

# Back to the Future Part II

*On Behalf of*

*Office of Acquisition and Project Management*

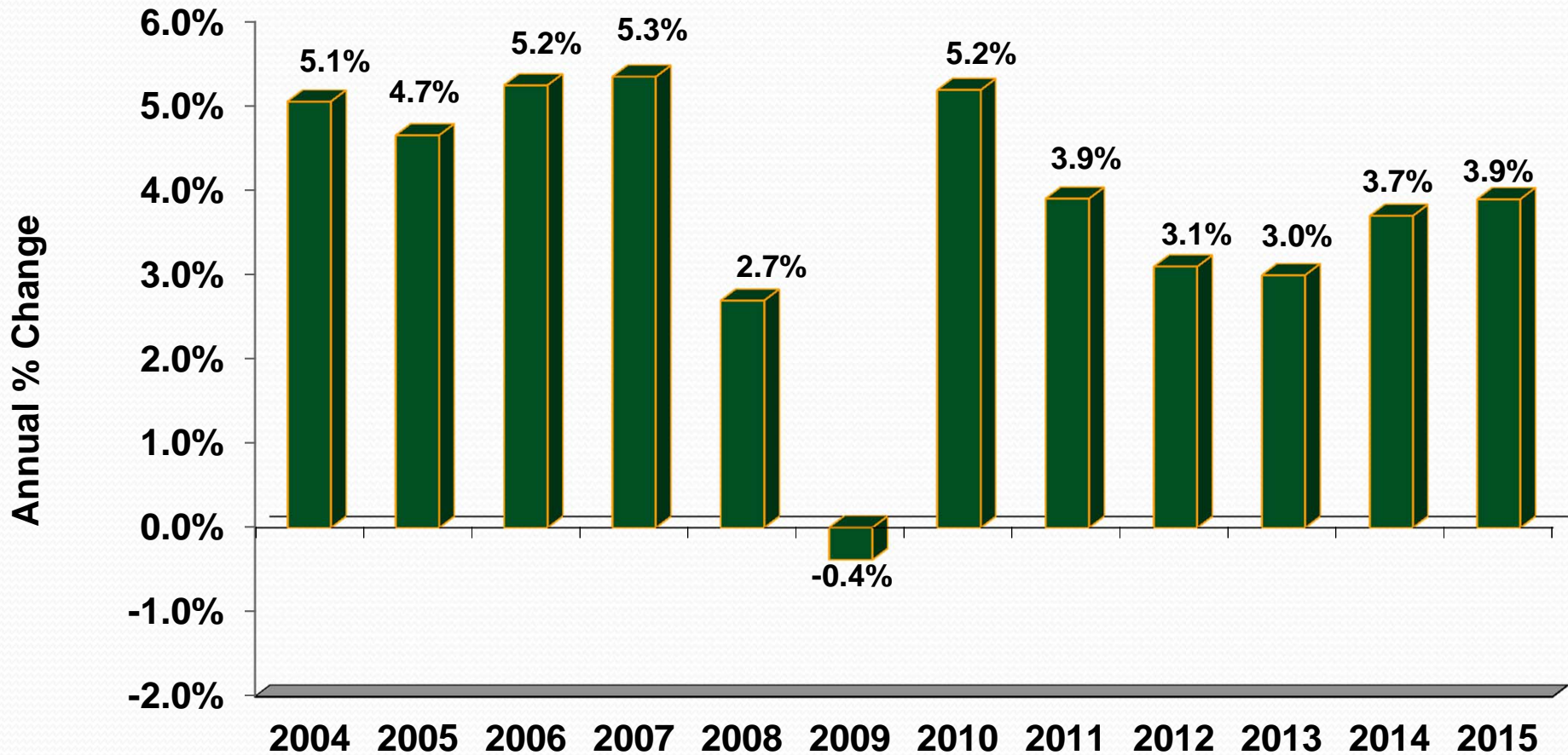
***By: Anirban Basu***  
***Sage Policy Group, Inc.***

***March 26<sup>th</sup>, 2014***

# Raging Bull (1980)

# Historic and Projected World Output Growth

2004 through 2015\*



Source: International Monetary Fund

\*2014-2015 data are projections



# Real GDP Growth, 20 Fastest and Slowest Growing Countries

*Estimated 2013, Annual Percent Change (for available nations)*

Rank	Country	Region	%	Rank	Country	Region	%
1	South Sudan	Africa	24.7	169	Belgium	Europe	0.1
2	Sierra Leone	Africa	13.3	170	Denmark	Europe	0.1
3	Turkmenistan	Central Asia	12.2	171	Samoa	Asia	0.1
4	Paraguay	South America	12.0	172	Swaziland	Africa	0.0
5	Mongolia	Asia	11.8	173	Czech Republic	Europe	-0.4
6	Lao P.D.R.	Southeast Asia	8.3	174	Croatia	Eastern Europe	-0.6
7	Liberia	Africa	8.1	175	Finland	Europe	-0.6
8	Timor-Leste	Southeast Asia	8.1	176	Barbados	Caribbean	-0.8
9	Côte d'Ivoire	Africa	8.0	177	Spain	Europe	-1.3
10	Ghana	Africa	7.9	178	Netherlands	Europe	-1.3
11	China	Asia	7.6	179	Equatorial Guinea	Africa	-1.5
12	Panama	Central America	7.5	180	Islamic Republic of Iran	Middle East	-1.5
13	Rwanda	Africa	7.5	181	Portugal	Europe	-1.8
14	Kyrgyz Republic	Central Asia	7.4	182	Italy	Europe	-1.8
15	Uzbekistan	Central Asia	7.0	183	Slovenia	Eastern Europe	-2.6
16	Cambodia	Southeast Asia	7.0	184	San Marino	Europe	-3.5
17	Ethiopia	Africa	7.0	185	Greece	Europe	-4.2
18	Mozambique	Africa	7.0	186	Libya	Middle East	-5.1
19	Tanzania	Africa	7.0	187	Cyprus	Europe	-8.7
20	Myanmar	Southeast Asia	6.8	188	Central African Republic	Africa	-14.5

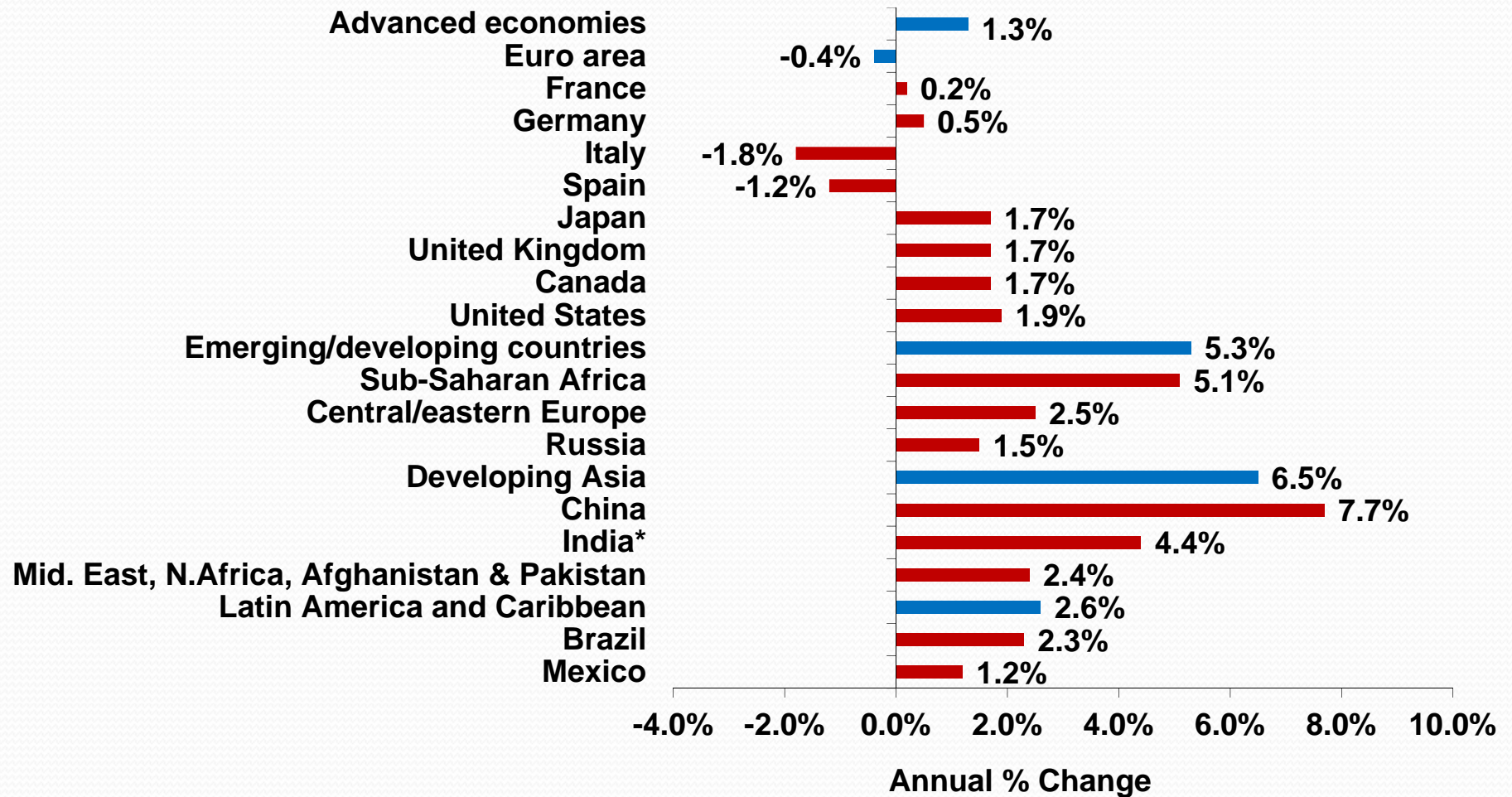
Source: International Monetary Fund

*\*2013-2014 data are projections*



# Estimated Growth in Output by Select Global Areas

2013

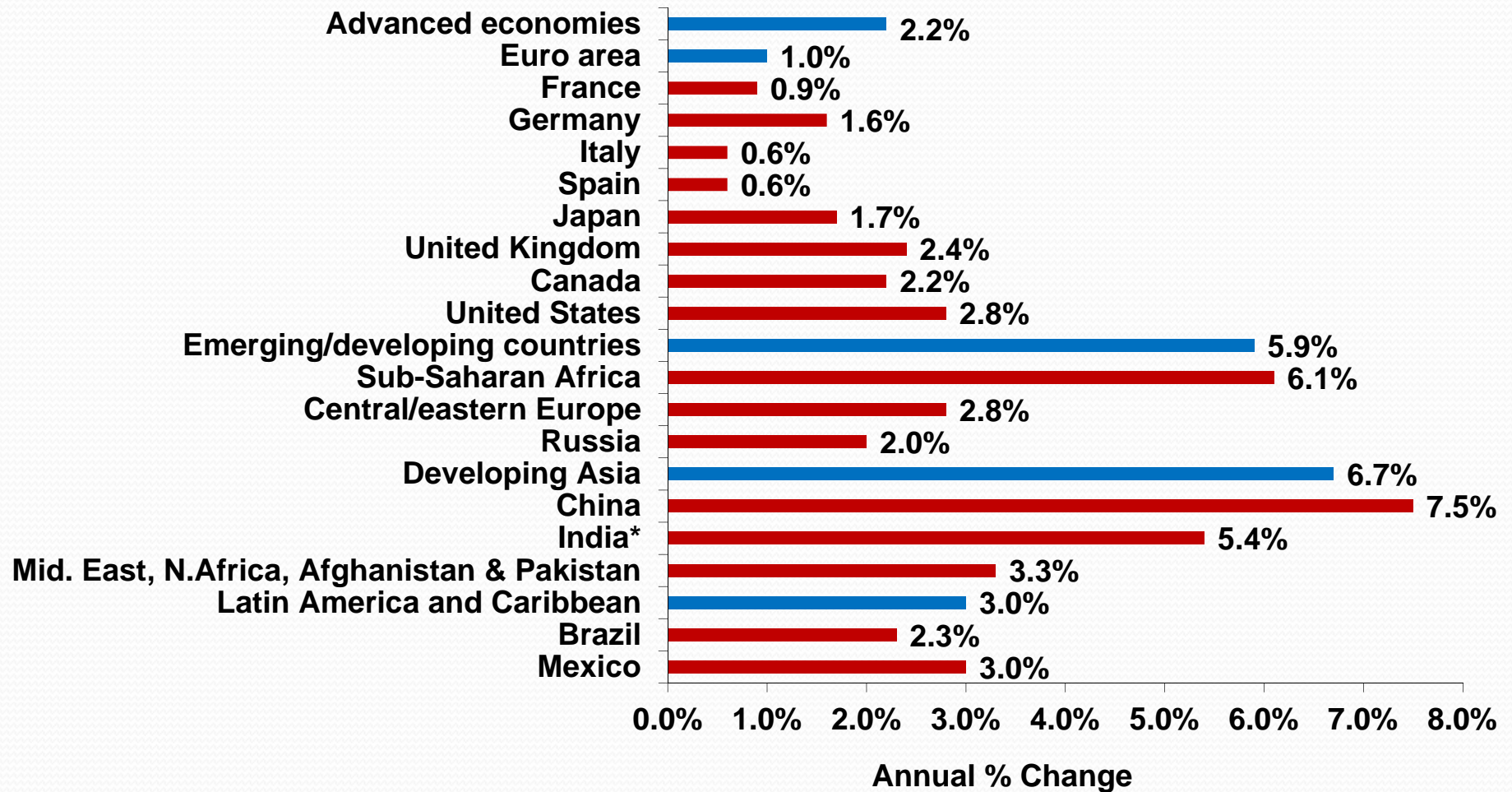


Source: International Monetary Fund

\*For India, data and forecasts are presented on a fiscal year basis and output growth is based on GDP at market prices. Corresponding growth forecasts for GDP at factor cost are 4.6 percent for 2013.

