

# Warren County Office of Economic Development



## Prosperity in the Age of Decline

ITR Economics

[itreconomics.com](http://itreconomics.com)

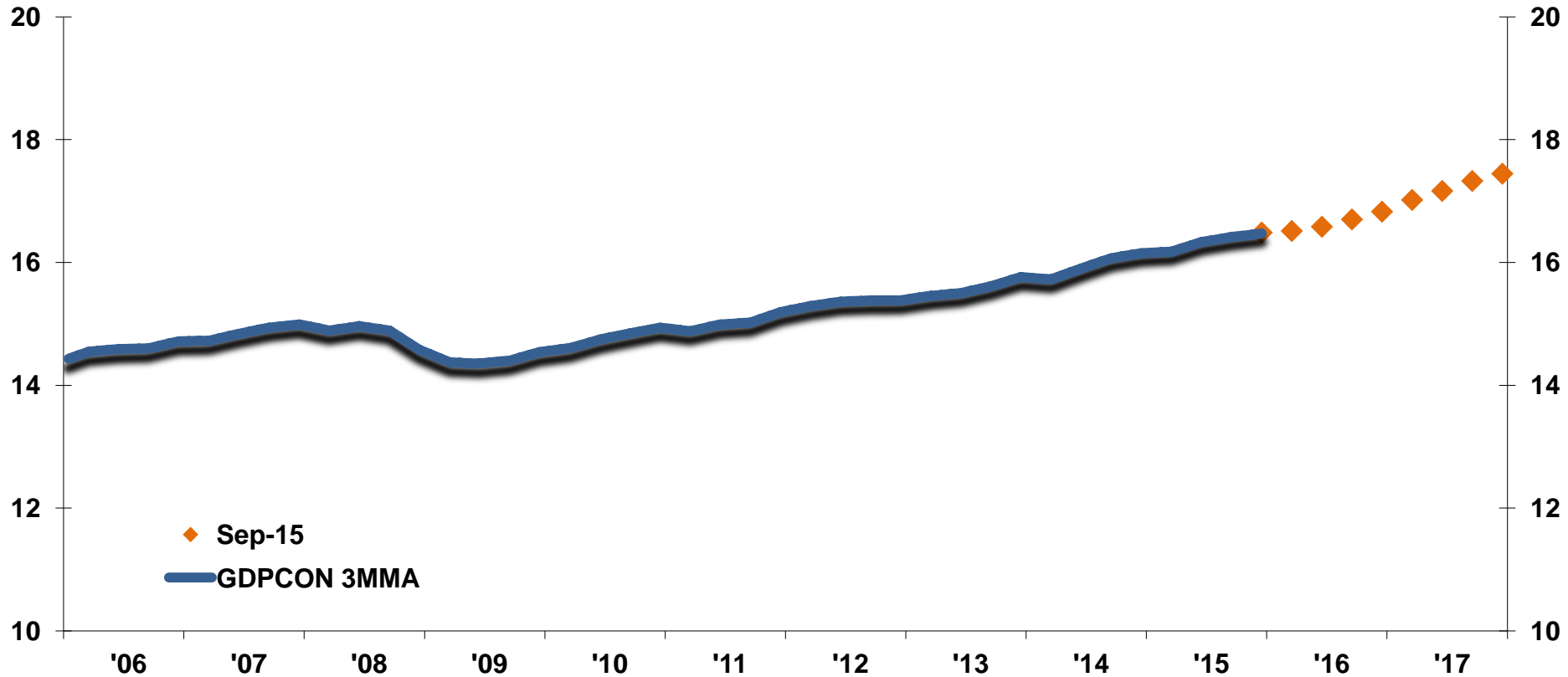
Brian L Beaulieu

# 2015 Forecast Results

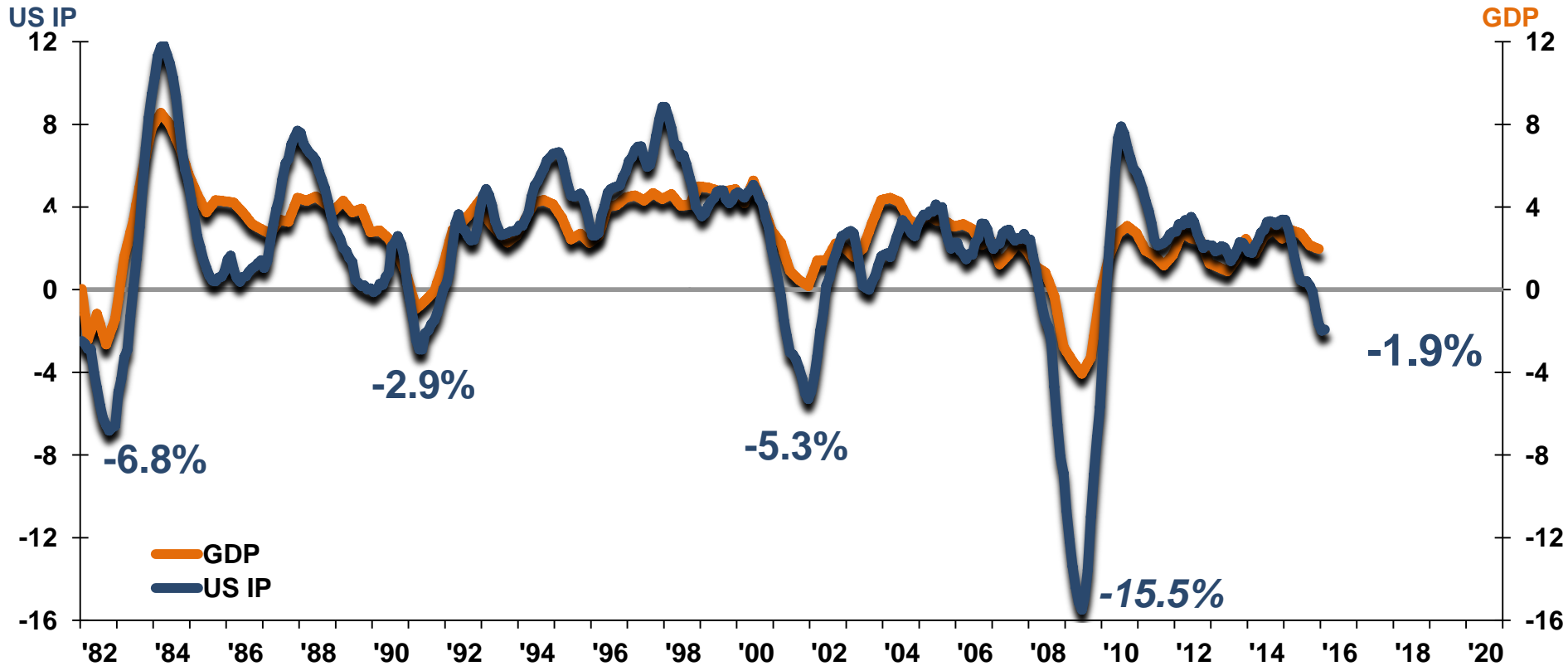
	Duration	2015 Forecast	Result	Accuracy
US GDP	18	\$16.632 Trillion	\$16.442 Trillion	98.9%
US Ind. Prod.	17	108.3 (12MMA)	107.1	98.9%
Eur Ind. Prod.	15	100.4 (12MMA)	103.3	97.1%
Canada Ind Prod	17	361.2 (12MMA)	C\$351.2	97.2%
China Ind Prod	22	607.0 (12MMA)	598.3	98.6%
US Housing	17	1.090 Mils. Units	1.111 Mils. Units	98.1%
US Retail Sales	13	\$2.248 Trils deflated	\$2.244 Trils deflated	99.8%
US Employment	21	147.7 Million	148.8 Million	99.3%

*ITR Economics provides the best economic intelligence to reduce risk and drive practical and profitable business decisions.*

