Hardwood Manufacturers Association

March 2014

Ahead of the Curve 2014-2017

Brian Beaulieu

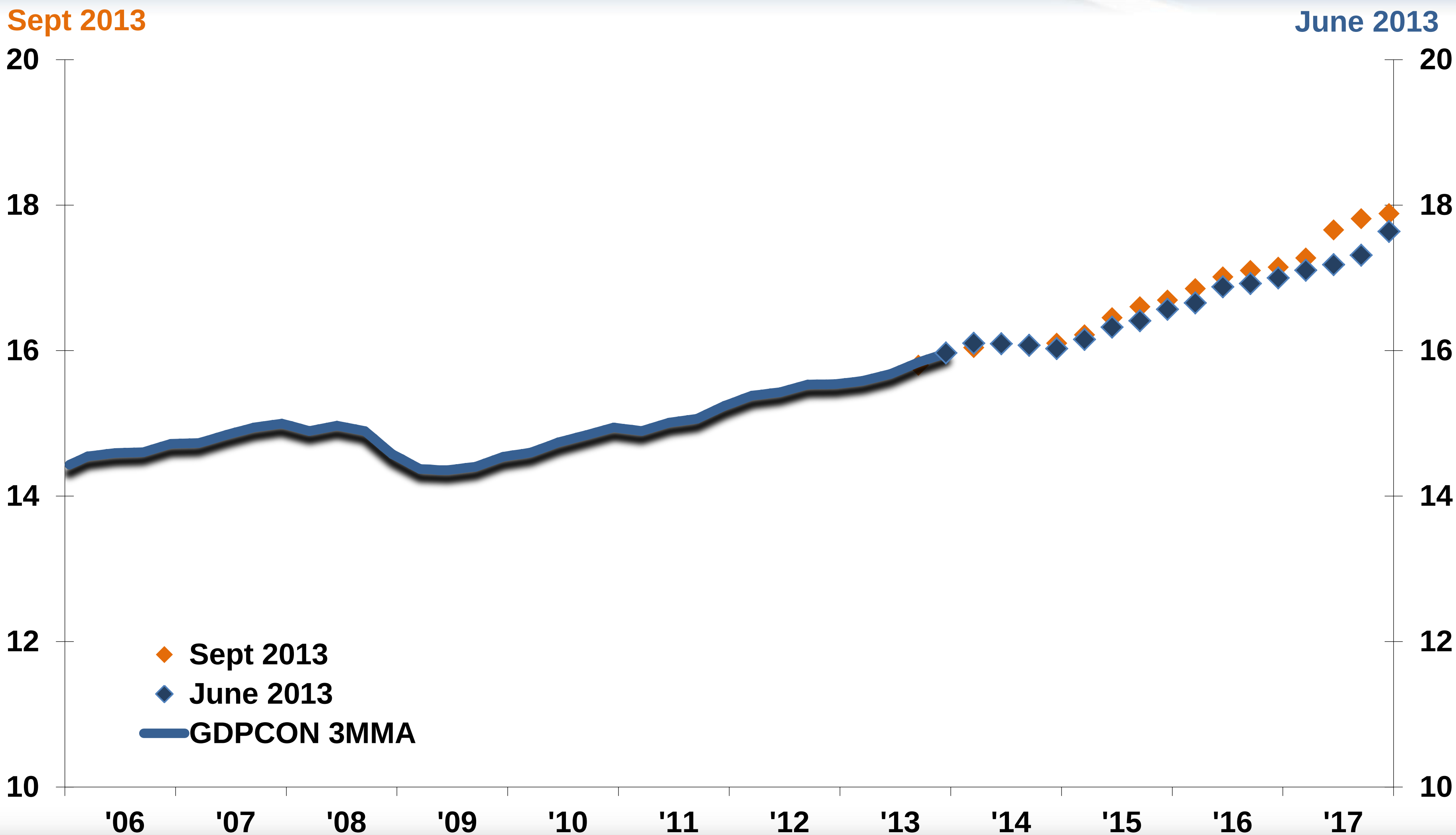
ITR Economics™

www.itreconomics.com

2013 Forecast Results

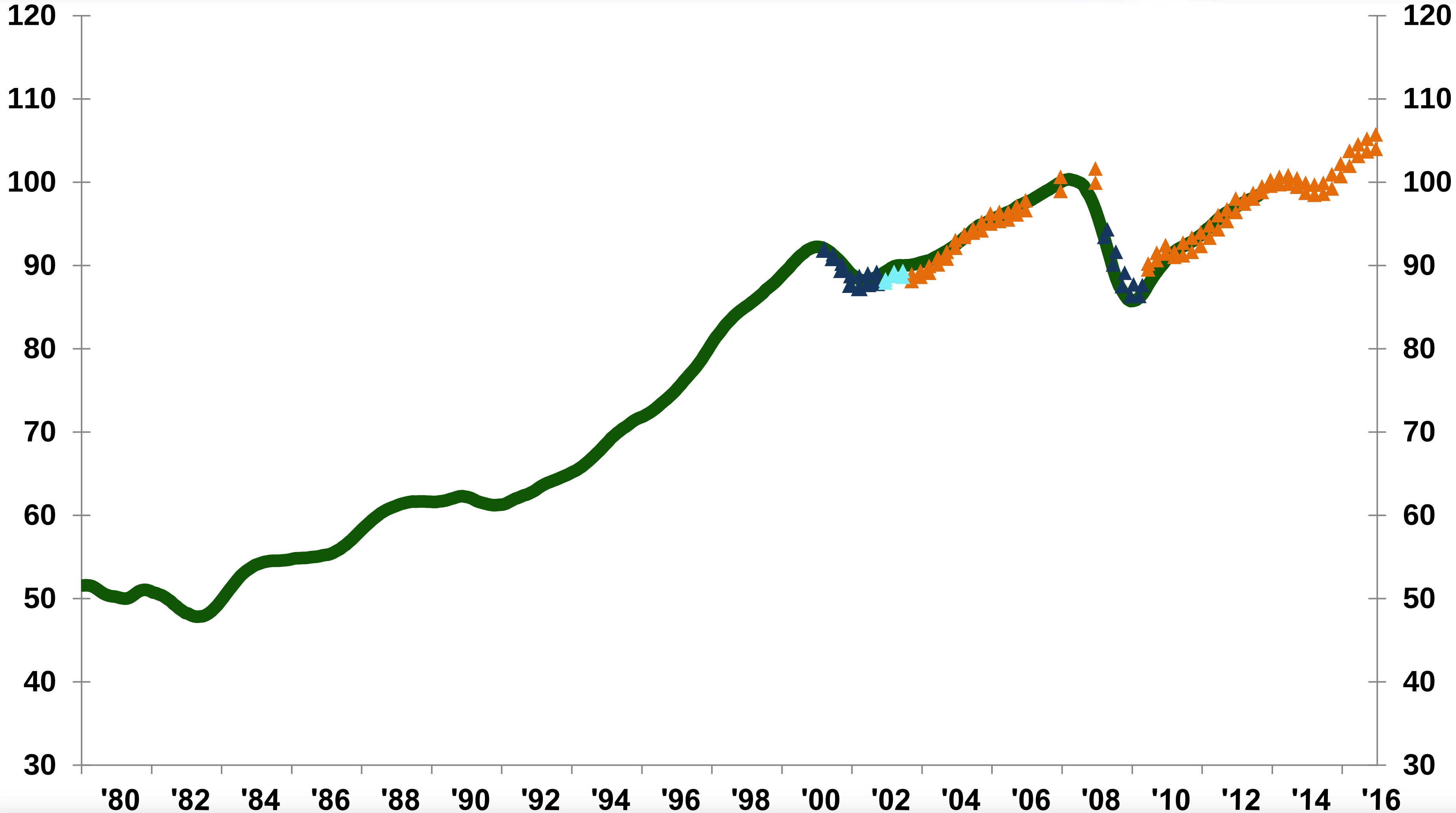
	Duration	Forecast		Actuals		
US GDP	12	$15.818	Trillion	$15.966	Dec	0.7%
US Ind. Prod.	10	99.9	(12MMA)	99.6	Dec	- 0.3%
EU Ind. Prod.	20	101.9	(12MMA)	100.6	Dec	- 1.3%
Canada Ind Prod	15	98.7	(12MMA)	97.8	Dec	-0.8%
China Ind Prod	9	522.6	(12MMA)	520.1	Dec	-0.5%
Housing	12	945	Ths Units	923	Dec	-2.3%
Retail Sales	18	$2.189	Trillion	$2.200	Dec	0.5%
Employment	24	144.3	Million	143.9	Dec	-0.3%

Real Gross Domestic Product



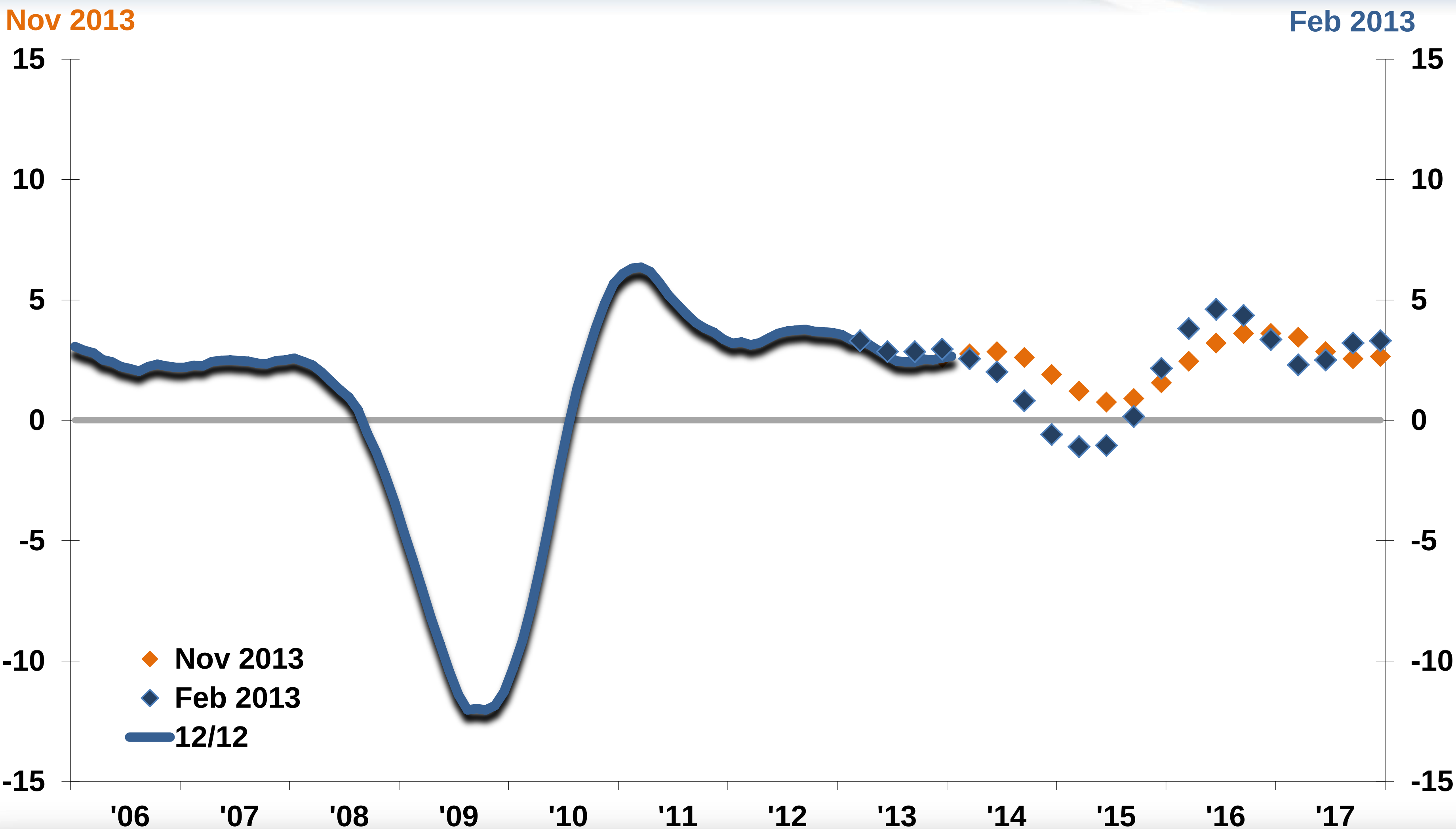
3MMA

US Industrial Production Index
Forecast Through December 2015 Annual Average Index



2007 = 100

US Total Industrial Production



12/12 Rates-of-Change

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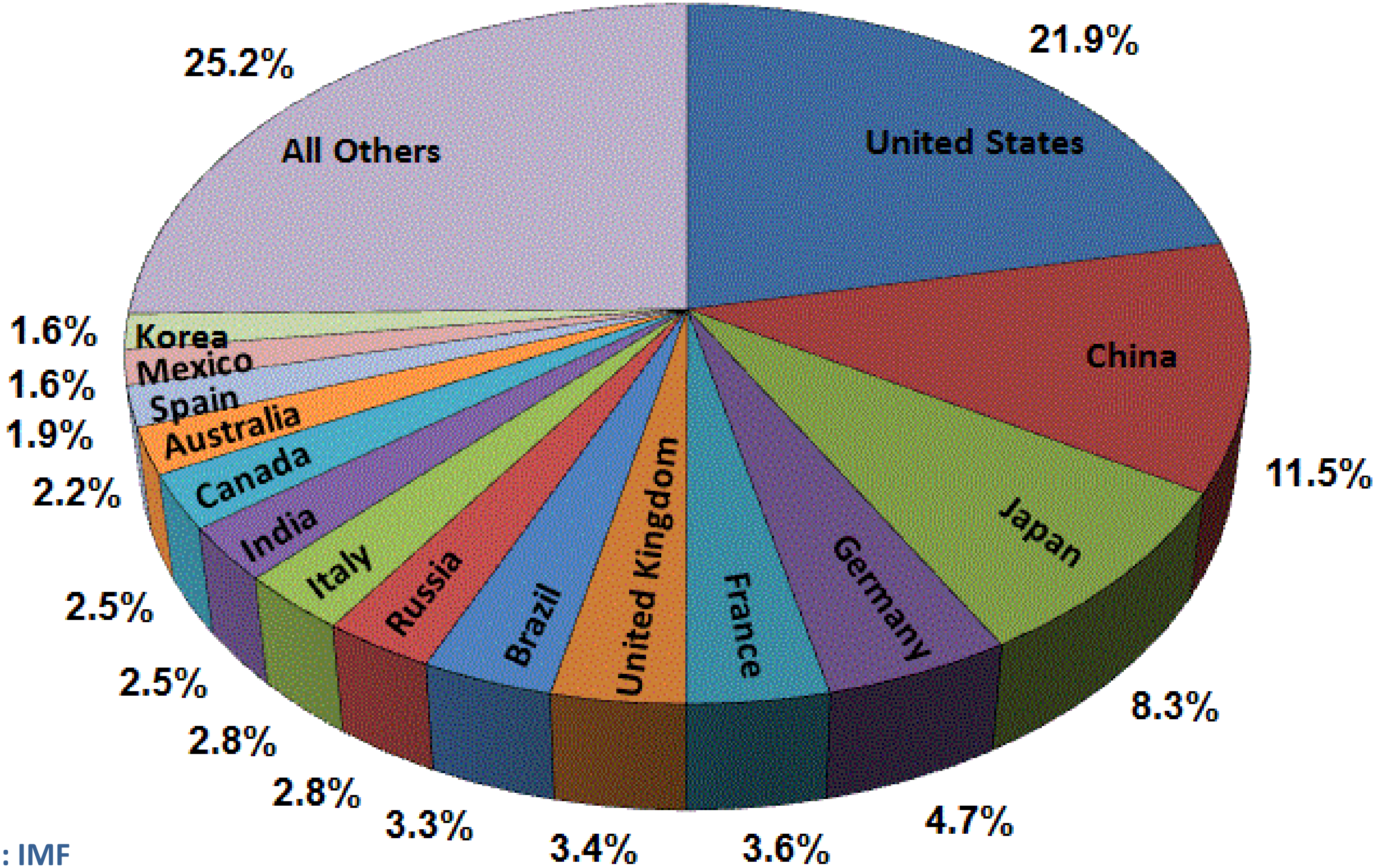
World GDP, Bils of US $, Current Prices



Source: IMF

71.707 Trillion US$

Percent of 2012 World GDP

Data Preparation

	Raw	3MMT	3/12	12MMT	12/12
Jan-13	1.4				
Feb-13	1.5				
Mar-13	1.5	4.4			
Apr-13	1.4	4.4			
May-13	1.5	4.4			
Jun-13	1.3	4.2			
Jul-13	1.3	4.2			
Aug-13	1.6	4.3			
Sep-13	1.6	4.6			
Oct-13	1.5	4.8			
Nov-13	1.7	4.8			
Dec-13	1.6	4.8		18.0	
Jan-14	1.7	4.9		18.3	
Feb-14	1.7	4.9		18.5	
Mar-14	1.7	5.0	14.1%	18.6	
Apr-14	1.6	5.0	13.6%	18.8	
May-14	1.7	5.0	13.2%	19.0	
Jun-14	1.5	4.9	15.1%	19.2	
Jul-14	1.5	4.7	13.5%	19.4	
Aug-14	1.9	4.9	14.1%	19.6	
Sep-14	1.7	5.1	11.3%	19.8	
Oct-14	1.7	5.3	11.5%	20.0	
Nov-14	1.9	5.3	10.1%	20.1	
Dec-14	1.7	5.3	10.5%	20.3	12.7%

3/12 Rate-of-Change

$$= \frac{December\ 2014\ 3MMT}{December\ 2013\ \ 3MMT} \times 100 - 100$$

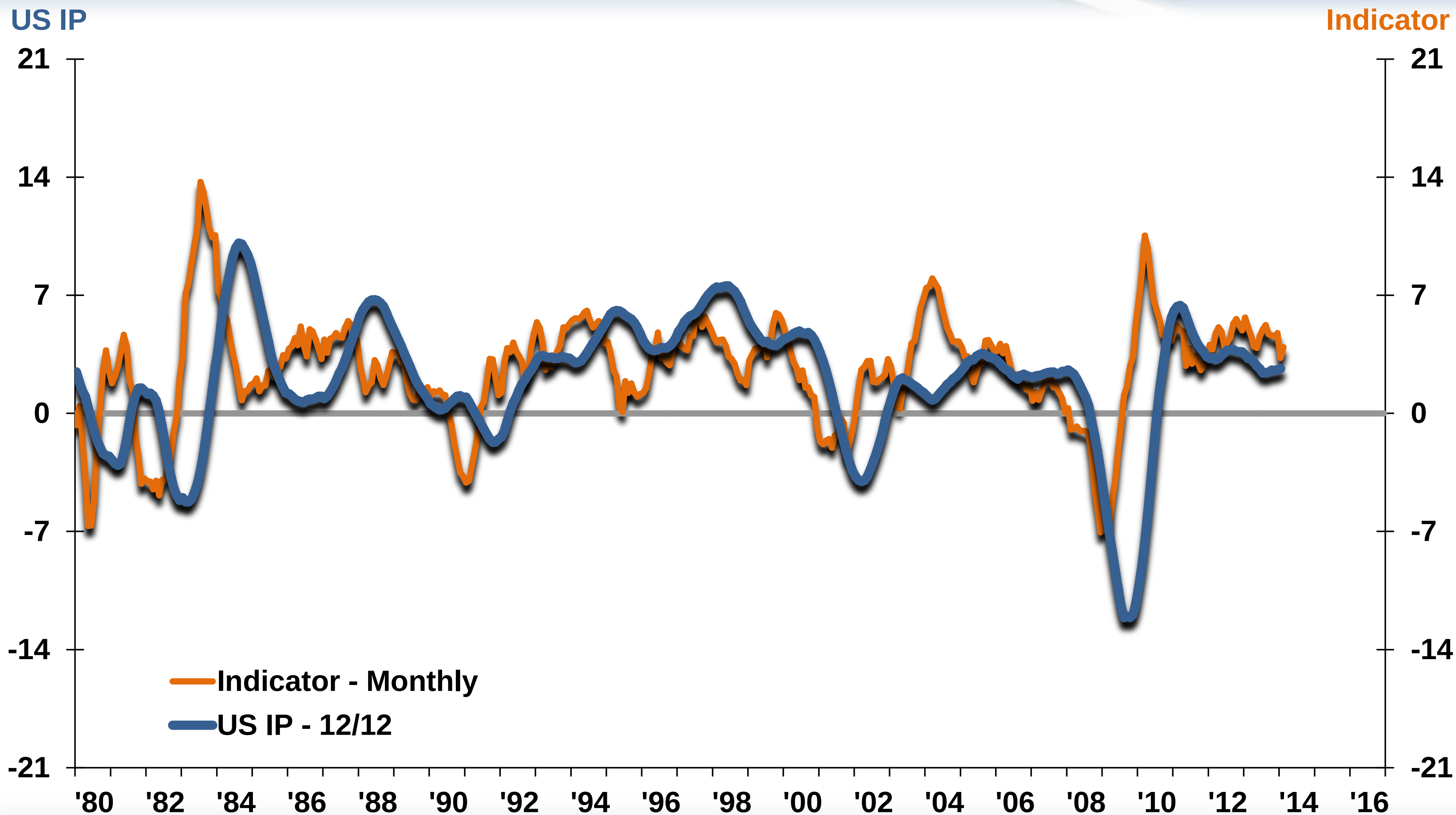
$$= \frac{5.3}{4.8} \times 100 - 100 = 10.5\%$$

