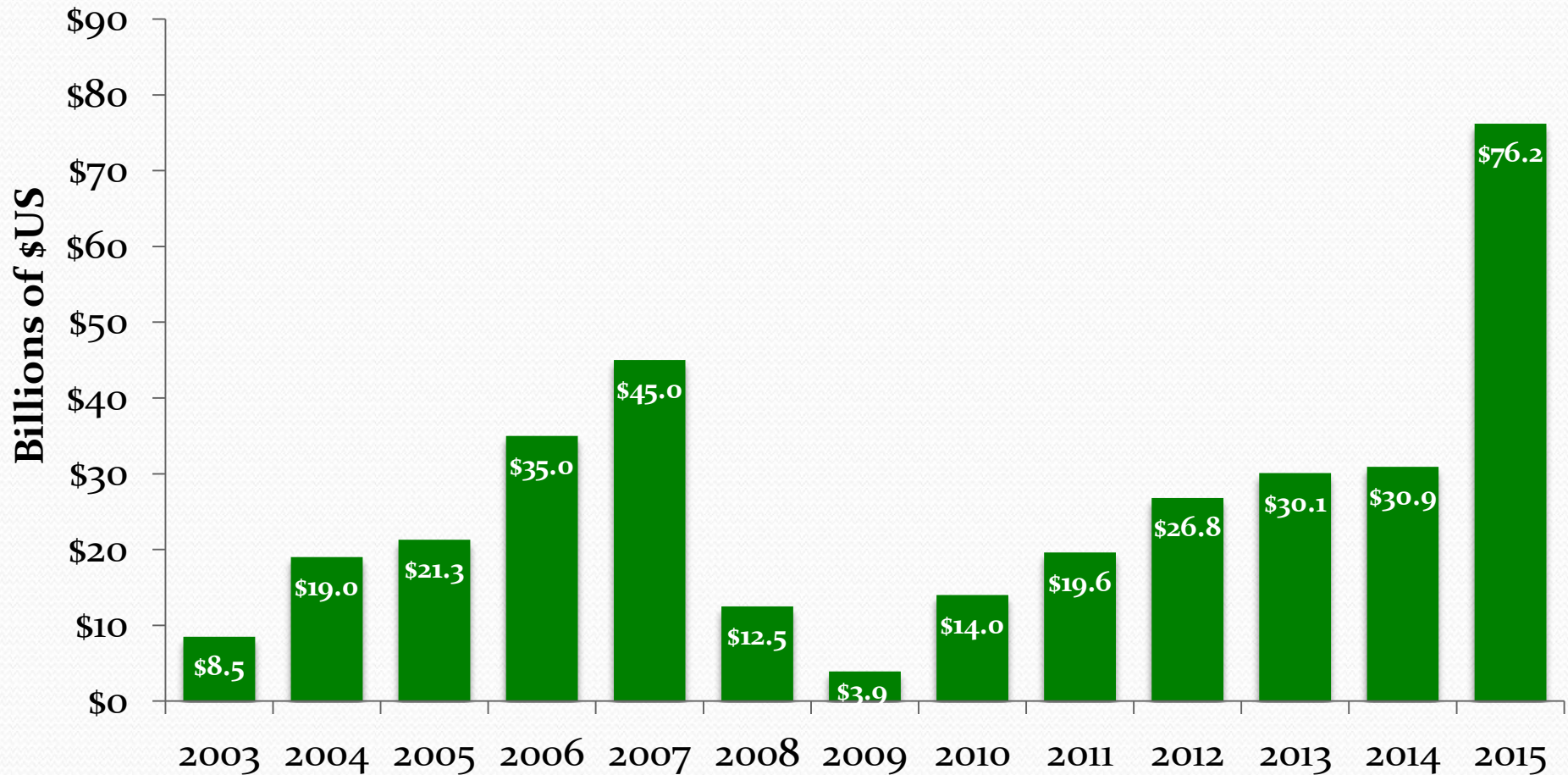
National Nonresidential Construction Spending by Subsector