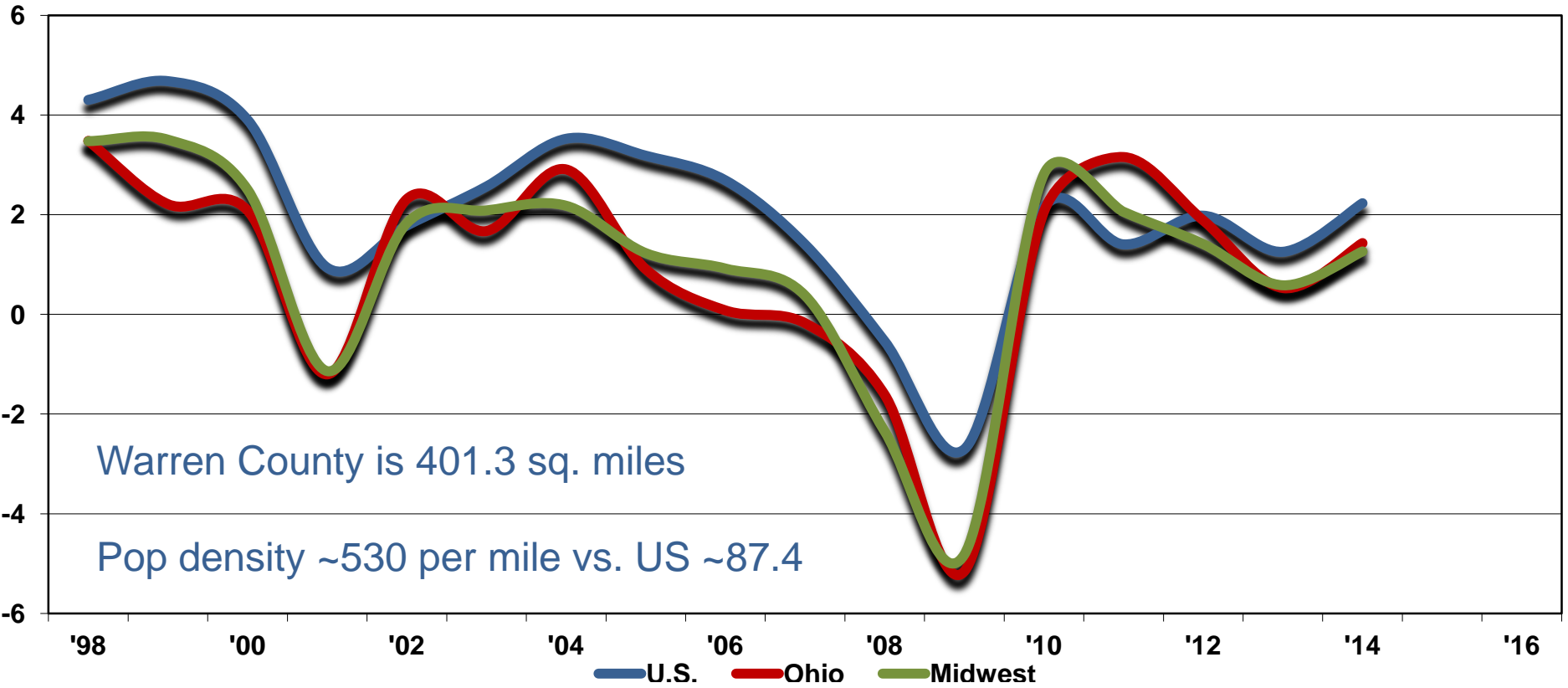
# Real Gross Domestic Product



# US Industrial Production to Gross Domestic Product



# US, Ohio & the Midwest Annual GSP Growth Rate



Warren County is 401.3 sq. miles

Pop density ~530 per mile vs. US ~87.4

# Ohio to Warren County per Capita Income

## Warren County rising faster than OH

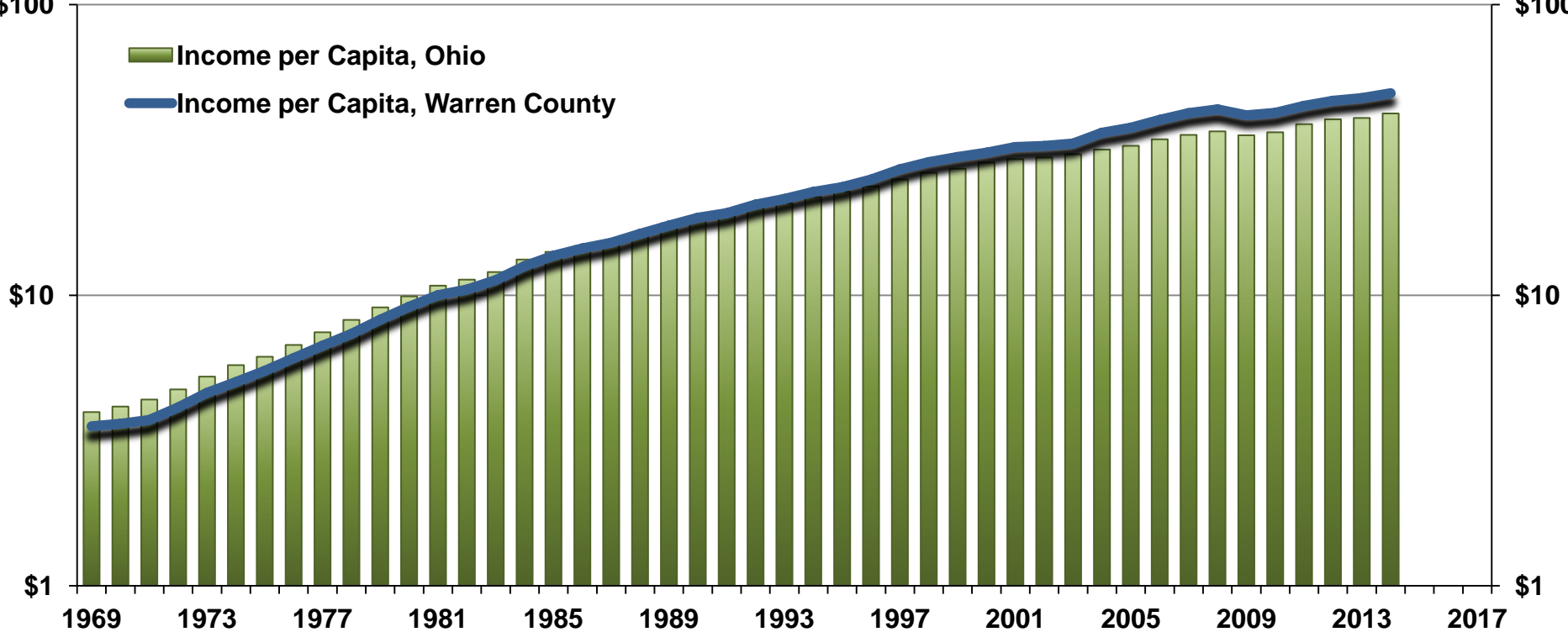
Warren County

Ohio

\$100

\$100

- Income per Capita, Ohio
- Income per Capita, Warren County



# US to Ohio to Warren County Household Income

(median, nominal dollars)

<b>Warren County</b>	<b>\$73,177</b>	<b>+36.8% vs. US</b>
<b>Ohio</b>	<b>\$48,849</b>	