12/12 Rate-of-Change

$$= \frac{December\ 2014\ 12MMT}{December\ 2013\ 12MMT} \times 100 - 100$$

$$= \frac{20.3}{18.0} \times 100 - 100 = 12.7\%$$

US Industrial Production to ITR Leading Indicator

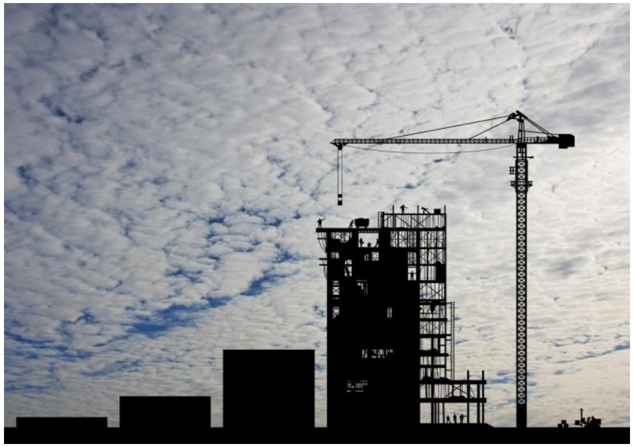


USIP – 12/12
Indicator - Monthly

Generating the Quantitative Forecast

Internal Trends

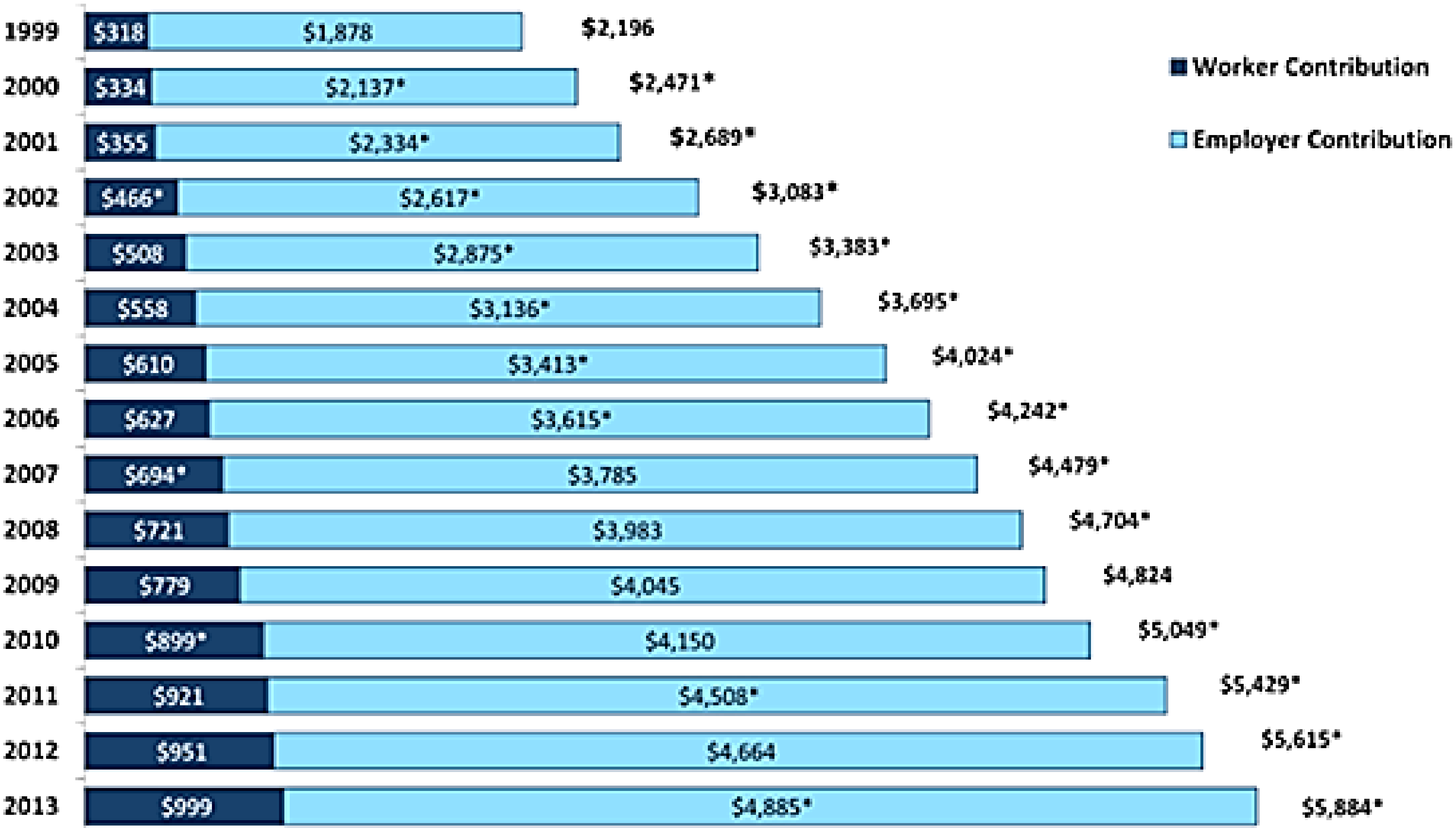
Leading Economic Indicators



ITR Long Term Business Cycle Theory

News and Market Observations

Average Annual Worker and Employer Contributions to Premiums and Total Premiums for Single Coverage, 1999-2013



* Estimate is statistically different from estimate for the previous year shown (p<.05).

SOURCE: Kaiser/HRET Survey of Employer-Sponsored Health Benefits, 1999-2012.

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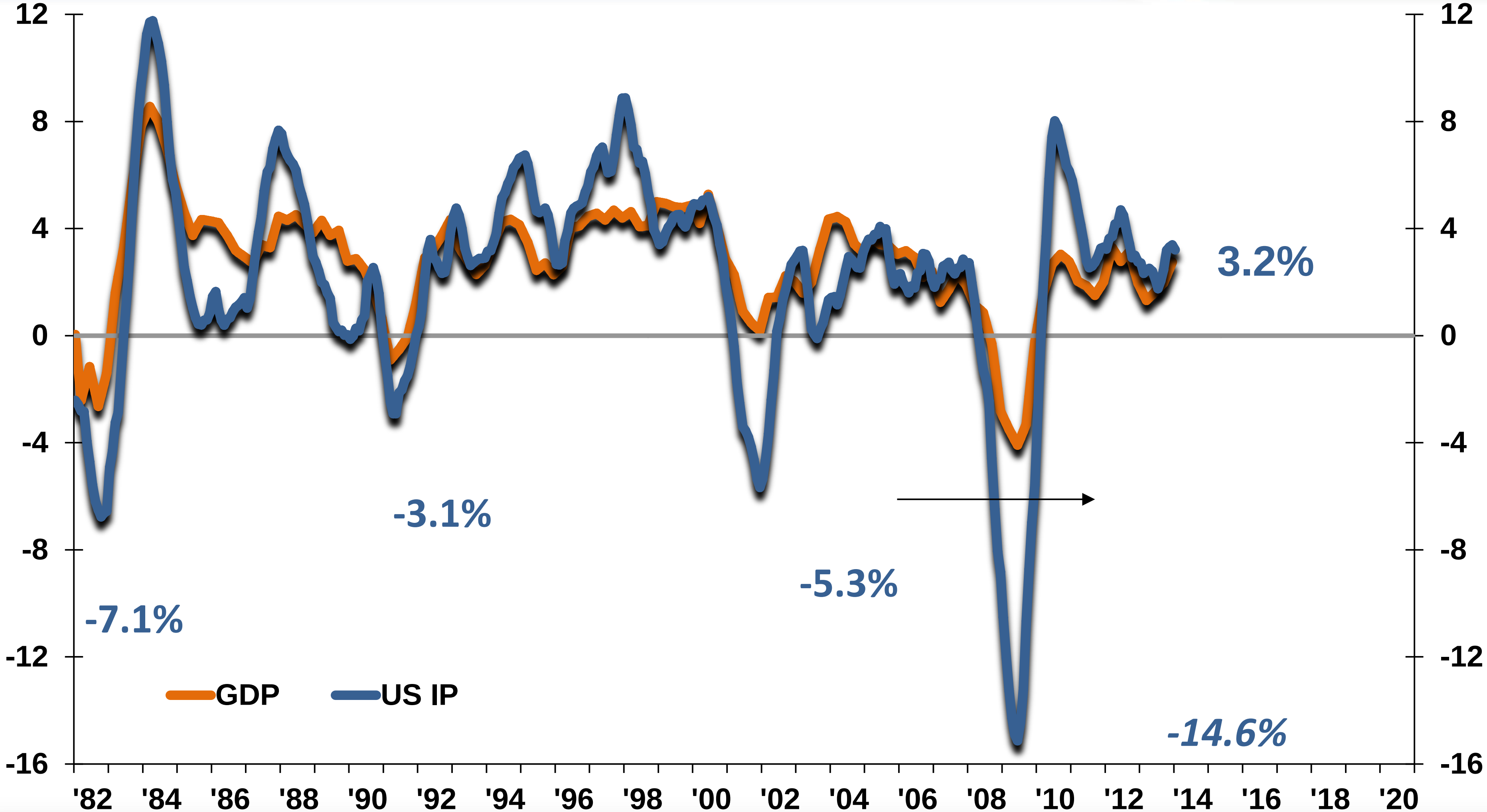
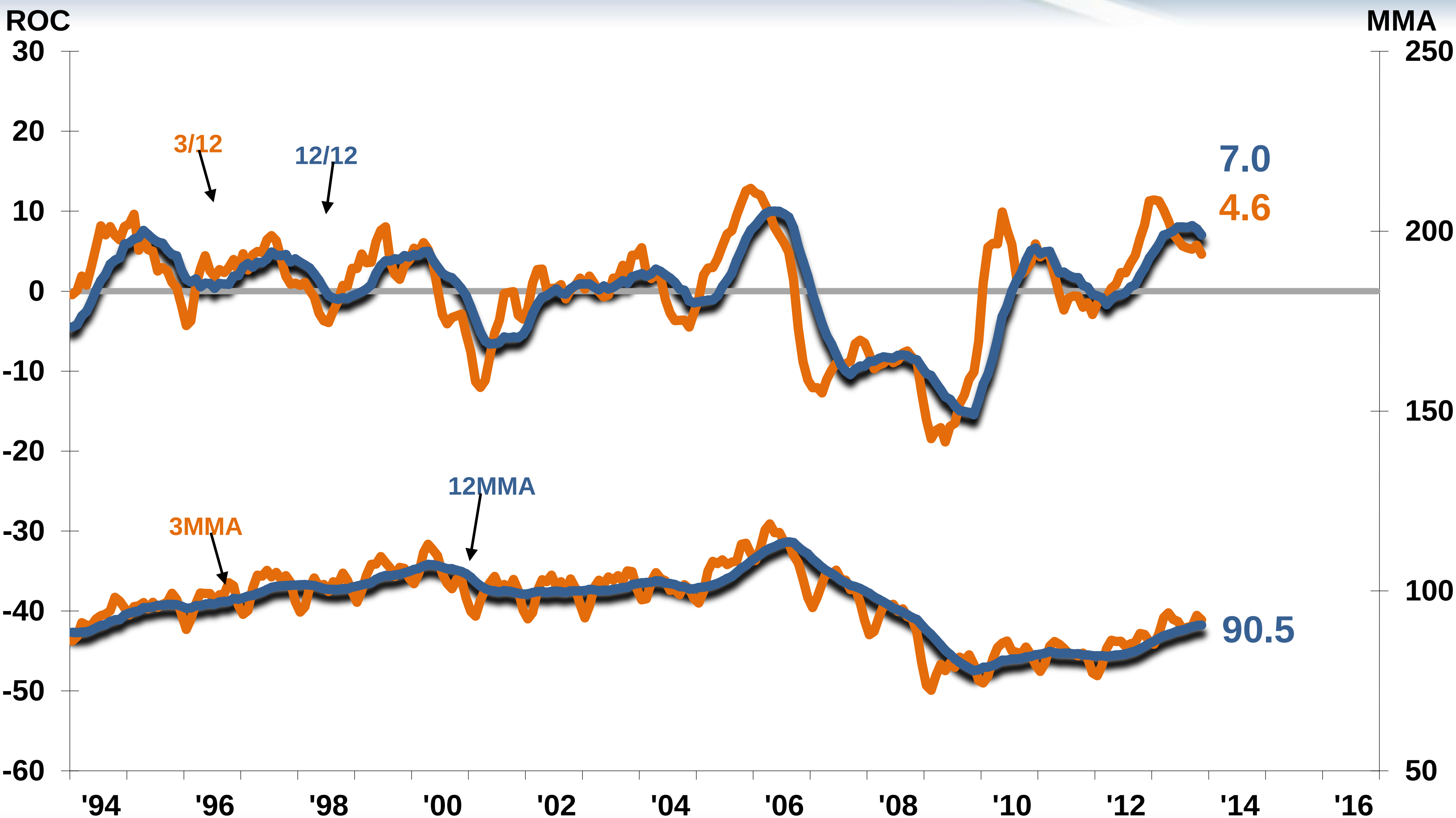
US Industrial Production to Gross Domestic Product



Year-over-year
Quarter to Quarter
(3/12)

US Sawmills & Wood Preservation Production Index



2007=100

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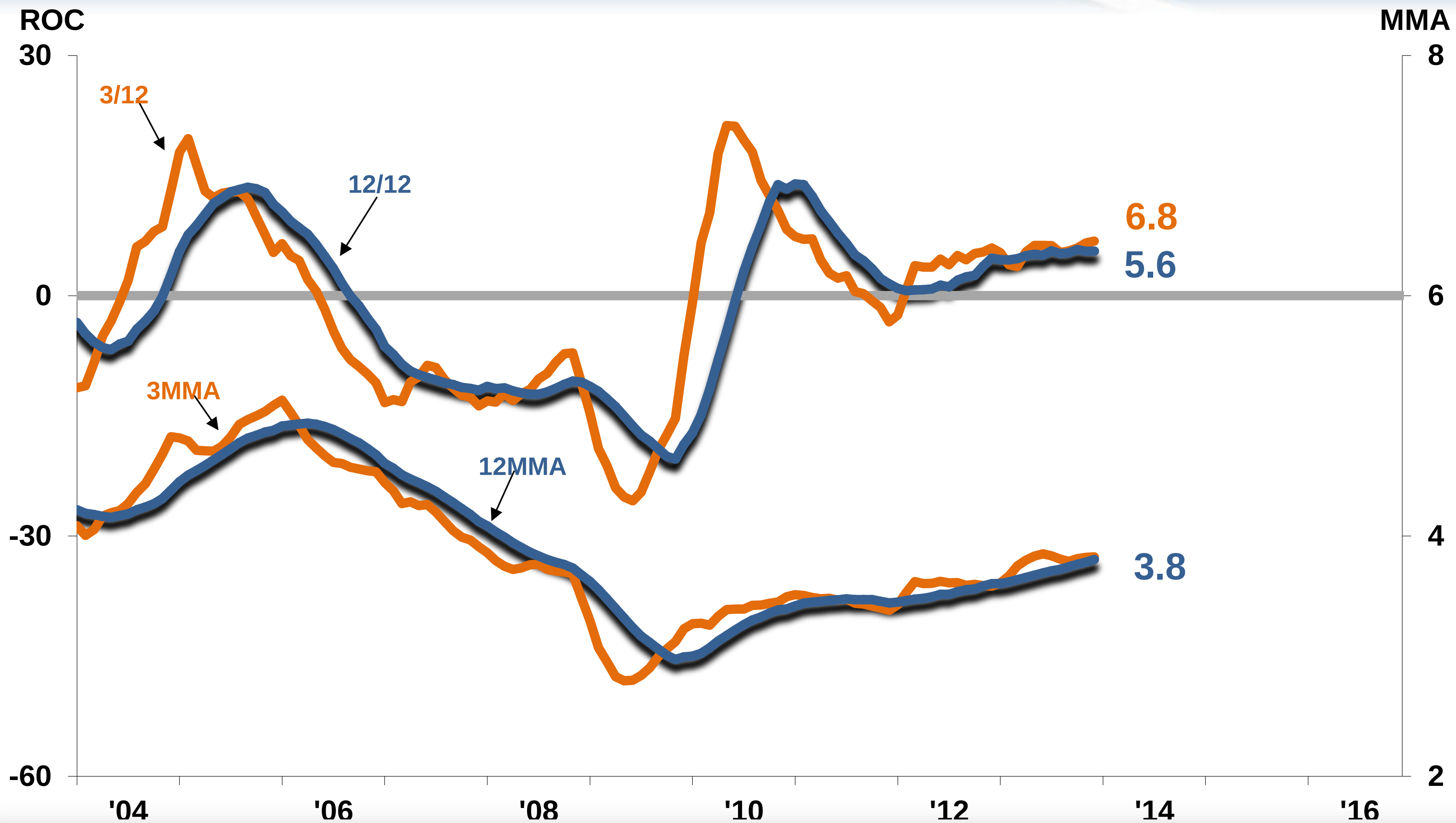
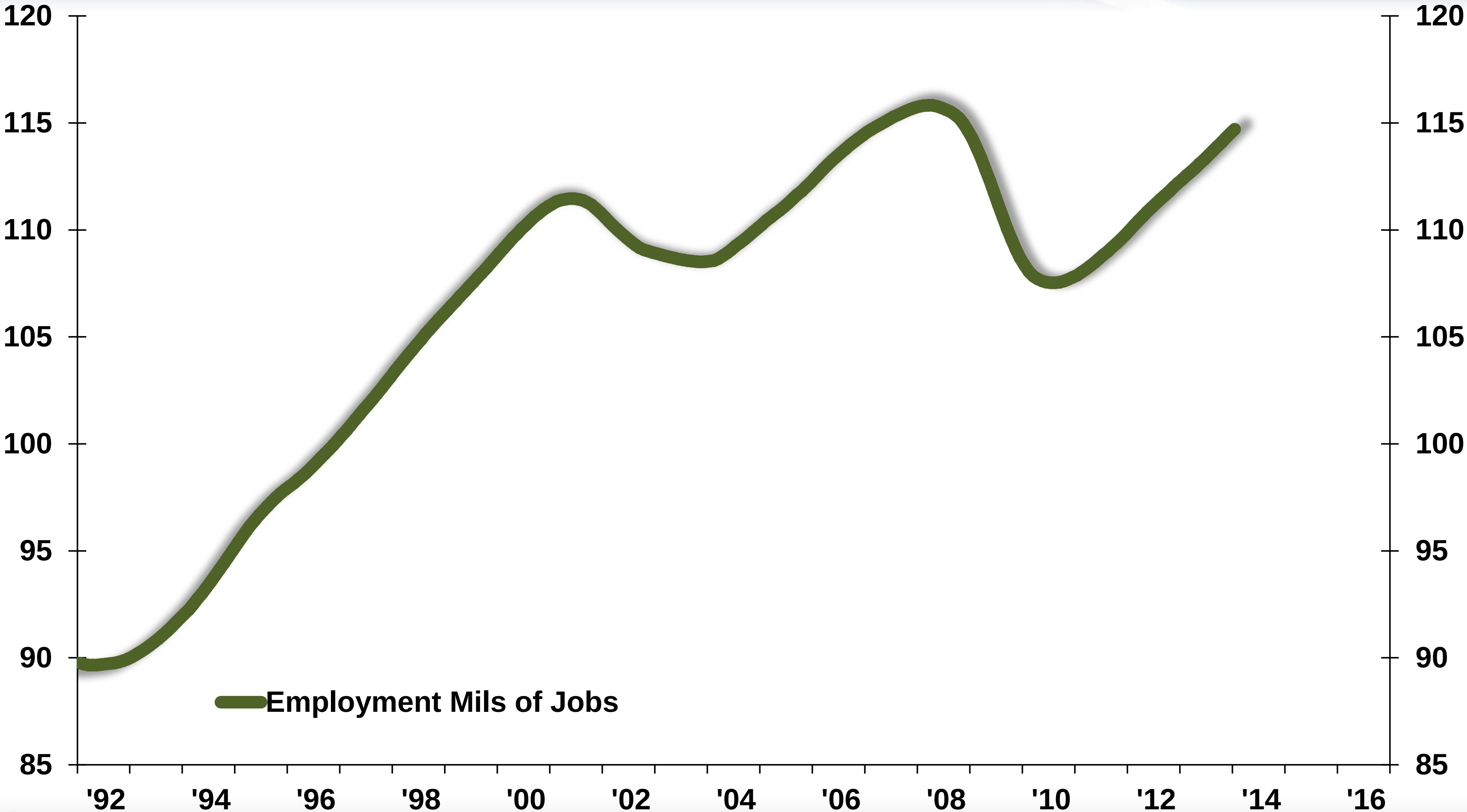
Canada Sawmills and Wood Preservation