December 2015 v. December 2016



Source: U.S. Census Bureau

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



Source: Jones Lang LaSalle; Real Capital Analytics

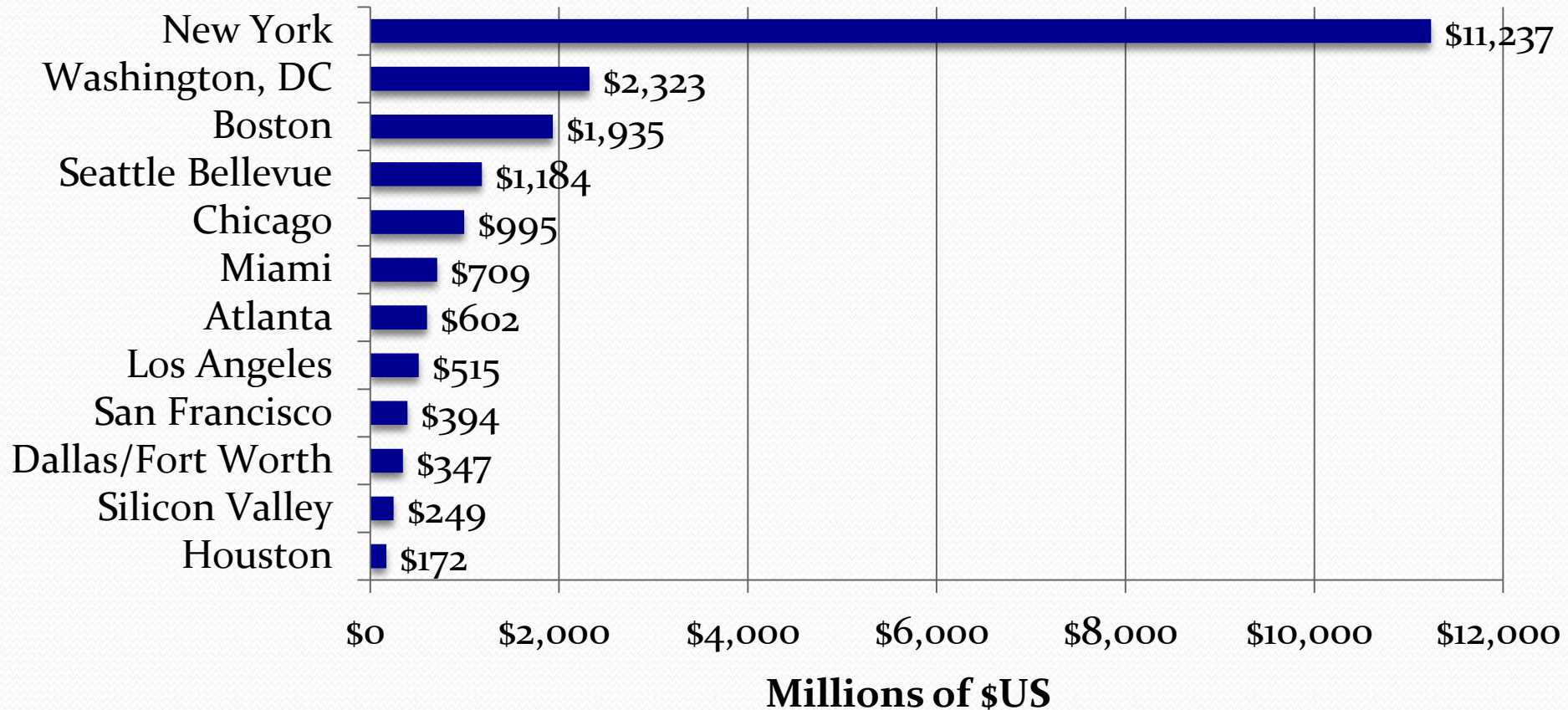
Note: Among transactions larger than \$5.0 million