<b>USA</b>	<b>\$53,482</b>	

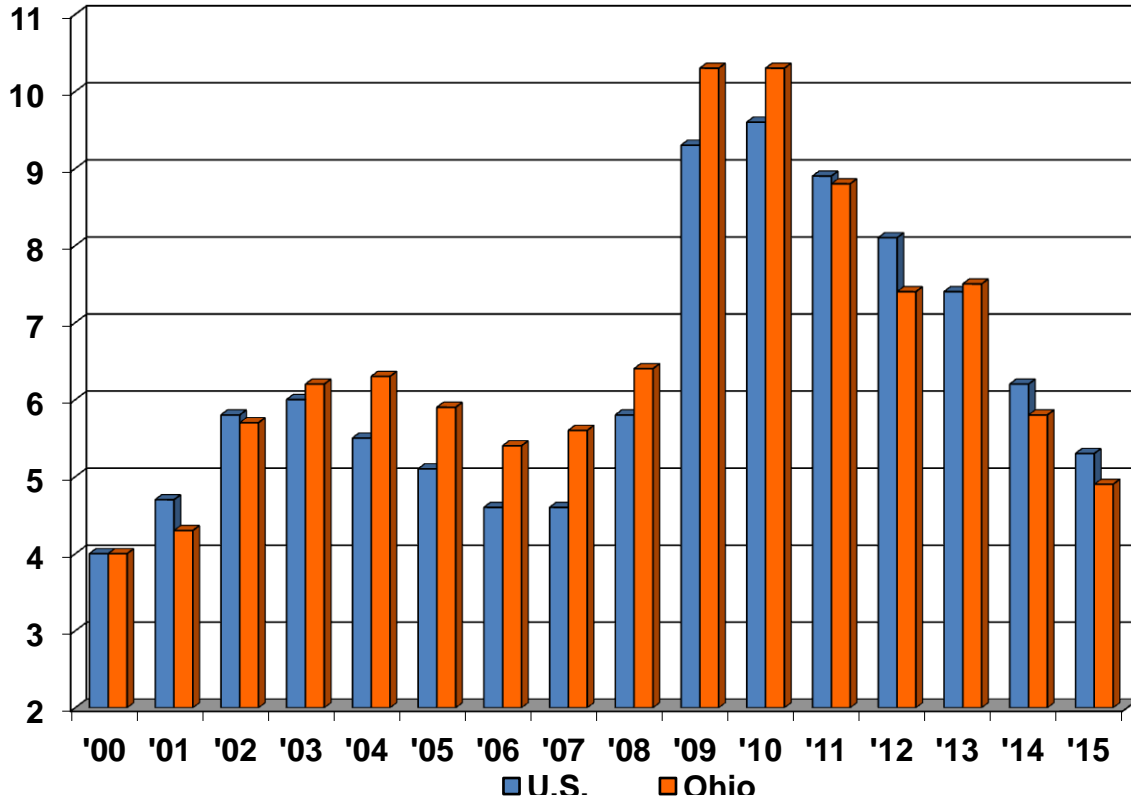
# US to Ohio to Warren County Education Levels

## Percent of Population over 25

	<u>High School</u>	<u>College Grad</u>
<b>Warren County</b>	<b>92.4%</b>	<b>38.7%</b>
<b>Ohio</b>	<b>88.8%</b>	<b>26.5%</b>
<b>USA</b>	<b>86.3%</b>	<b>29.3%</b>



# US to Ohio and Warren County Unemployment Rates



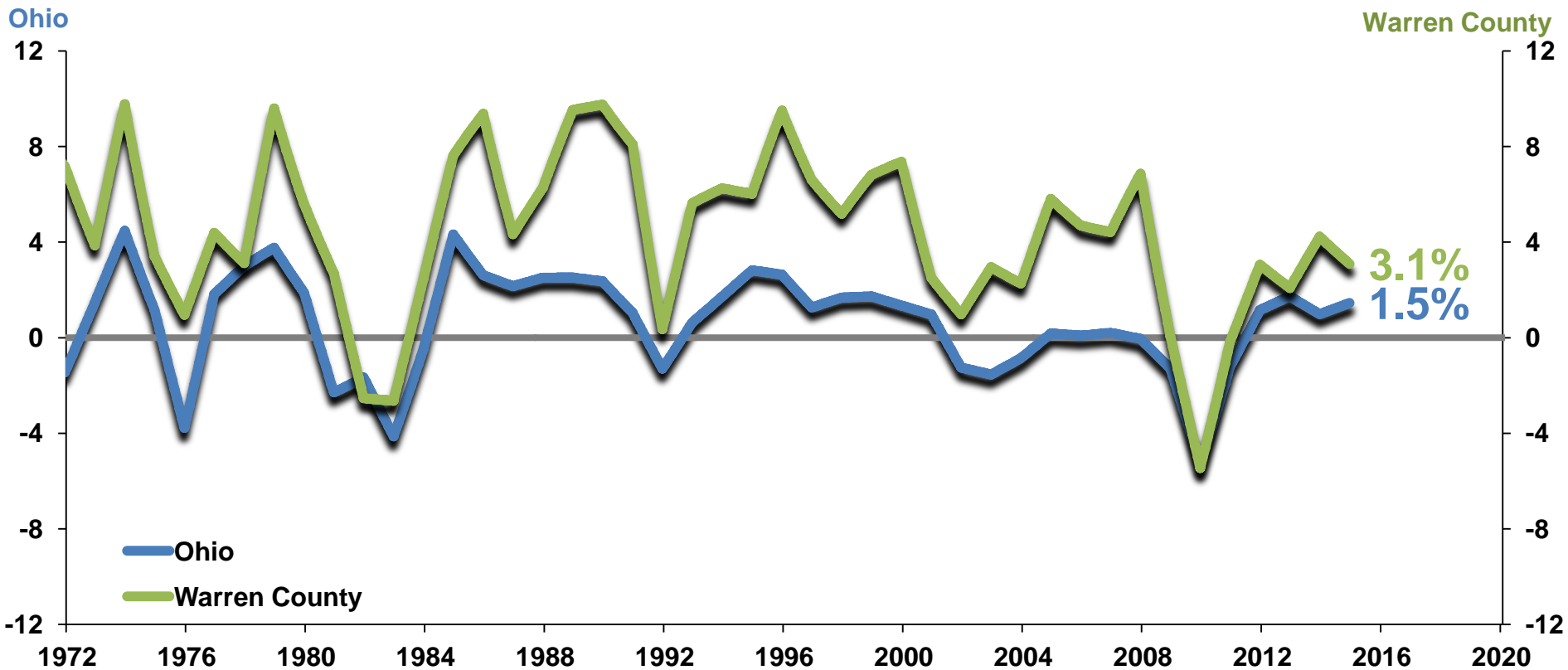
**Warren County**  
**5.1%**

**February 2016**

**OH 4.9%**

**US 4.9%**

# Ohio to Warren County Wage & Salary Jobs (number of jobs)



3.1%  
1.5%

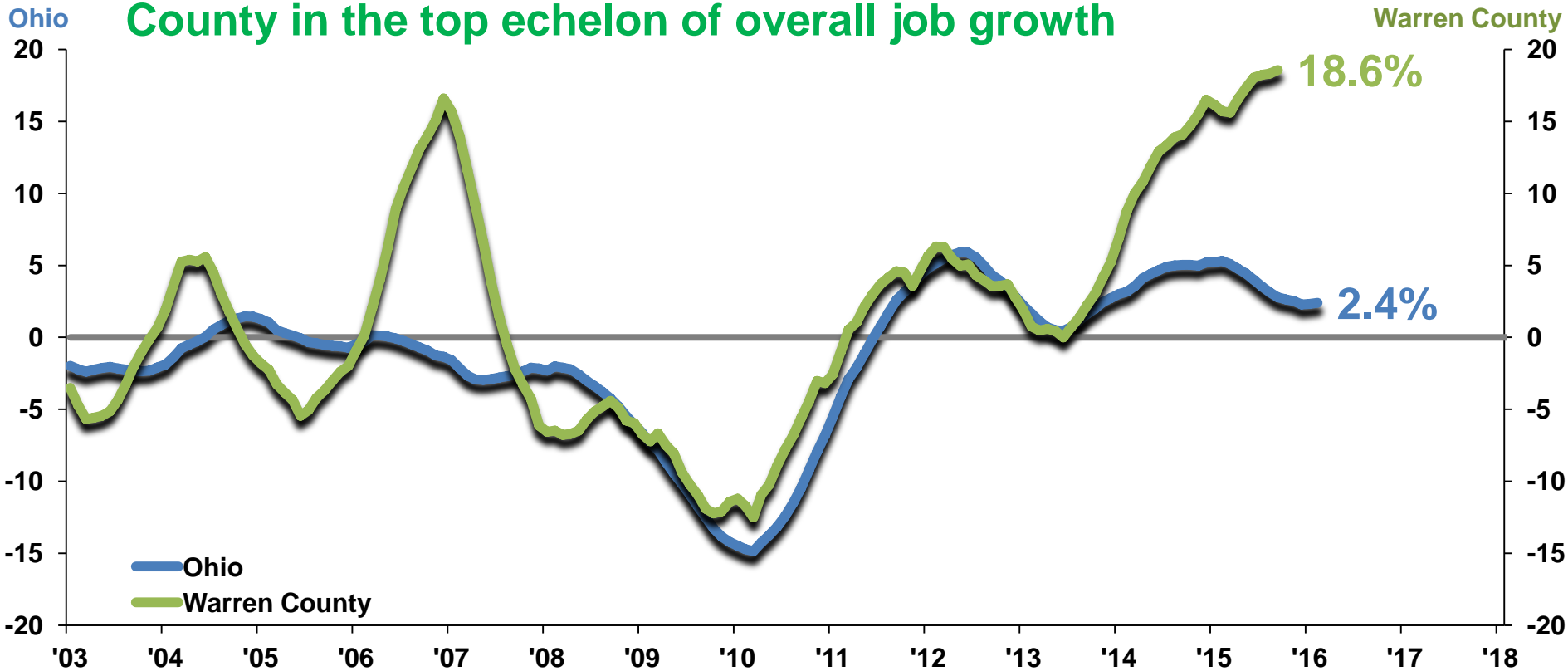
# Ohio to Warren County Construction Employment