# Estimated Growth in Output by Select Global Areas

2014 Projected

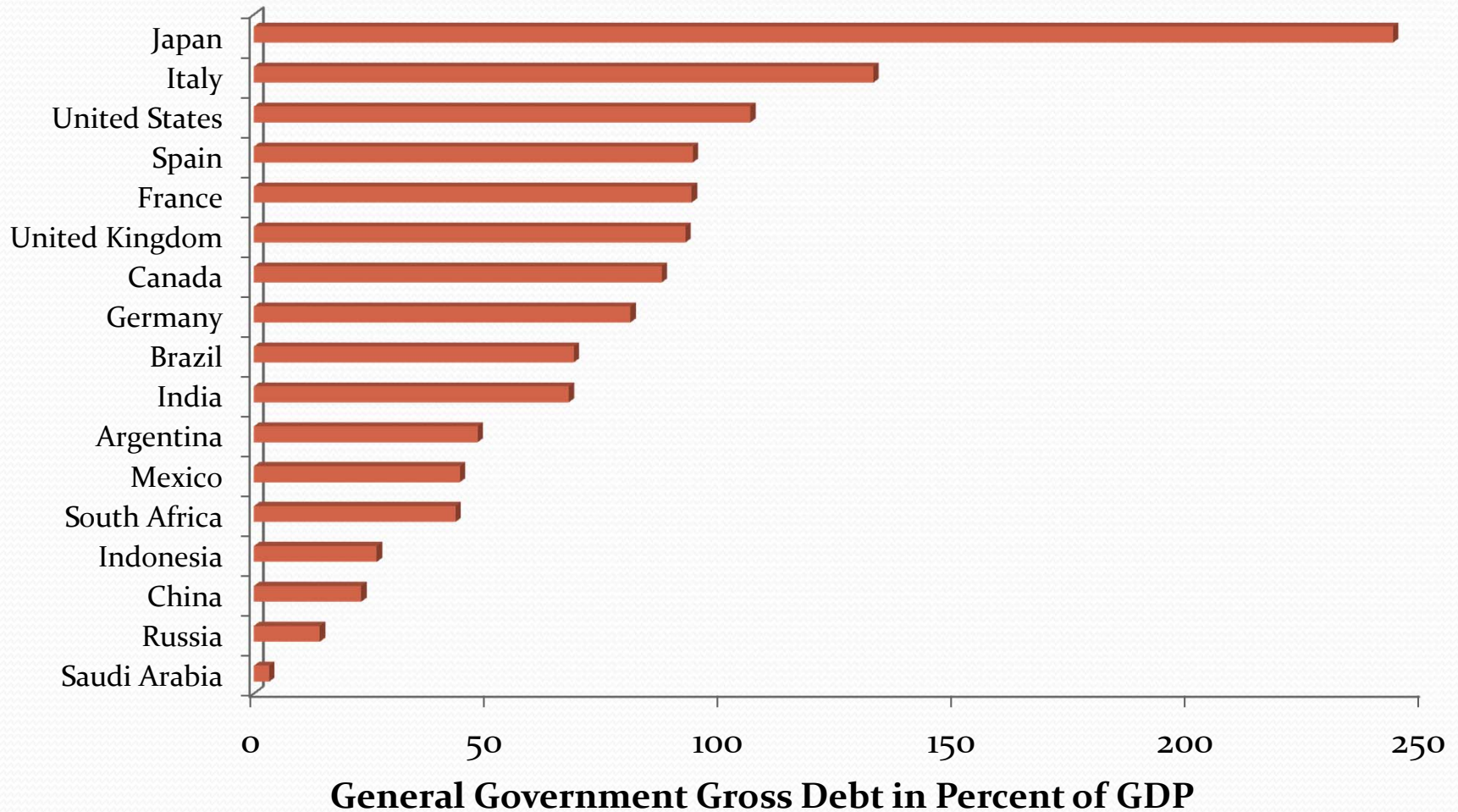


Source: International Monetary Fund

\*For India, data and forecasts are presented on a fiscal year basis and output growth is based on GDP at market prices. Corresponding growth forecasts for GDP at factor cost are 4.6 percent for 2013.

# Debt by Selected Country

## 2013 Estimates



Source: International Monetary Fund

\*IMF Staff Estimates



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# Top 12 Stock Exchanges

2013 Growth\*

Rank	Exchange	Index	% Change
4	Tokyo SE	Nikkei 225	56.7%
<b>2</b>	<b>Nasdaq</b>	<b>NASDAQ Composite</b>	<b>38.3%</b>
<b>1</b>	<b>NYSE Group</b>	<b>DJI A</b>	<b>26.5%</b>
6	Frankfurt SE	DAX	25.5%
8	Bolsa De Madrid	Madrid General	21.4%
12	Swiss Exchange	Swiss Market	20.2%
5	Euronext	CAC 40	18.0%
10	Borsaitaliana	FTSE MIB	16.6%
3	London SE	FTSE 100	12.0%
9	TSX Group	S&P TSX Composite	9.6%
11	Hong Kong Exchanges	Hang Seng Index	2.9%
7	Shanghai SE	Shanghai Composite	-6.8%

Source: Yahoo! Finance

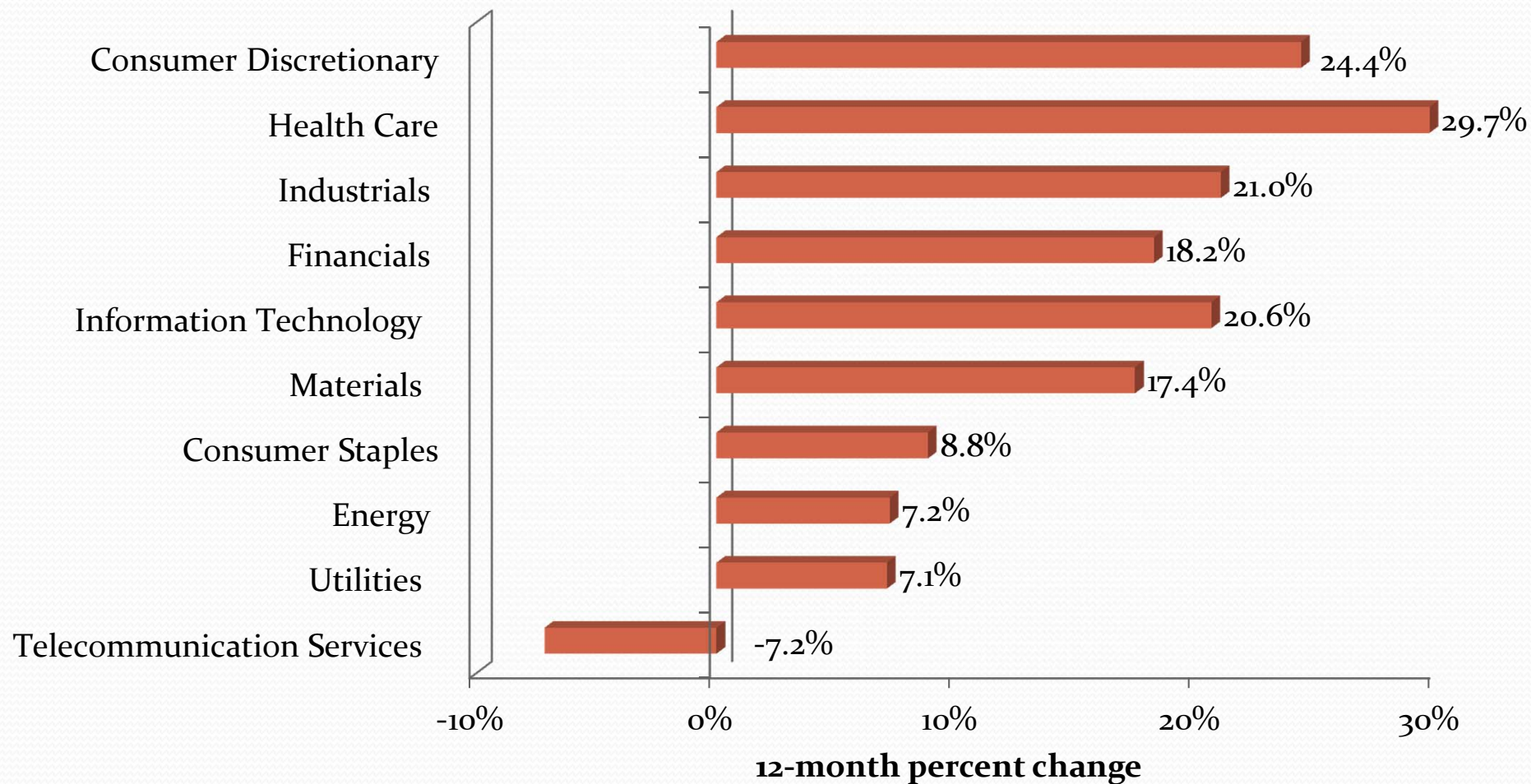
\*Change from the 2012 close to the 2013 close.





# S&P Select Sector Performance

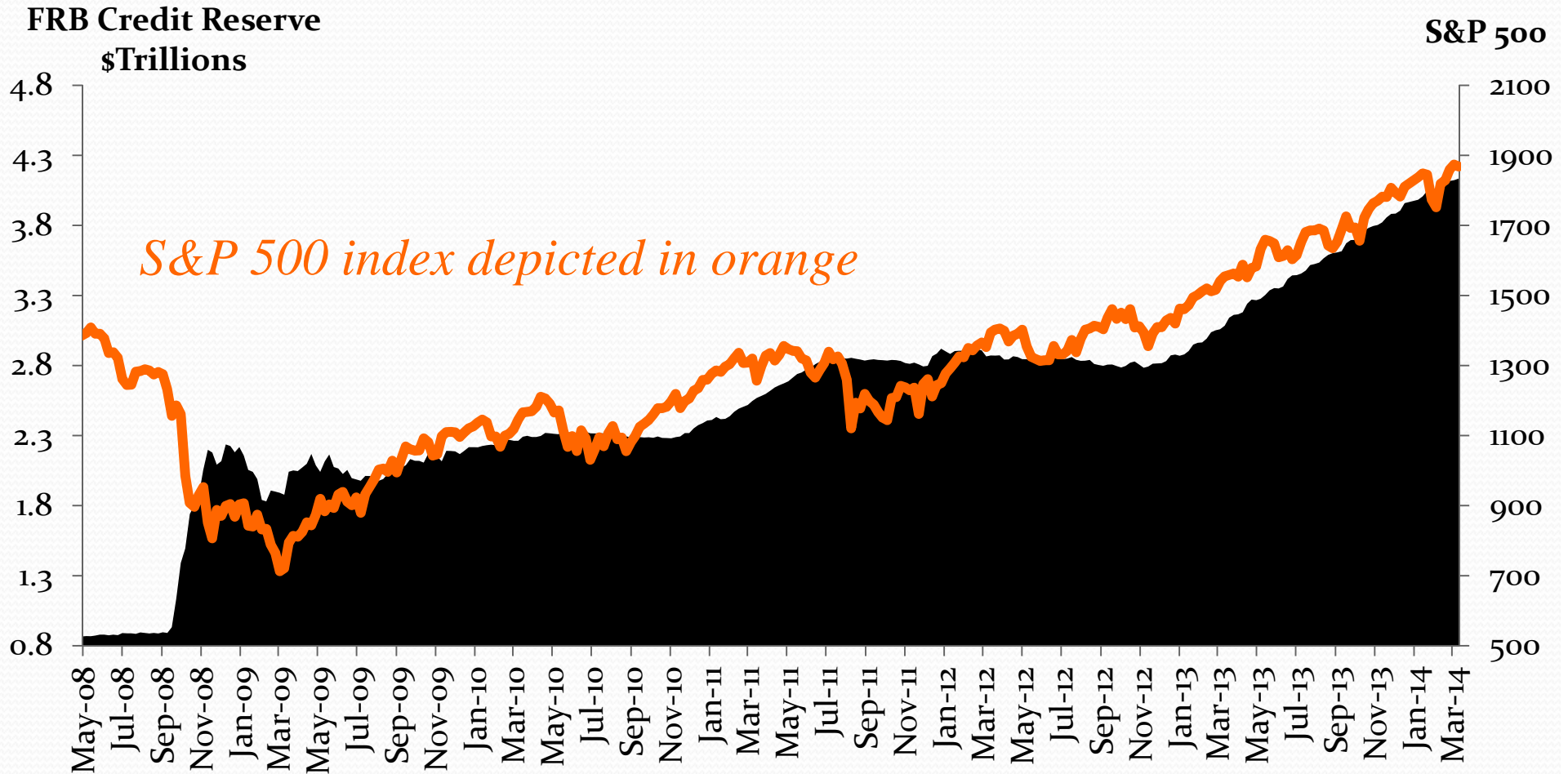
12-Month Percent Change as of March 14, 2014



Source: Standard & Poor's

# Federal Reserve Balance Sheet v. S&P 500 Index

May 2008 – March 2014



Source: Federal Reserve Bank; Yahoo Finance



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# Fourth Quarter Earnings for Select Corporations