Foreign Investment Increases 146.6 Percent in 2015 to \$76.2b



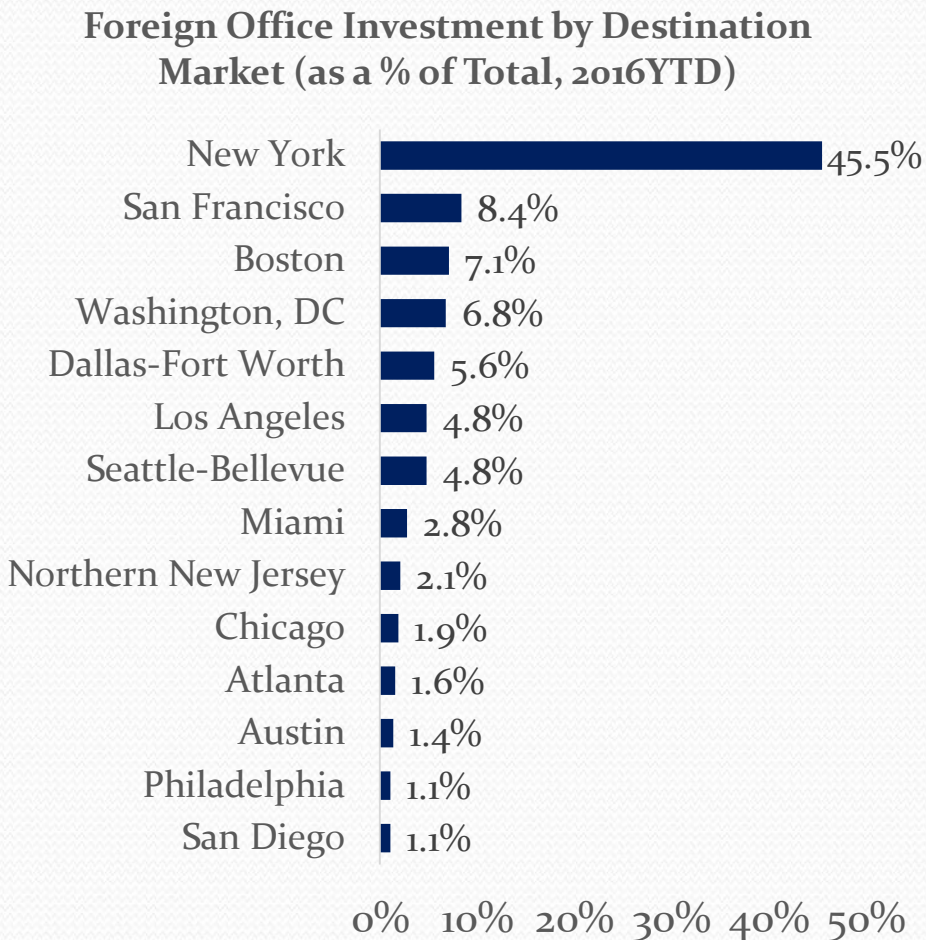
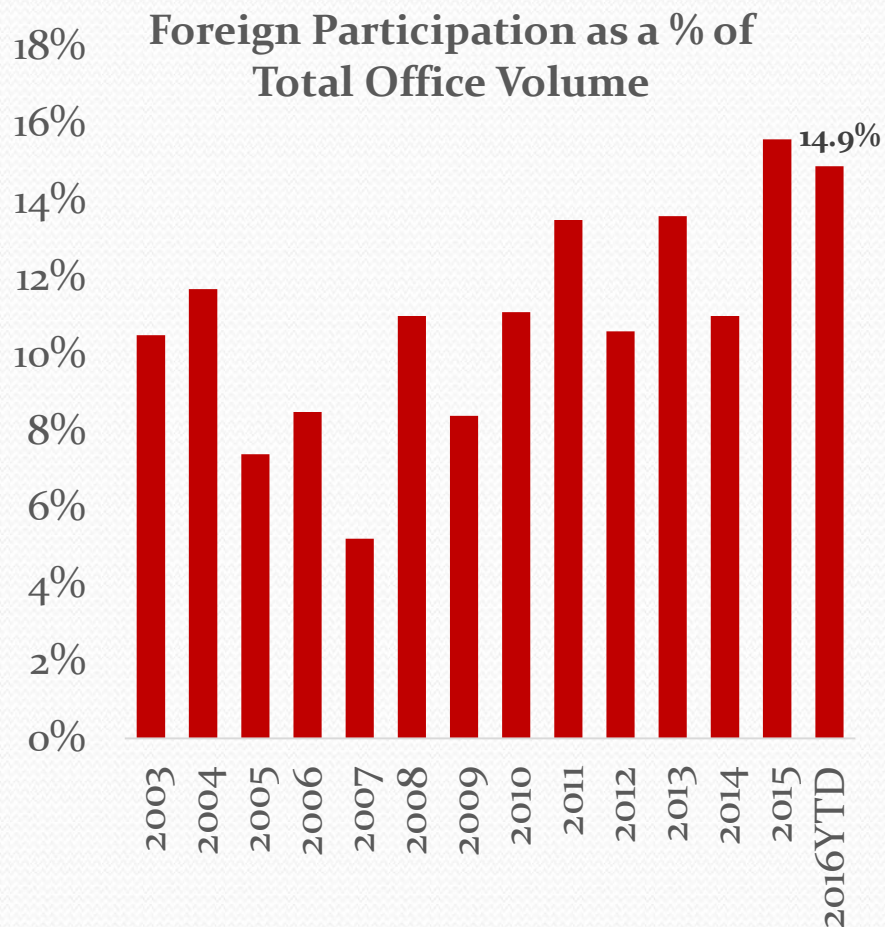
Top Markets for Foreign Office Investment, 2015

Annual Foreign Office Investment Volume



Source: Jones Lang LaSalle; Real Capital Analytics

Foreign Office Investment Activity, as of 2016Q3



Source: Jones Lang LaSalle; Real Capital Analytics

Note: Among transactions larger than \$5.0 million; includes all office markets which received > 1.0% of offshore capital.