County in the top echelon of overall job growth

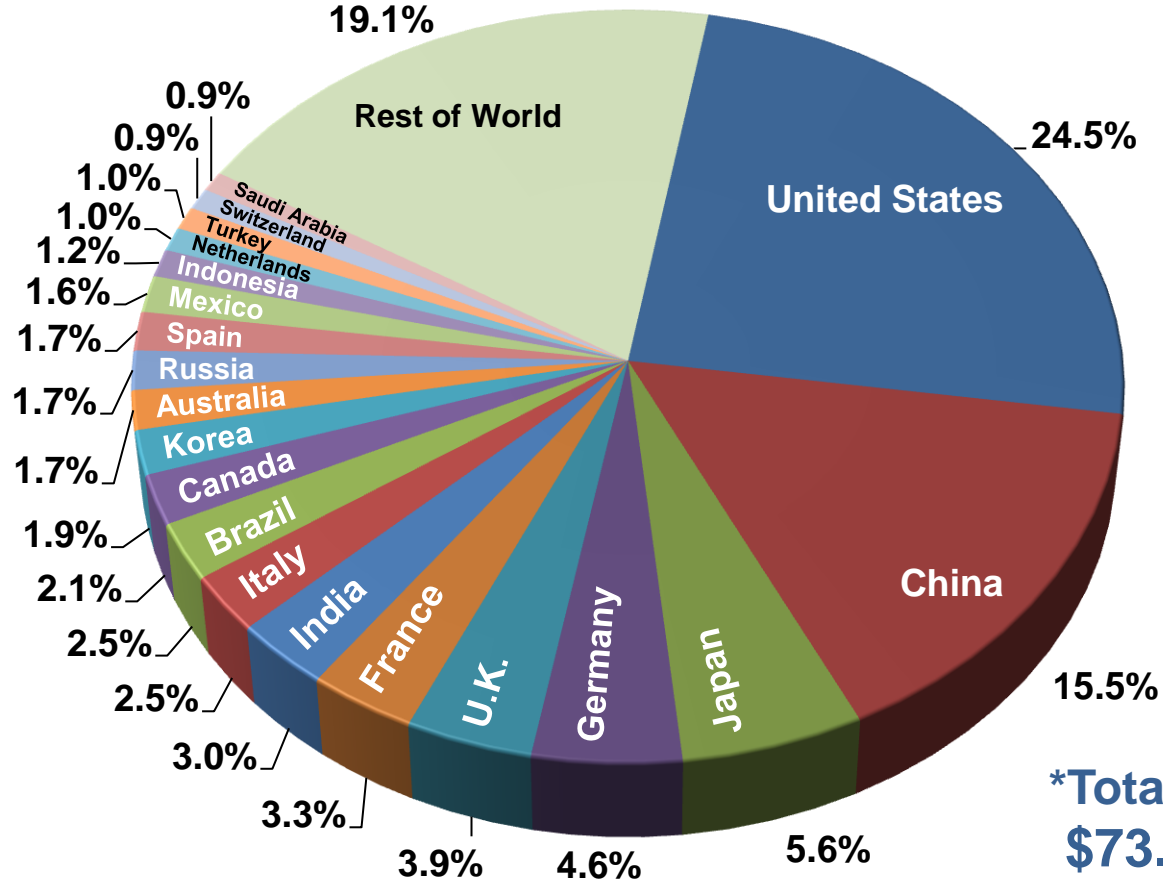
Warren County

18.6%

2.4%



# Percent of 2015 World GDP by Country



**\*Total 2015 World GDP:  
\$73.447 Trillion, US\$**

# US to Ohio to Warren County Population Trends

## Overall Population Growth (2010-14/15)

<b>Warren County</b>	<b>5.4%</b>	<b>This is great</b>
<b>Ohio</b>	<b>0.7%</b>	
<b>USA</b>	<b>4.1%</b>	

# US to Ohio to Warren County Population Trends

But we are getting older....

	< 5 yrs old	> 65
<b>Warren County</b>	<b>5.9%</b> (6.7%)	<b>13.0%</b> (10.8%)
<b>Ohio</b>	<b>6.0%</b>	<b>15.5%</b>
<b>USA</b>	<b>6.2%</b>	<b>14.5%</b>

# Data Preparation

	<u>Raw</u>	<u>3MMT</u>	<u>3/12</u>	<u>12MMT</u>	<u>12/12</u>
May-14	1.4				
Jun-14	1.5				
Jul-14	1.5	4.4			
Aug-14	1.4	4.4			
Sep-14	1.5	4.4			
Oct-14	1.3	4.2			
Nov-14	1.3	4.1			
Dec-14	1.6	4.2			
Jan-15	1.6	4.5			
Feb-15	1.5	4.7			
Mar-15	1.7	4.8			
Apr-15	1.6	4.8		18.0	
May-15	1.7	5.0		18.2	
Jun-15	1.7	5.0		18.4	
Jul-15	1.7	5.1	15.9%	18.6	
Aug-15	1.6	5.0	13.6%	18.8	
Sep-15	1.7	5.0	13.6%	19.0	26.7%
Oct-15	1.5	4.8	14.3%	19.2	25.5%
Nov-15	1.5	4.7	14.6%	19.4	25.2%
Dec-15	1.9	4.9	16.7%	19.7	22.4%
Jan-16	1.7	5.1	13.3%	19.8	20.0%
Feb-16	1.7	5.3	12.8%	20.0	18.3%
Mar-16	1.9	5.3	10.4%	20.2	15.4%
Apr-16	1.7	5.3	10.4%	20.3	12.7%

## 3/12 Rate-of-Change

$$= \frac{\text{April 2016 3MMT}}{\text{April 2015 3MMT}} \times 100 - 100$$

$$= \frac{5.3}{4.8} \times 100 - 100 = 10.4\%$$

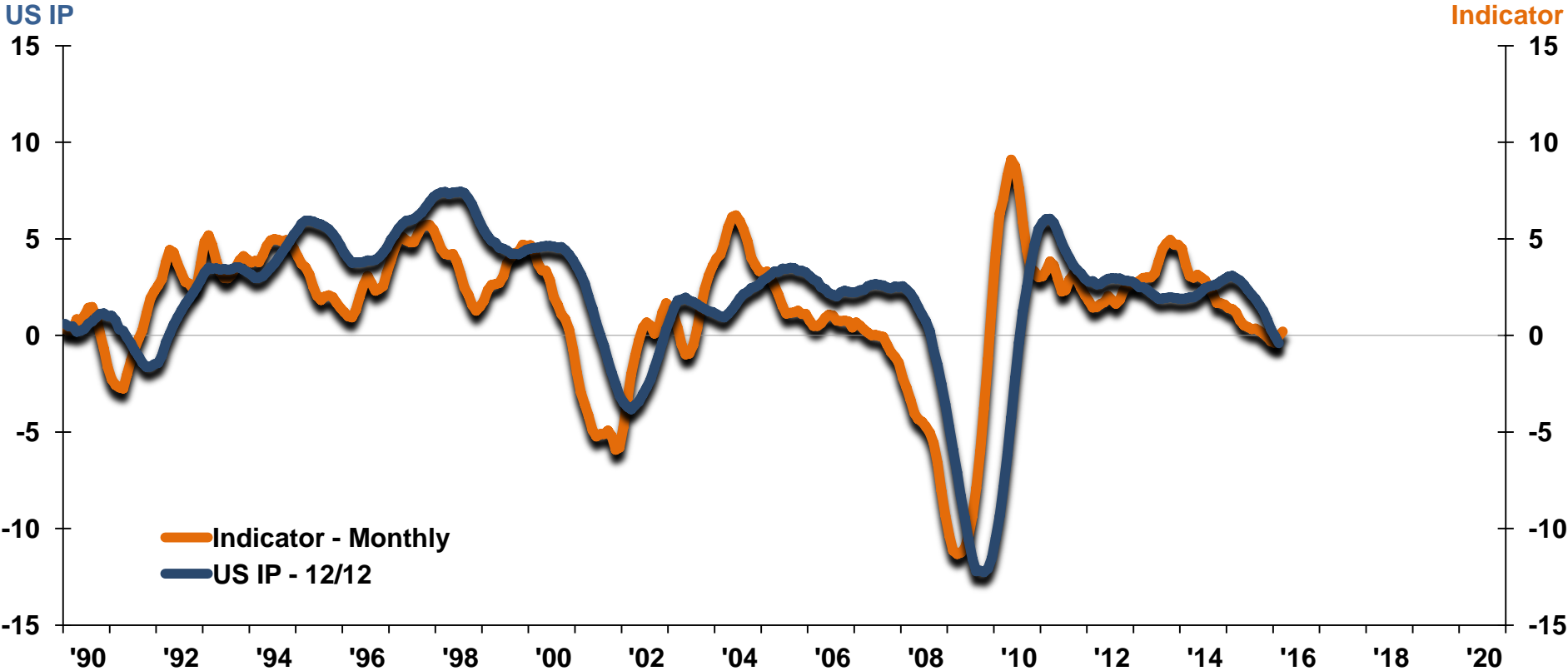
## 12/12 Rate-of-Change

$$= \frac{\text{April 2016 12MMT}}{\text{April 2015 12MMT}} \times 100 - 100$$

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

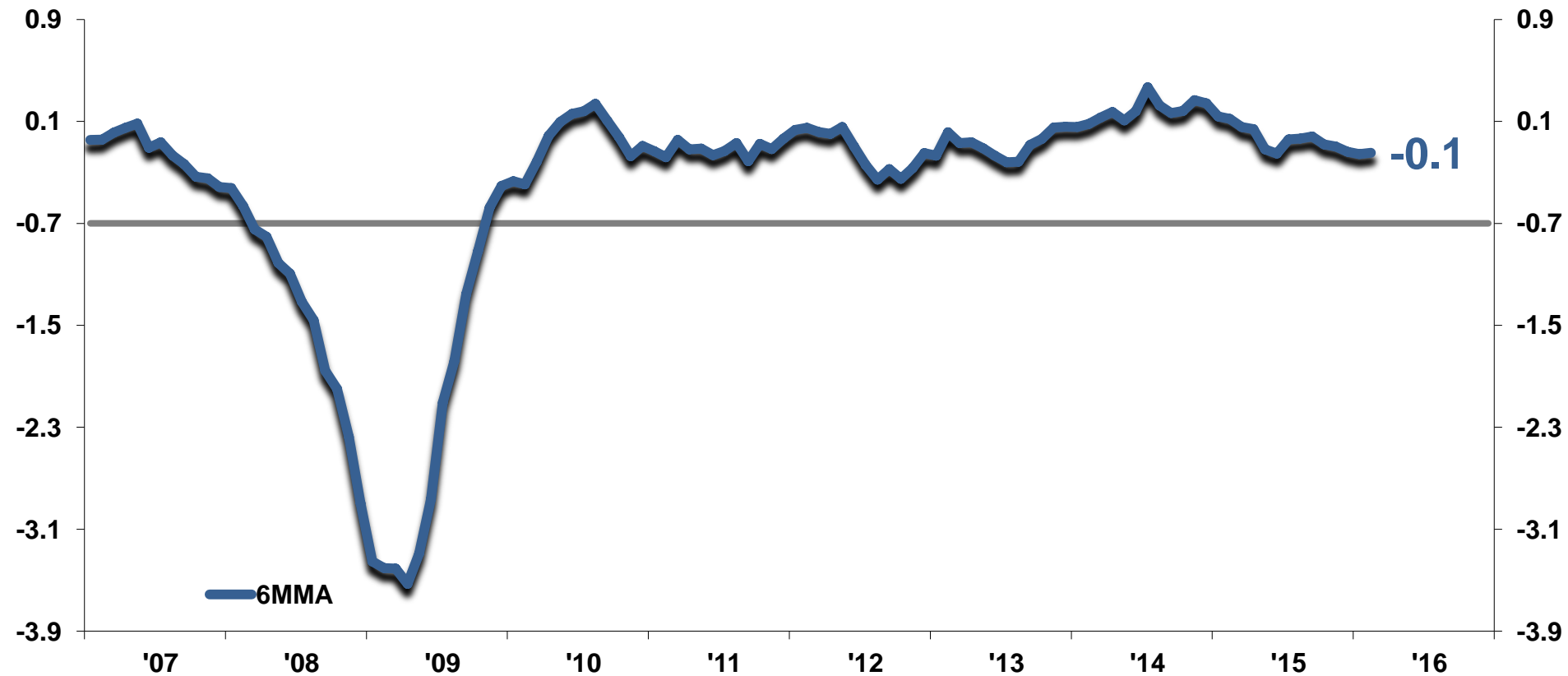
# US Industrial Production to ITR Leading Indicator™