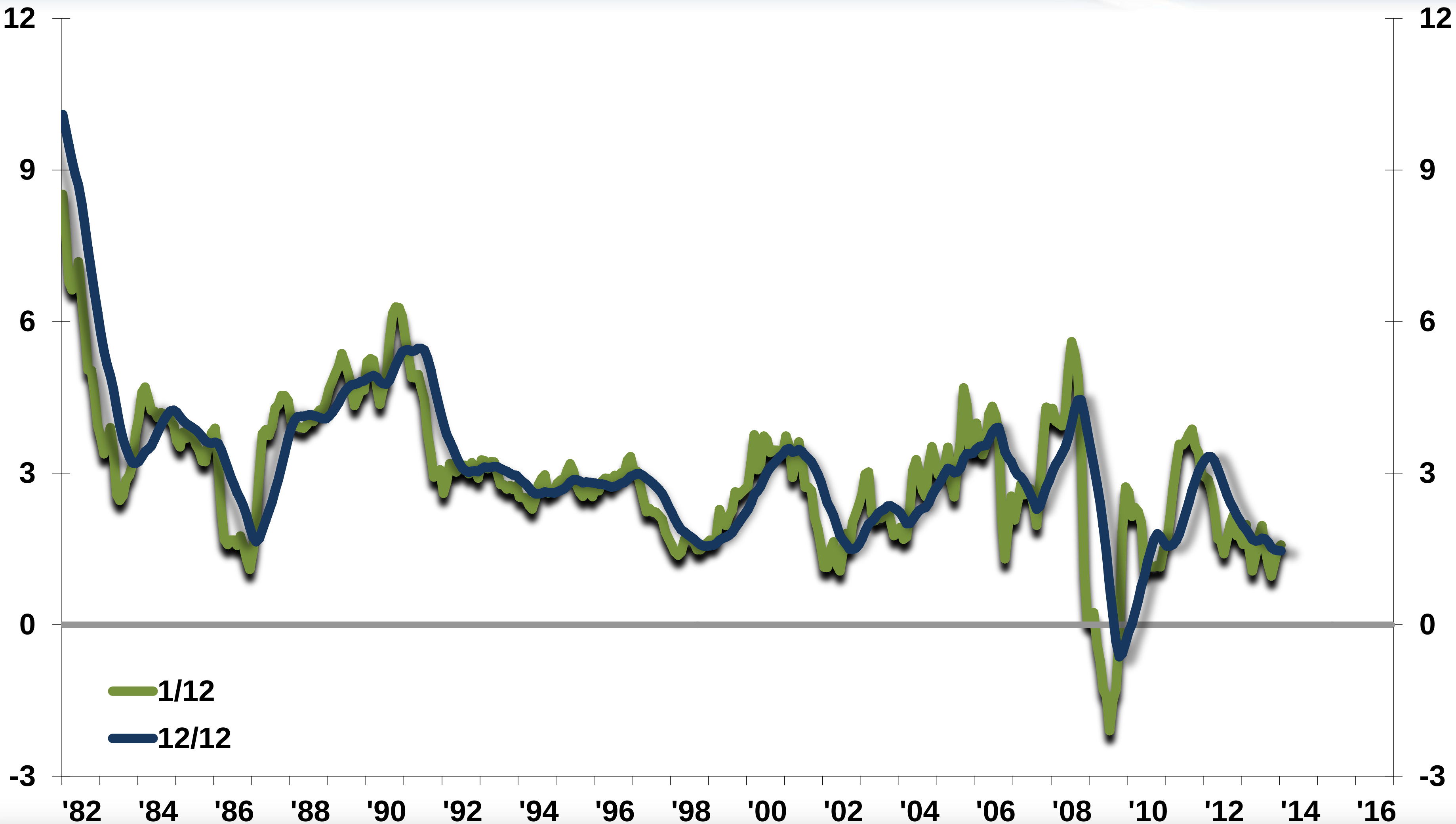
Billions of 2007 Chained Canadian $

Employment – Private Sector

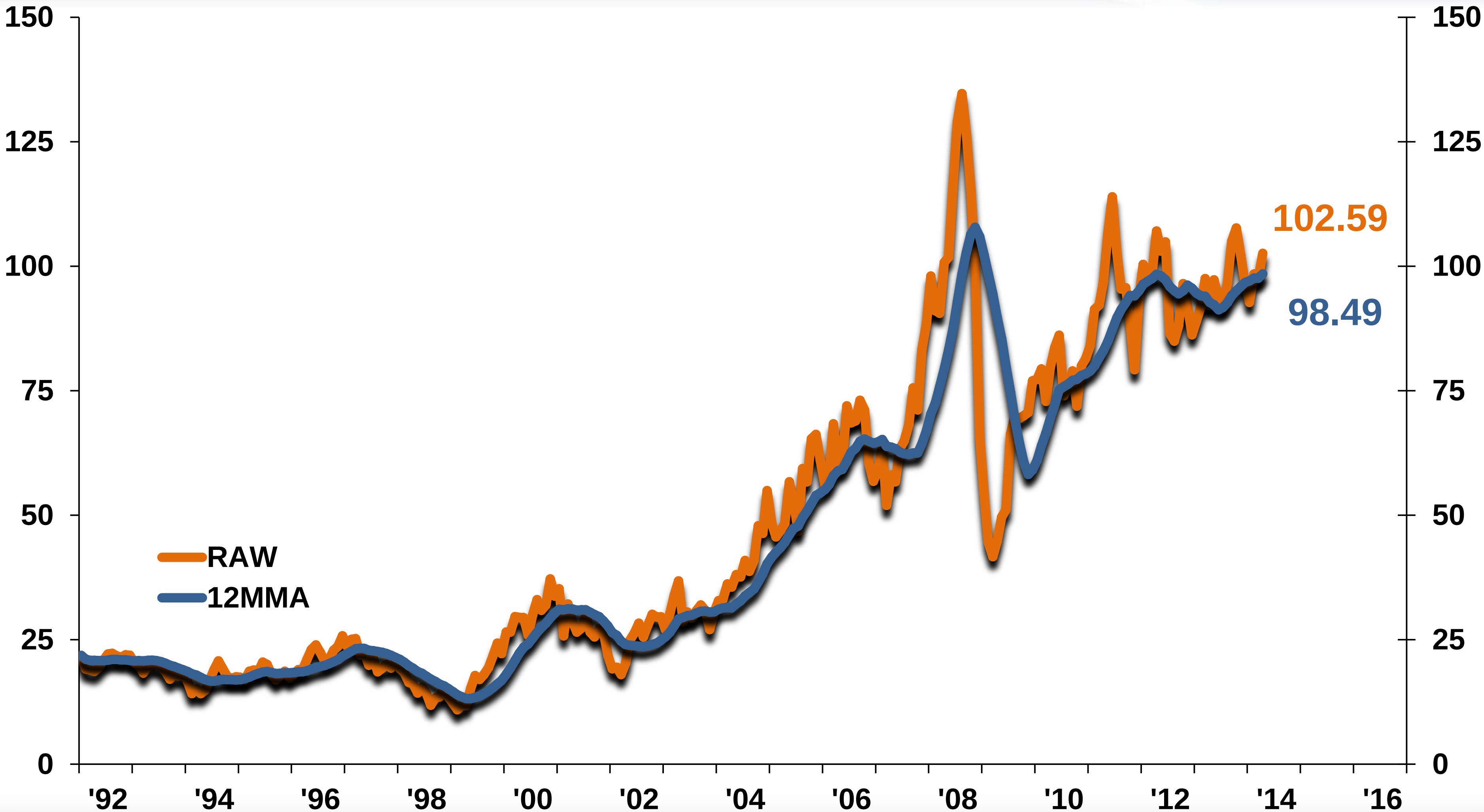


Annual Data Trend

Consumer Price Index – All Items

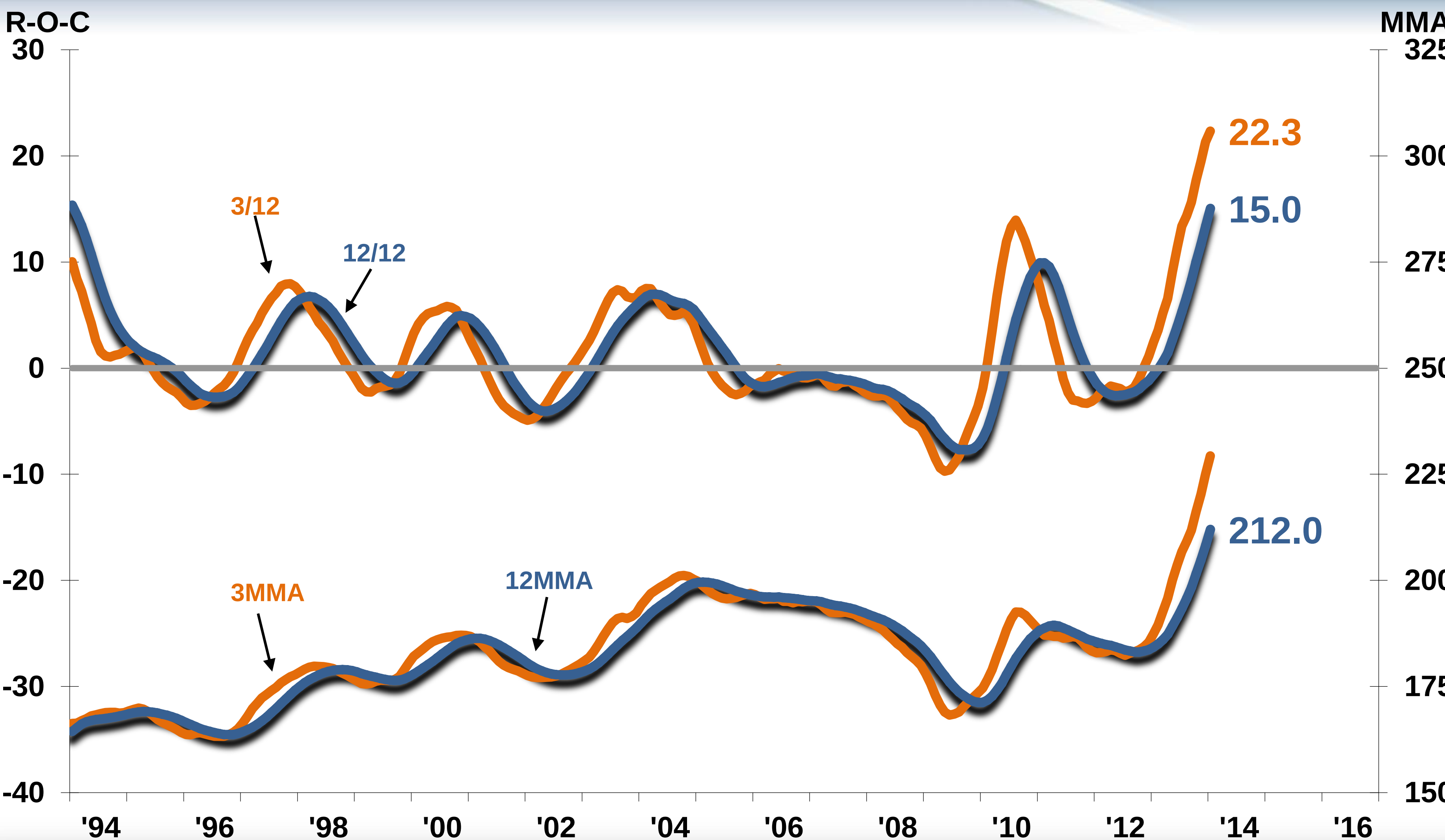


Crude Oil Futures Prices



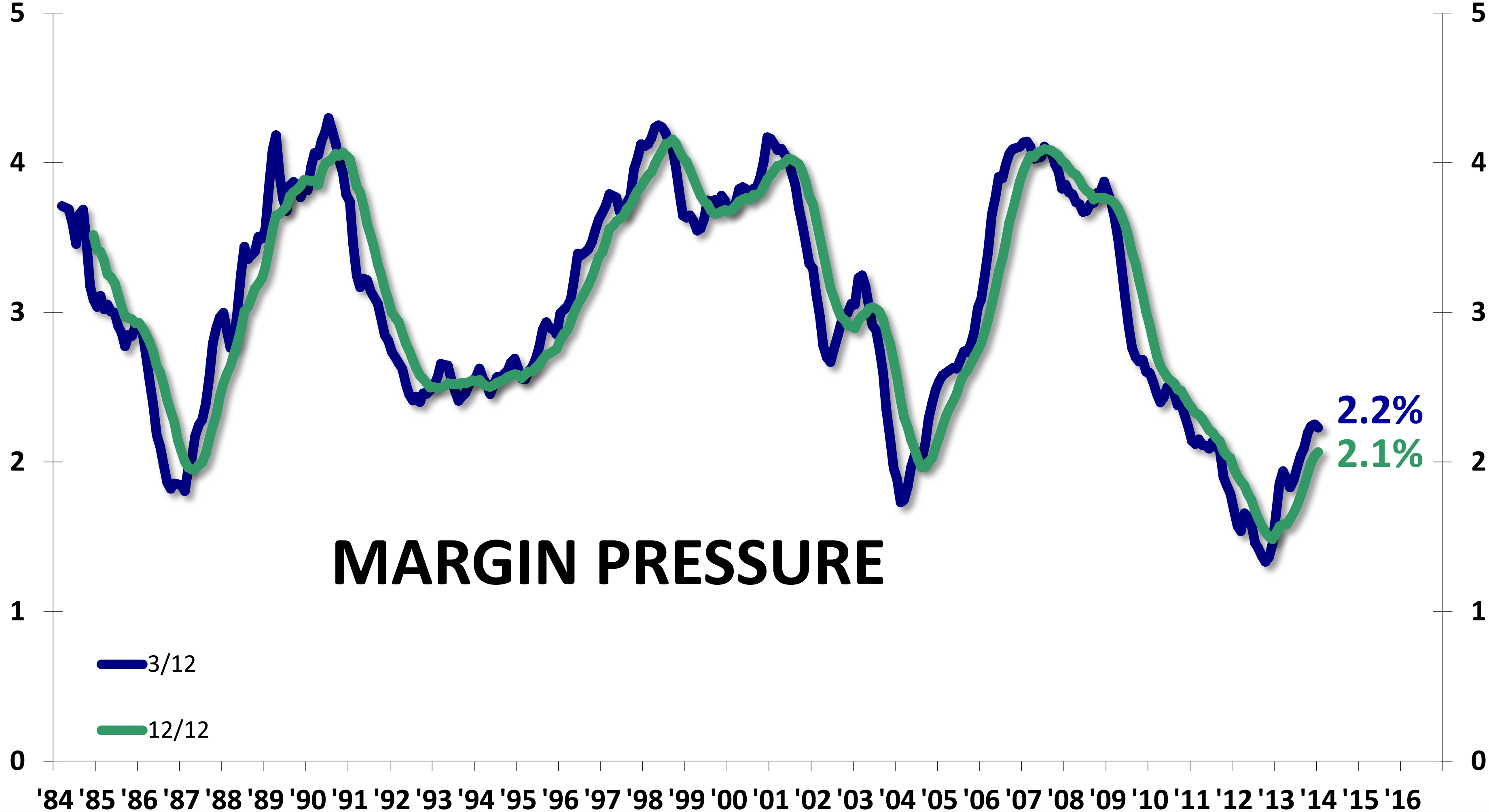
Light & Sweet $ per Barrel,
Data Trends

Hardware Lumber Producer Price Index

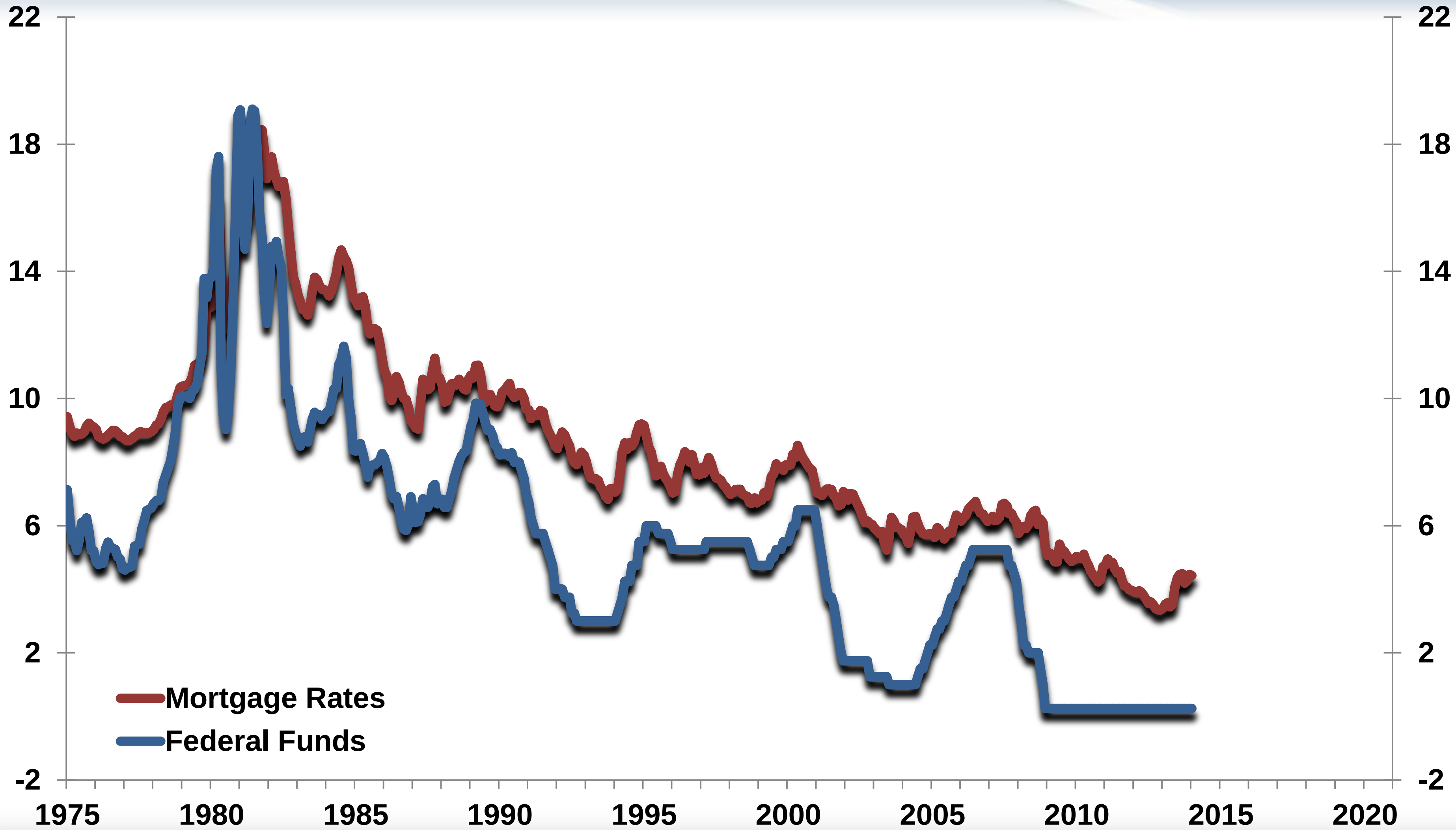


1982=100

Average Hourly Wages for Production & Nonsupervisory Employees

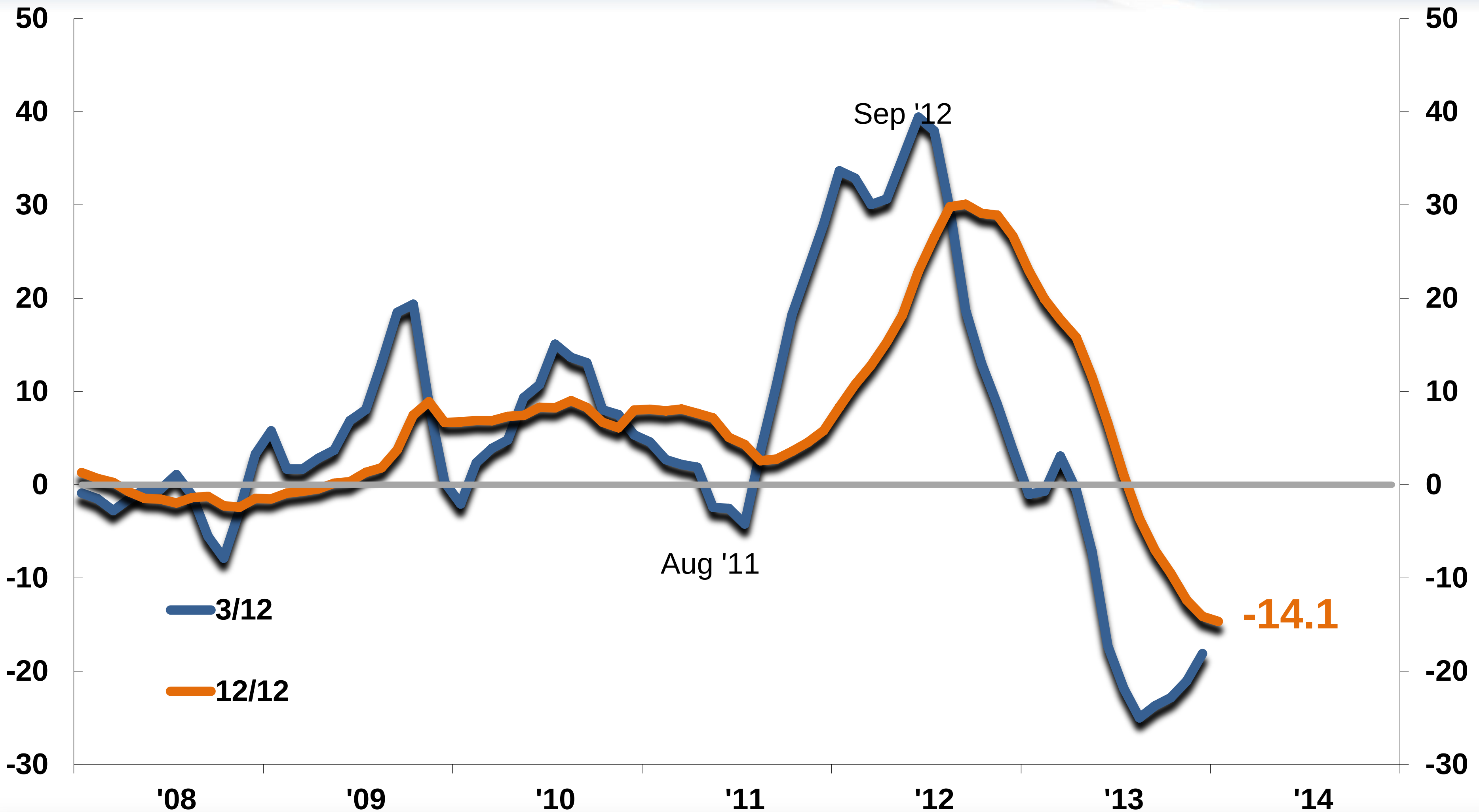