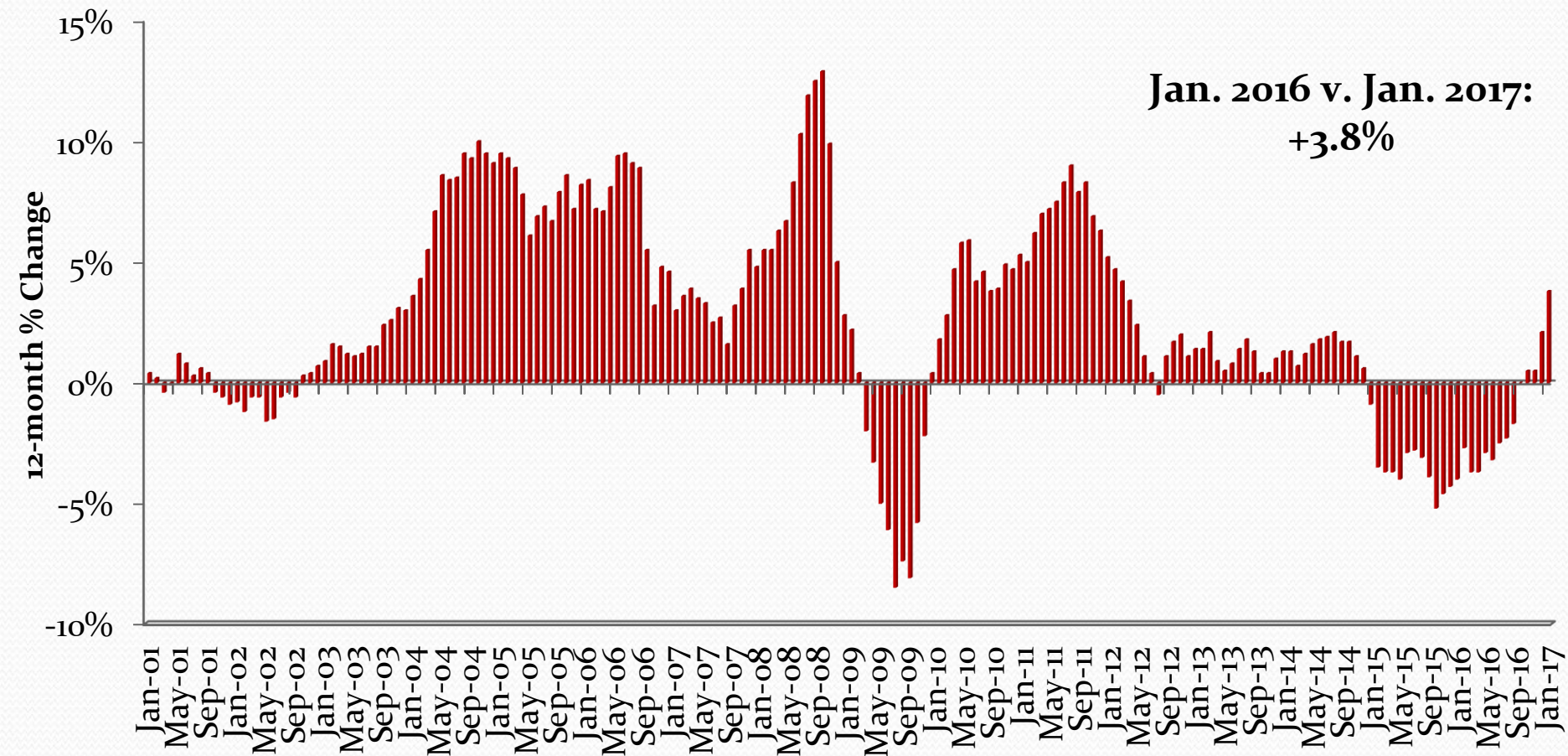
Primary markets continue to capture the lion's share of inbound capital, receiving 78.2% of this capital YTD.



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Inputs to Construction PPI (NSA)