Reported in *ITR Trends Report – ITR Advisor*

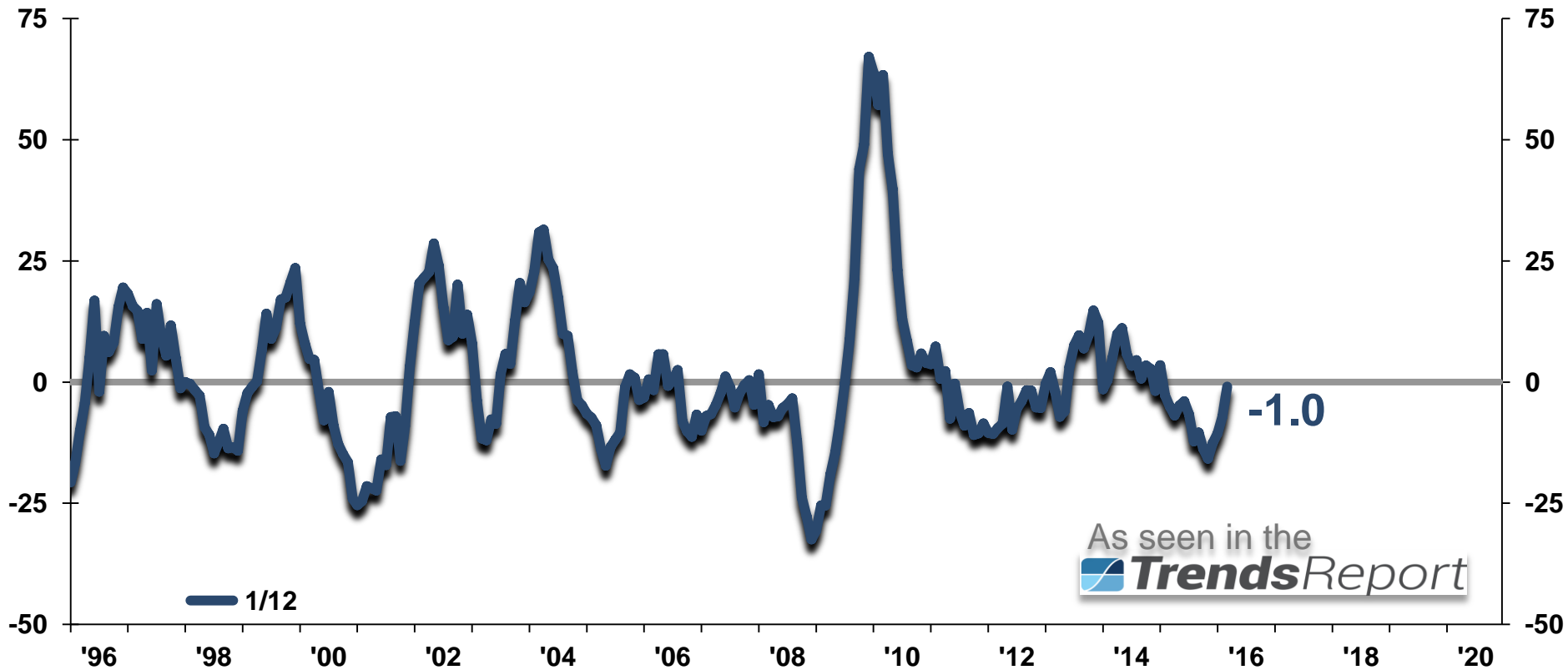




# Chicago Fed National Activity Index

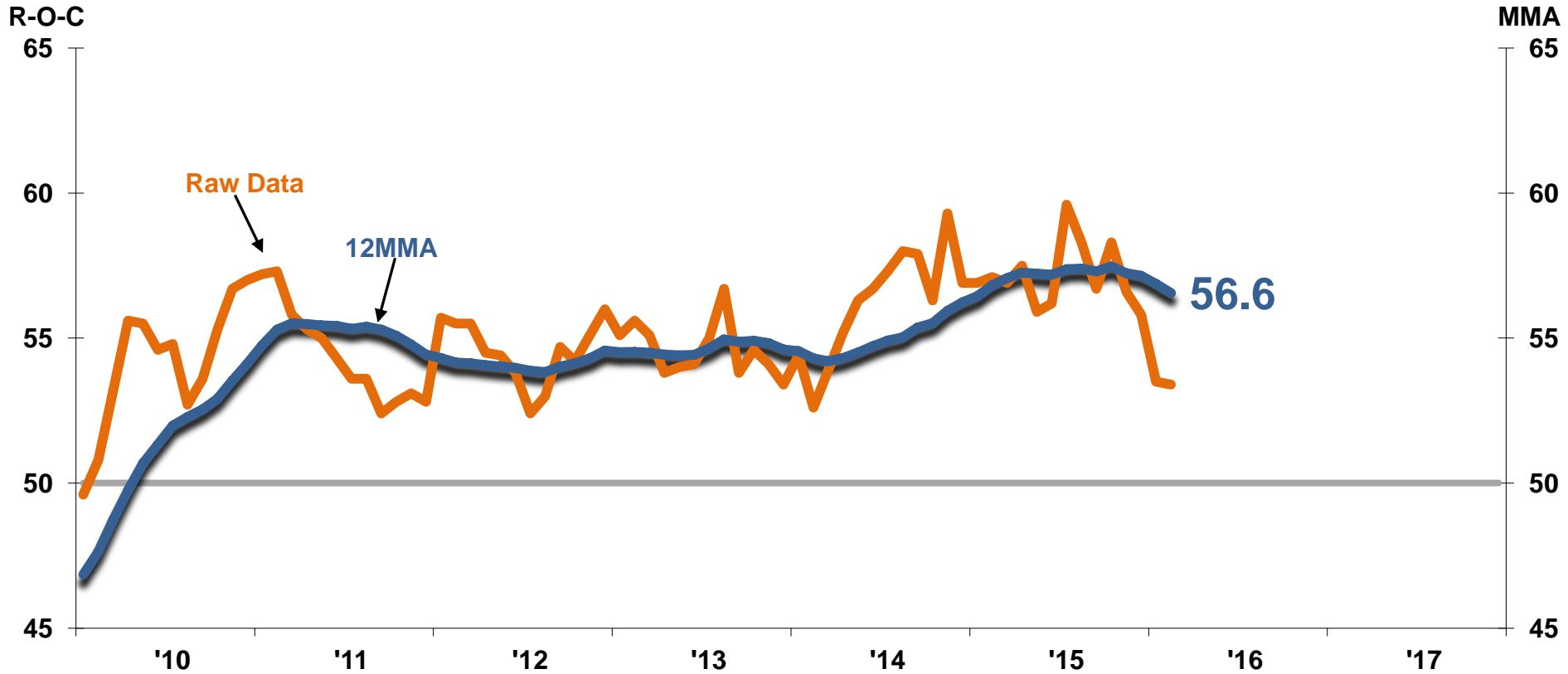


# US Purchasing Managers Index

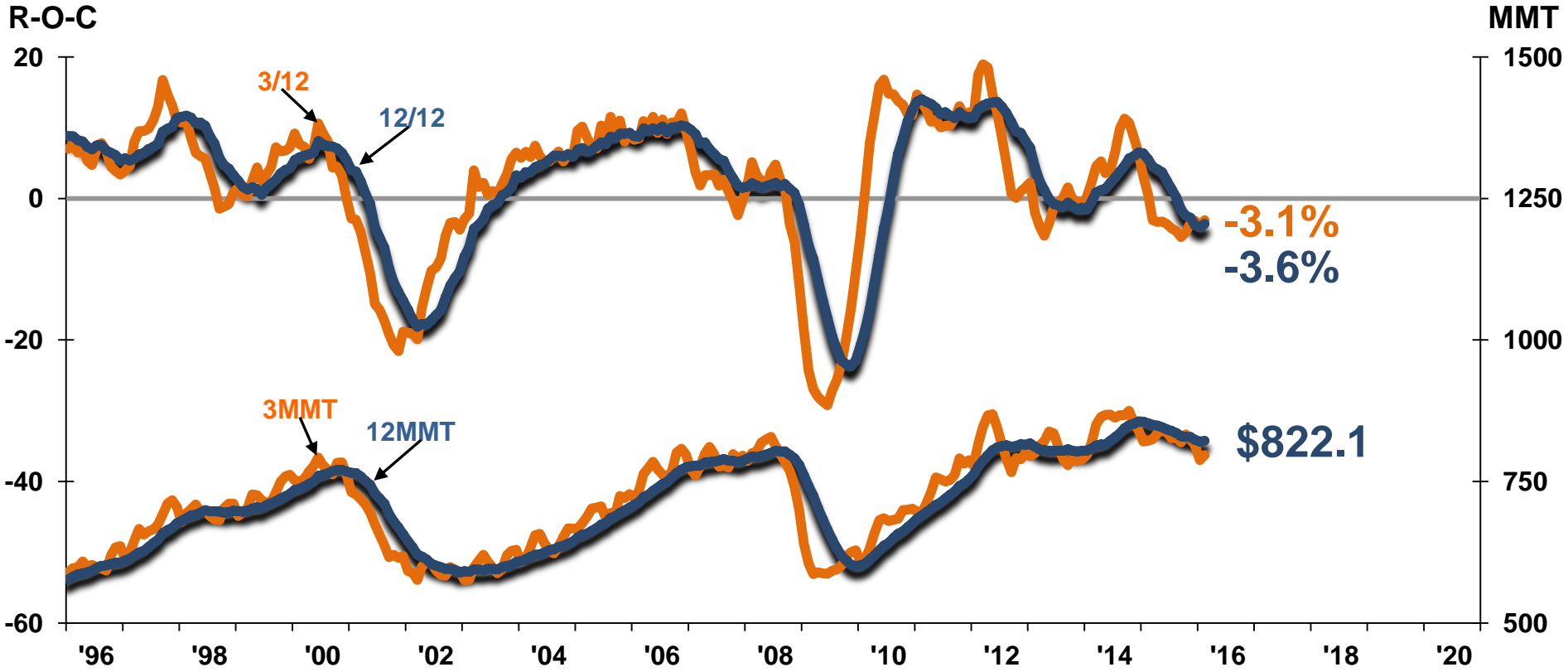


As seen in the  
**TrendsReport**

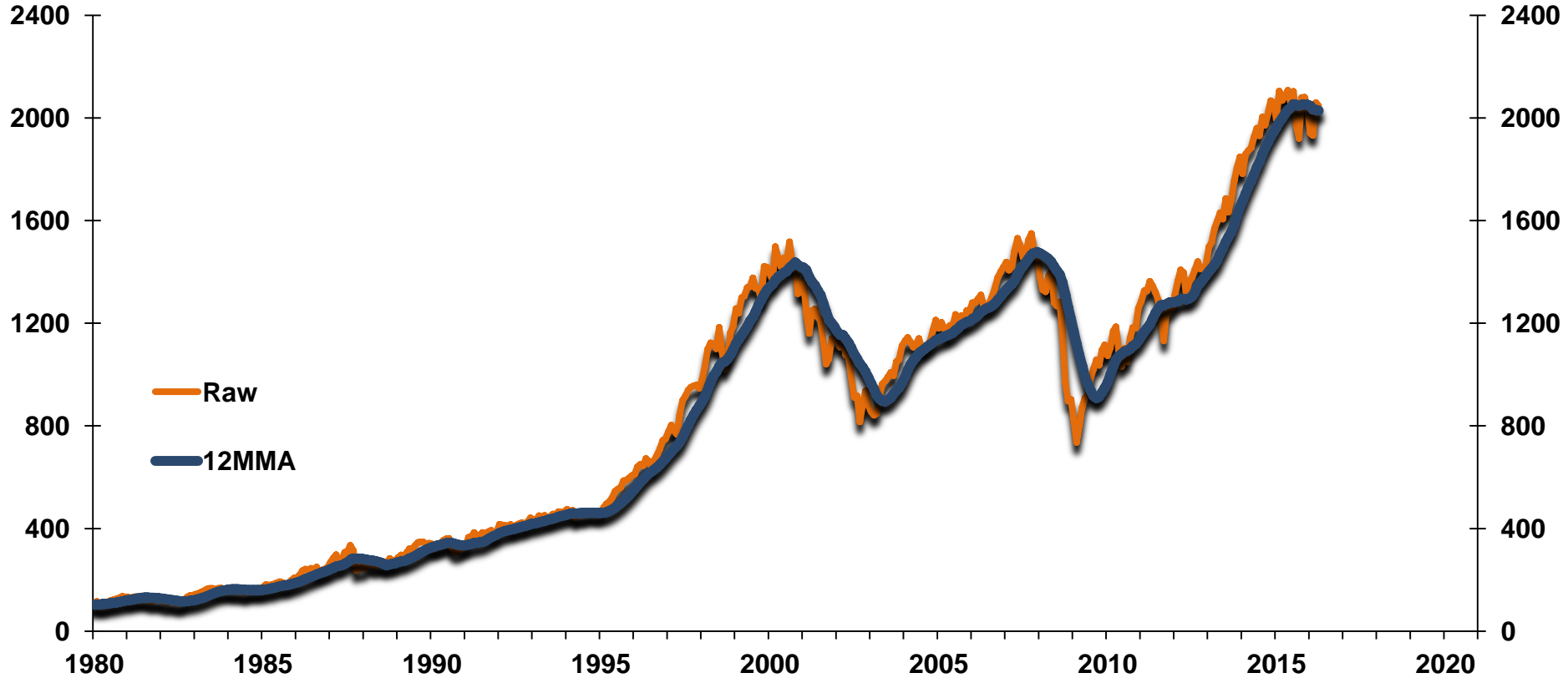
# Non-Manufacturing Purchasing Managers Index



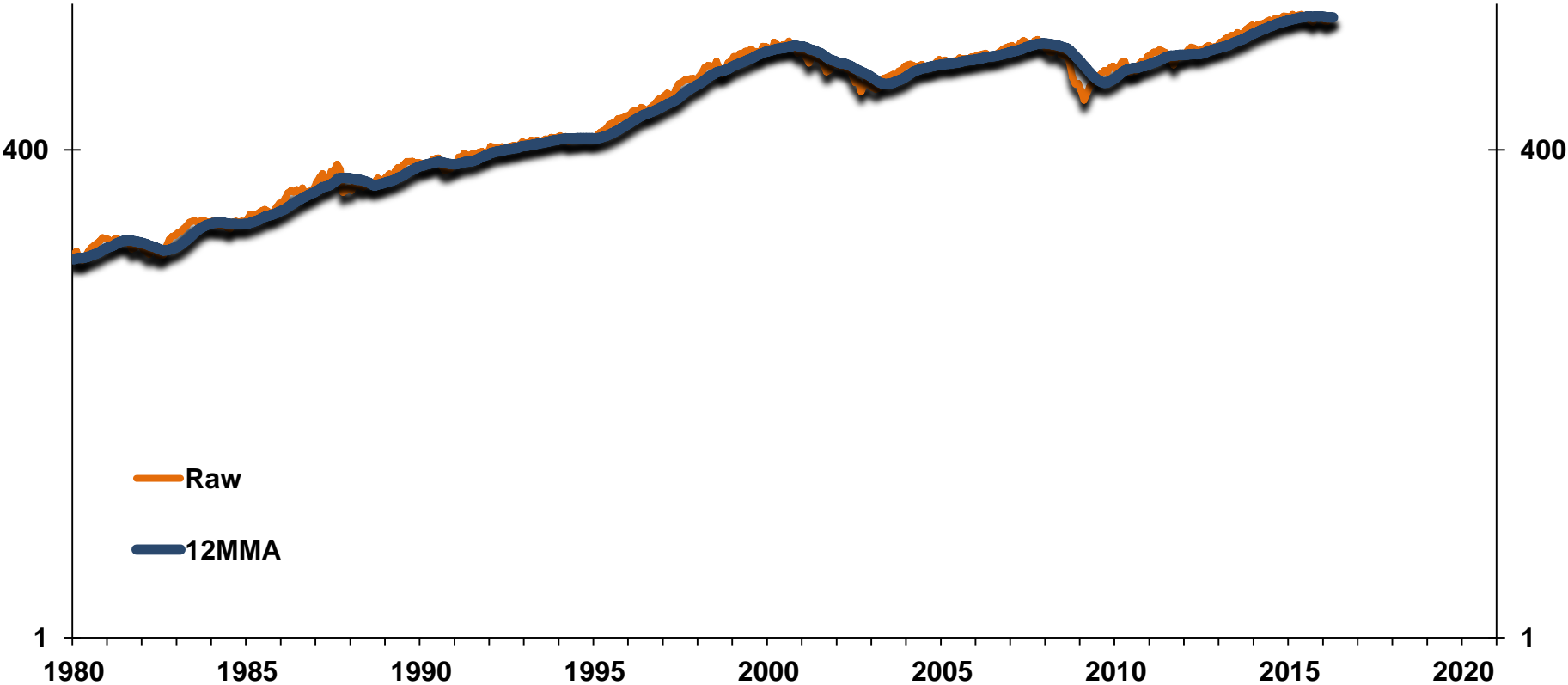
# Nondefense Capital Goods New Orders w/o Aircraft