Mortgage Rates to Federal Funds

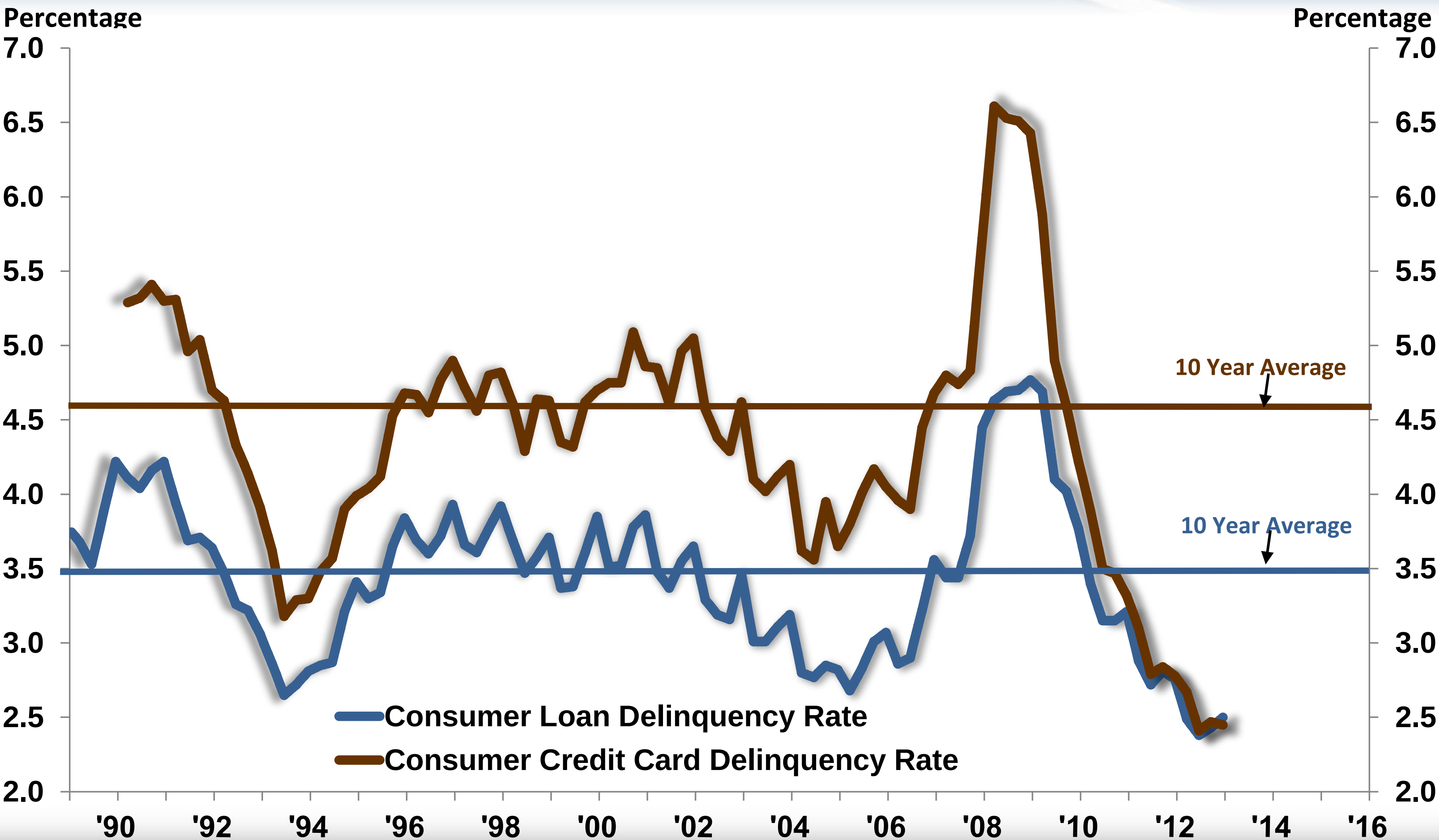


Raw Data

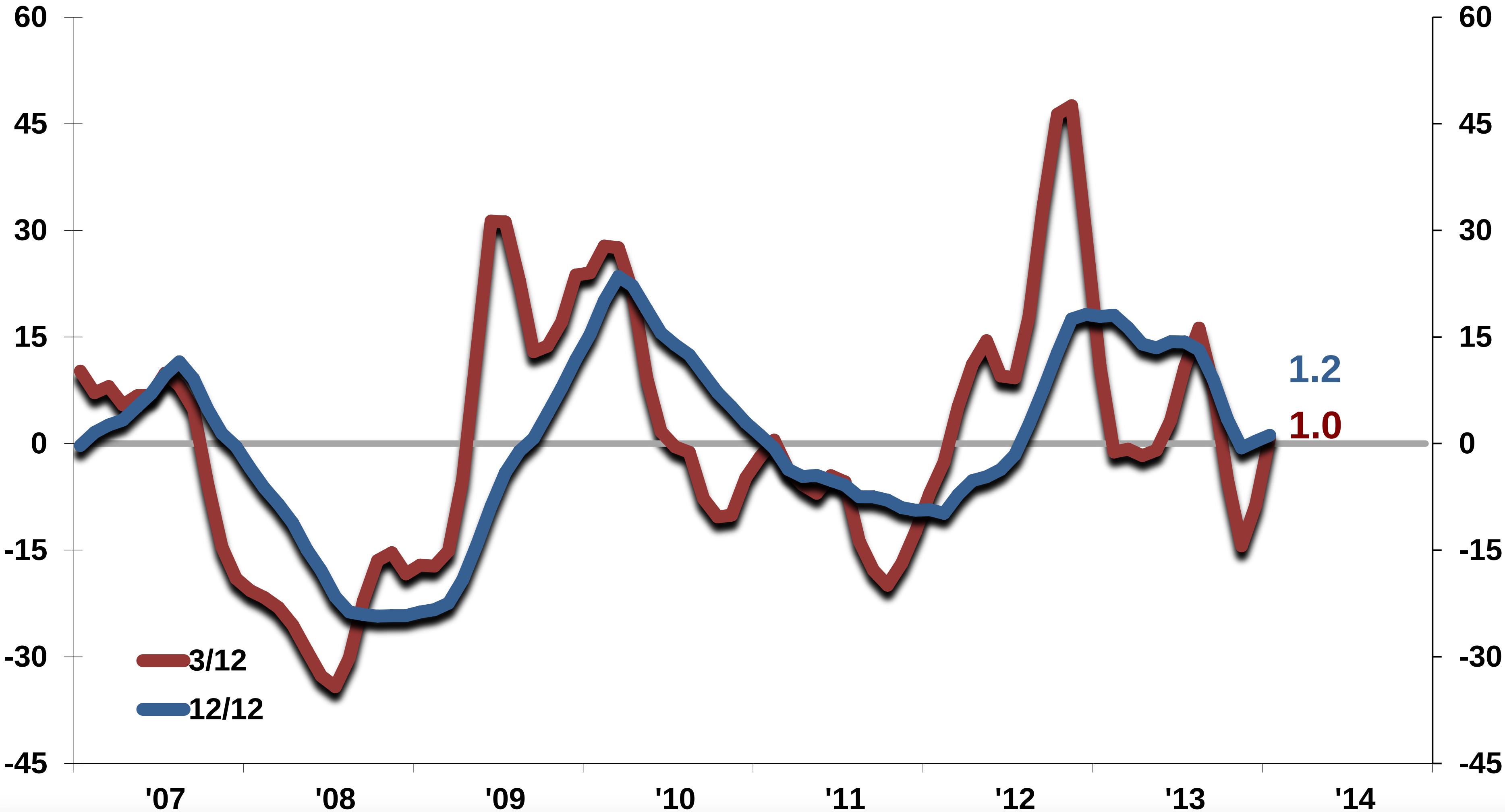
Corporate Bond Prices



Delinquency Rates on Consumer Loans

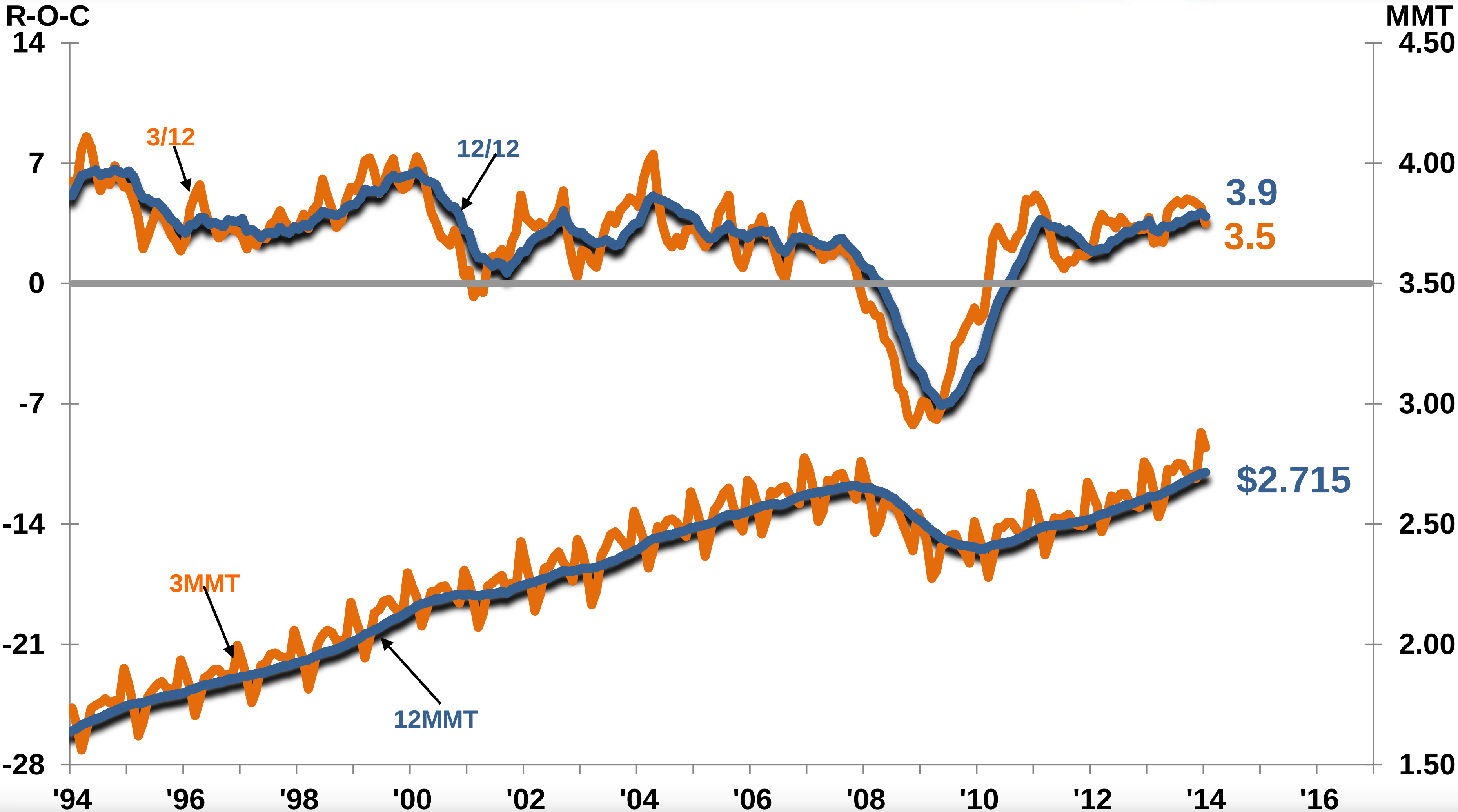


University of Michigan Consumer Expectations Index



12/12 Rate-of-Change

Total Retail Sales (deflated)



Trillions of 82-84$

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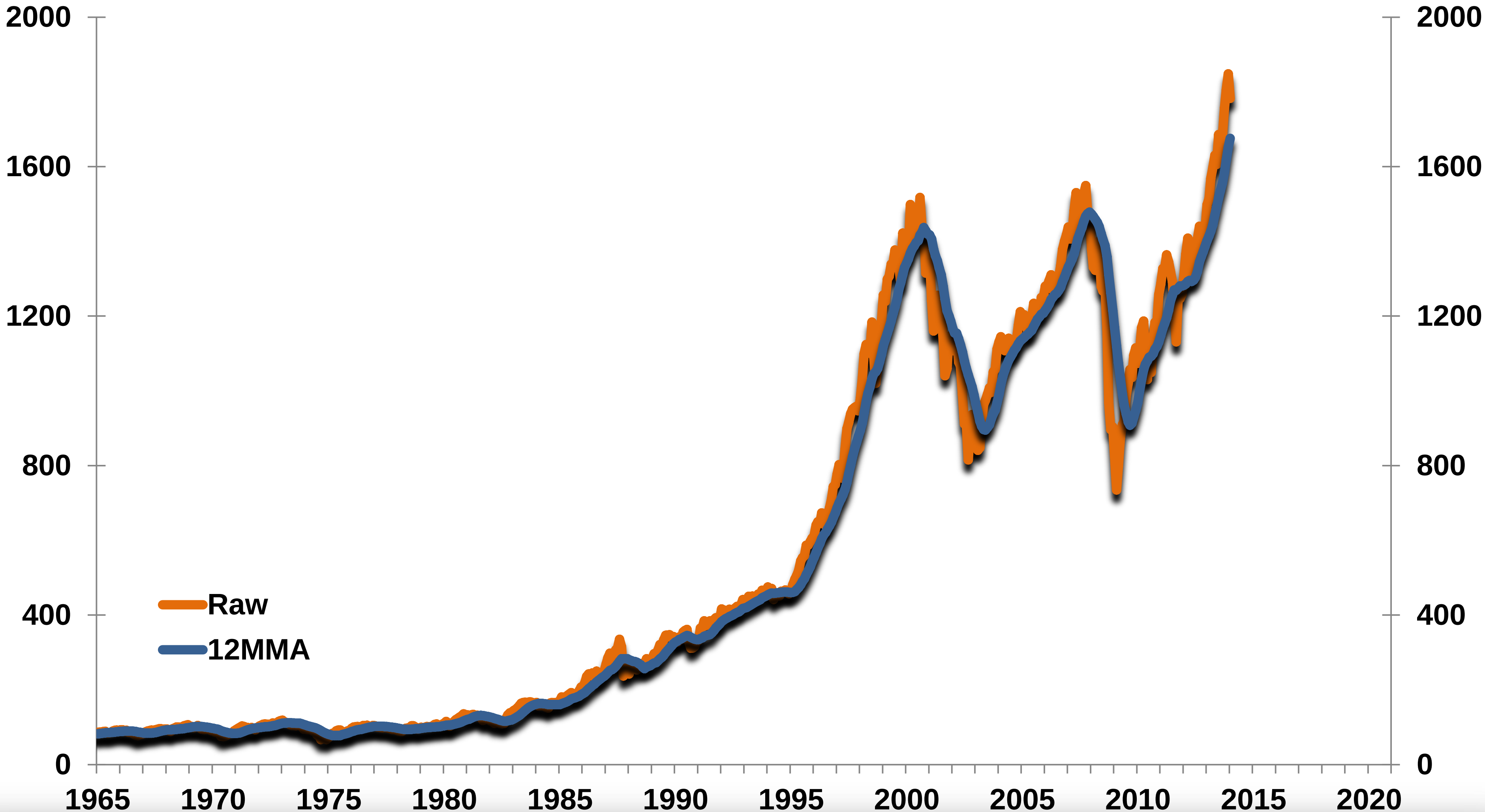
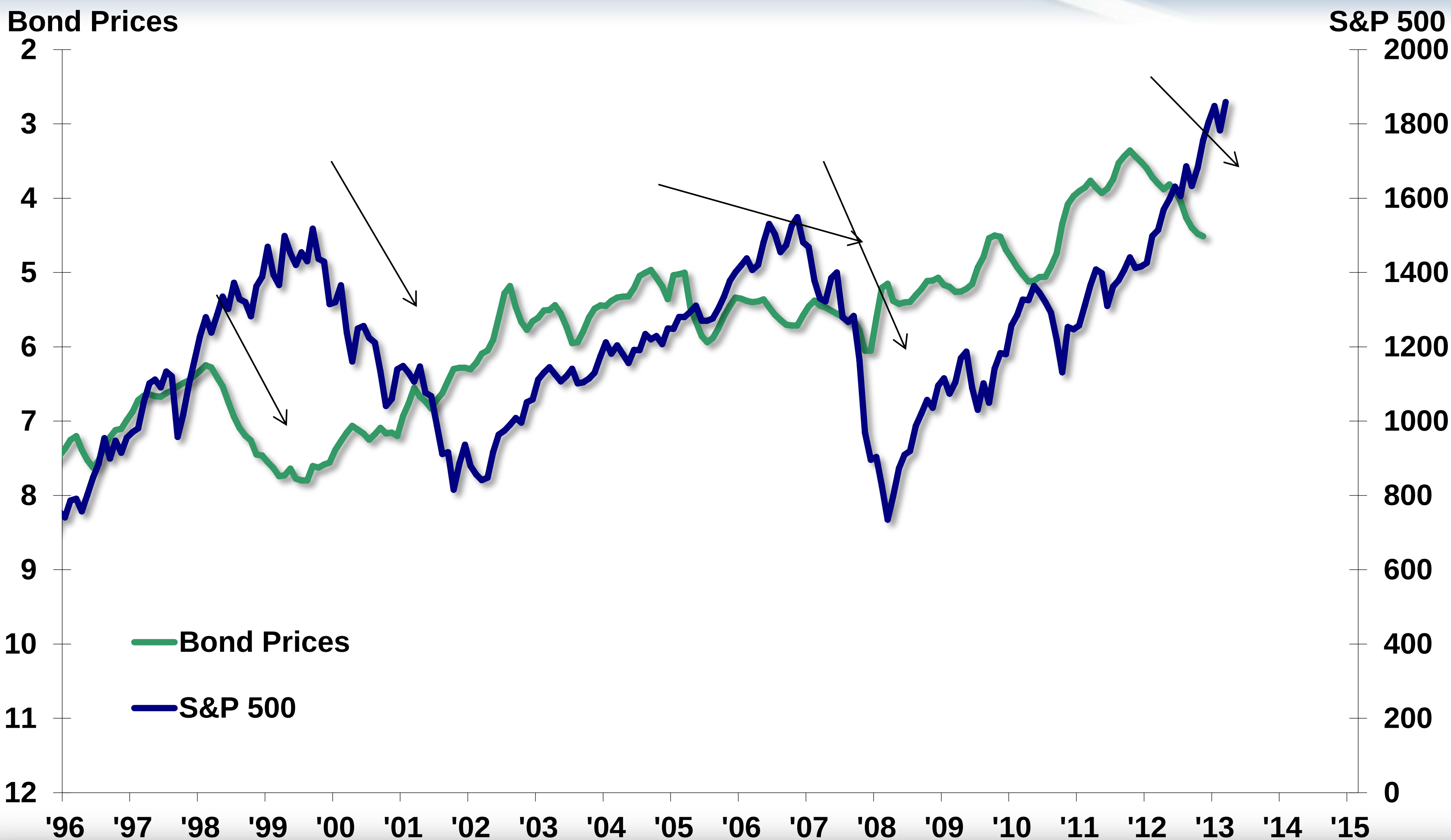
S&P500 Stock Prices Index