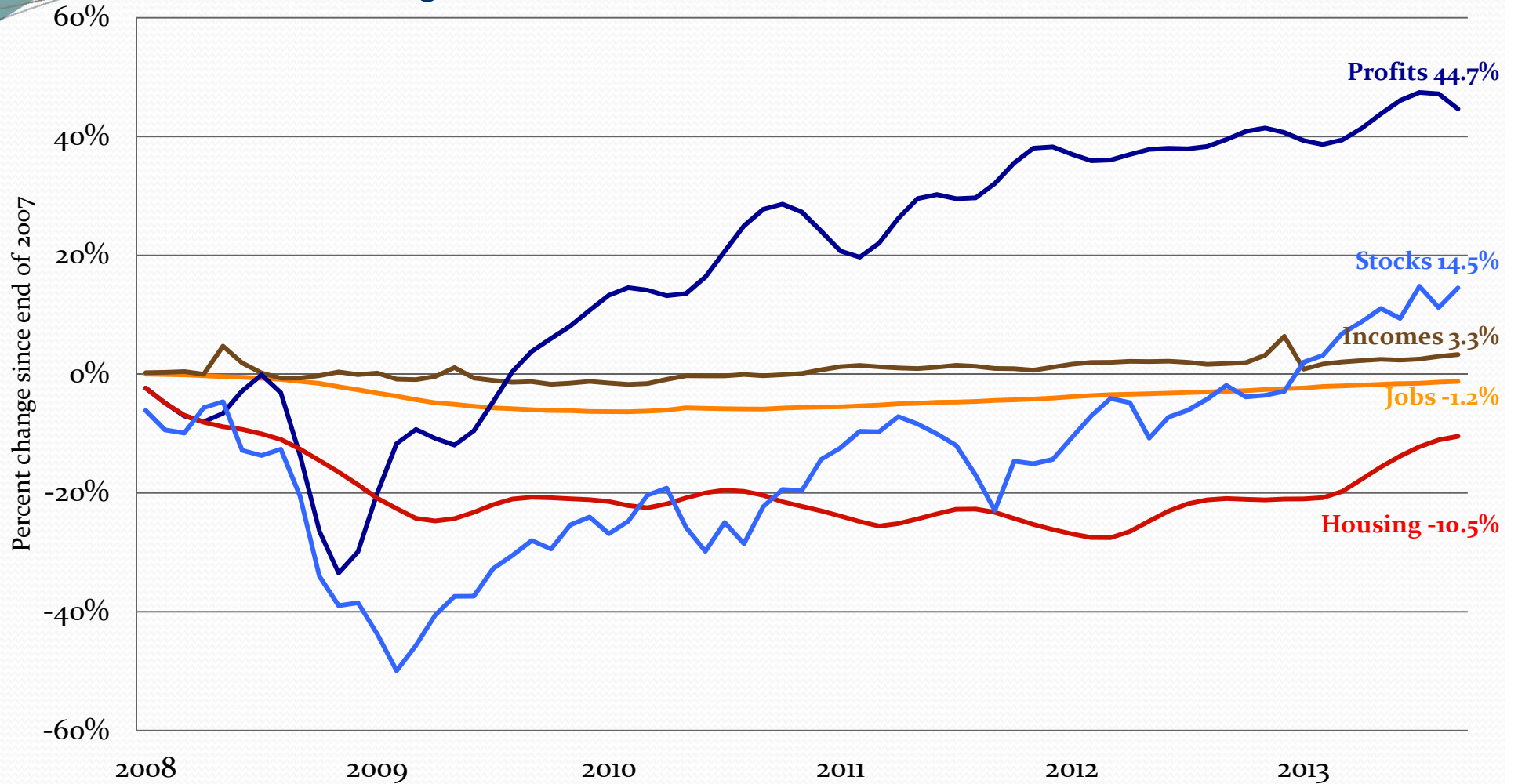
## Earnings per Share

Symbol	Q4 2012	Q4 2013 Estimated	Q4 2013 Reported	Surprise	Symbol	Q4 2012	Q4 2013 Estimated	Q4 2013 Reported	Surprise
CAT	\$1.46	\$1.28	\$1.58	\$0.30	AMD	-\$0.14	\$0.05	\$0.06	\$0.01
DOW	\$0.33	\$0.43	\$0.65	\$0.22	XRX	\$0.30	\$0.29	\$0.29	\$0.00
BTU	\$0.36	-\$0.10	\$0.00	\$0.10	GE	\$0.44	\$0.53	\$0.53	\$0.00
STI	\$0.65	\$0.69	\$0.77	\$0.08	CMG	\$1.95	\$2.53	\$2.53	\$0.00
YHOO	\$0.32	\$0.38	\$0.46	\$0.08	COH	\$0.86	\$0.98	\$0.98	\$0.00
UTX	\$1.04	\$1.53	\$1.58	\$0.05	MMM	\$1.41	\$1.62	\$1.62	\$0.00
DD	\$0.11	\$0.55	\$0.59	\$0.04	UPS	\$1.32	\$1.25	\$1.25	\$0.00
FCX	\$0.78	\$0.80	\$0.84	\$0.04	TXN	\$0.36	\$0.46	\$0.46	\$0.00
HON	\$1.10	\$1.21	\$1.24	\$0.03	VFC	\$0.77	\$0.84	\$0.82	-\$0.02
VZ	\$0.45	\$0.65	\$0.66	\$0.01	MSFT	\$0.67	\$0.75	\$0.66	-\$0.09
MCD	\$1.38	\$1.39	\$1.40	\$0.01	COF	\$1.41	\$1.55	\$1.45	-\$0.10

Source: Yahoo! Finance

# Top Gun (1986)

## Profits out of the Danger Zone

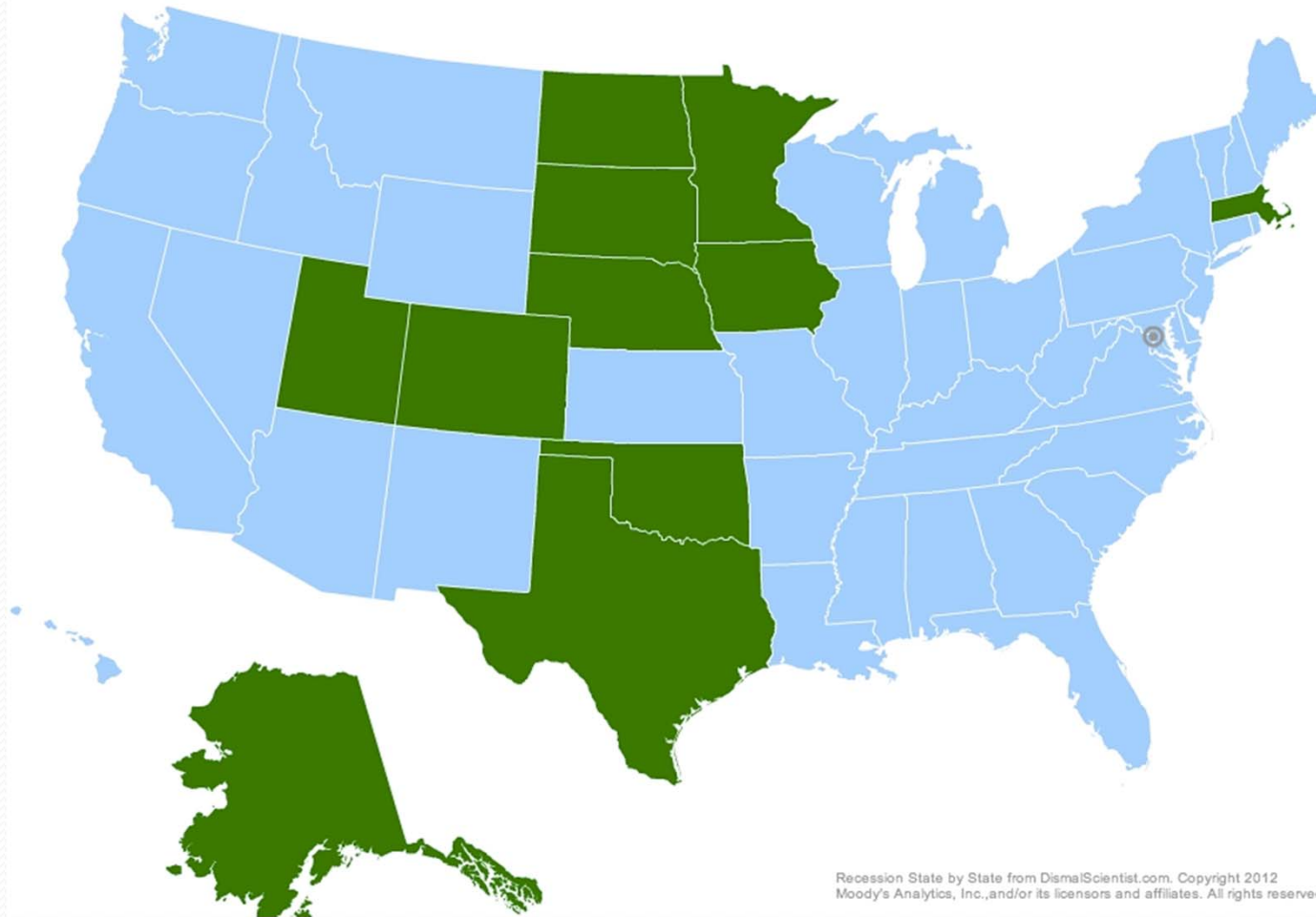


Source: BEA, BLS, S&P Case-Shiller, Yahoo! Finance



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# Recession Watch as of December 2013



Source: Moody's Economy

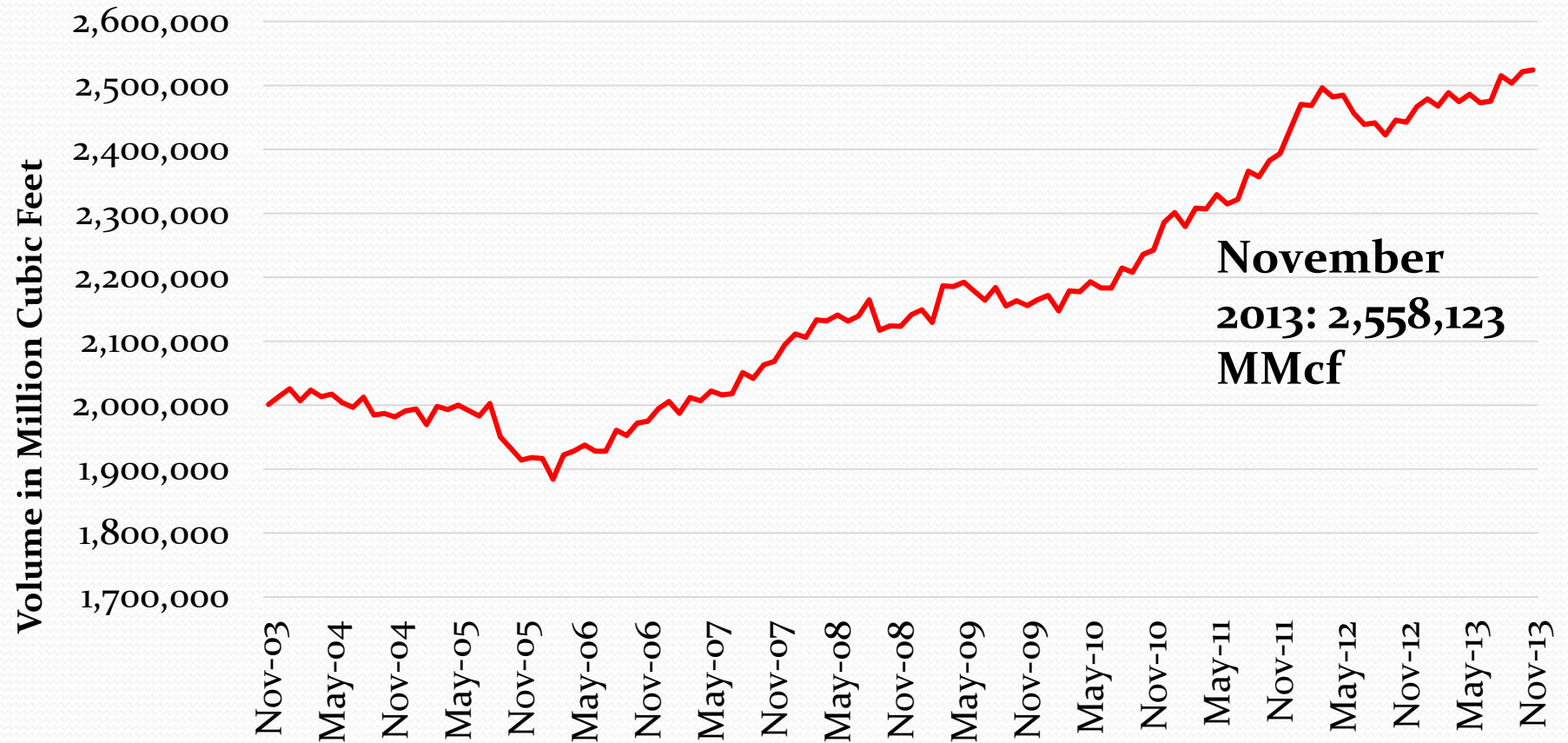
■ In Recession   ■ At Risk   ■ Recovering   ■ Expanding



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# U.S. Natural Gas Gross Withdrawals 6-Month Moving Average

November 2003 through November 2013



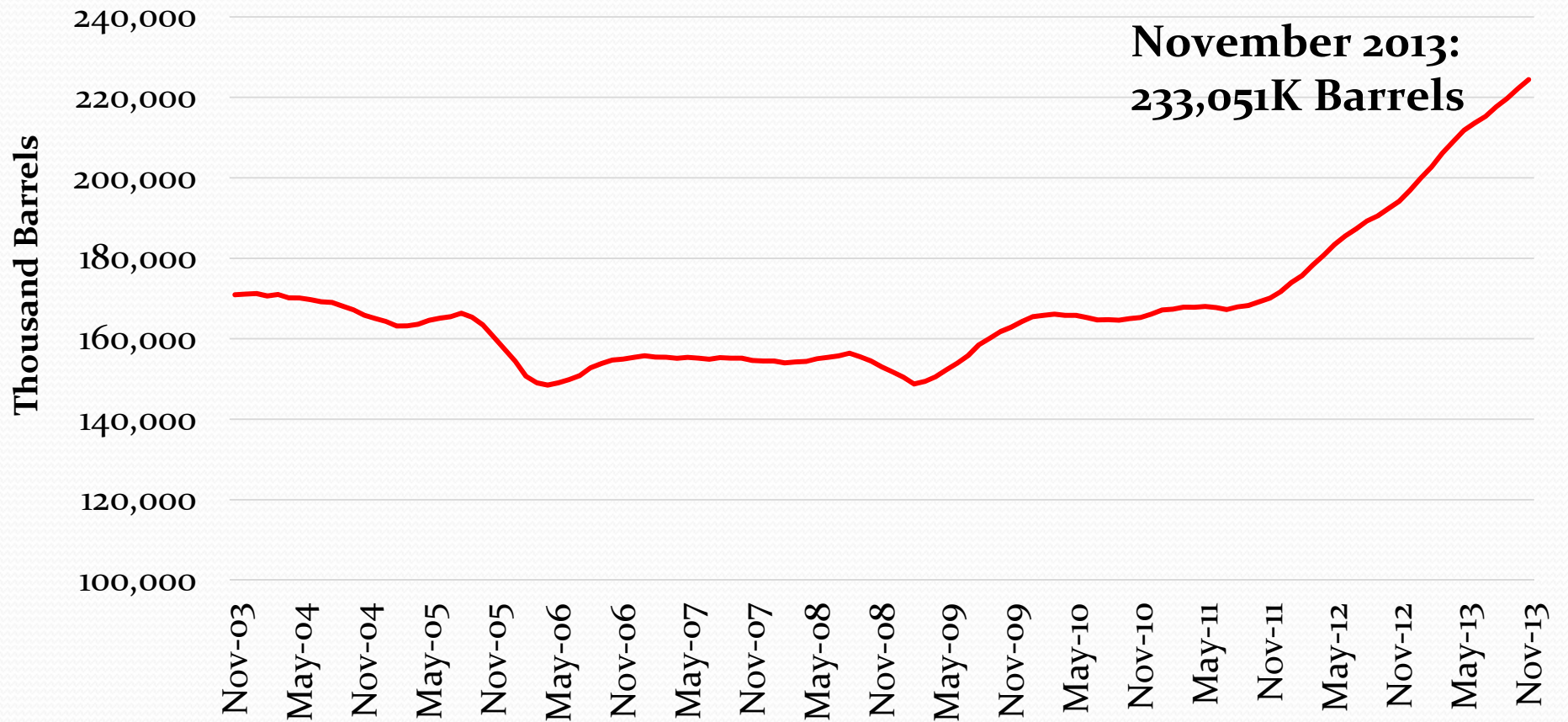
Source: U.S. Energy Information Administration



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# U.S. Oil Production 6-Month Moving Average