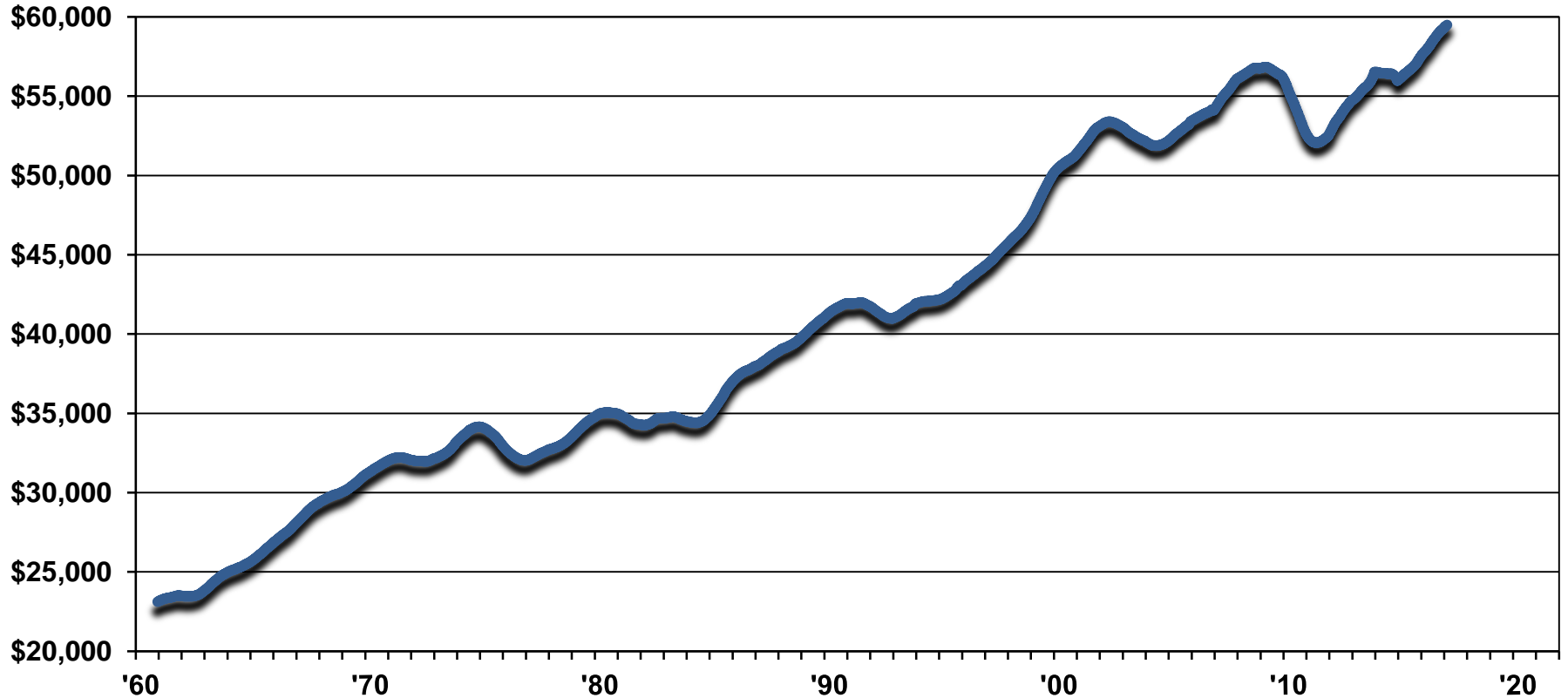
# S&P500 Stock Prices Index



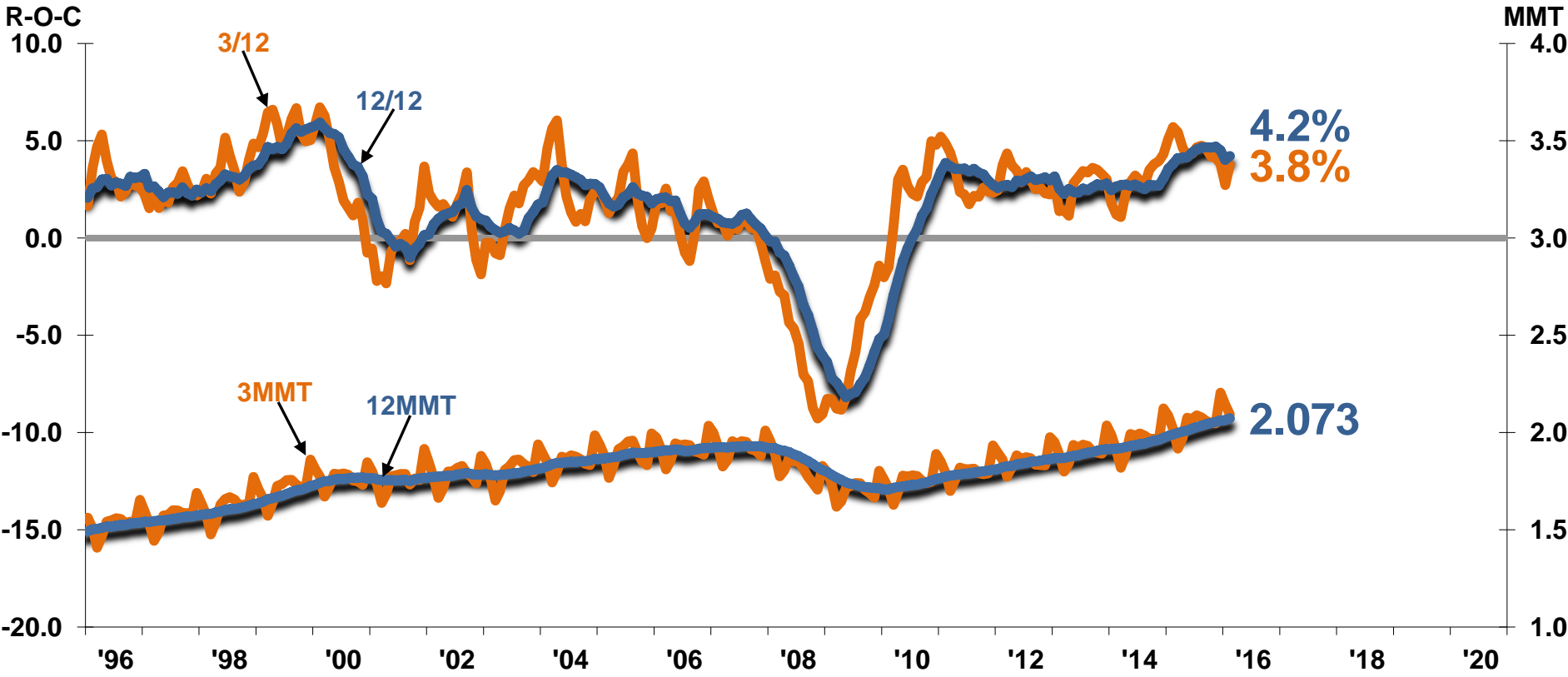
# S&P500 Stock Prices Index



# Real Personal Income Less Transfer Receipts Average per Person Age 18 to 65

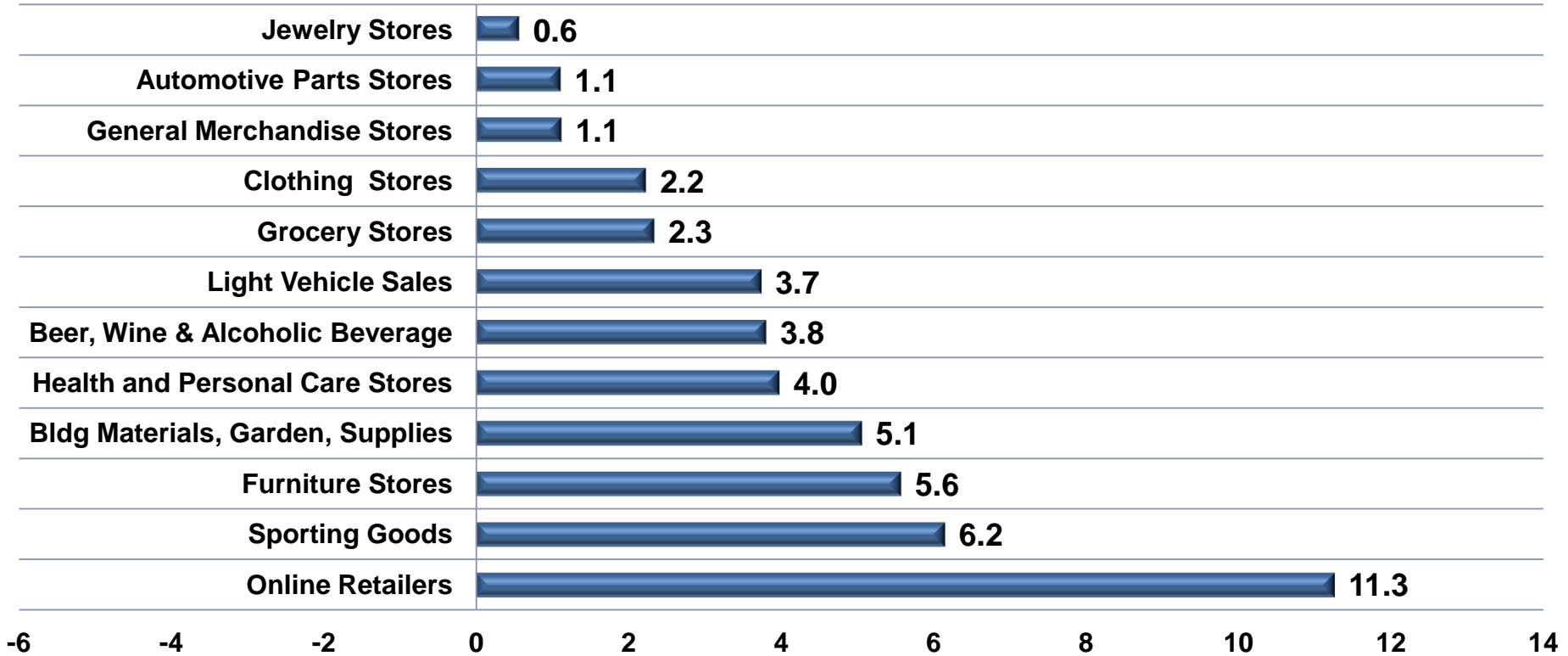


# US Retail Sales Excluding Gas Stations (deflated)

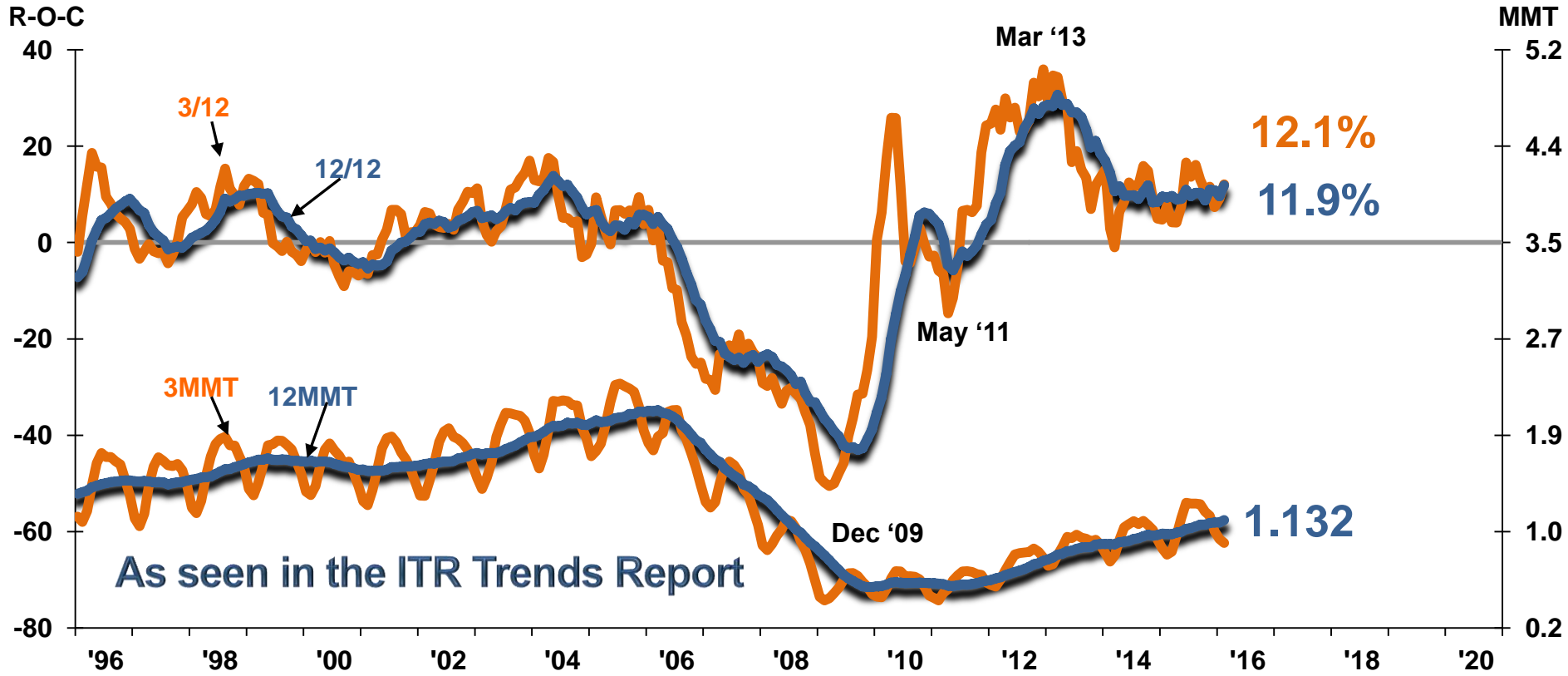