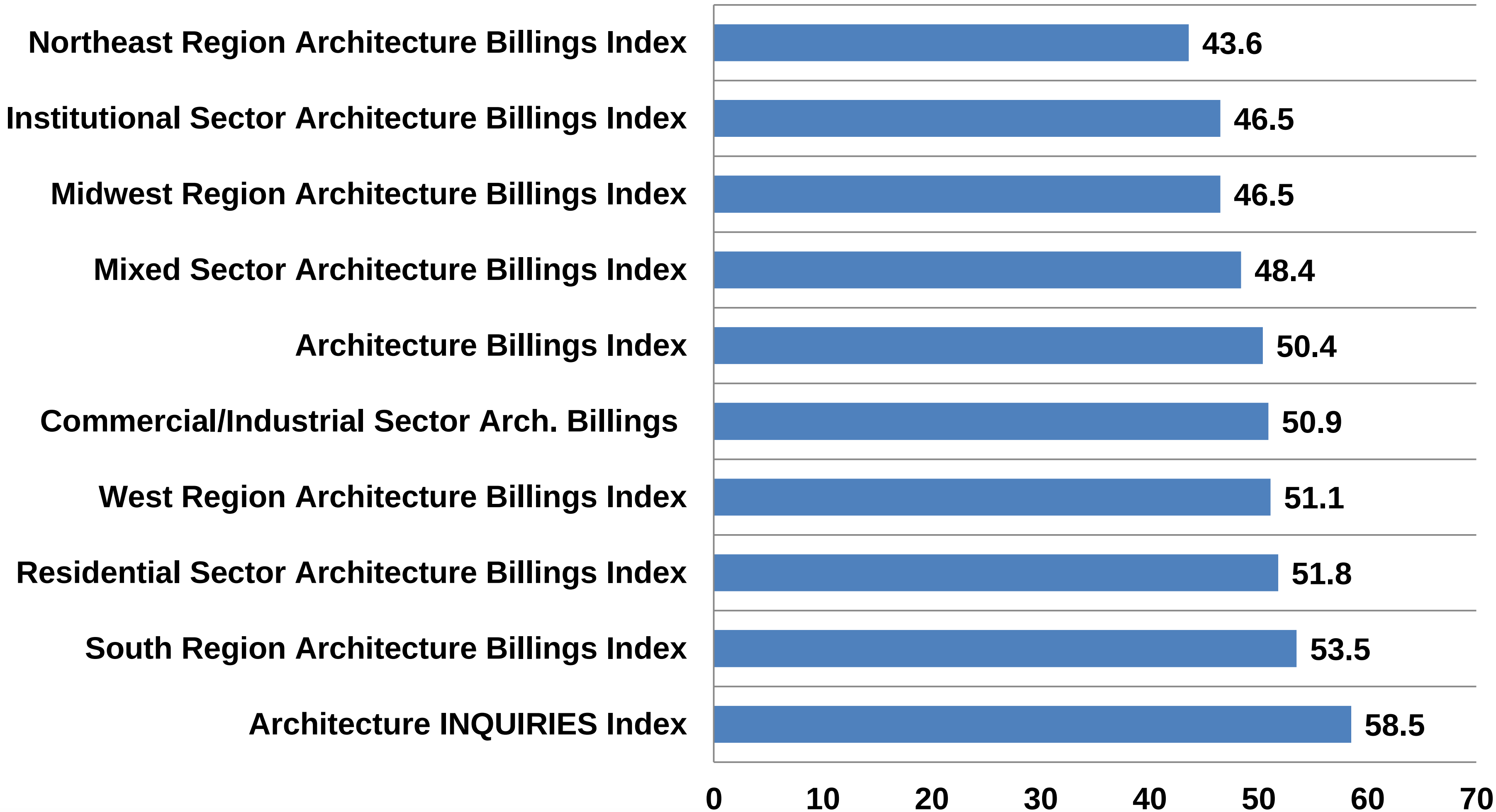
Source: Wall Street Journal

Corporate AAA Bond Prices to the S&P 500



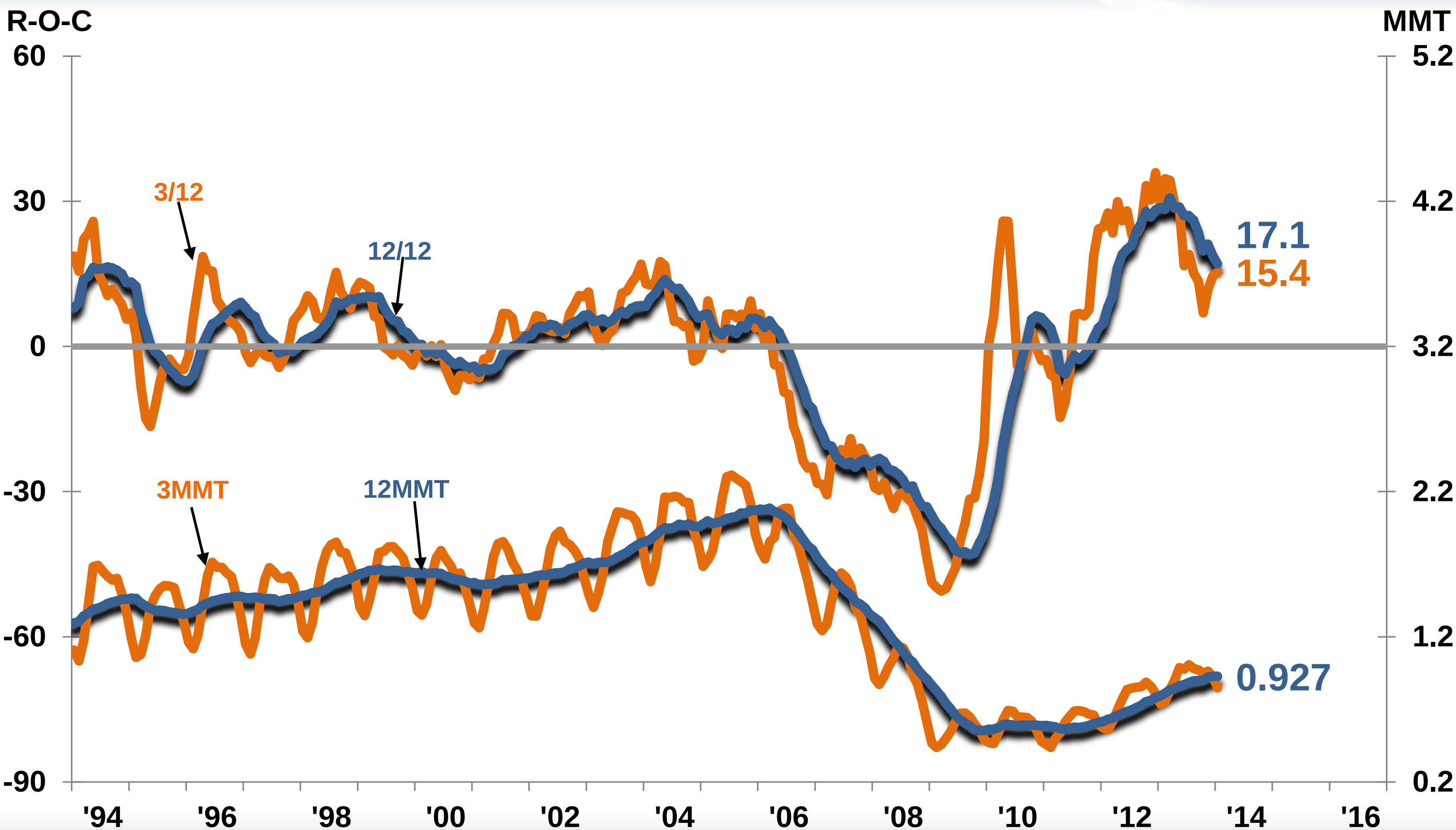
Source: Wall Street Journal

Architecture Billing Index



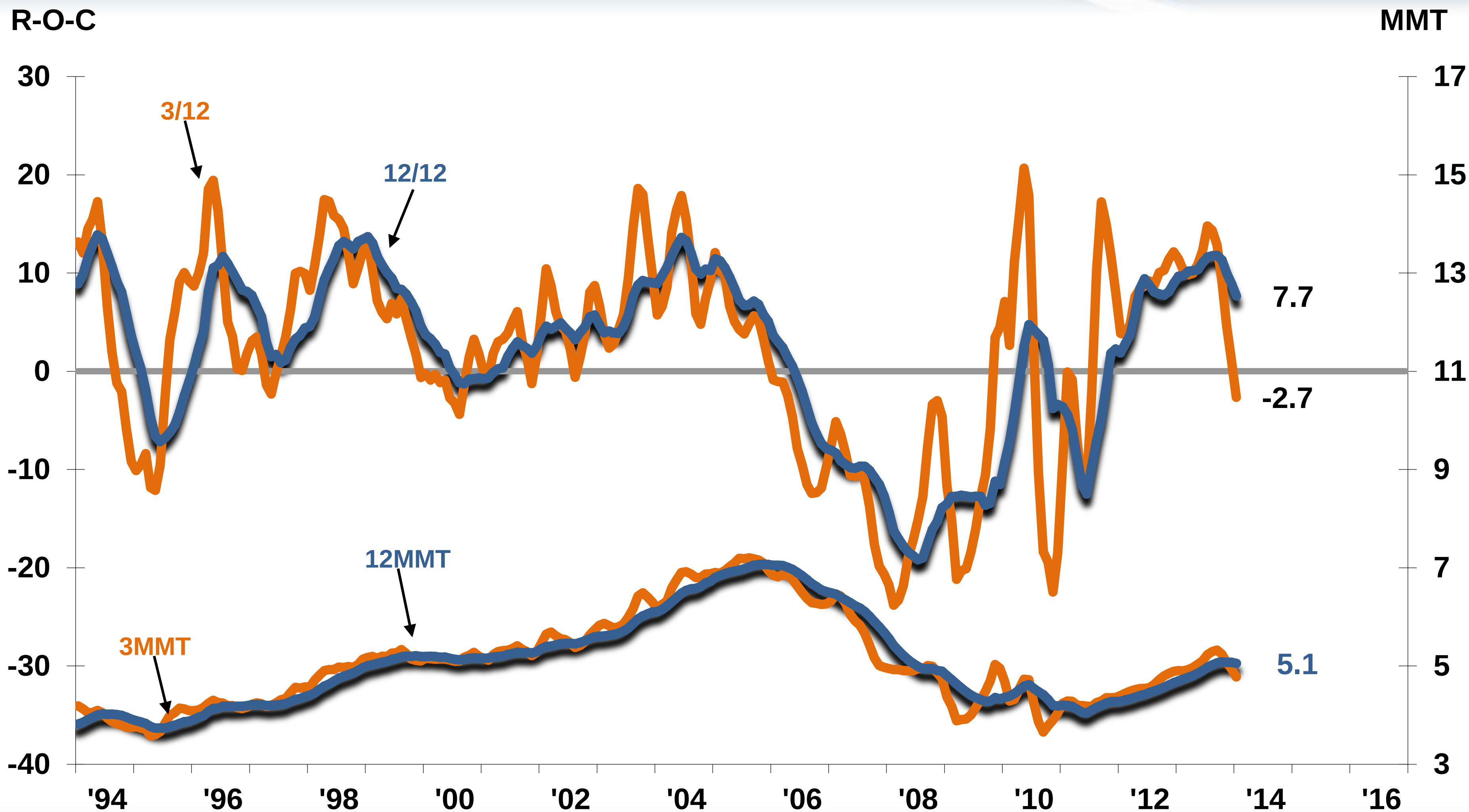
Source: American Institute of Architects