November 2003 through November 2013



Source: U.S. Energy Information Administration

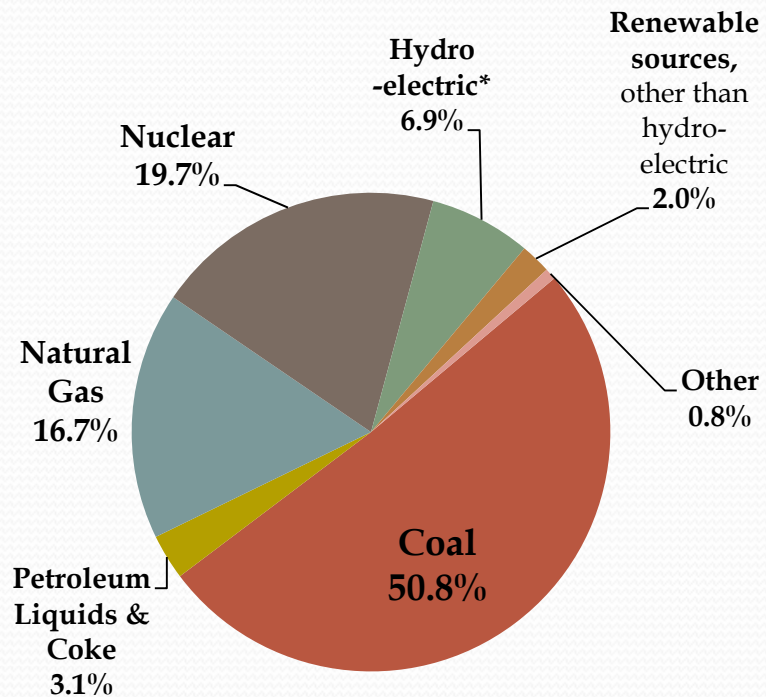


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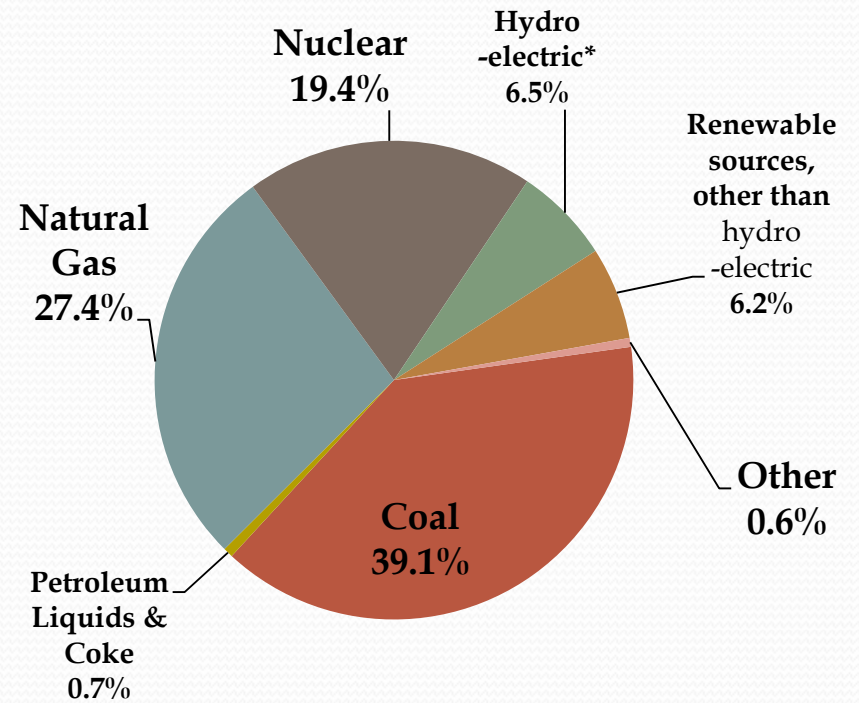
# U.S. Electricity Production by Source

2003 v. 2013 as of December

2003



2013



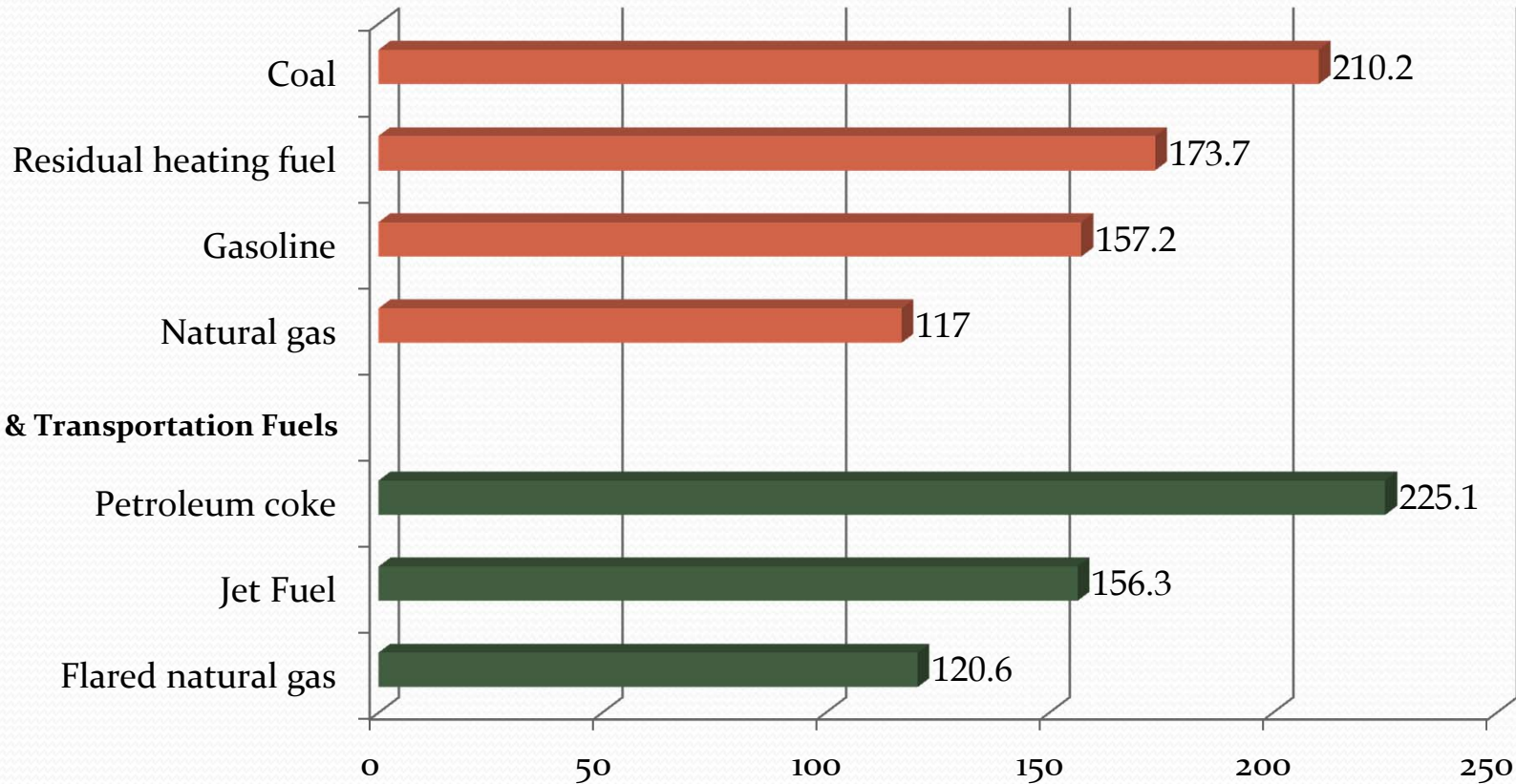
Source: U.S. Energy Information Administration

\*Net of hydroelectric pumped storage.

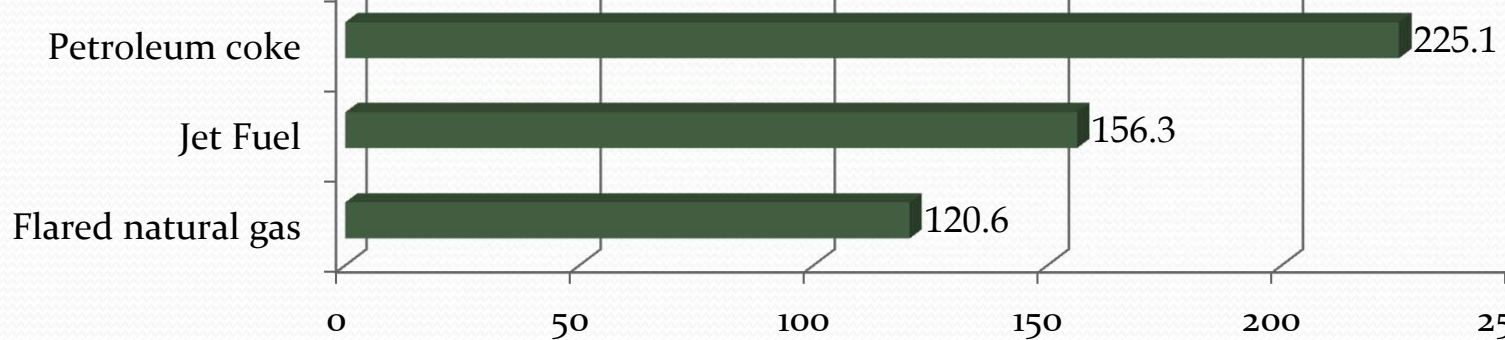


# Carbon Footprint\* Comparison Across Fuel Source

## Residential & Non-industrial Businesses



## Industrial & Transportation Fuels



Pounds CO<sub>2</sub> emitted for each million Btu

Source: U.S. Energy Information Agency (2013) 'Carbon Dioxide Emissions Coefficients'

\* Carbon footprint is defined as amount of carbon dioxide (CO<sub>2</sub>) emissions.

\*\* Btu = British Thermal Unit

# Trends in Carbon Dioxide (CO<sub>2</sub>) Emissions

1990 - 2012

	1990 (billion tons of CO <sub>2</sub> )	2000 (billion tons of CO <sub>2</sub> )	2012 (billion tons of CO <sub>2</sub> )	% growth 1990-2012
U.S.	4.99	5.87	5.19	4%
EU 27	4.32	4.06	3.74	-13%
Australia	0.27	0.36	0.43	59%
Canada	0.45	0.55	0.56	24%
China	2.51	3.56	9.86	293%
Japan	1.16	1.28	1.32	14%
Asian Tigers*	0.71	1.31	1.91	169%
India	0.66	1.06	1.97	198%
Brazil	0.22	0.35	0.46	109%

Source: PBL Netherlands Environmental Assessment Agency, "Trends in global CO<sub>2</sub> emissions: 2013 Report" (p. 16)

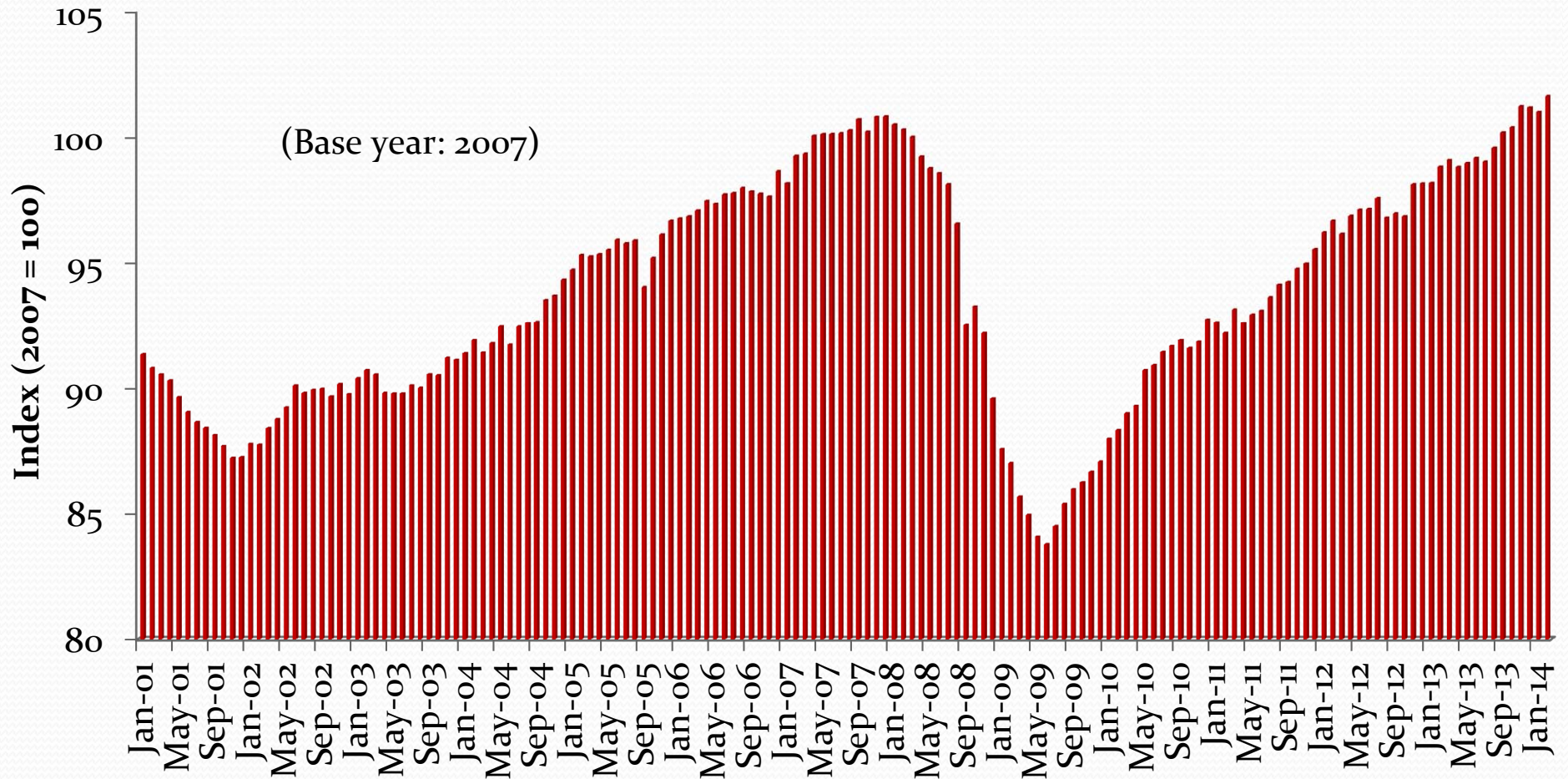
\* 'Asian Tigers' include Indonesia, Singapore, Malaysia, Thailand, South Korea, and Taiwan