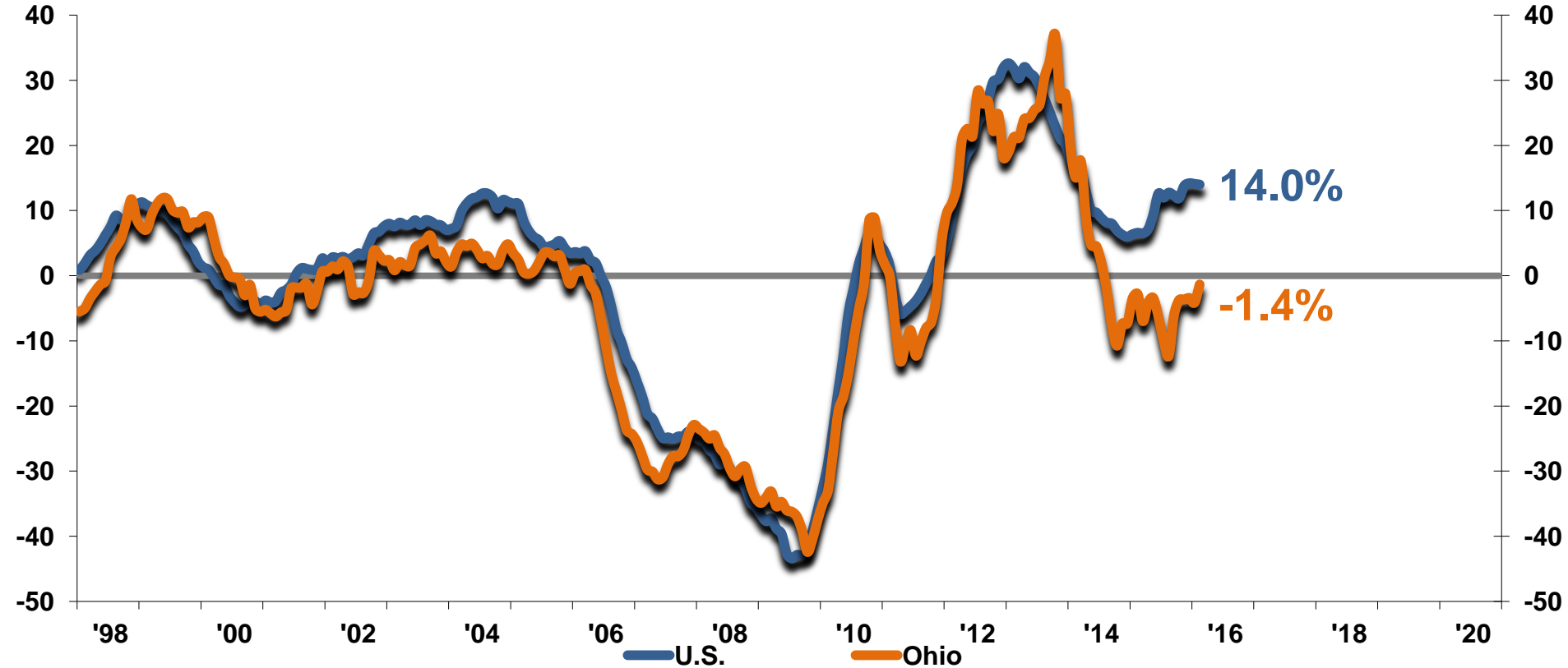
# Retail Sales



# Housing Starts

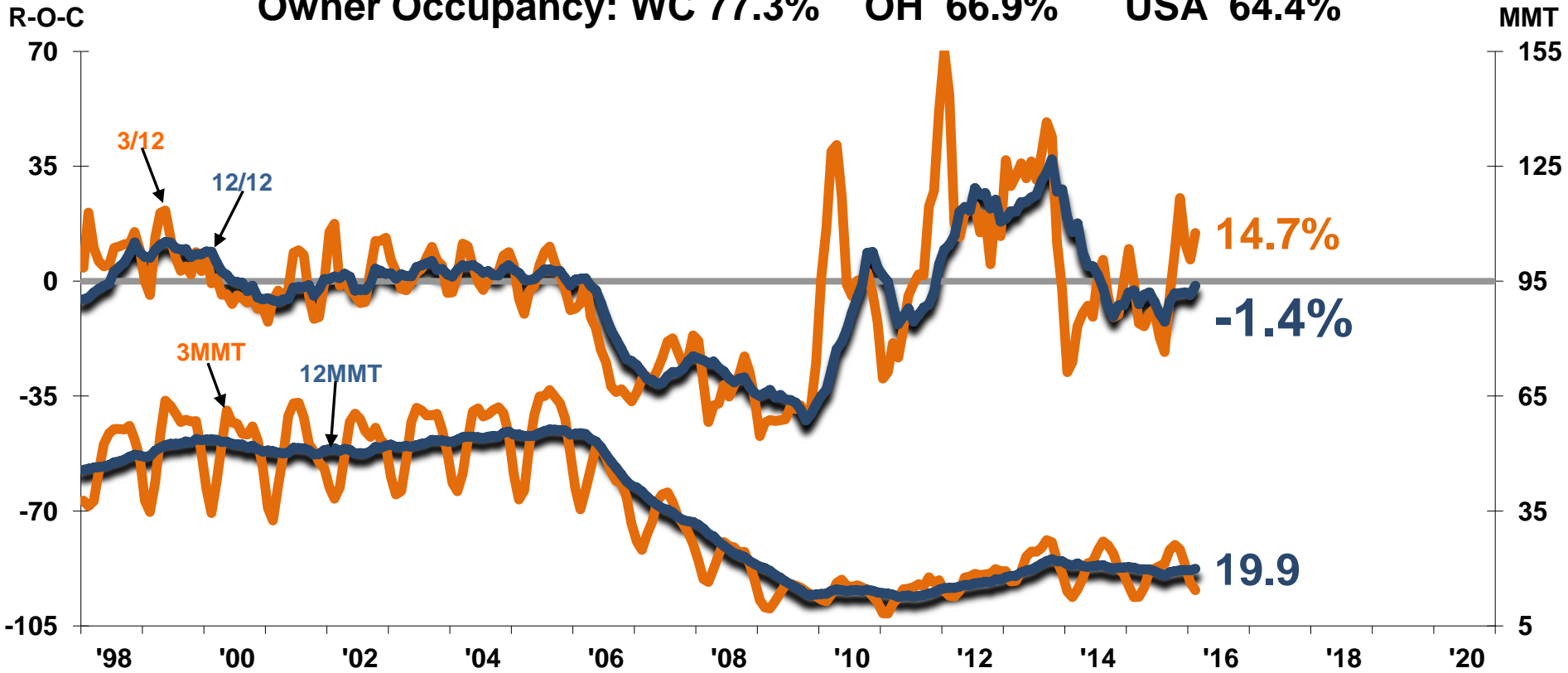


# US to Ohio Housing Unit Building Permits

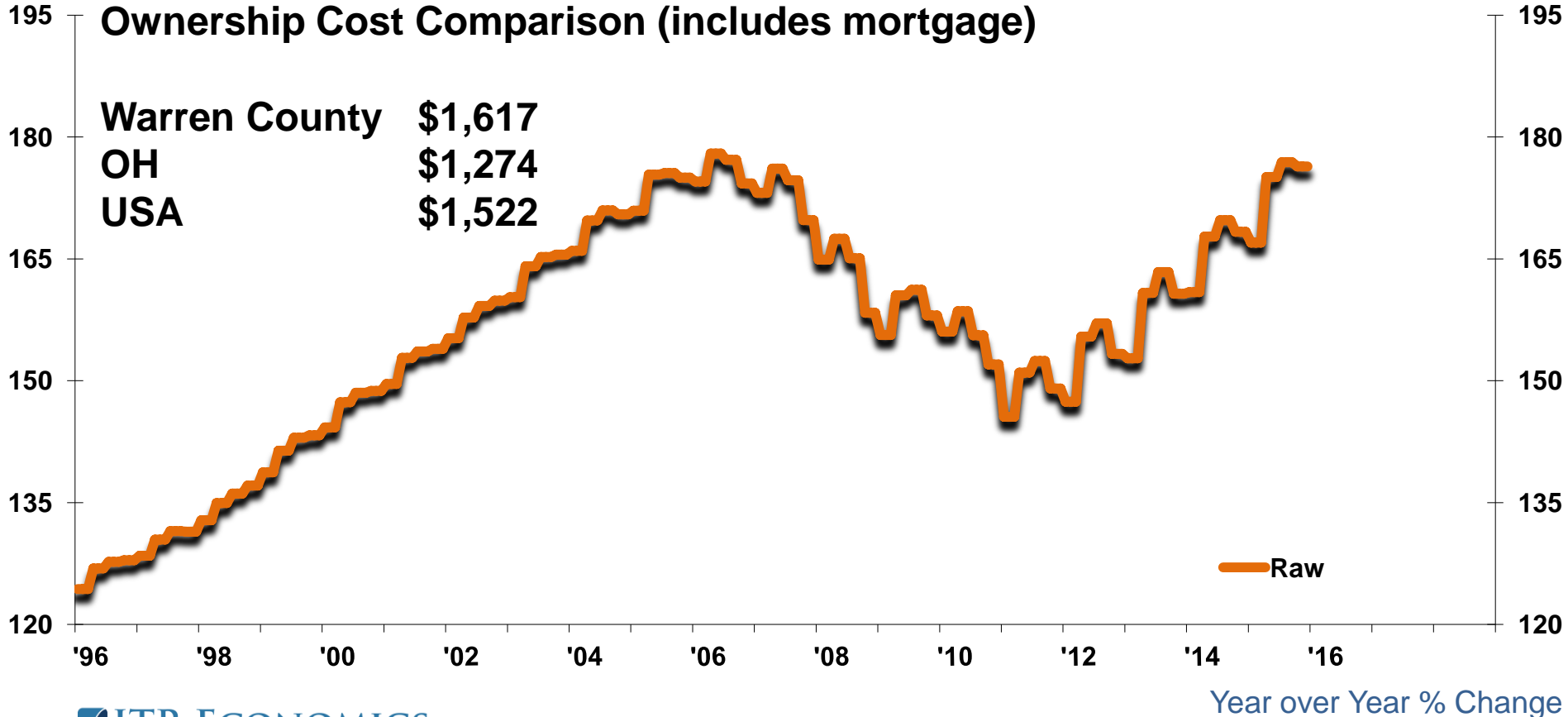


# Ohio Housing Unit Building Permits

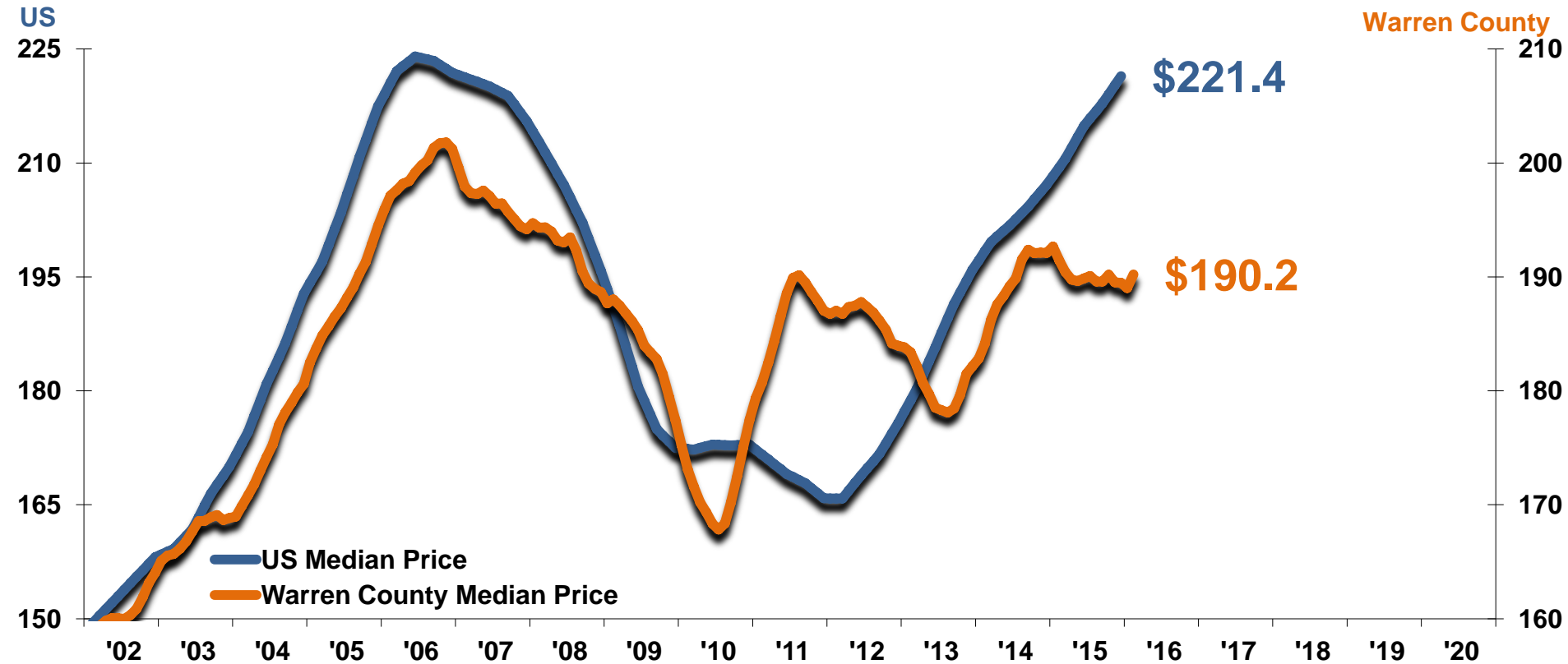
Owner Occupancy: WC 77.3% OH 66.9% USA 64.4%