January 2001 – January 2017



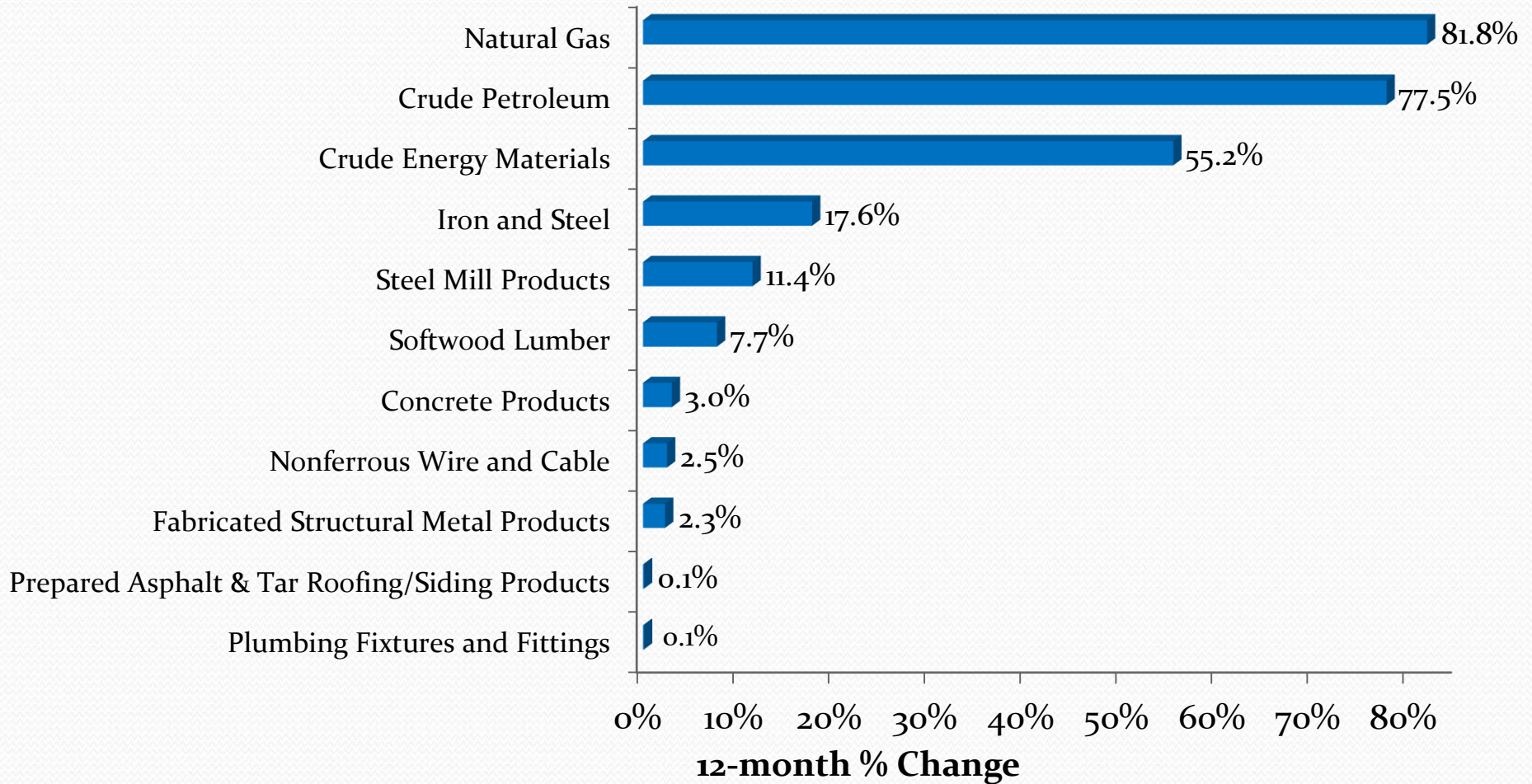
Source: U.S. Bureau of Labor Statistics



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Construction Materials PPI (NSA)

12-month % Change as of January 2017



Source: U.S. Bureau of Labor Statistics

Down to “The Wire”