Housing Starts



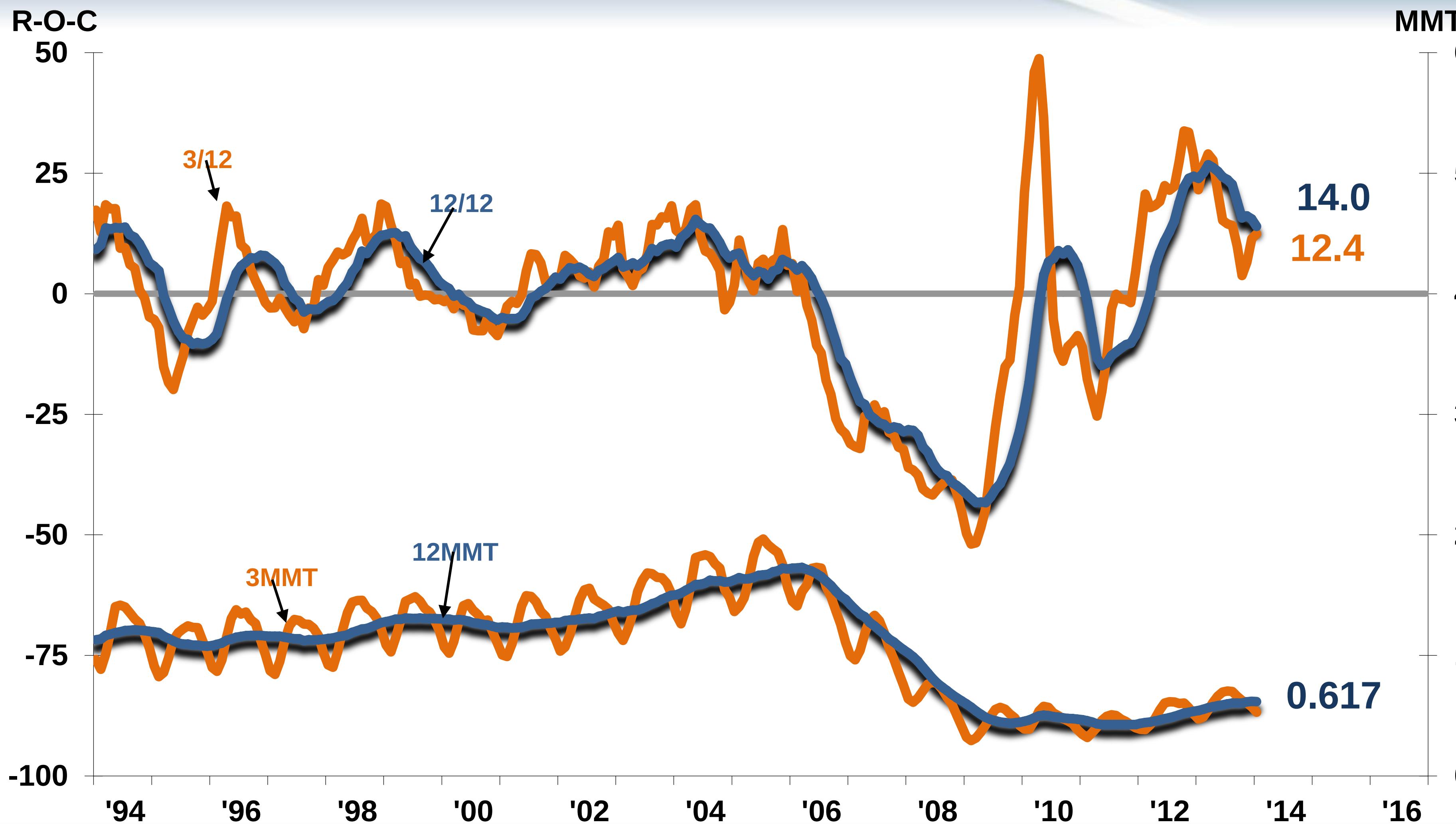
Millions of Units

Existing Home Sales



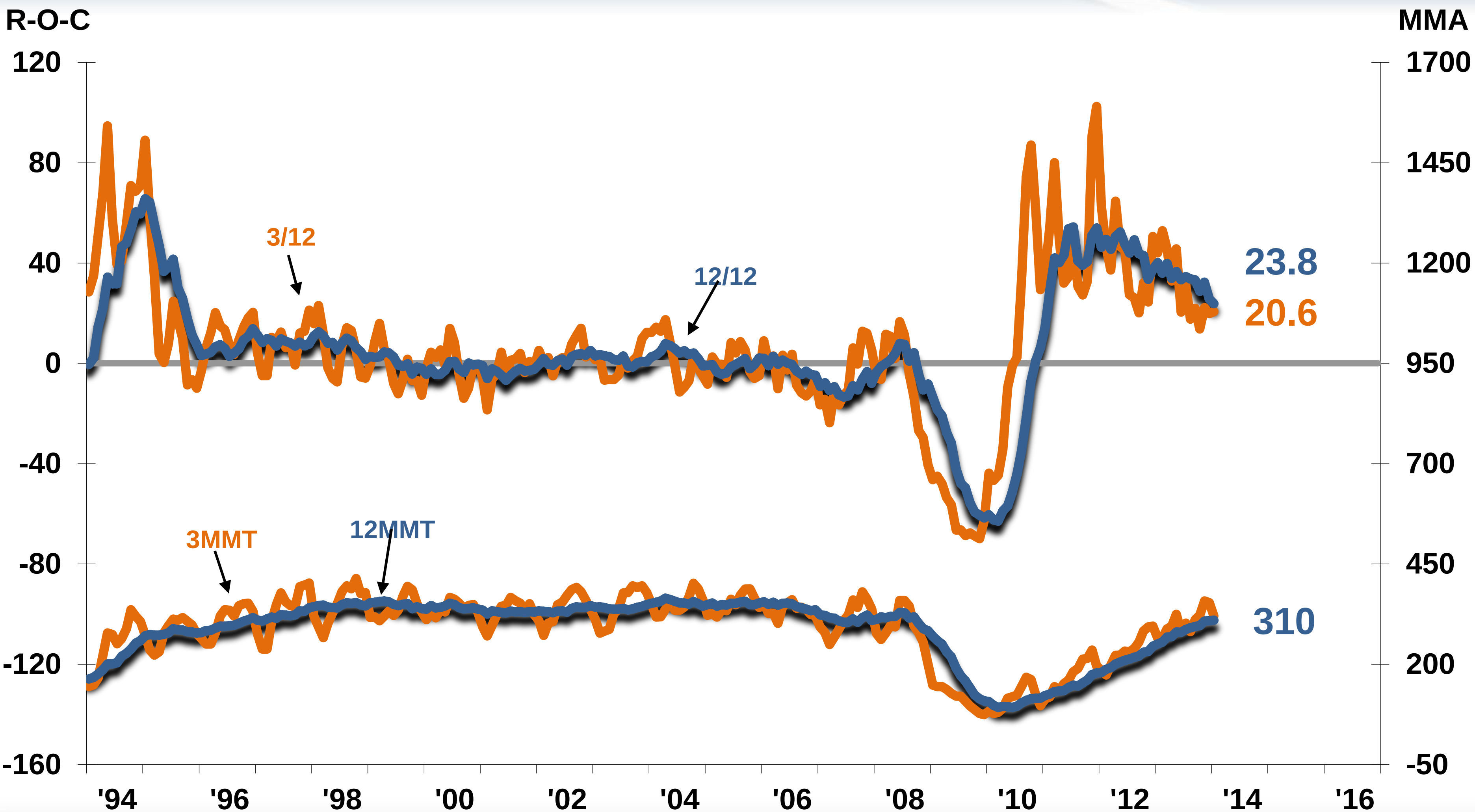
Millions of Units

Single Unit Housing Series



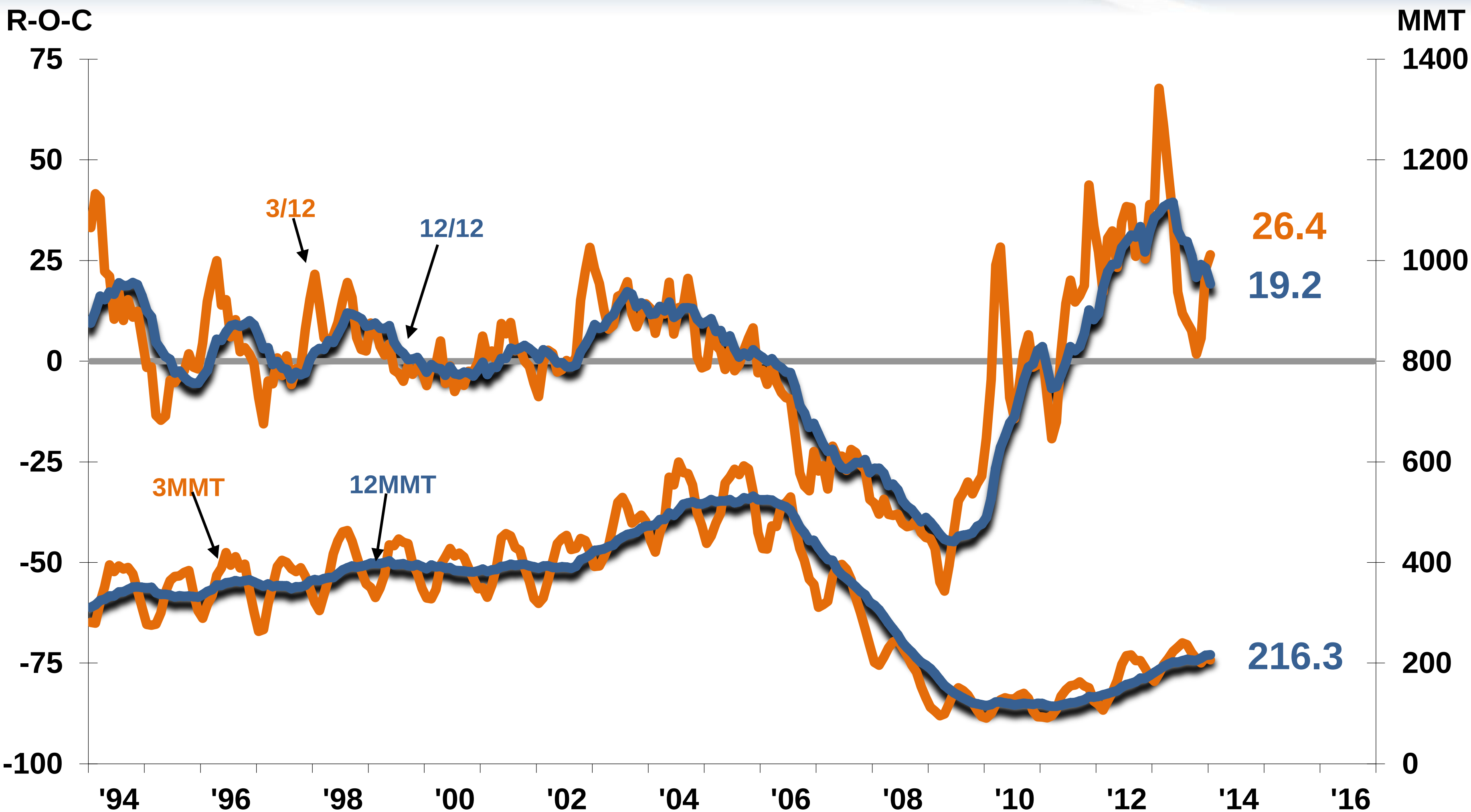
Millions of Units

Multi Unit Housing Starts



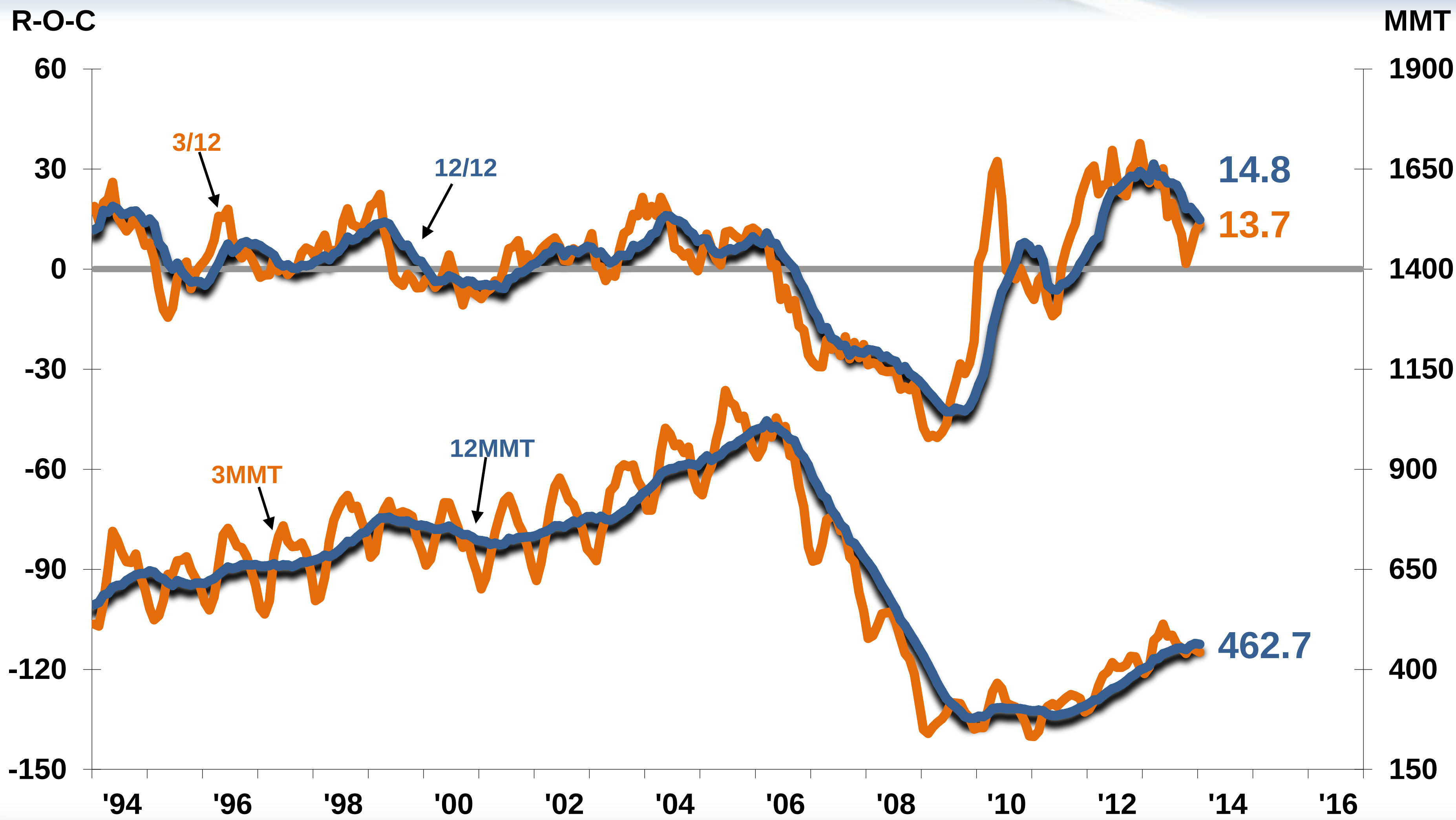
Thousands of Units

West Housing Starts



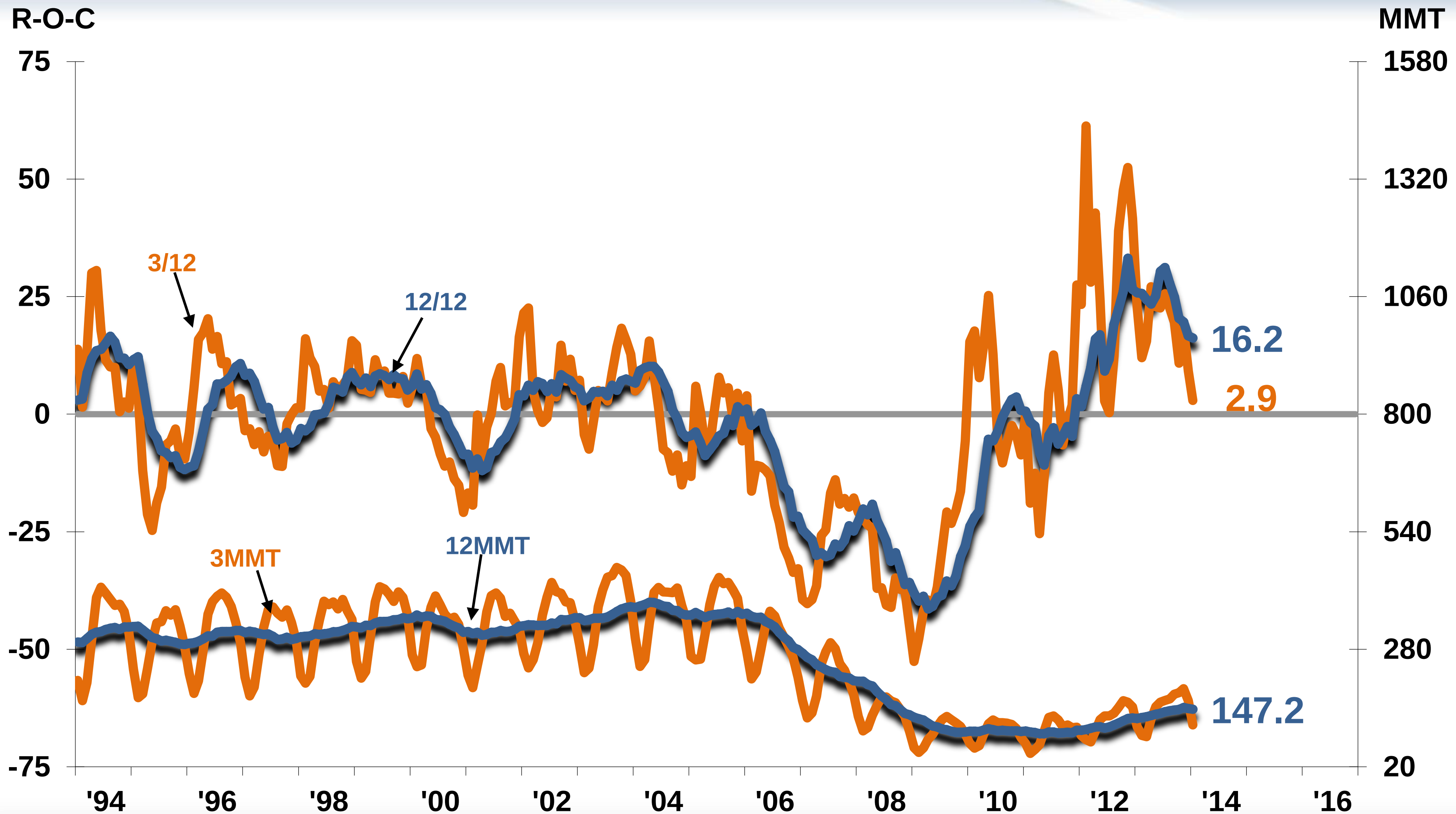
Thousands of Units

South Housing Starts



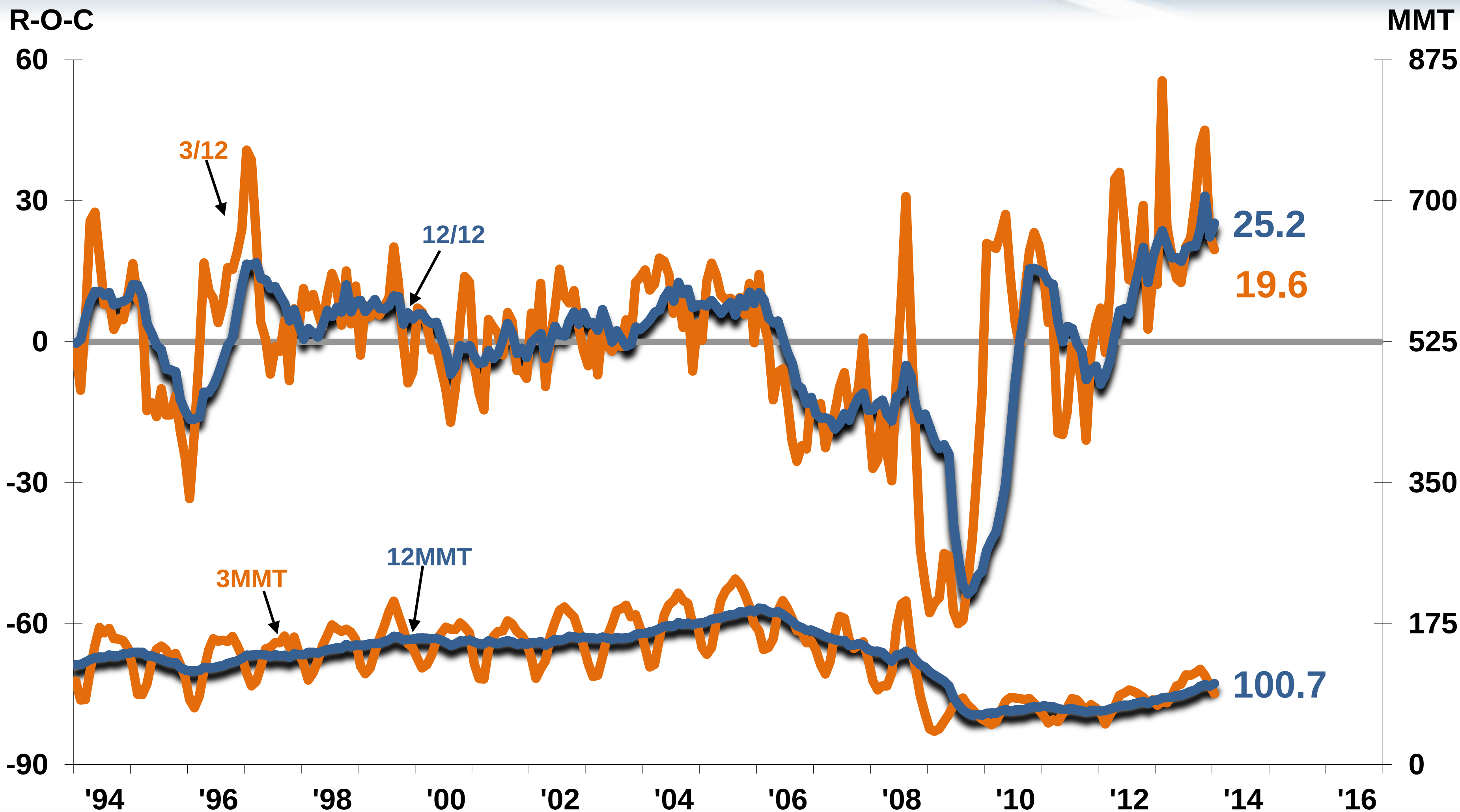
Thousands of Units N.S.A.

Midwest Housing Starts



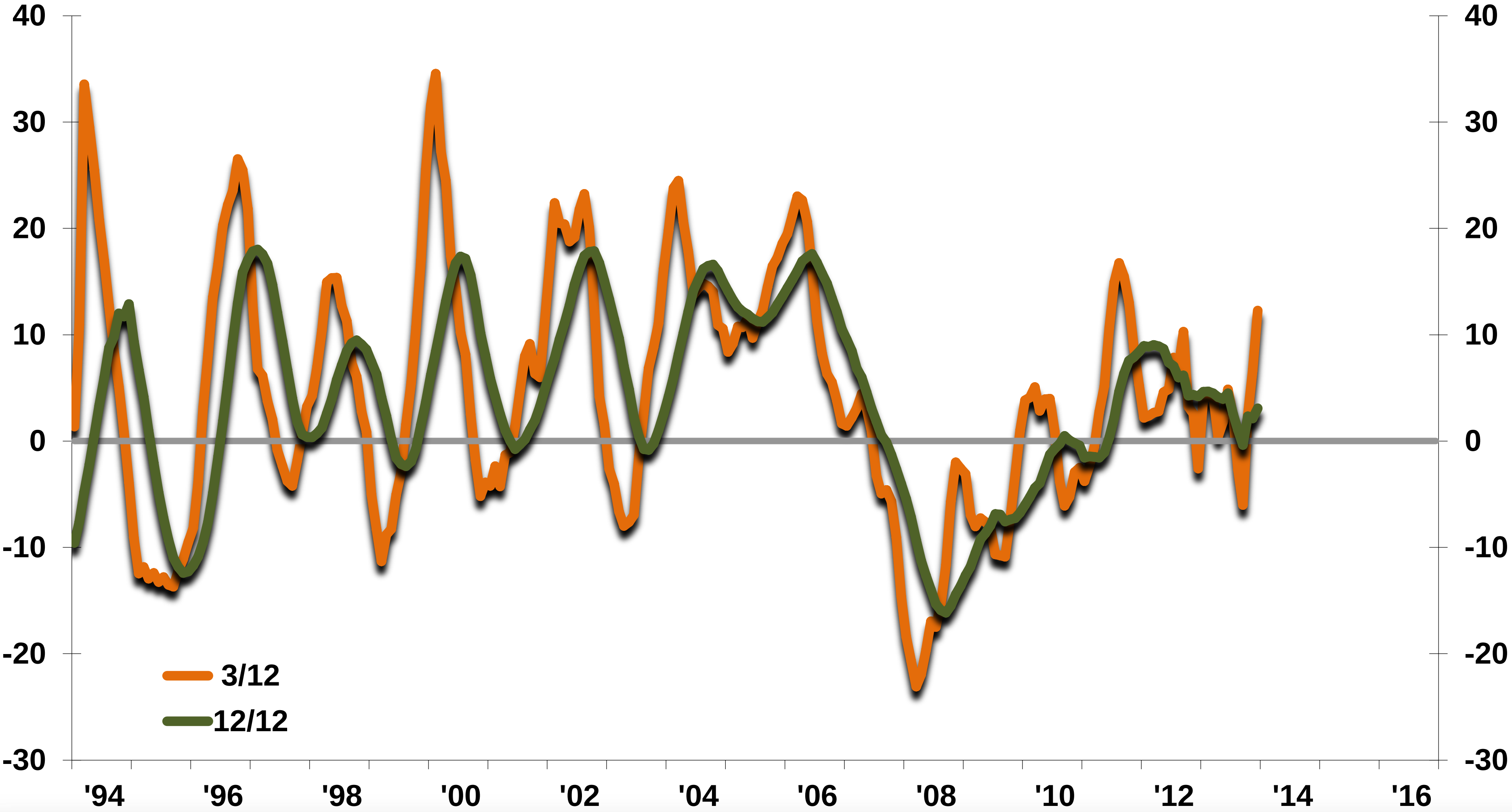
Thousands of Units

Northeast Housing Starts



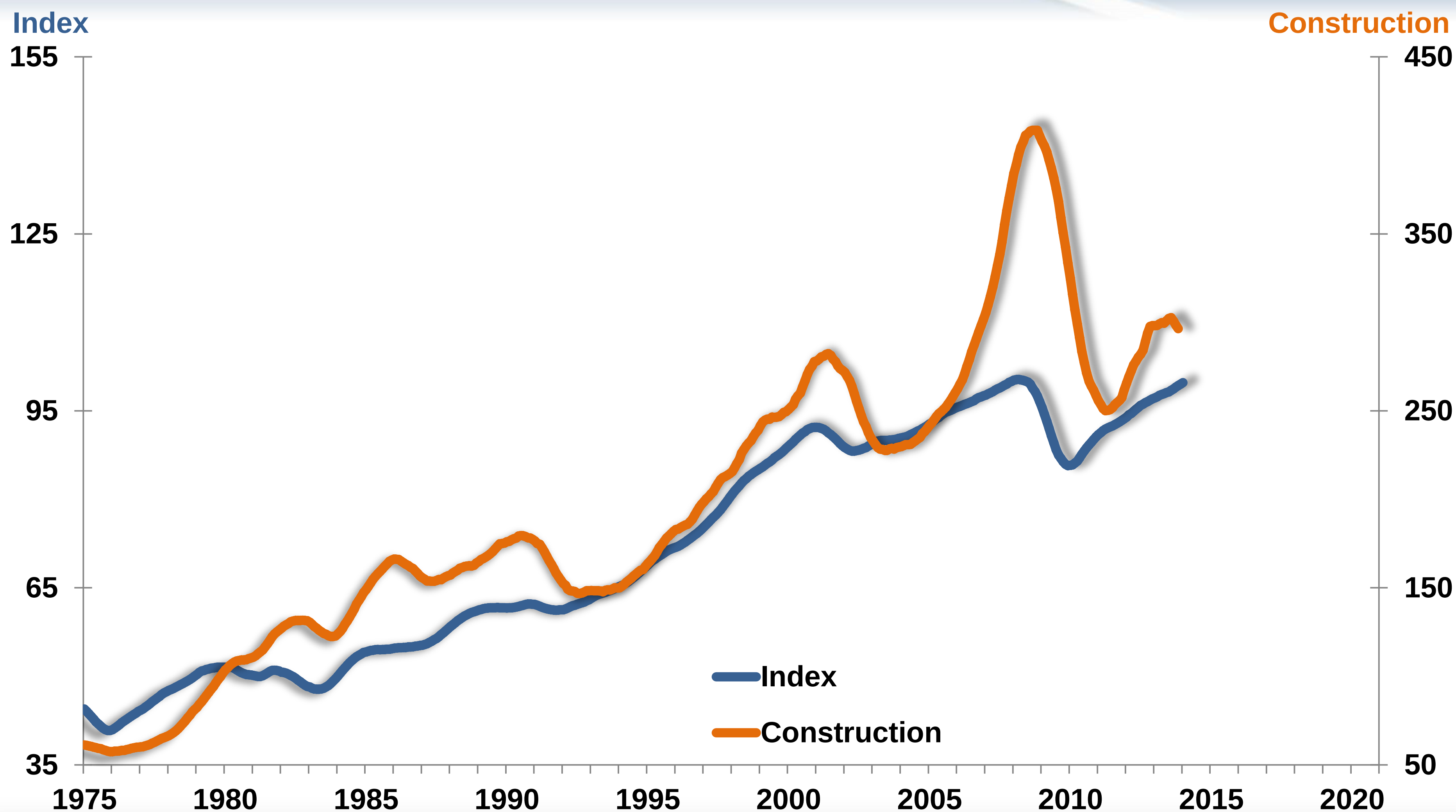
Thousands of Units N.S.A.