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# Industrial Production

January 2001 through February 2014



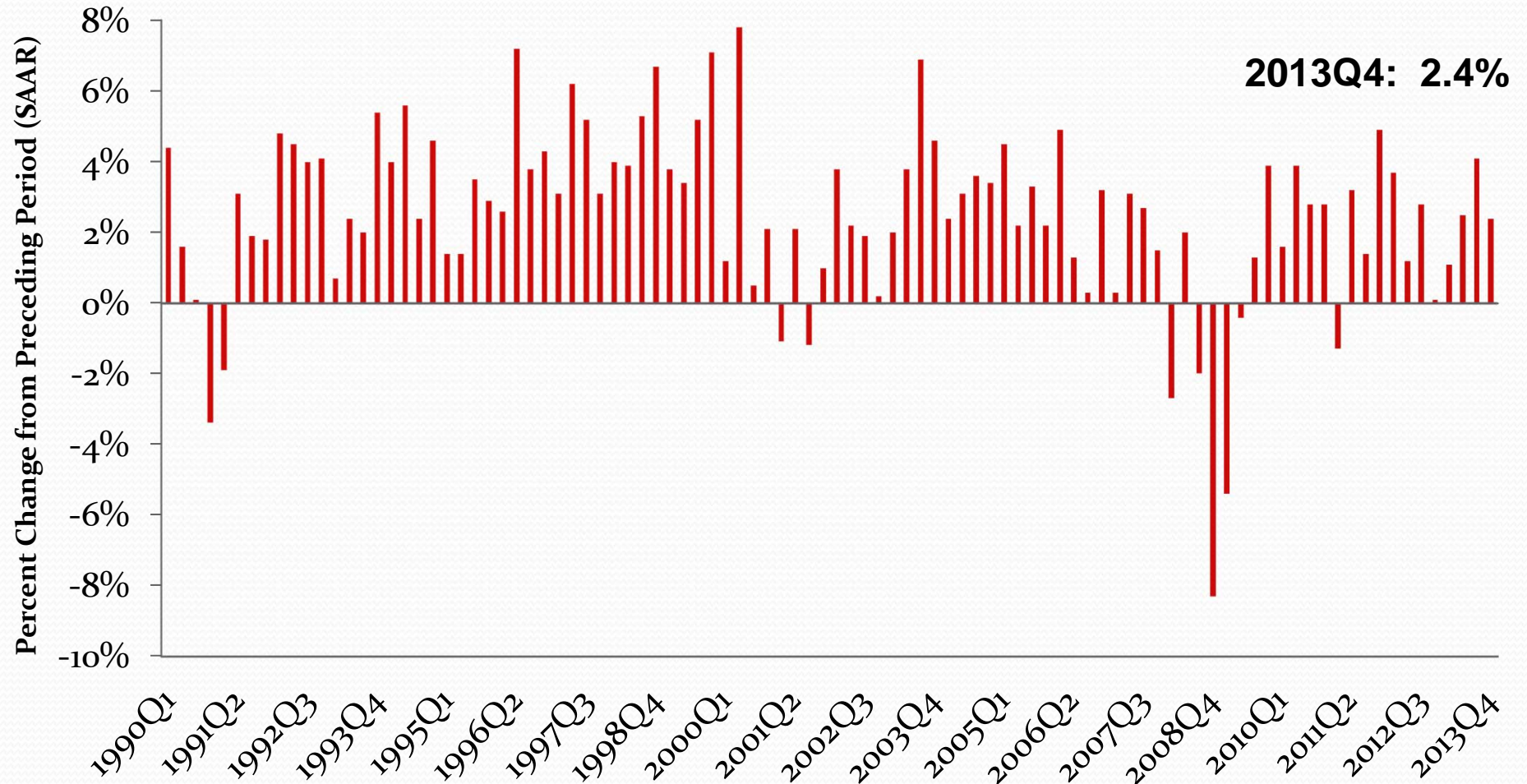
Source: Federal Reserve

The industrial production index measures the real output of the manufacturing, mining, and electric and gas utilities industries.



# Gross Domestic Product

## 1990Q1 through 2013Q4\*



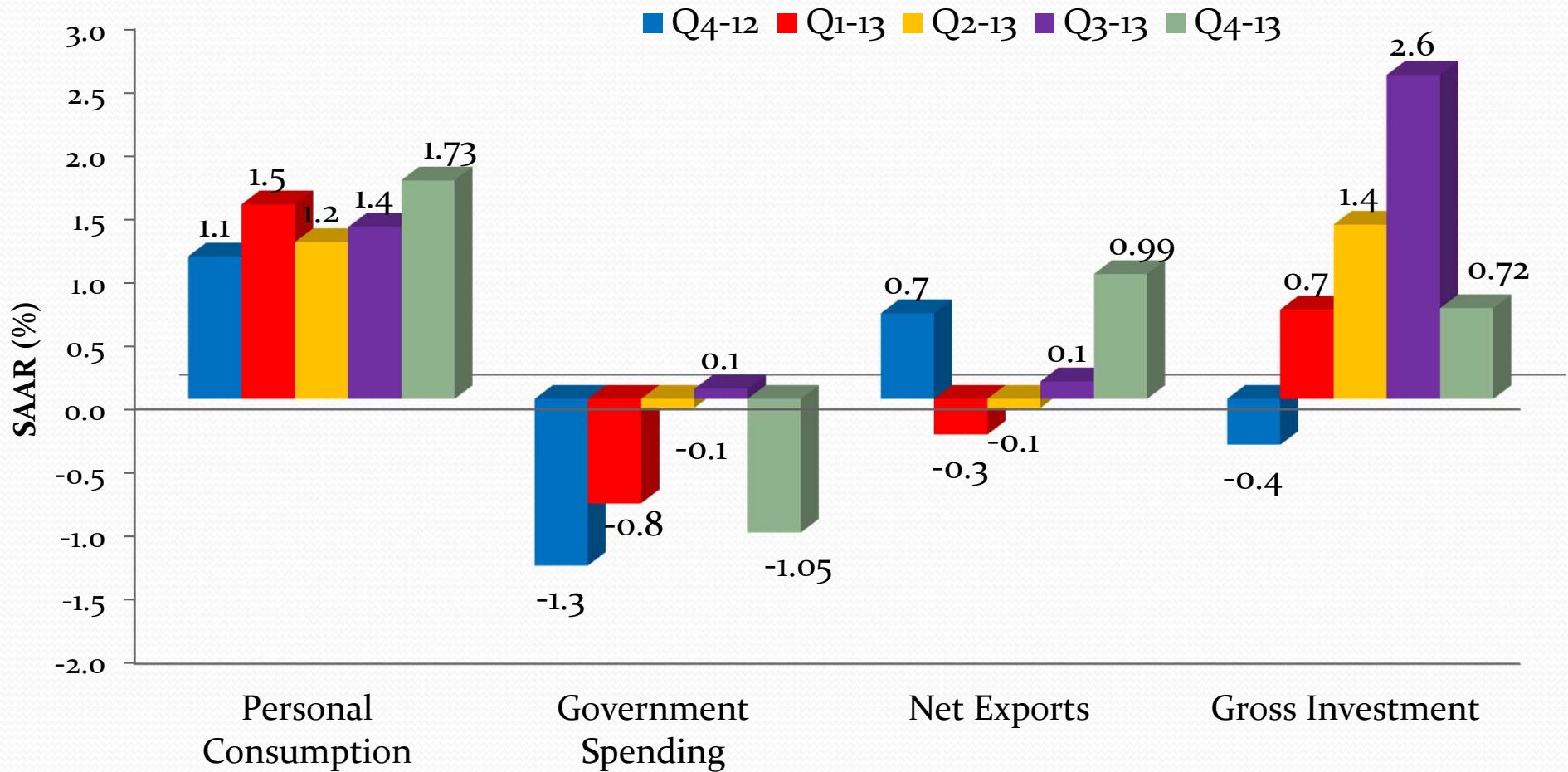
Source: Bureau of Economic Analysis

\*Second Estimate



# Contributions to GDP Growth by Component

Q4 2012 – Q4 2013



Source: Bureau of Economic Analysis

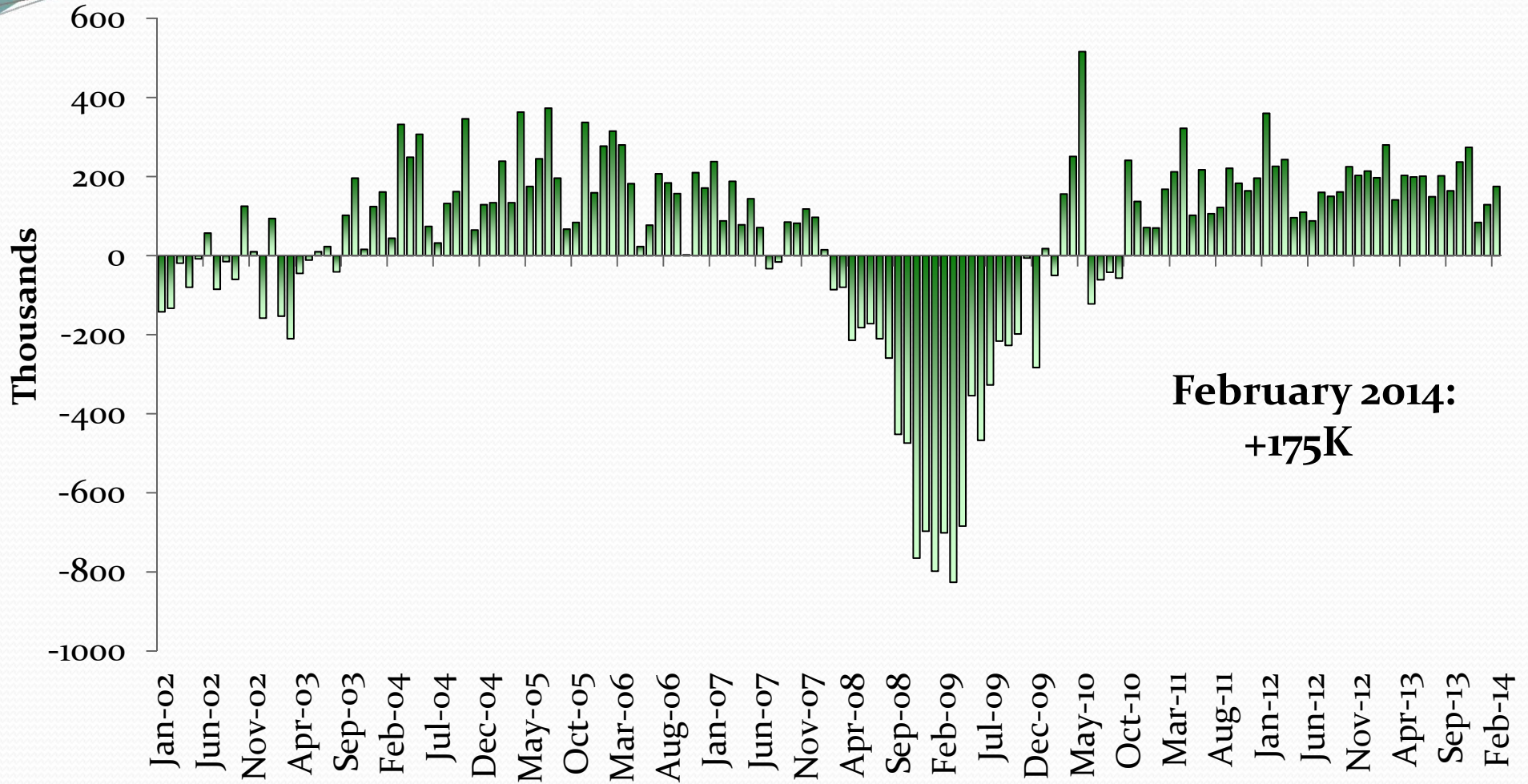


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# Ordinary People (1980)

# Net Change in U.S. Jobs, BLS

January 2002 through February 2014



**February 2014:  
+175K**

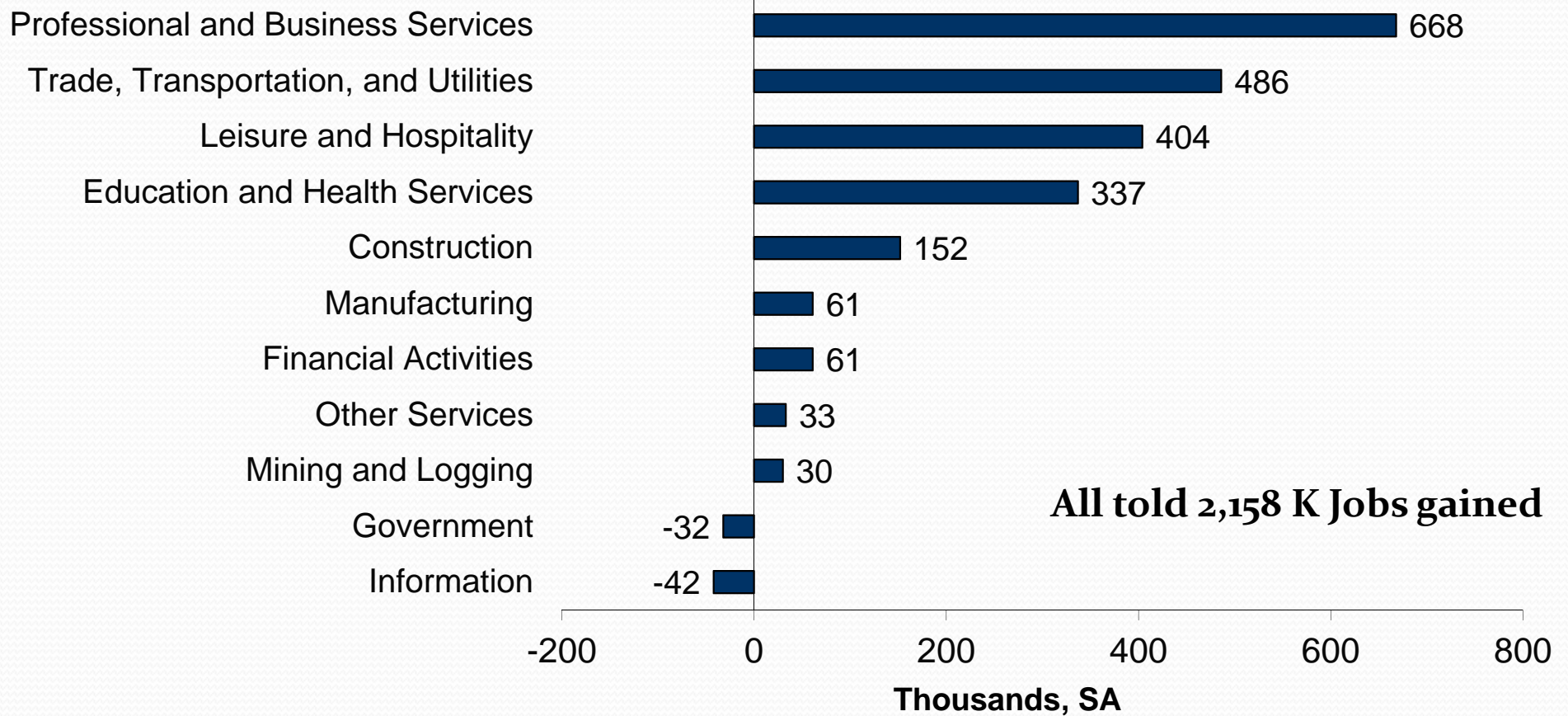
Source: Bureau of Labor Statistics



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# National Nonfarm Employment by Industry Sector