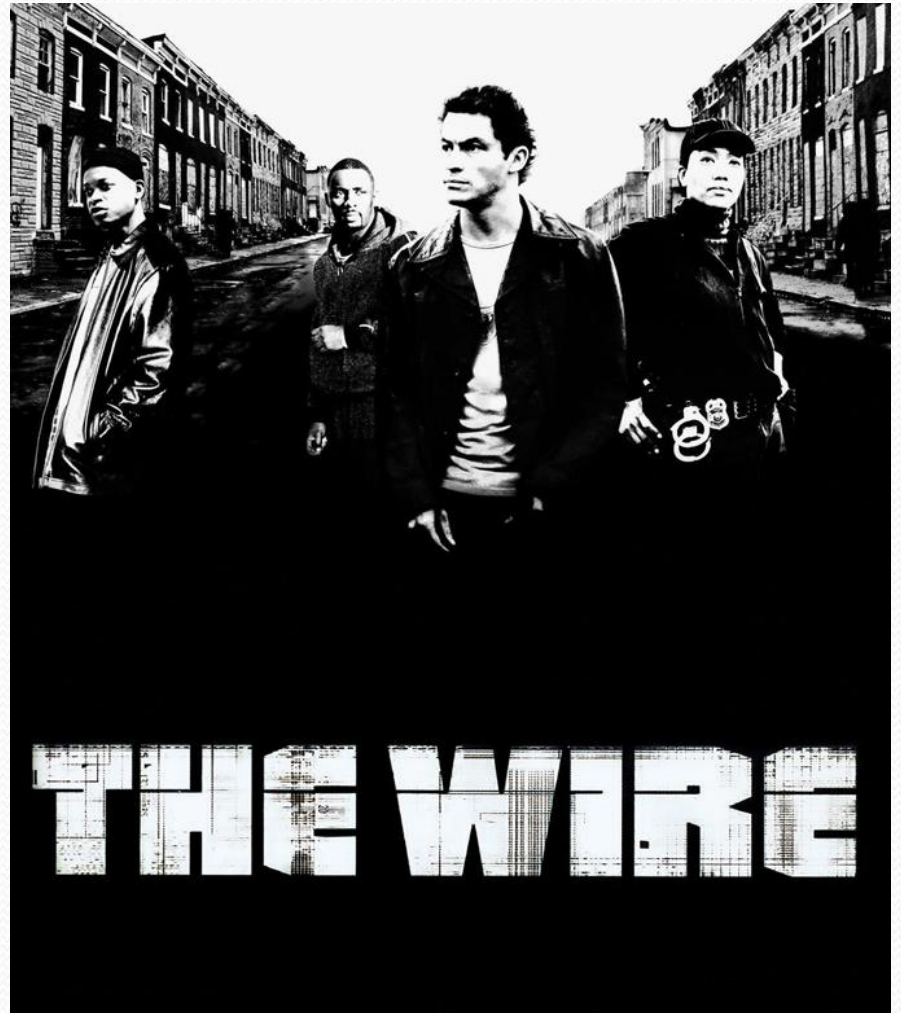


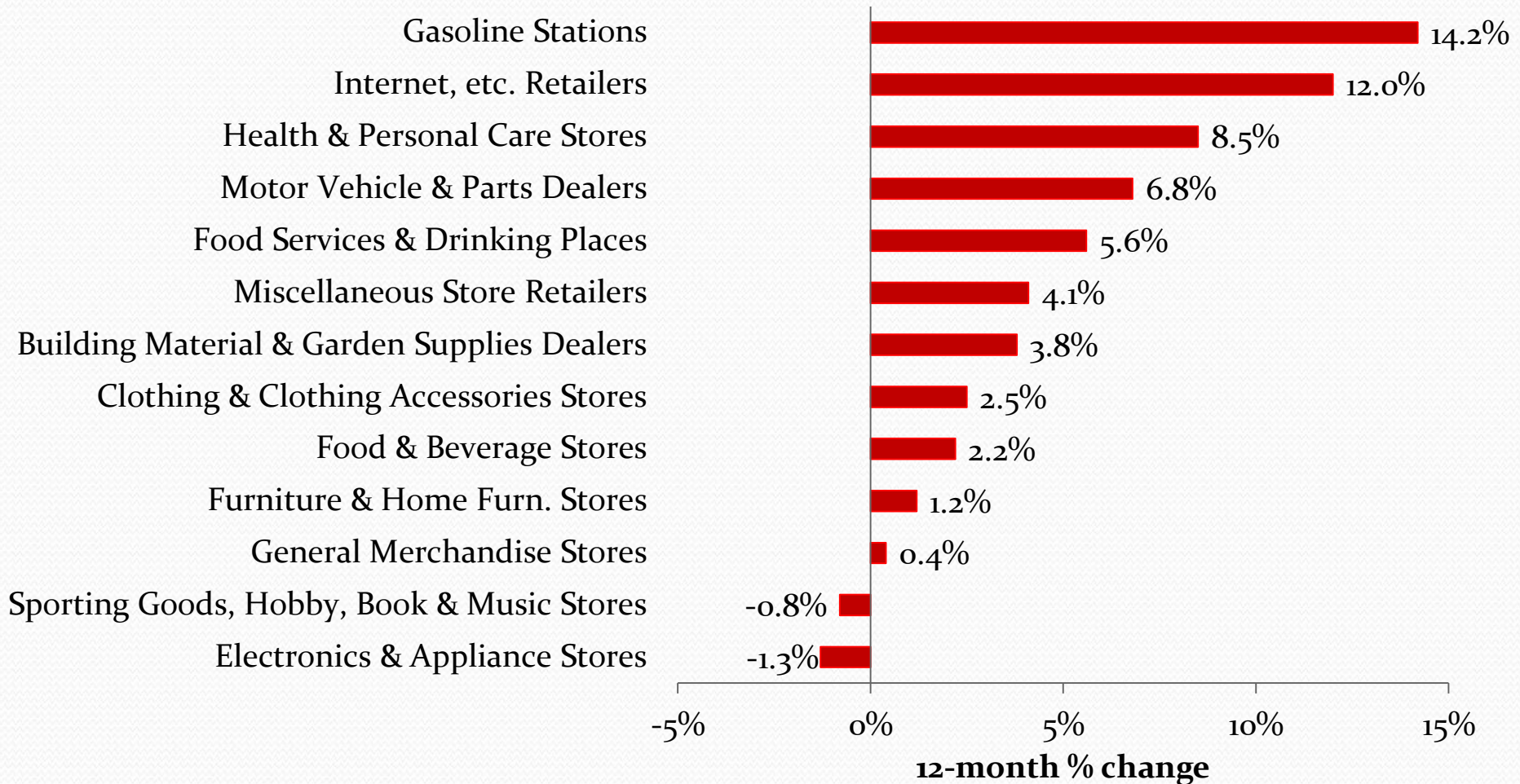
Photo: RecapGuide.com



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Sales Growth by Type of Business