Home Improvement Construction Spending



Billions of $

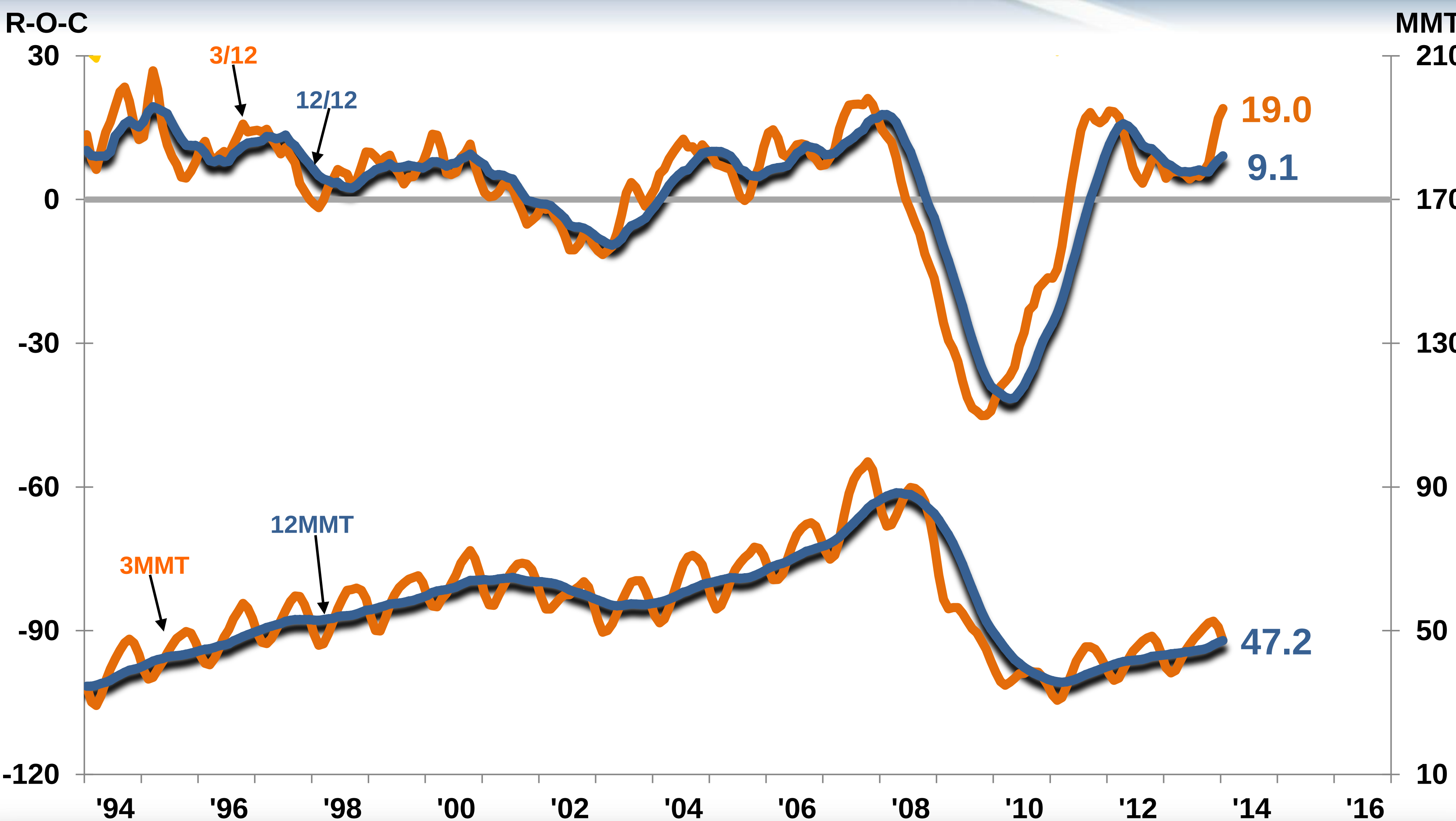
US Industrial Production to Non-Residential Construction



Construction Segments Annual Trend

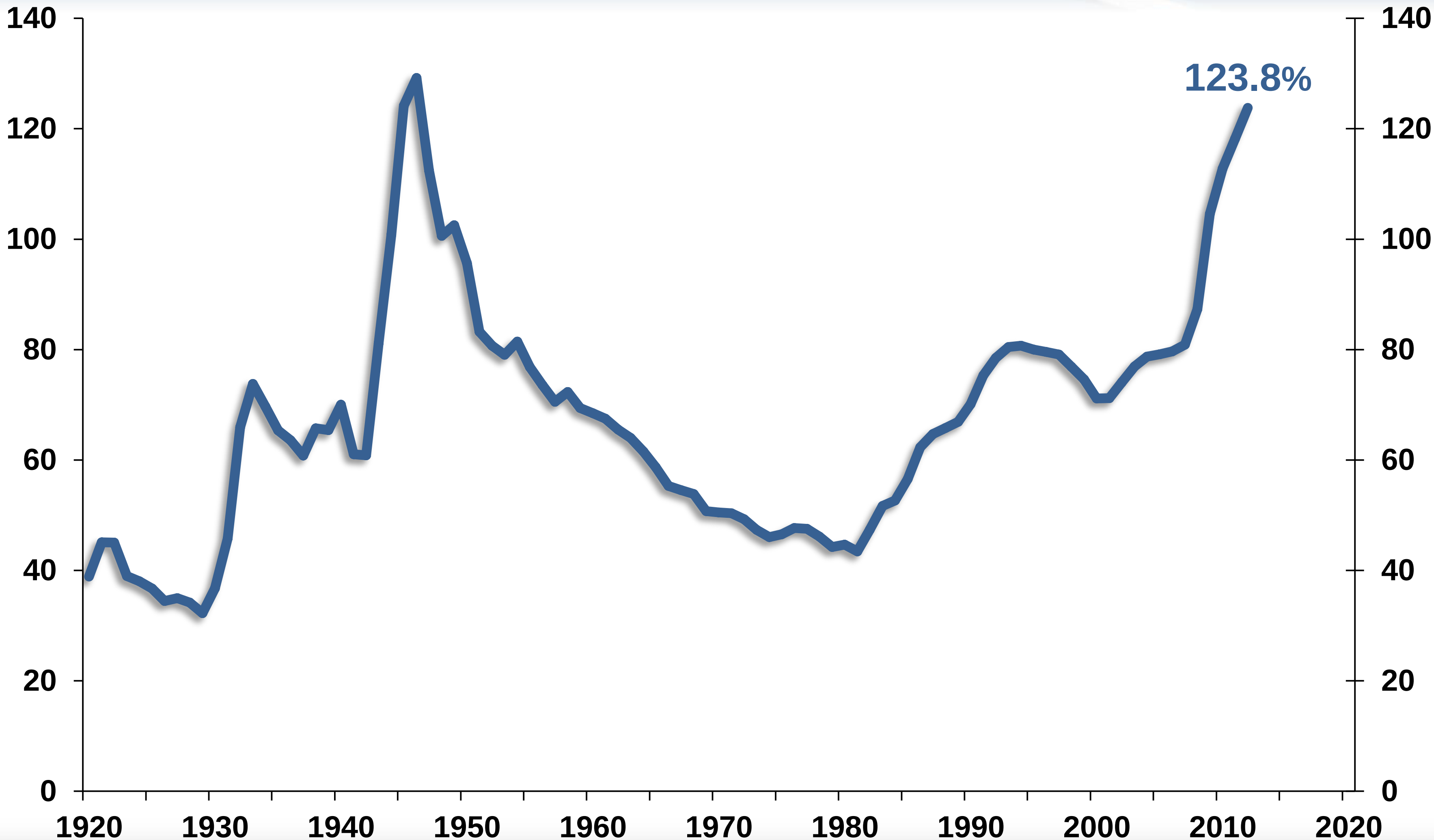
Sector	Phase	Year-over-year	Annual Data Trend In $$
Total Public Construction	A	-2.2	Rising
Total New Construction	B	5.2	Rising
Total Health Care Facilities	D	-3.3	Declining
Private Medical Building Construction	C	5.9	Declining
Primary & Secondary Bldg Construction	C	5.2	Rising
Private Education Building	B	0.7	Rising
Total Office Building	B	1.2	Rising
Private Office Bldg Construction	B	10.1	Rising
Private Lodging	B	30.5	Rising
Total Commercial Building	B	6.9	Rising
Multi-Family Residential	C	41.7	Rising
Airport Passenger Terminals	B	12.5	Rising

Commercial Buildings Construction



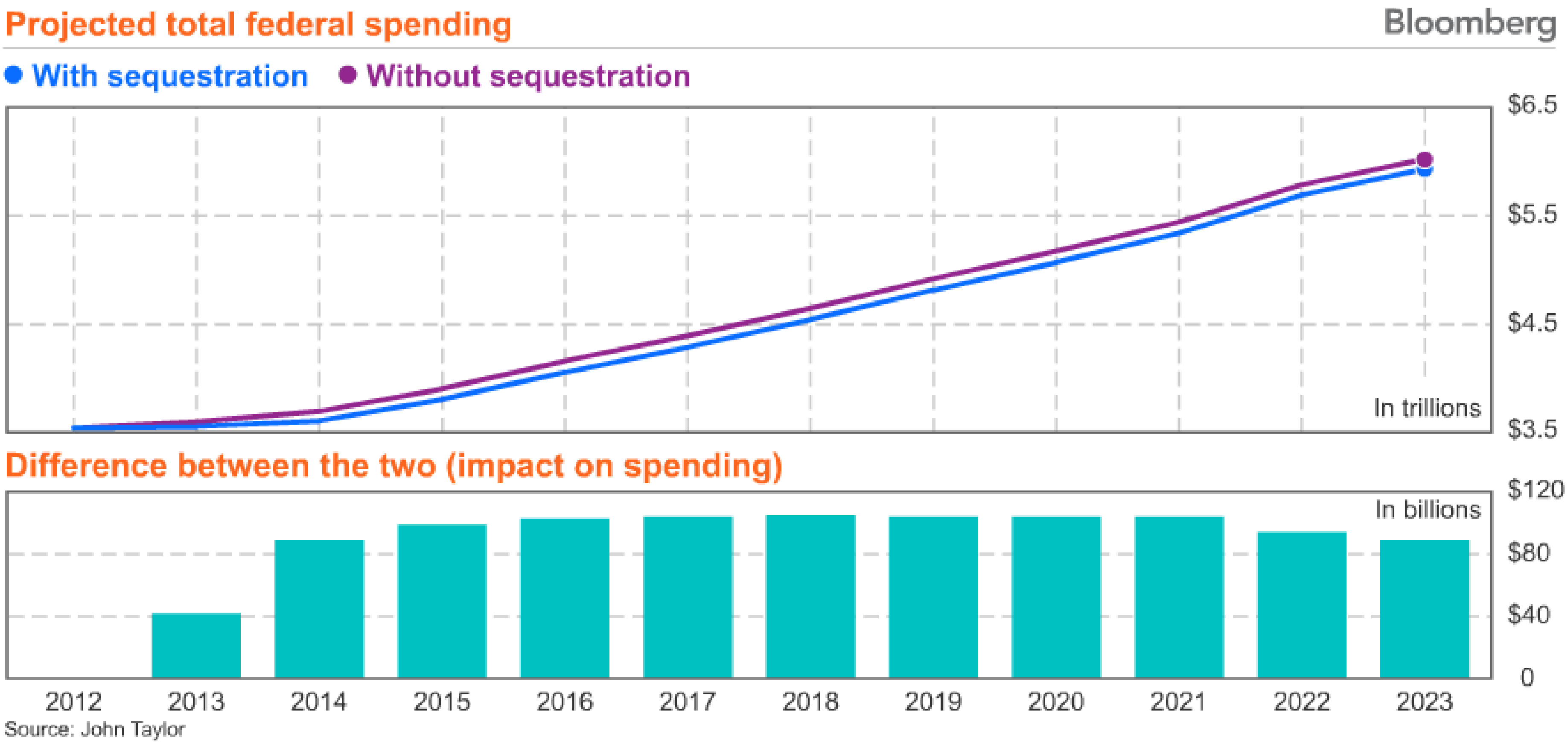
Billions of $

Total U.S. Public Debt



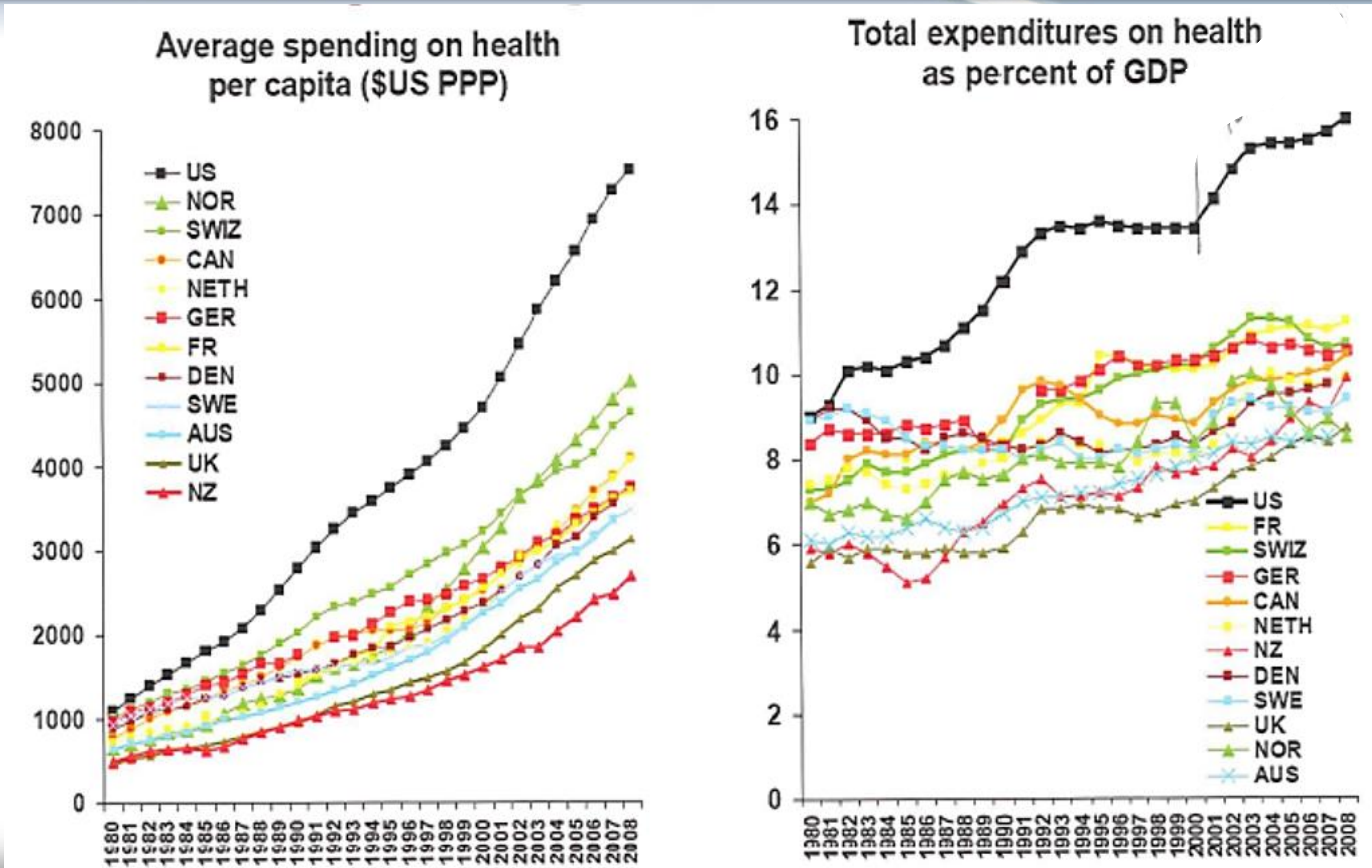
(% of GDP)

Sequestration



Source: John Taylor, Bloomberg

Health Care Spending



(% of GDP)

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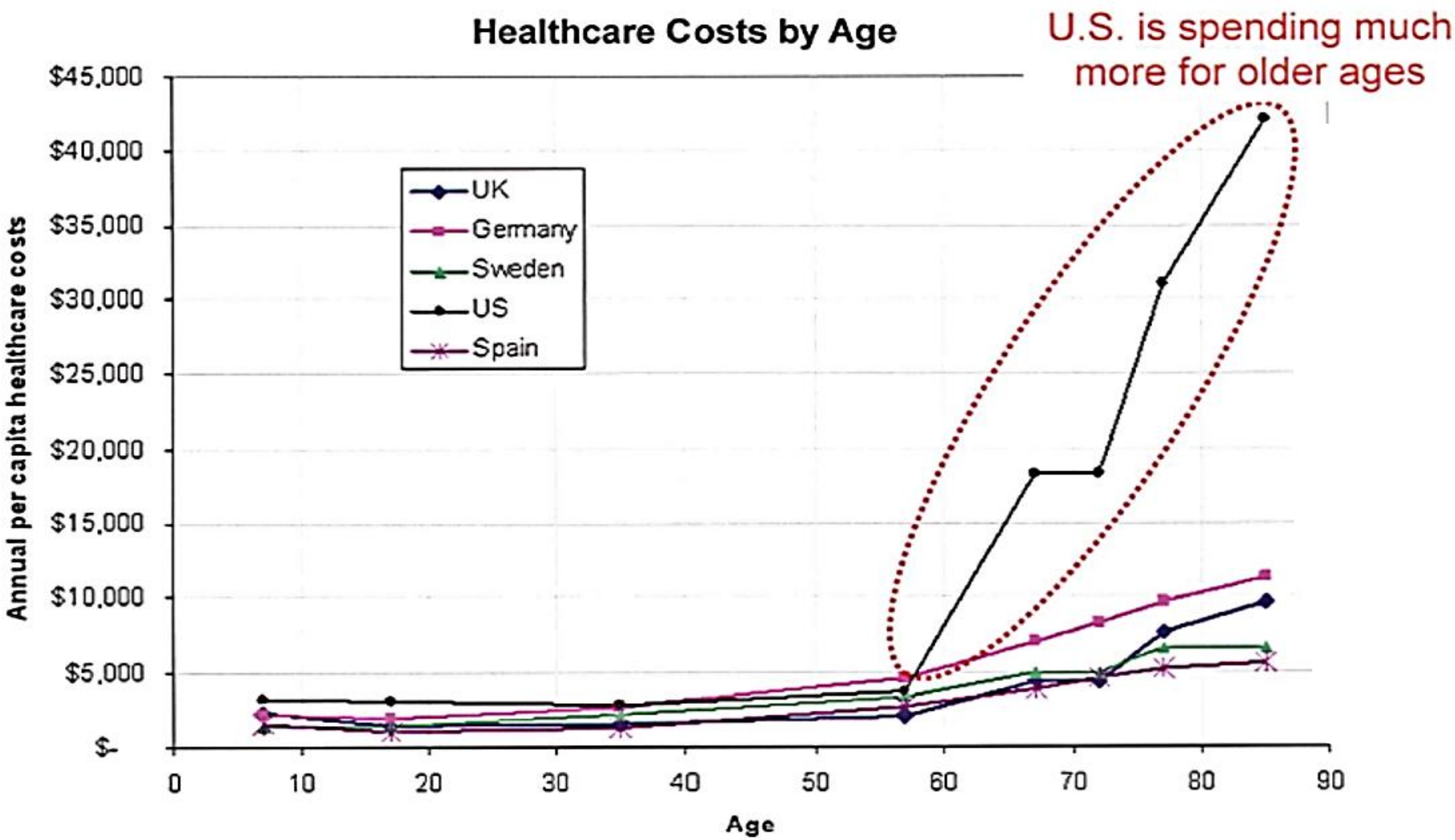
Source: OECD Health Data 2010 (Oct. 2010)

Costs by Age Categories



added

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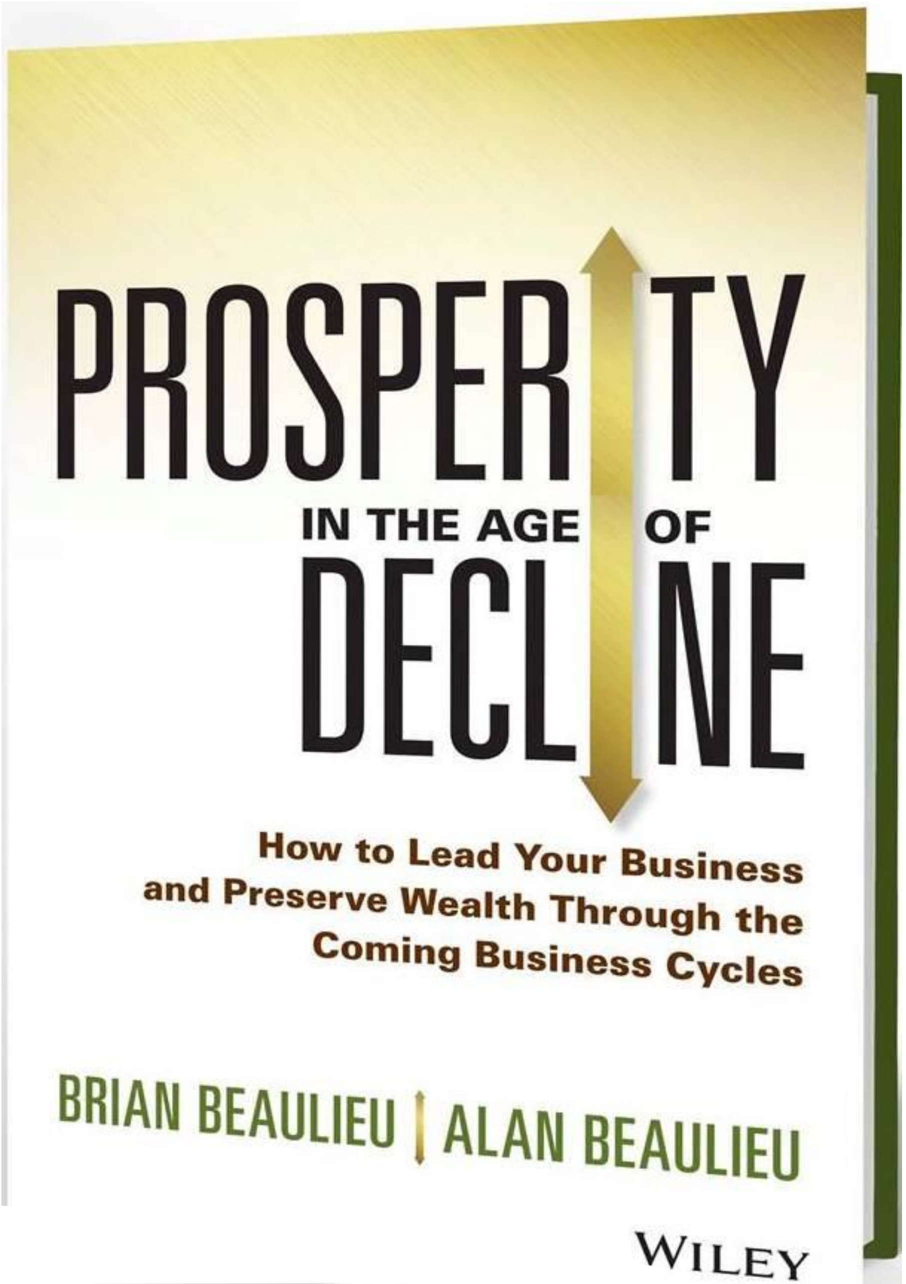
Source: Fischbeck, Paul. "US-Europe Comparisons of Health Risk for Specific Gender-Age Groups." Carnegie Mellon University; September, 2009.