February 2013 v. February 2014



Source: Bureau of Labor Statistics



# Employment Growth, U.S. States (SA)

## January 2013 v. January 2014 Percent Change

RANK	STATE	%	RANK	STATE	%	RANK	STATE	%
1	NEVADA	3.4	17	NORTH CAROLINA	1.7	34	IDAHO	0.9
2	NORTH DAKOTA	3.3	19	INDIANA	1.5	34	LOUISIANA	0.9
3	TEXAS	2.9	19	MASSACHUSETTS	1.5	34	MICHIGAN	0.9
4	COLORADO	2.7	19	MISSOURI	1.5	34	MISSISSIPPI	0.9
5	FLORIDA	2.6	19	MONTANA	1.5	39	DISTRICT OF COLUMBIA	0.5
5	OREGON	2.6	23	KANSAS	1.4	39	PENNSYLVANIA	0.5
7	UTAH	2.4	23	TENNESSEE	1.4	39	SOUTH DAKOTA	0.5
8	ARIZONA	2.2	25	IOWA	1.3	42	ILLINOIS	0.4
9	CALIFORNIA	2.1	25	NEW YORK	1.3	42	NEW HAMPSHIRE	0.4
9	HAWAII	2.1	25	OHIO	1.3	44	MARYLAND	0.3
11	MINNESOTA	2.0	25	RHODE ISLAND	1.3	45	CONNECTICUT	0.2
11	SOUTH CAROLINA	2.0	29	VERMONT	1.2	46	ALASKA	0.1
11	WISCONSIN	2.0	29	WYOMING	1.2	46	NEW JERSEY	0.1
14	GEORGIA	1.9	31	ARKANSAS	1.1	48	VIRGINIA	0.0
15	OKLAHOMA	1.8	31	MAINE	1.1	49	WEST VIRGINIA	-0.2
15	WASHINGTON	1.8	31	NEBRASKA	1.1	50	KENTUCKY	-0.3
17	DELAWARE	1.7	34	ALABAMA	0.9	50	NEW MEXICO	-0.3

Source: Bureau of Labor Statistics

*U.S. Year-over-year Percent Change: 1.7%*



# Unemployment Rates, U.S. States (SA)

January 2014

RANK	STATE	%	RANK	STATE	%	RANK	STATE	%
1	NORTH DAKOTA	2.6	18	MARYLAND	5.8	34	NEW YORK	6.8
2	NEBRASKA	3.5	19	WEST VIRGINIA	5.9	36	OHIO	6.9
3	SOUTH DAKOTA	3.6	20	MISSOURI	6.0	37	OREGON	7.0
4	UTAH	3.9	21	ALABAMA	6.1	38	NEW JERSEY	7.1
5	VERMONT	4.0	21	COLORADO	6.1	39	CONNECTICUT	7.2
6	IOWA	4.3	21	DELAWARE	6.1	39	TENNESSEE	7.2
6	WYOMING	4.3	21	FLORIDA	6.1	41	ARKANSAS	7.3
8	HAWAII	4.6	21	WISCONSIN	6.1	41	GEORGIA	7.3
9	MINNESOTA	4.7	26	MAINE	6.2	43	DISTRICT OF COLUMBIA	7.4
10	KANSAS	4.8	27	ALASKA	6.4	44	ARIZONA	7.5
11	LOUISIANA	4.9	27	INDIANA	6.4	44	MISSISSIPPI	7.5
11	NEW HAMPSHIRE	4.9	27	PENNSYLVANIA	6.4	46	KENTUCKY	7.7
13	VIRGINIA	5	27	SOUTH CAROLINA	6.4	47	MICHIGAN	7.8
14	OKLAHOMA	5.2	27	WASHINGTON	6.4	48	CALIFORNIA	8.1
15	MONTANA	5.3	32	NEW MEXICO	6.6	49	ILLINOIS	8.7
16	IDAHO	5.4	33	NORTH CAROLINA	6.7	49	NEVADA	8.7
17	TEXAS	5.7	34	MASSACHUSETTS	6.8	51	RHODE ISLAND	9.2

Source: Bureau of Labor Statistics

*U.S. Unemployment Rate: 6.6%*



# Unemployment Rates, 20 Largest Metros (NSA)

December 2013

Rank	MSA	UR	Rank	MSA	UR
1	Minneapolis-St. Paul-Bloomington, MN-WI Metropolitan Statistical Area	4.3	11	Phoenix-Mesa-Glendale, AZ Metropolitan Statistical Area	6.2
2	Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Statistical Area	4.6	12	San Diego-Carlsbad-San Marcos, CA Metropolitan Statistical Area	6.4
3	Dallas-Fort Worth-Arlington, TX Metropolitan Statistical Area	5.4	12	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metropolitan Statistical Area	6.4
3	Seattle-Tacoma-Bellevue, WA Metropolitan Statistical Area	5.4	14	St. Louis, MO-IL Metropolitan Statistical Area	6.6
5	Houston-Sugar Land-Baytown, TX Metropolitan Statistical Area	5.5	14	New York-Northern New Jersey-Long Island, NY-NJ-PA Metropolitan Statistical Area	6.6
6	San Francisco-Oakland-Fremont, CA Metropolitan Statistical Area	5.6	16	Atlanta-Sandy Springs-Marietta, GA Metropolitan Statistical Area	6.8
7	Boston-Cambridge-Quincy, MA-NH Metropolitan NECTA	5.9	17	Los Angeles-Long Beach-Santa Ana, CA Metropolitan Statistical Area	7.9
7	Tampa-St. Petersburg-Clearwater, FL Metropolitan Statistical Area	5.9	18	Detroit-Warren-Livonia, MI Metropolitan Statistical Area	8.0
7	Baltimore-Towson, MD Metropolitan Statistical Area	5.9	19	Chicago-Joliet-Naperville, IL-IN-WI Metropolitan Statistical Area	8.3
10	Miami-Fort Lauderdale-Pompano Beach, FL Metropolitan Statistical Area	6.0	20	Riverside-San Bernardino-Ontario, CA Metropolitan Statistical Area	8.9

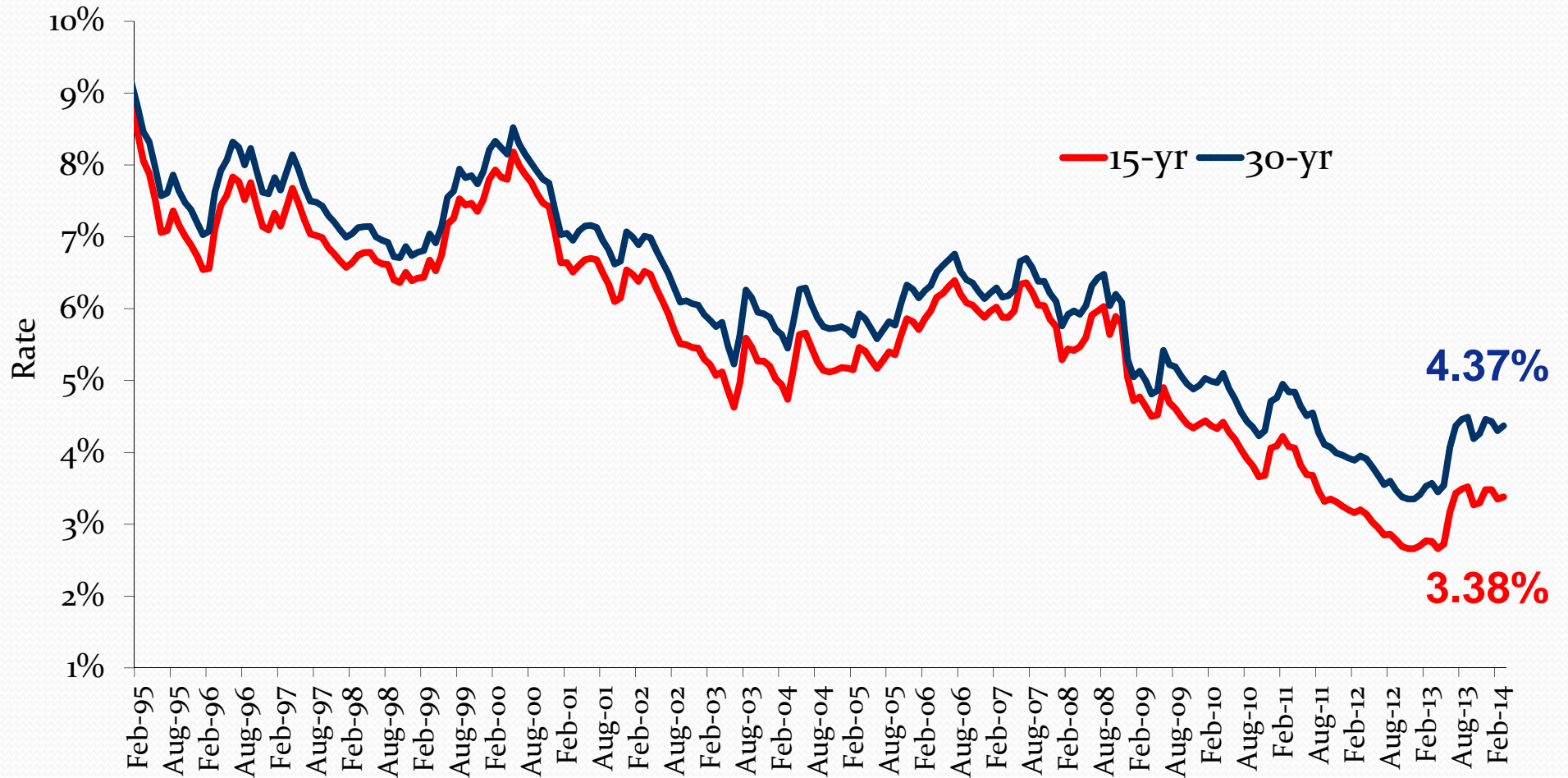
Source: Bureau of Labor Statistics



# Field of Dreams (1989)

# 15-Year & 30-Year Fixed Mortgage Rates

February 1995 through March 2014



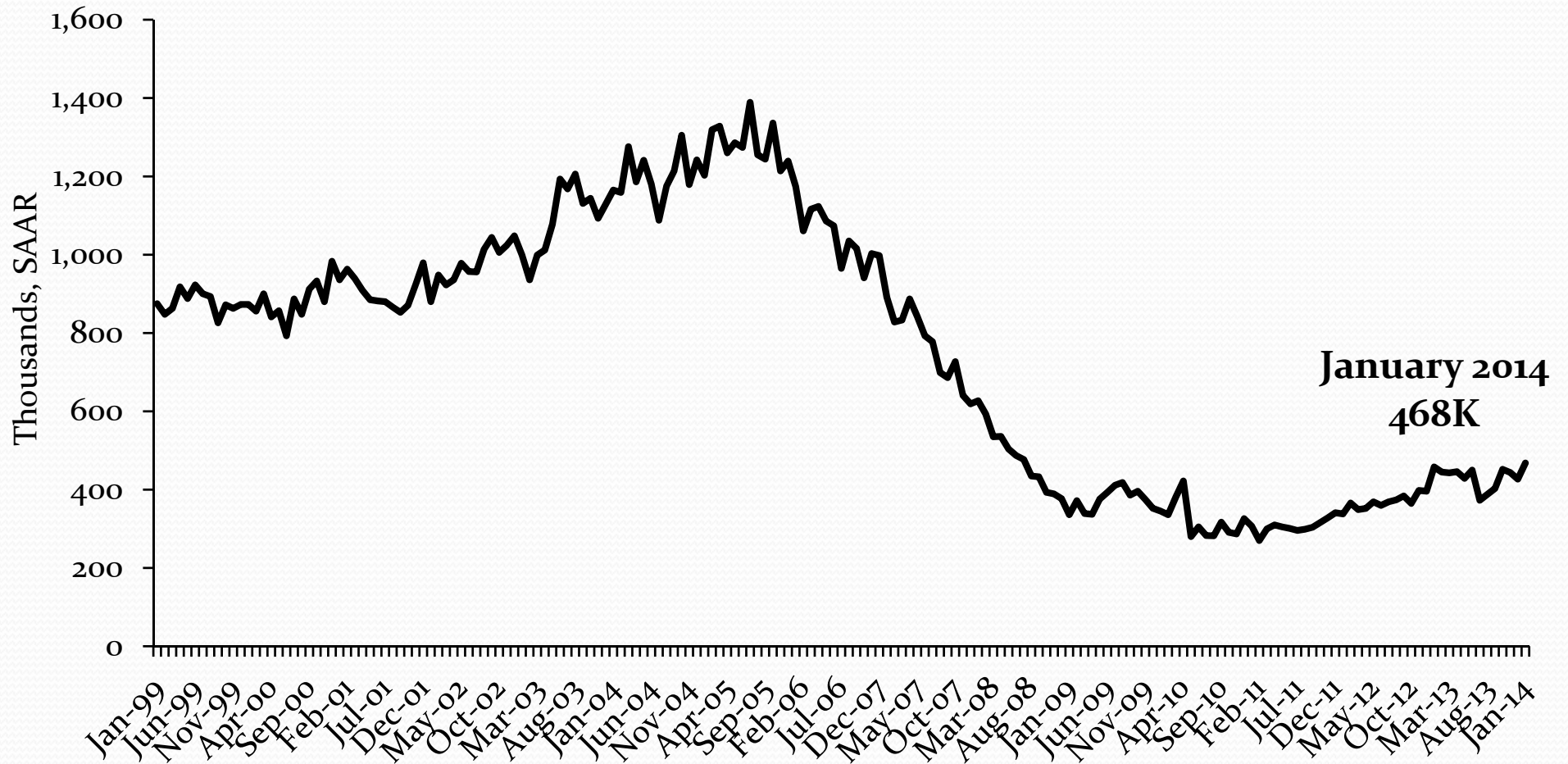
Source: Freddie Mac



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# U.S. New Home Sales

January 1999 through January 2014



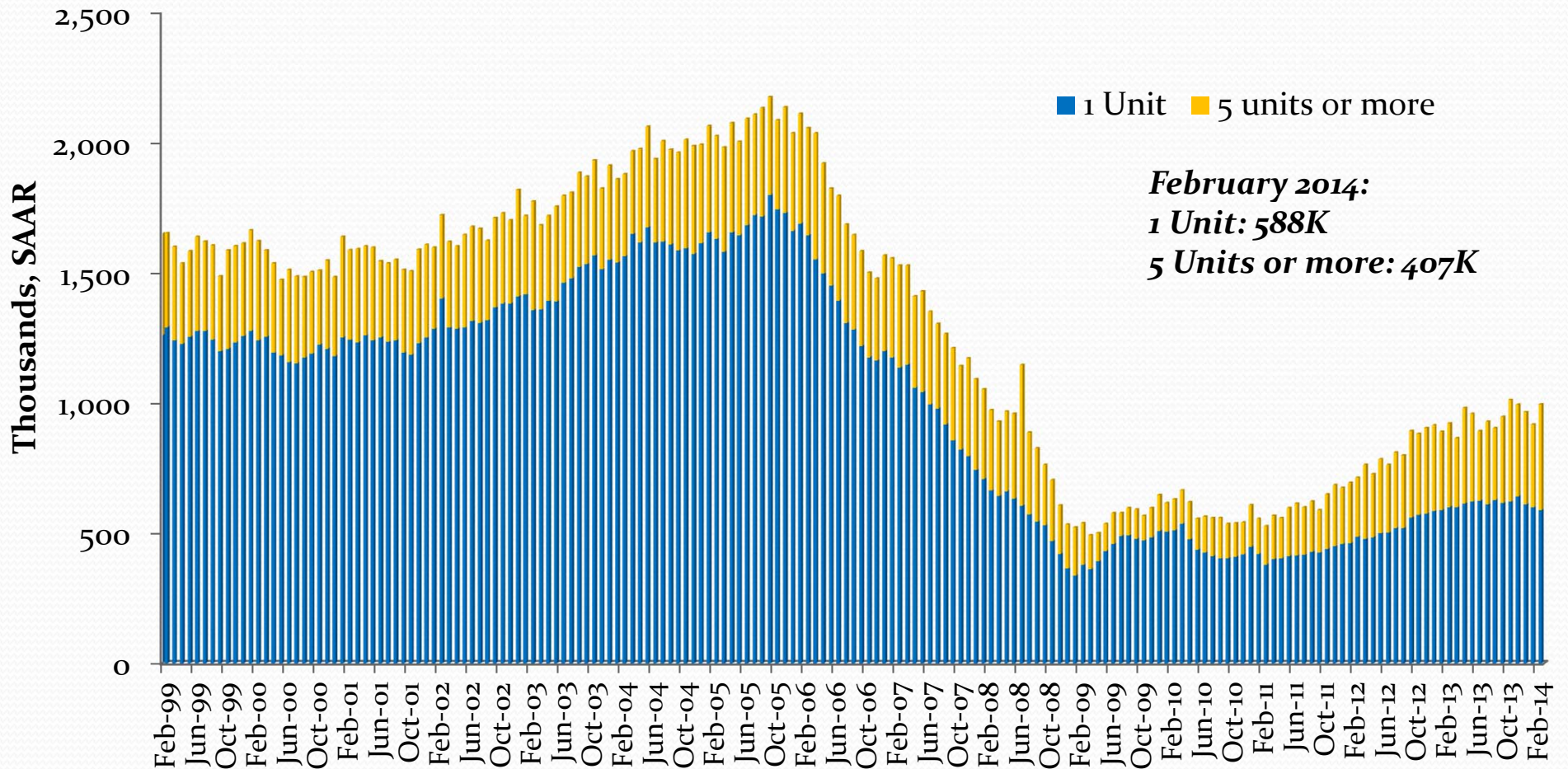
Source: Economy.com, Census Bureau



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# U.S. Housing Building Permits