*January 2016 v. January 2017**



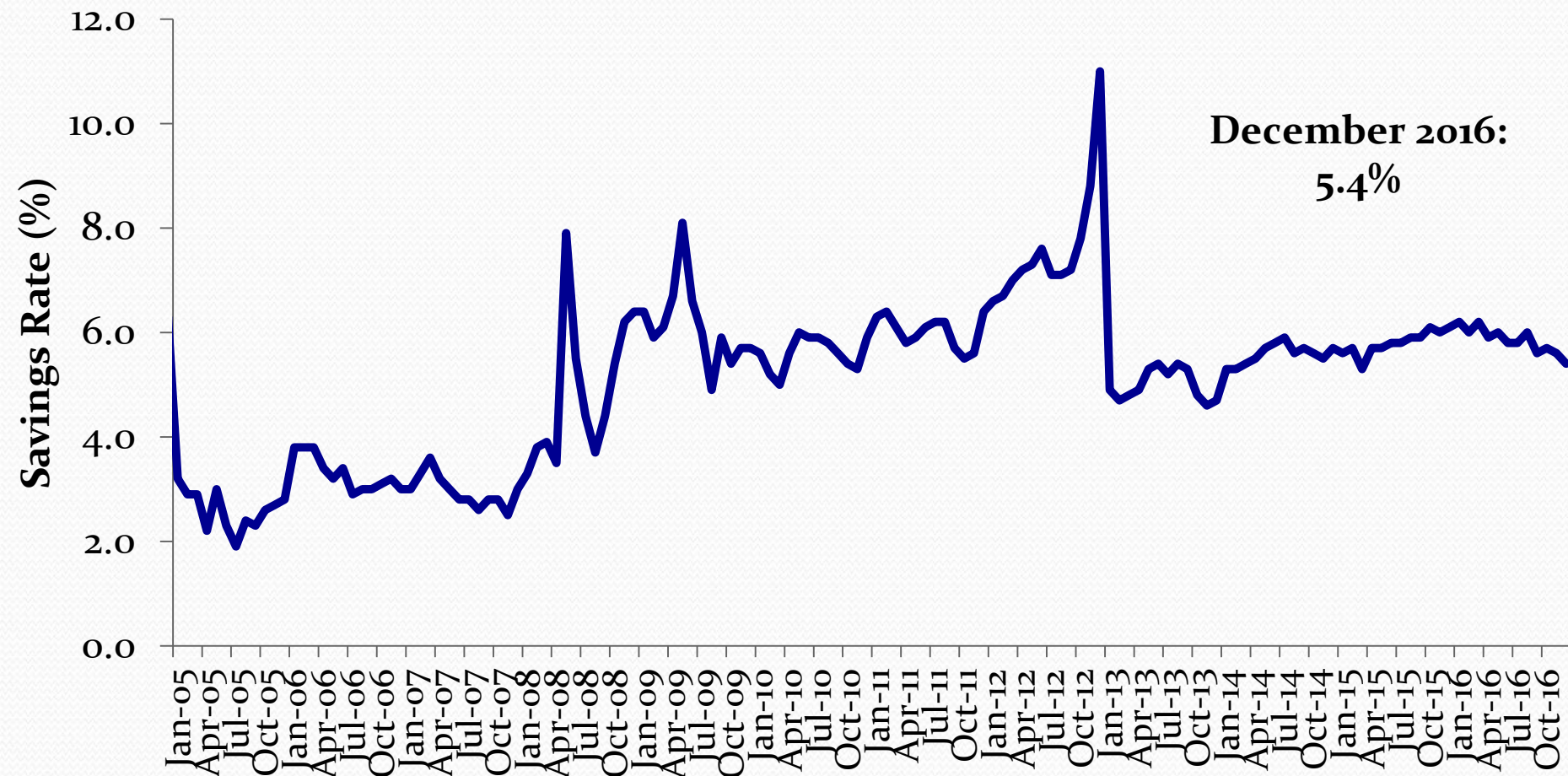
Source: U.S. Census Bureau

*January 2017 advanced estimate

Total Retail Sales: +5.6% YOY

U.S. Saving Rate, January 2005 – December 2016

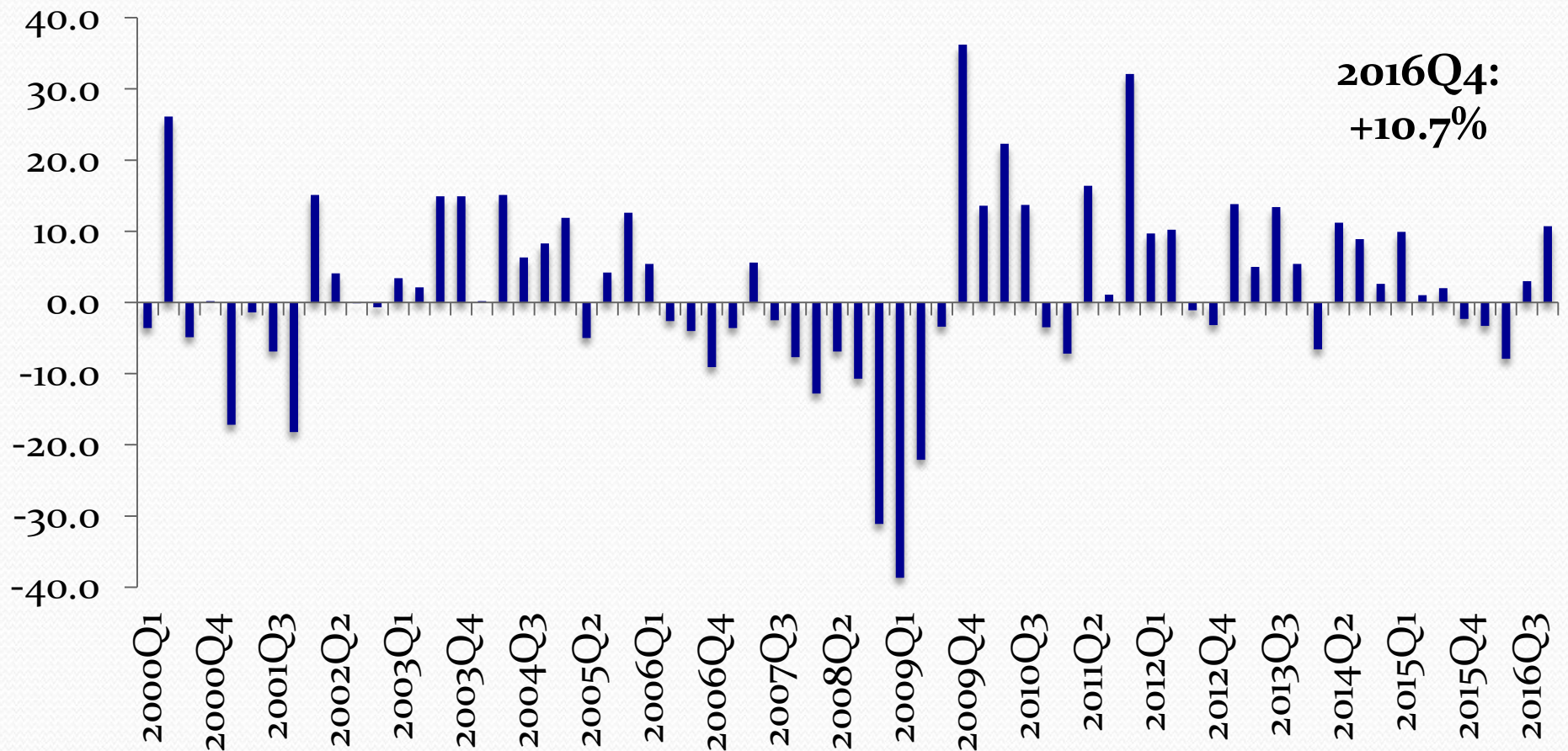
(Savings as Percentage of Personal Disposable Income)