Coming Soon

July 2014

Published by Wiley Press

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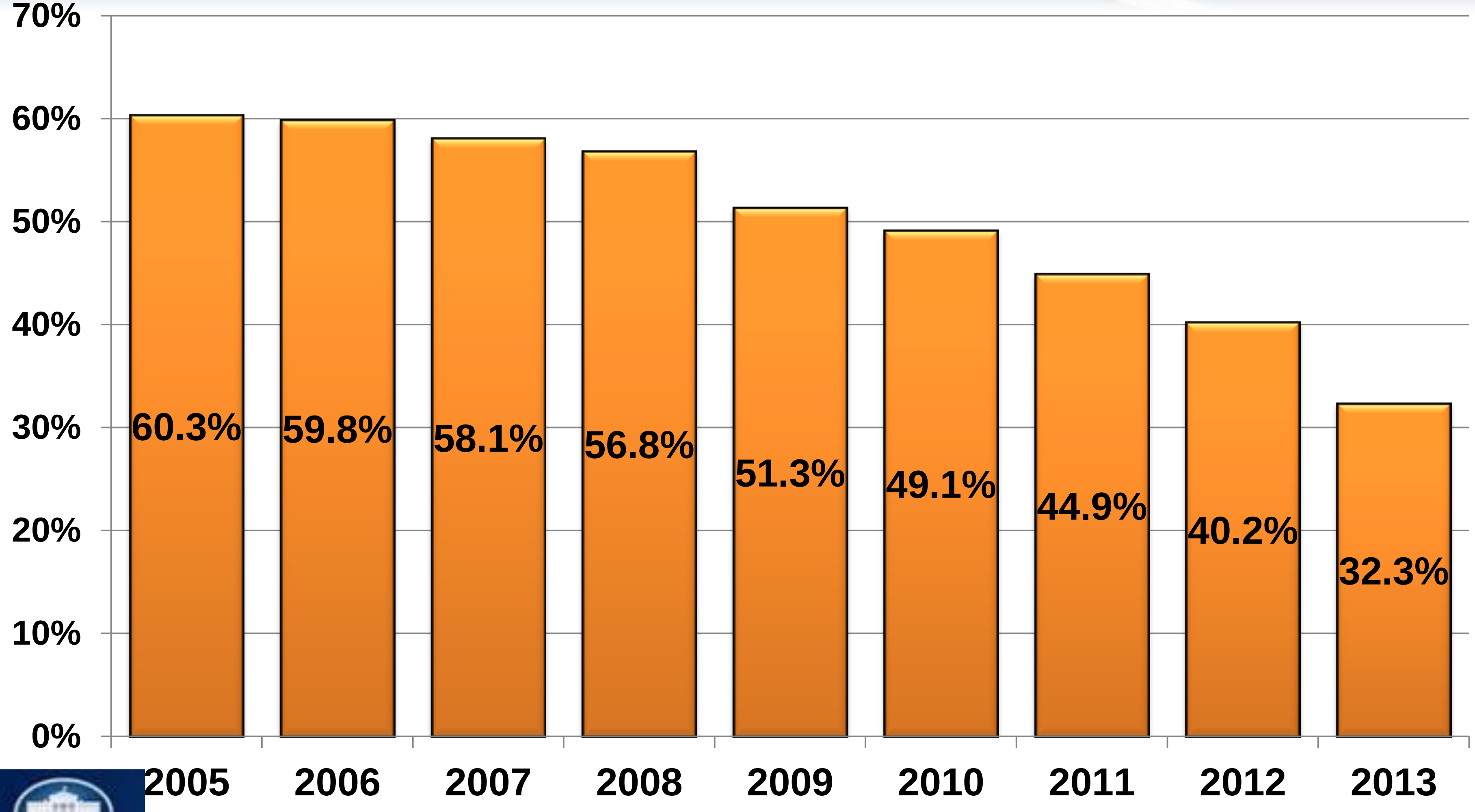
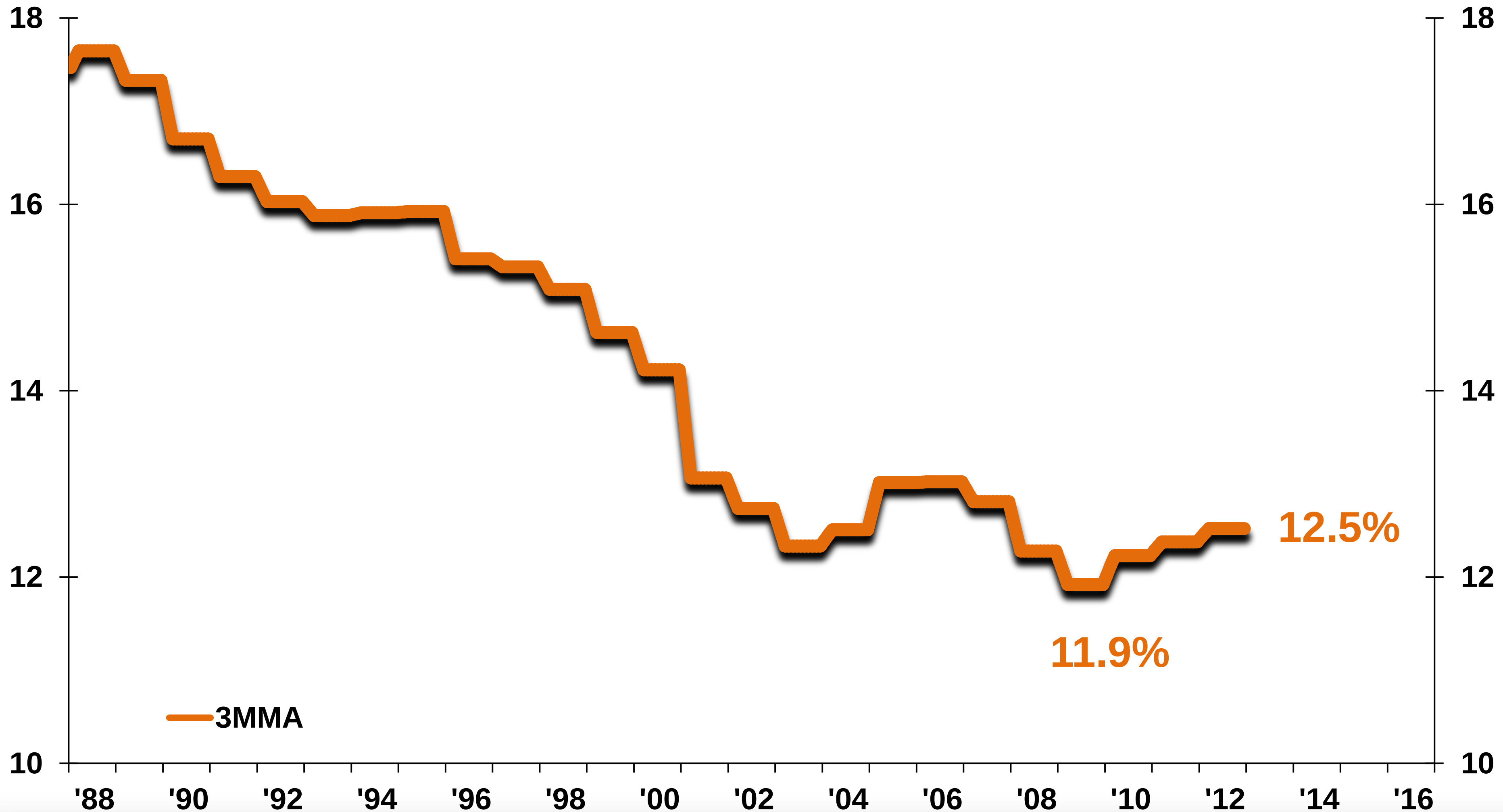
U.S. Dependence on Foreign Oil Declining
Net imports as a share of domestic consumption



Source: Energy Information Administration

US Manufacturing as a % of GDP (Value Added)

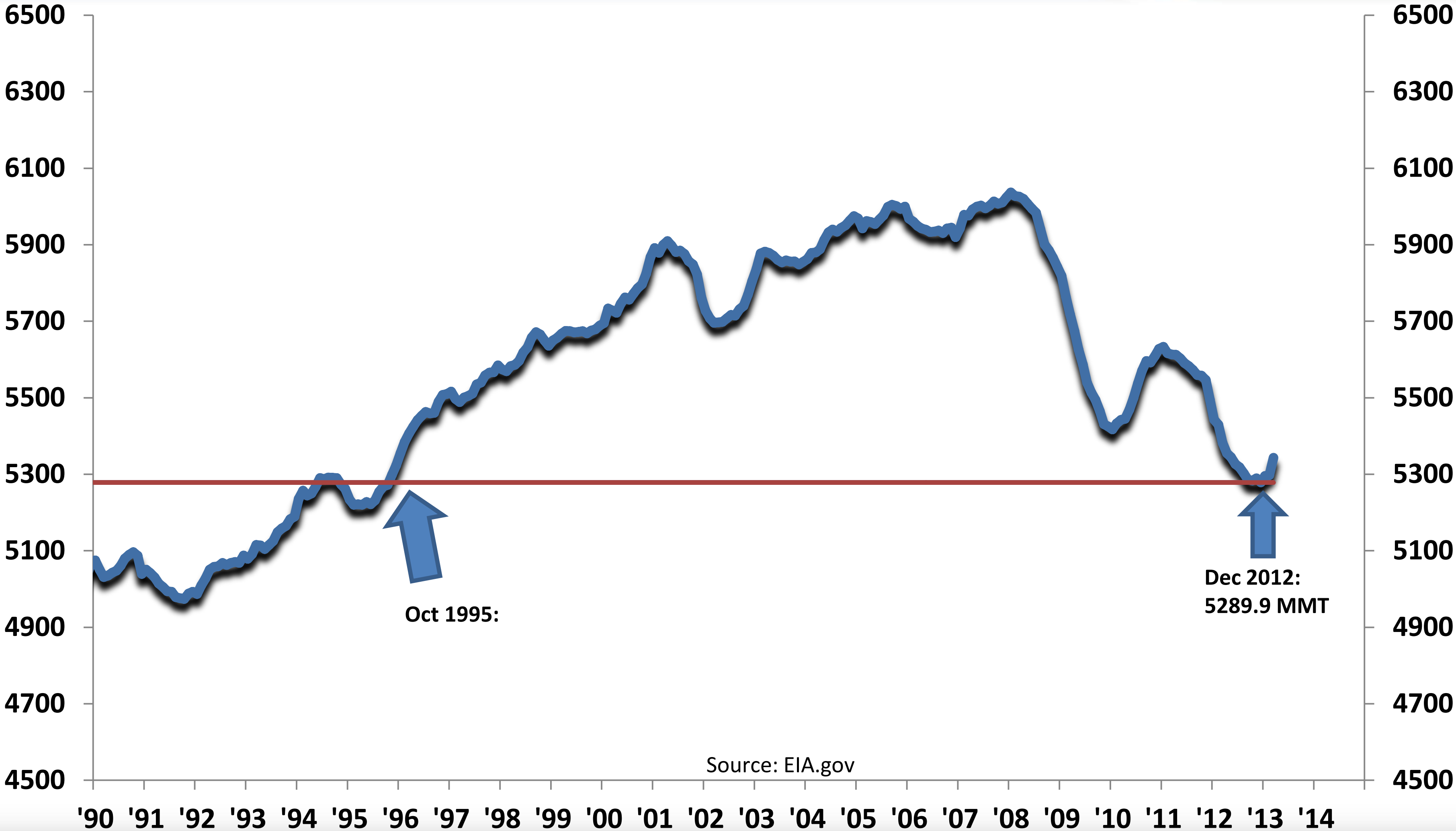


3MMA

The Tip of the Iceberg for Manufacturing Finding a Home in the USA

Apple	**Rolls Royce**
Yamaha	**Honda**
Michelin	**Lenovo**
Wham-O	**Airbus**
Bayer Chemical	**Toshiba**
Caterpillar	**Toyota**
GE	**Flextronics**
NCR	**Siemens**

US Carbon Dioxide Emissions



Million Metric Tons

ITR™

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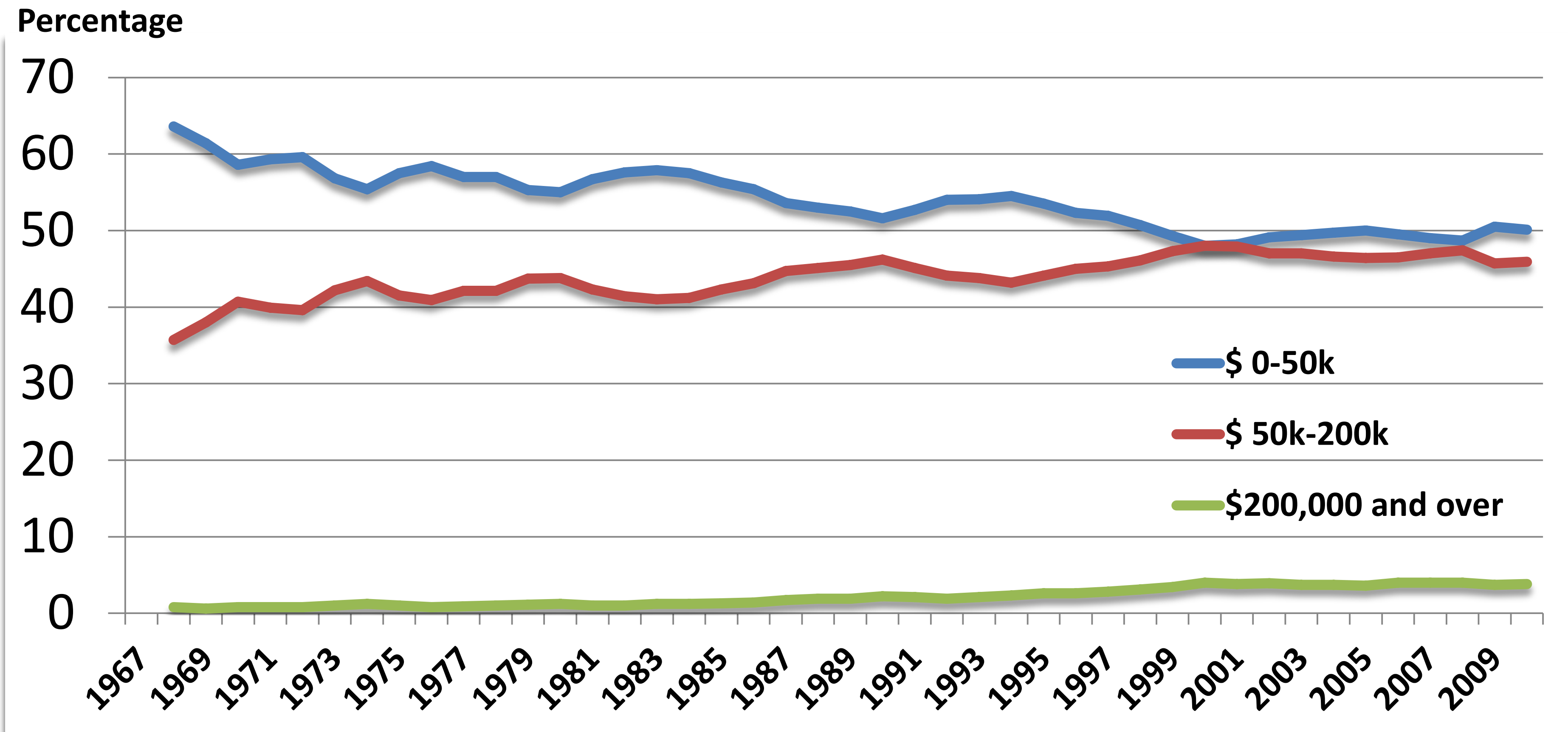
Growing Income Disparity ?



Income by Household	% in 1967	% in 2009
Less than $50,000	61.4%	50.1%
$50,000 to $200,000	39.0%	45.9%
Over $200,000	0.6%	3.8%

Source: Census Bureau

Phase Management Objectives™

Preparing for 2014-2017

1. Positive leadership modeling (culture turns to behavior)
2. Invest in customer market research (know what they value)
3. Training programs (people, process, internal metrics)
4. Review and uncover competitive advantages
5. Spend $ on new products, marketing, advertising
6. Improve efficiencies with investment in technology and software
7. Check systems for readiness to accommodate increased activity
8. Add Sales Staff and Hire Top People
9. Lock in costs
10. Judiciously examine credit
11. Work on "what's next"

Opportunities:

- Energy Distribution
- Water Distribution/Conservation
- Exports from U.S.
- Vocational Education
- Health Care
- Food
- Mexico
- Housing
- Printed Electronics
- Alcohol
- Security
- 3-D Printing
- Natural Resources (Harvesting/Conserving)
- Entertainment

8 Must Watch Items

- ITR Leading Indicator
- Housing Starts
- Bond Market
- US Leading Indicator
- Purchasing Managers Index
- Retail Sales
- Employment
- Nondefense Capital Goods New Orders

Available from ITR via *ITR Trends Report,*
the *ITR Advisor*, or on the web

Complimentary Copy of the ITR Advisor

- **Concise 4 Page Monthly Report**
- **Excellent Economic "Snap Shot"**
- **Consists of Current Events, Brief Industry Segments, Snap Shot Indicators, Readers' Questions, Fed Notes, ITR Opportunity Index, and more**
- **Delivered Monthly**
- **nbeaulieu@itreconomics.com**

Email:
nbeaulieu@ITReconomics.com
Subject: "Brian is Cool"
With your contact information

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THE ITR ADVISOR

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FOR SALE

Make Your Move

There is no change to our outlook for 2012 and 2013. The next 18 months will provide an opportunity for entrepreneurial-minded leaders to mitigate the 2014 recession.

Inside this issue:

Current Events	2
Opportunity Index	3
Industry Segments	3
Snap Shot Indicators	4
Reader's Question	4
Fed Notes	4

Housing Signals

It is no secret that housing starts are still only a third of what they were pre-recession. But when viewed as a leading indicator, the housing market is pointing up, providing a positive sign for business in 2012.

Those familiar with ITR know that we are all about taking the guesswork out of planning by focusing on the tried and true economic signals in front of us. The housing market is one of those reliable indicators. Through the early days of the recession, the housing market was one of the most overtly negative indicators, suggesting the downturn in the overall economy would be neither brief nor mild. On the backside of the recession, housing remained weak, only temporarily boosted by the 2009 to 2010 *homebuyer's tax credit*. Accordingly we told our clients that the recovery in the US economy would not be strong by historical standards and that garnering new business would require an aggressive and proactive approach.

The economic tides have shifted once again. Over the past three months, foreclosure filings have fallen 8.6% and new starts are up 23.8% over last year, making for some of the most positive numbers we have seen out of the housing market in years. With a 5 to 8 month lead time to most other industries, housing starts are pointing to a stronger economy ahead.

Why are we seeing an improvement in housing? The reason is a robust demand for new apartments. As bad as the single-family market has been, the multi-family market is seeing stronger demand, scarce supply, and a 54.1% annual increase in new construction to fill the gap. Typically, a large number of the new households are young adults, moving away from home or college as they attain jobs. The US employment trend has been improving, and as a result, apartment demand is higher. Rents have been stable or rising in most metro areas, and apartment vacancy rates are falling.

2011 Housing Starts

It is time to adapt our mindsets. The housing market will not return to full steam on apartment construction alone since multi-family typically accounts for less than one-third of the residential market. However, with the majority of the US economy already in a recovery and the housing market no longer being the dead-weight anchor dragging along, you can plan with confidence for an improving economic environment in 2012.

1