## February 1999 through February 2014



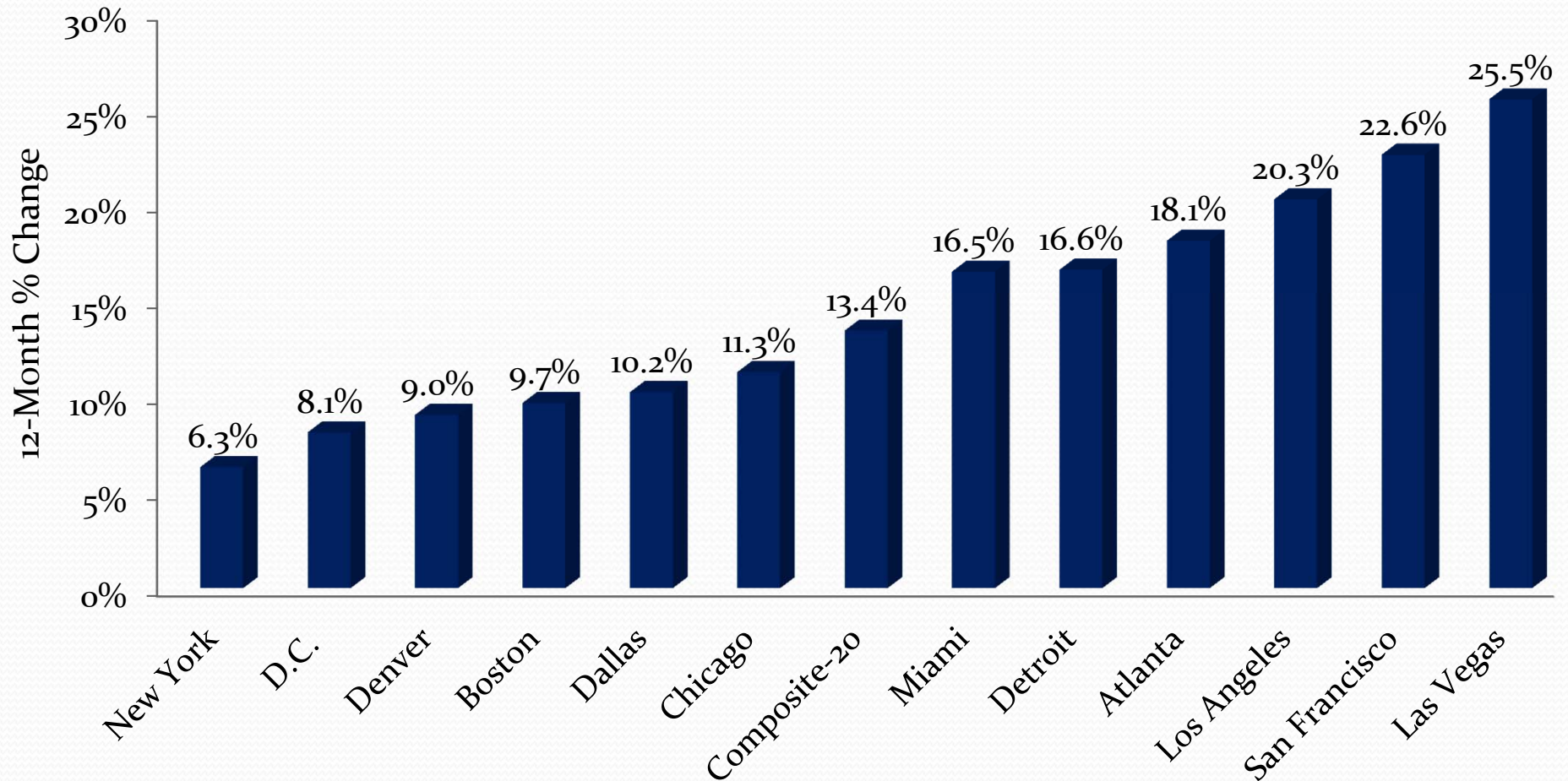
Source: Census Bureau



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# S&P/Case-Shiller Home Price Indices for Select Metros

## December 2013, 12-Month Percentage Change



Source: Standard & Poor's

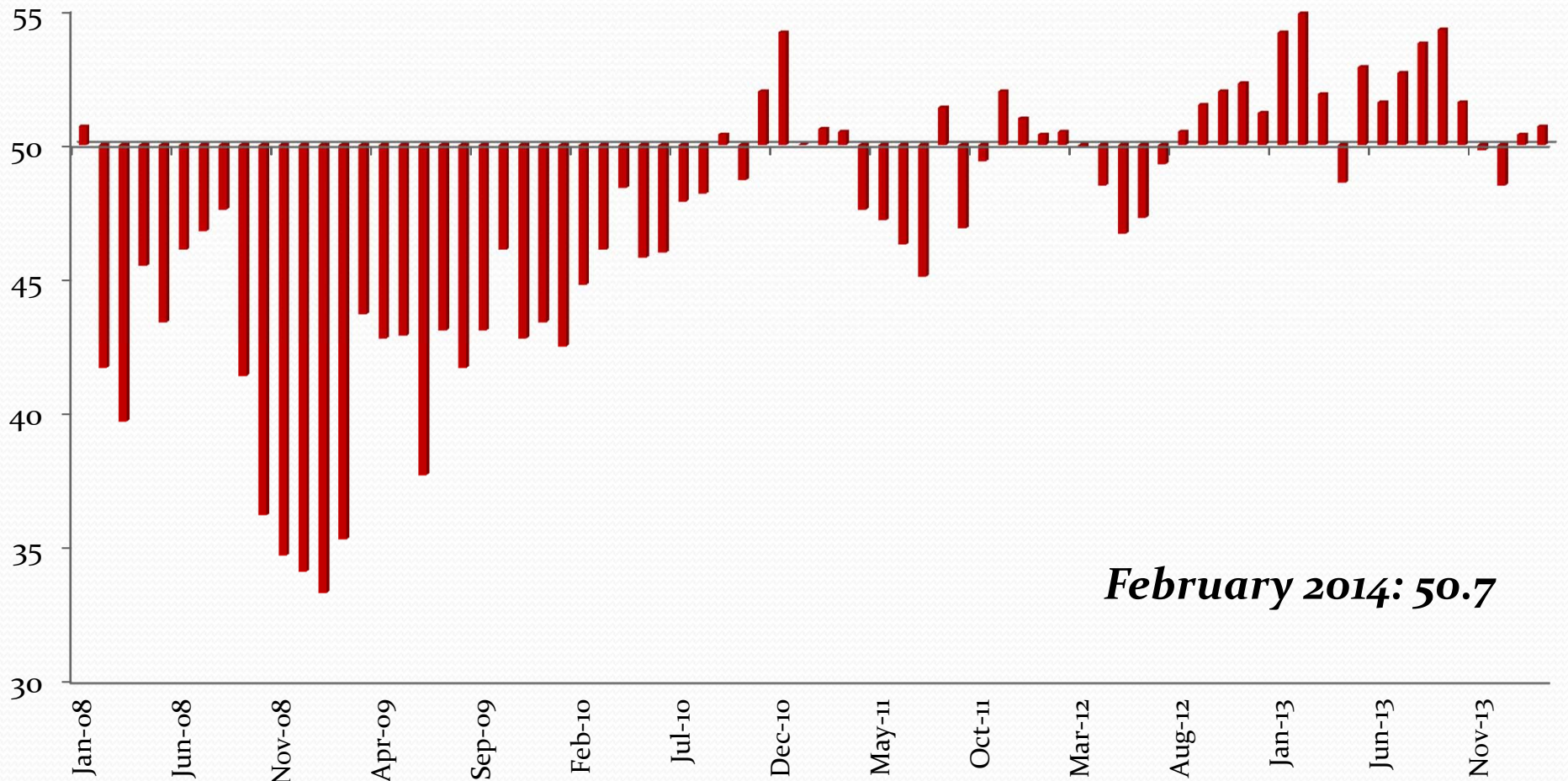


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# Architecture Billings Index

January 2008 through February 2014



**February 2014: 50.7**

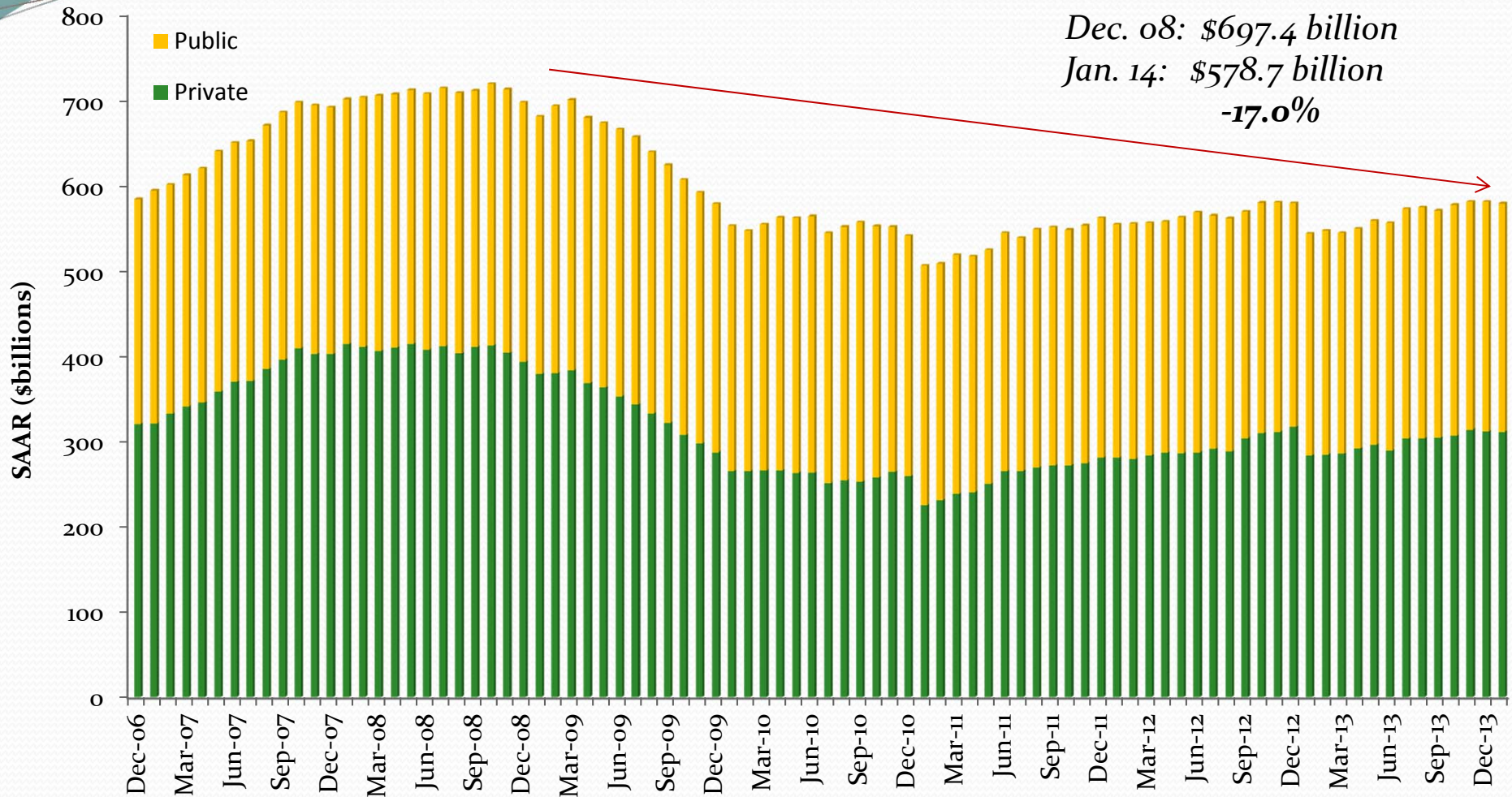
Source: The American Institute of Architects



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# Nonresidential Construction Put-in-Place