Source: Bureau of Economic Analysis

U.S. Gross Private Domestic Investment (SAAR)

% Change from Previous Quarter, 2000Q1 – 2016Q4*



2016Q4:
+10.7%

Source: Bureau of Economic Analysis

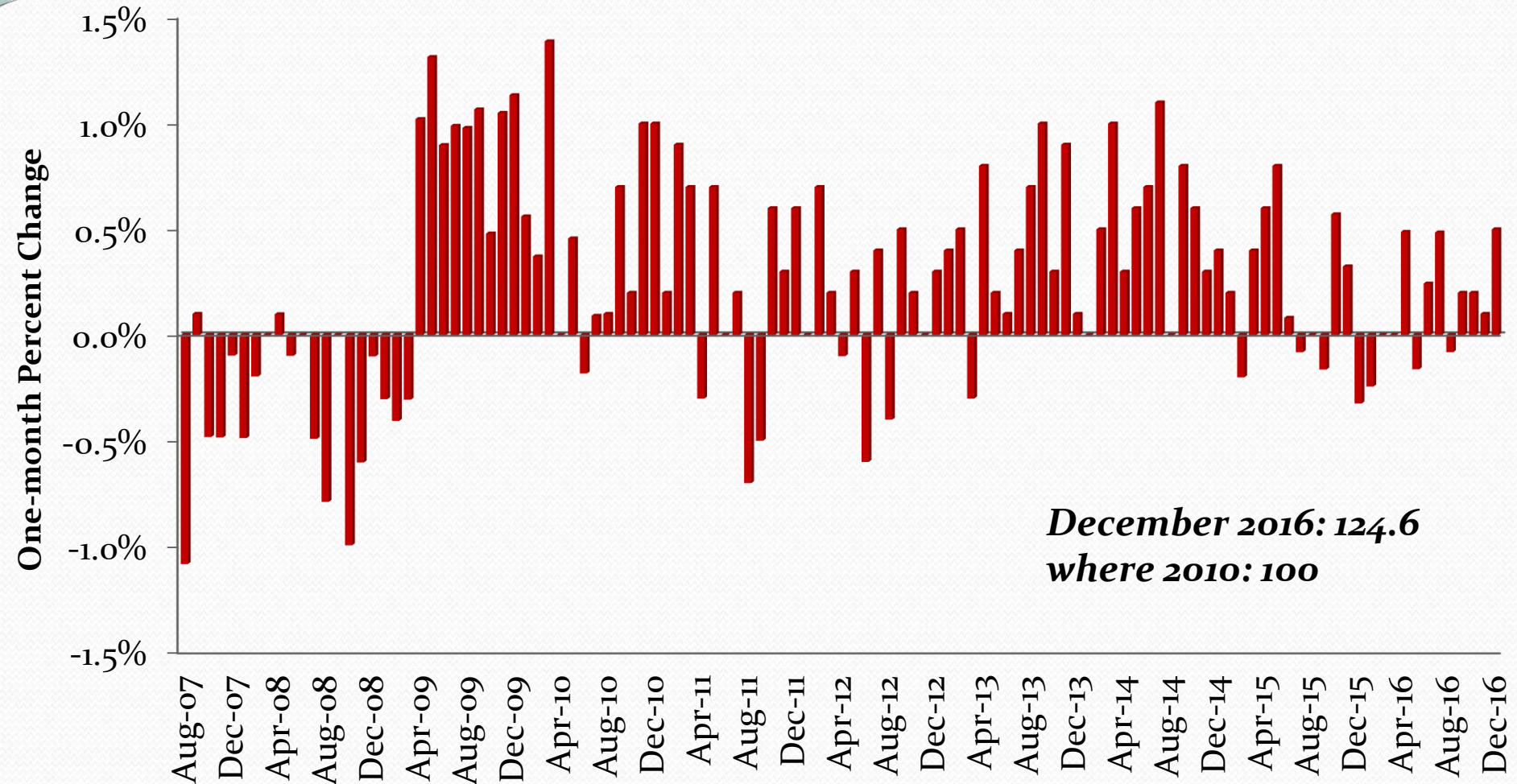
*1st (Advance) Estimate



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Conference Board Leading Economic Indicators Index

August 2007 through December 2016



Source: Conference Board



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The Closer

- Global economy remains weak, 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, a bit less true in 2016;
- Inflationary pressures are on the rise – so, too, are interest rates – that could begin to squeeze asset prices in 2017, particularly if expected tax cuts are not passed into law;
- There are indications of mini-bubbles forming in commercial real estate, particularly in office, lodging and multifamily segments;
- But tax cuts, stimulus, and more defense spending should see us through 2017-18;
- 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;
- 2017 shaping up to be solid, but beyond 2018, we may have some issues . . .

Photo: Google



*Kyra Sedgwick as Brenda Leigh Johnson



Thank You

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- Please look for updates of information at www.sagepolicy.com.
- Also, if you need us in a hurry, we are at 410.522.7243 (410.522.SAGE)
- Please contact us when you require economic research & policy analysis.