December 2006 through January 2014



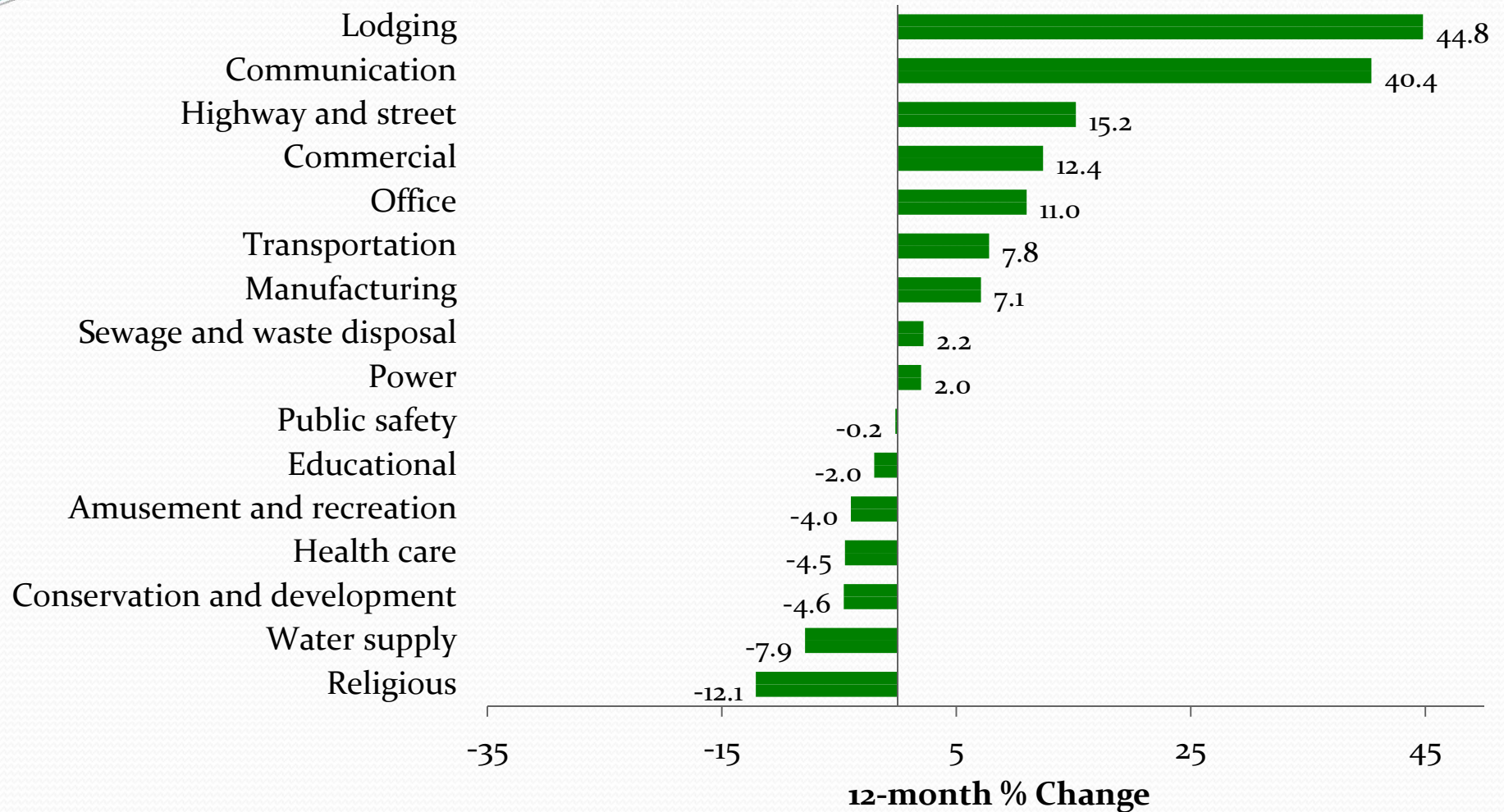
Source: U.S. Census Bureau



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# National Nonresidential Construction Spending by Subsector

January 2013 v. January 2014



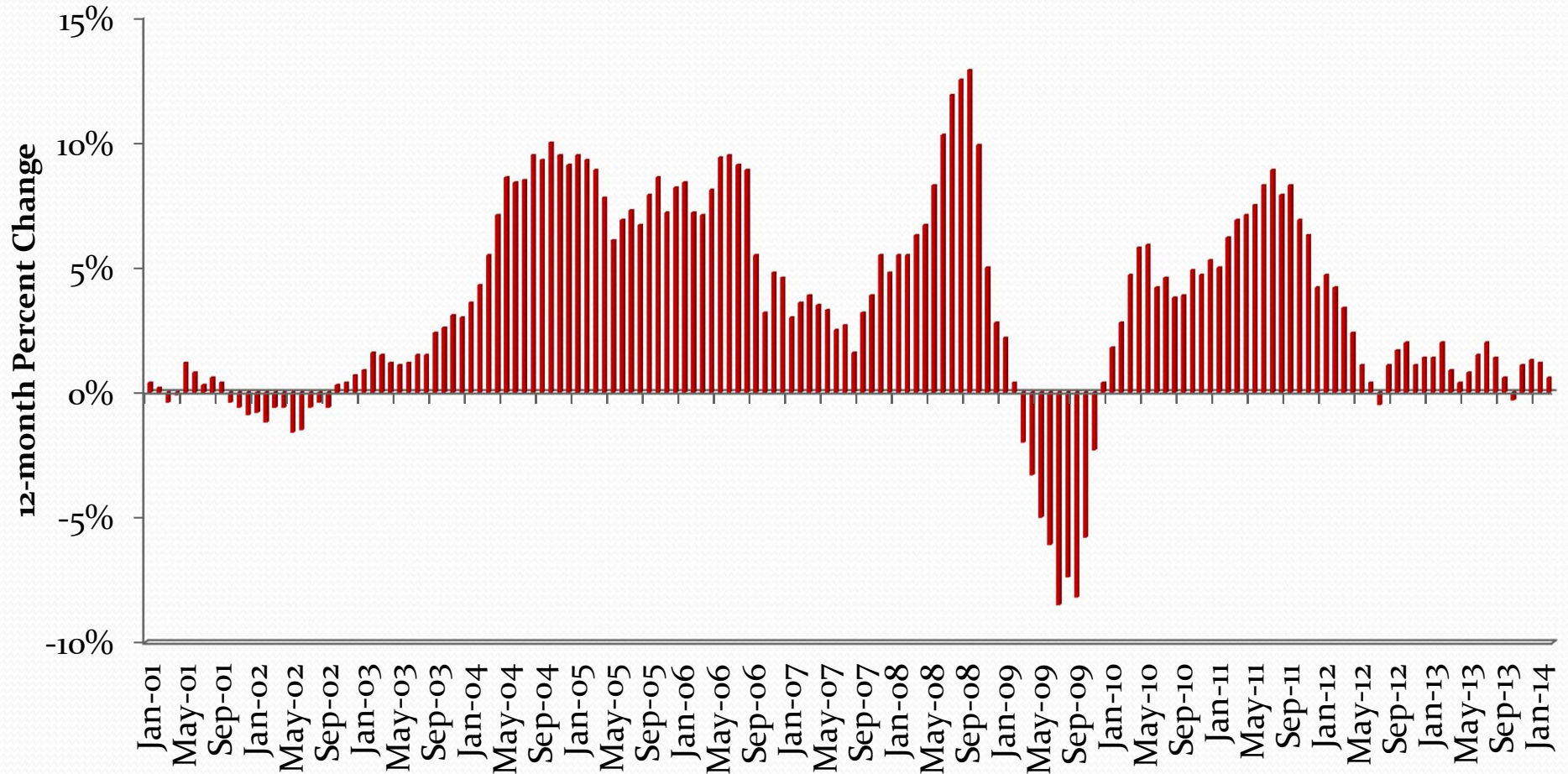
Source: U.S. Census Bureau



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# Inputs to Construction PPI

January 2001 – February 2014



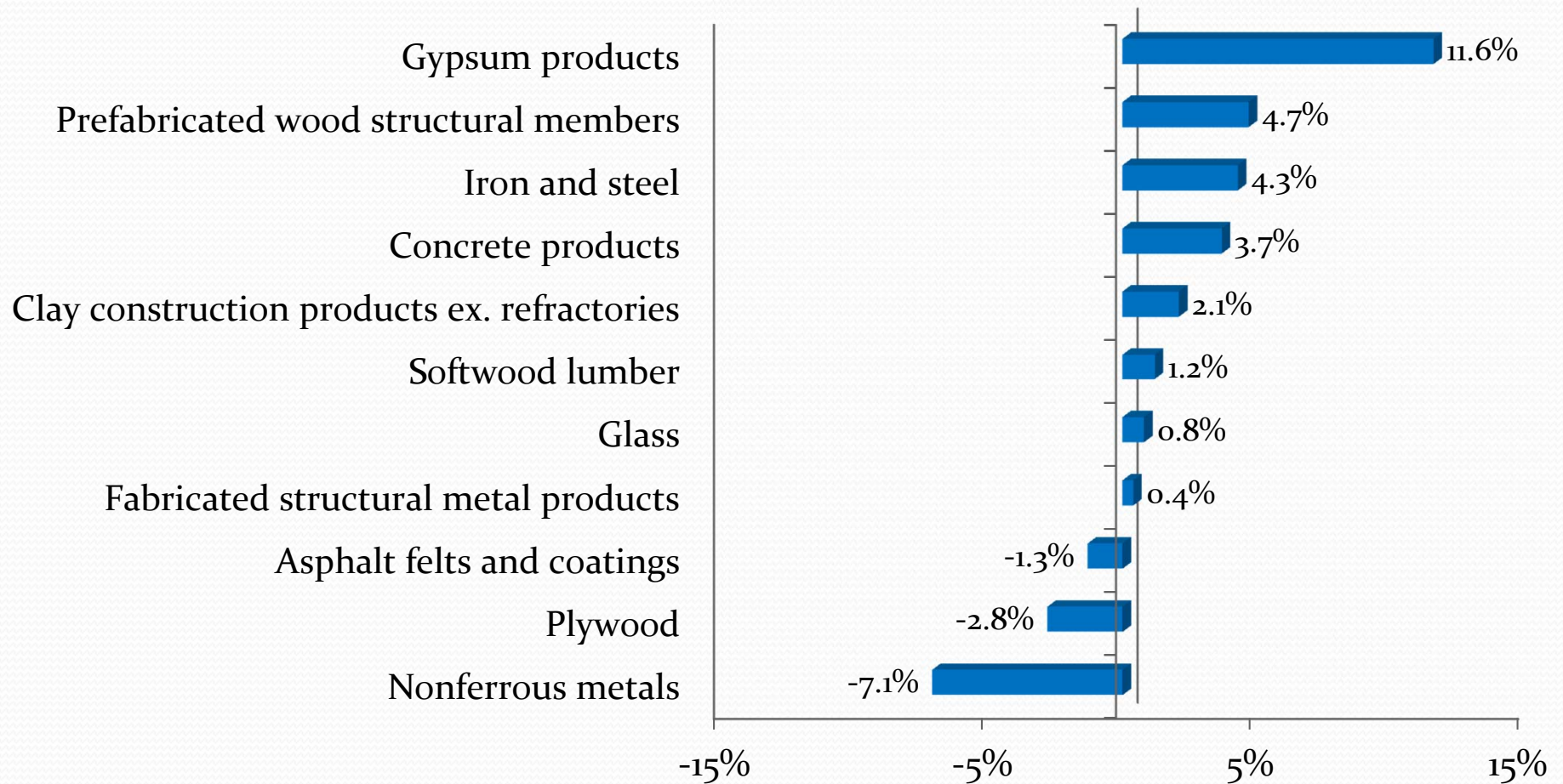
Source: Bureau of Labor Statistics



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# Construction Materials PPI

12-month % Change as of February 2014



Source: Bureau of Labor Statistics

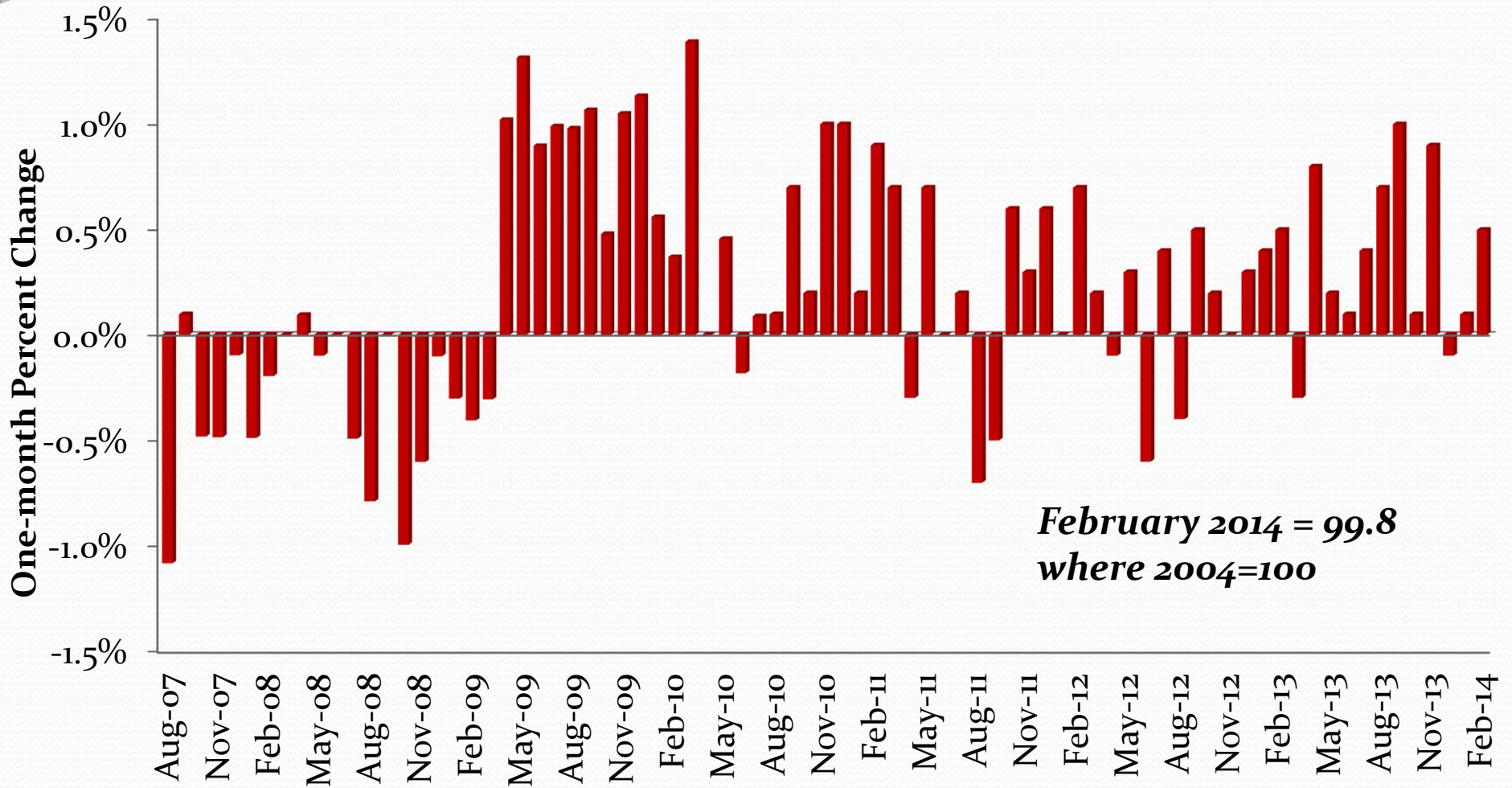


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# The Shining (1980)

# Conference Board Leading Economic Indicators Index

August 2007 through February 2014



Source: Conference Board

## Coming to America (1988)

- Economy gained momentum over the course of last year;
- Tailwinds included booming stock market, lower gasoline prices, stabilizing global economy, and consumer expenditures on interest rate sensitive durable goods like housing and autos;
- The current year is associated with greater certainty regarding federal budgeting and monetary policy – that helps;
- The world is not perfect - black swan threats remain: (1) Iran (2) Israel/Iran (3) Europe (4) contagion (5) cyber (6) EMP;
- Healthcare reform could slow full-time hiring over the course of the year; and
- Regions with rapid population growth and/or significant import/export activity, industrial output and energy production will lead the way.



# Thank You

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- 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.