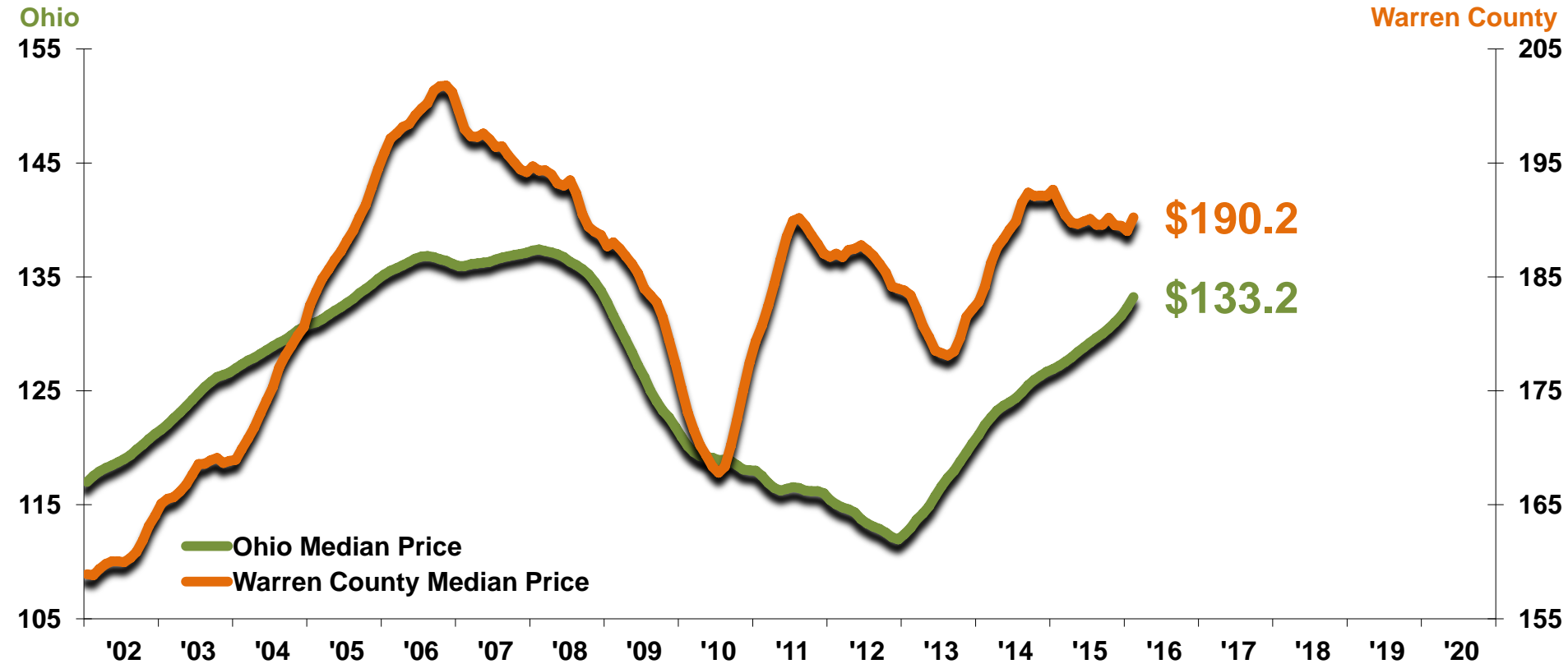
# Ohio Housing Price Index



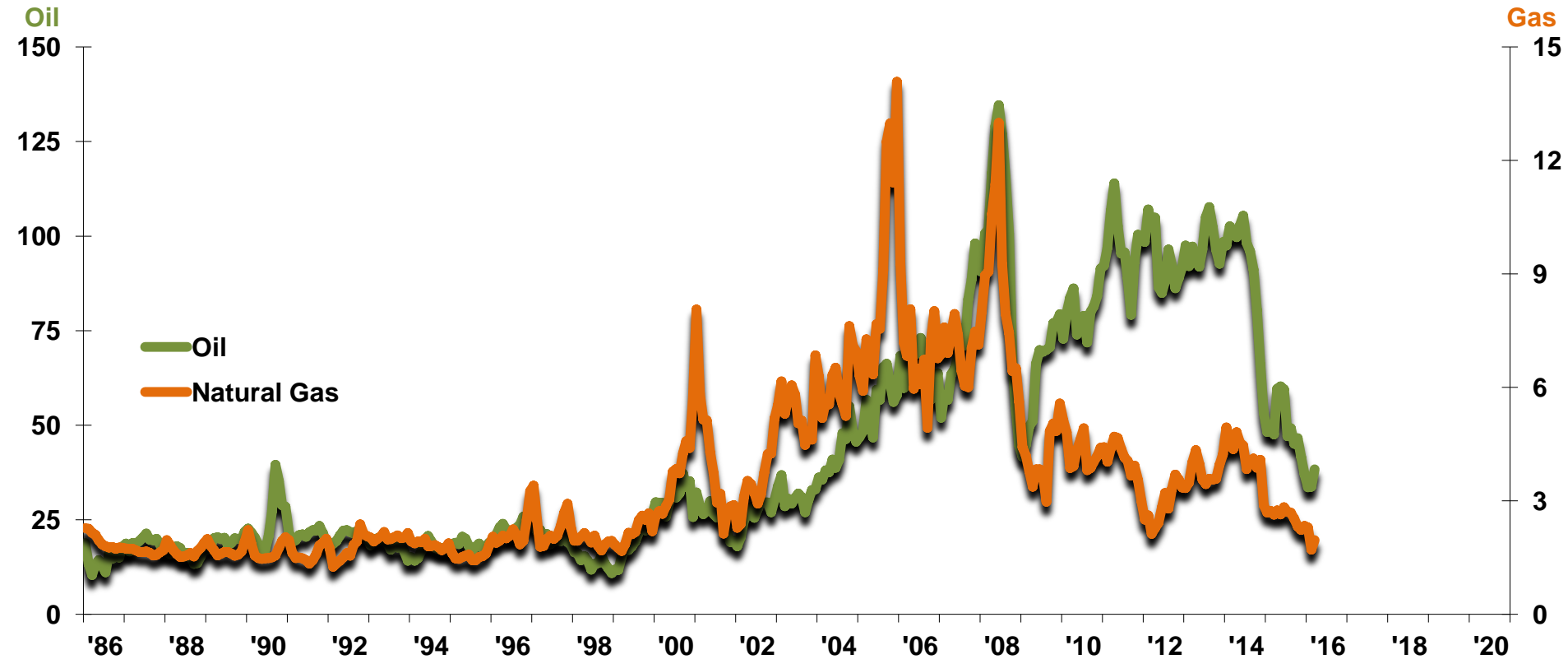
# US To Warren County Median Home Sale Price



# Ohio to Warren County Median Home Sale Price



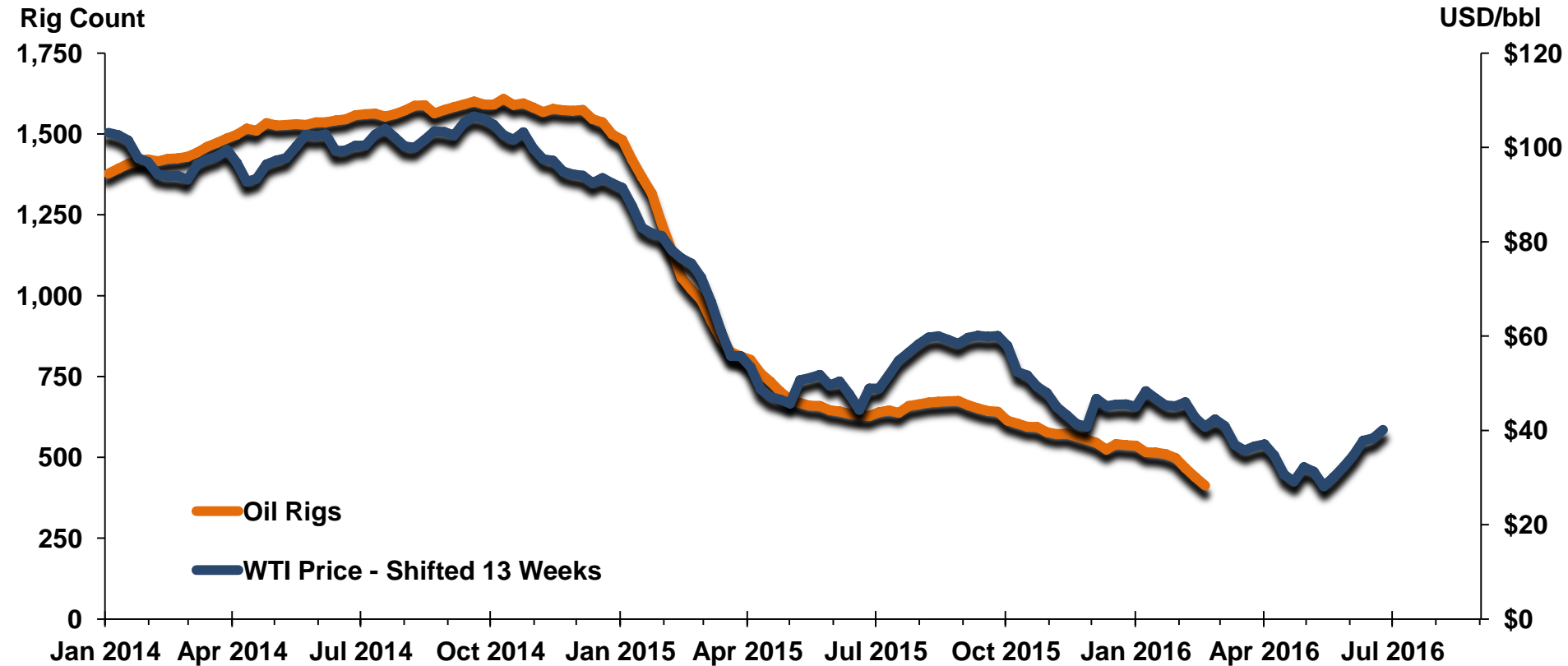
# Crude Oil Futures Prices to Natural Gas Future Prices





# United States Overview

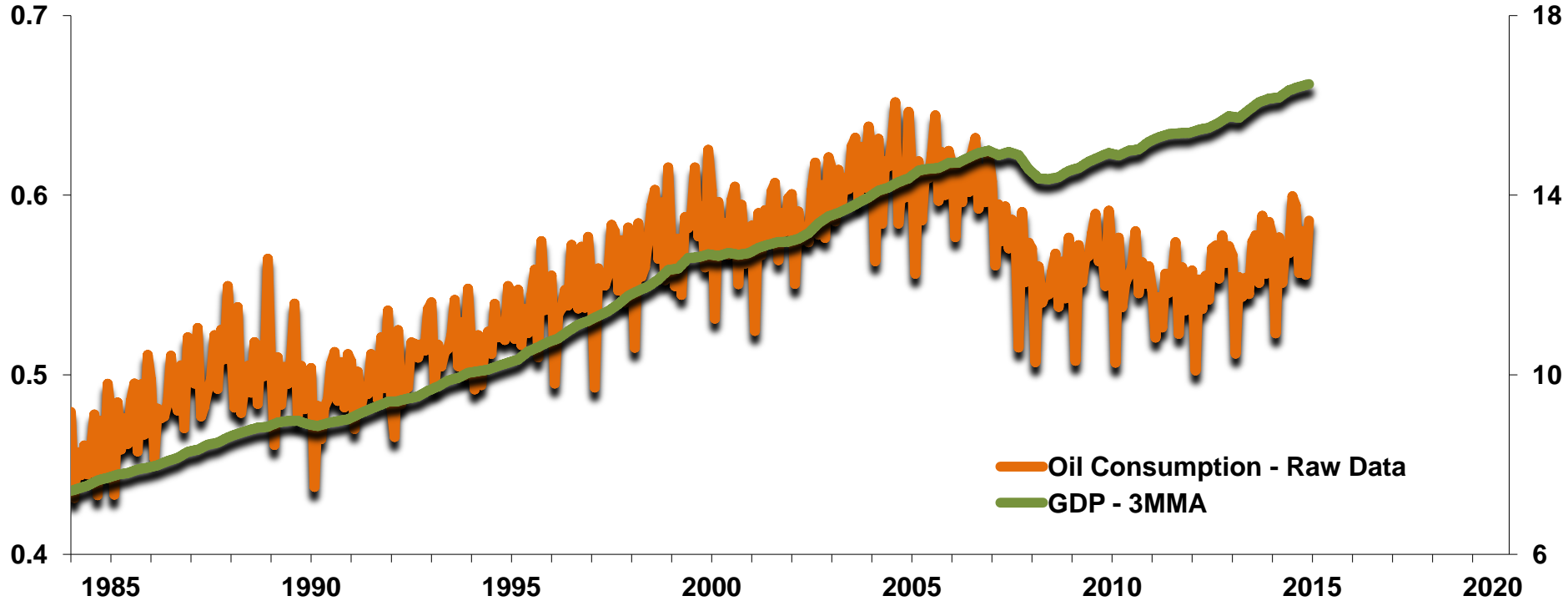
## Weekly Oil Price & Rig Count



# US Consumption of Crude Oil & Petroleum Products to Real Gross Domestic Product

Oil  
Bils Barrels

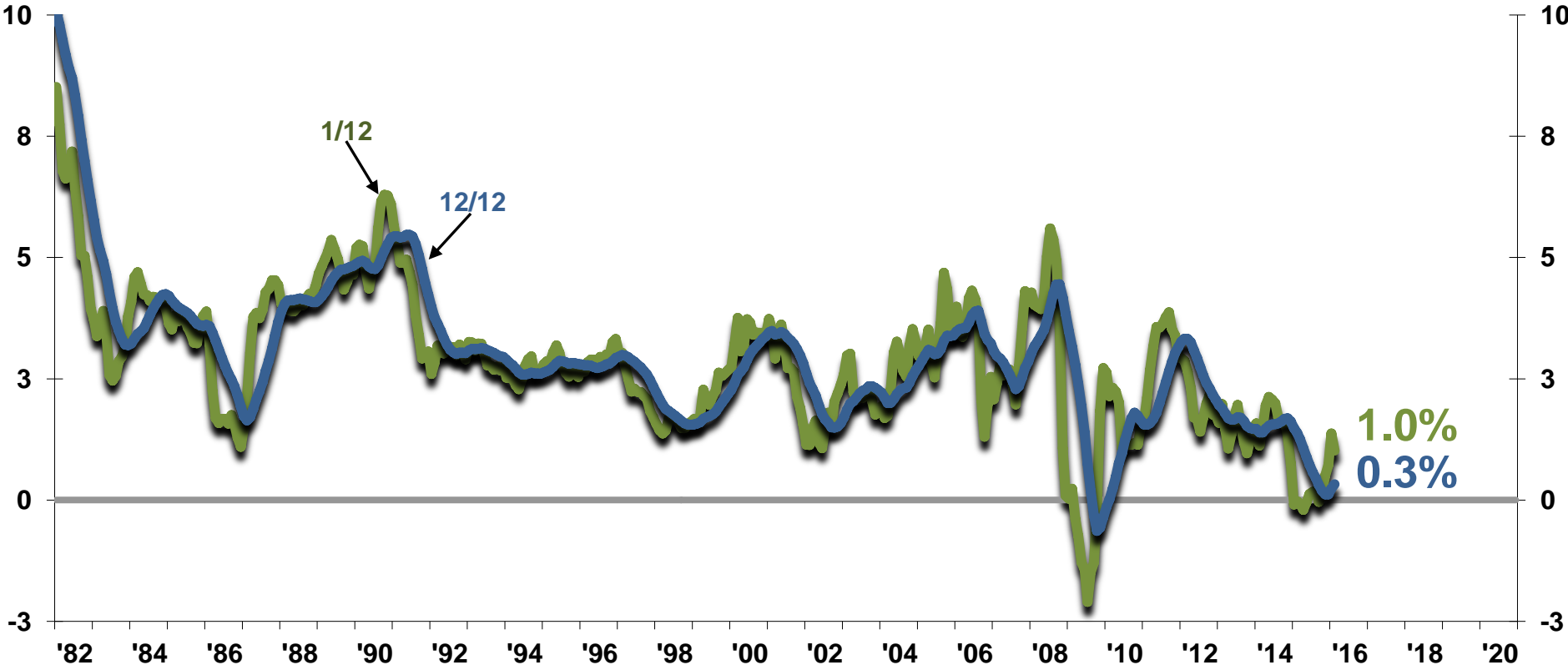
GDP  
Trils C2009\$



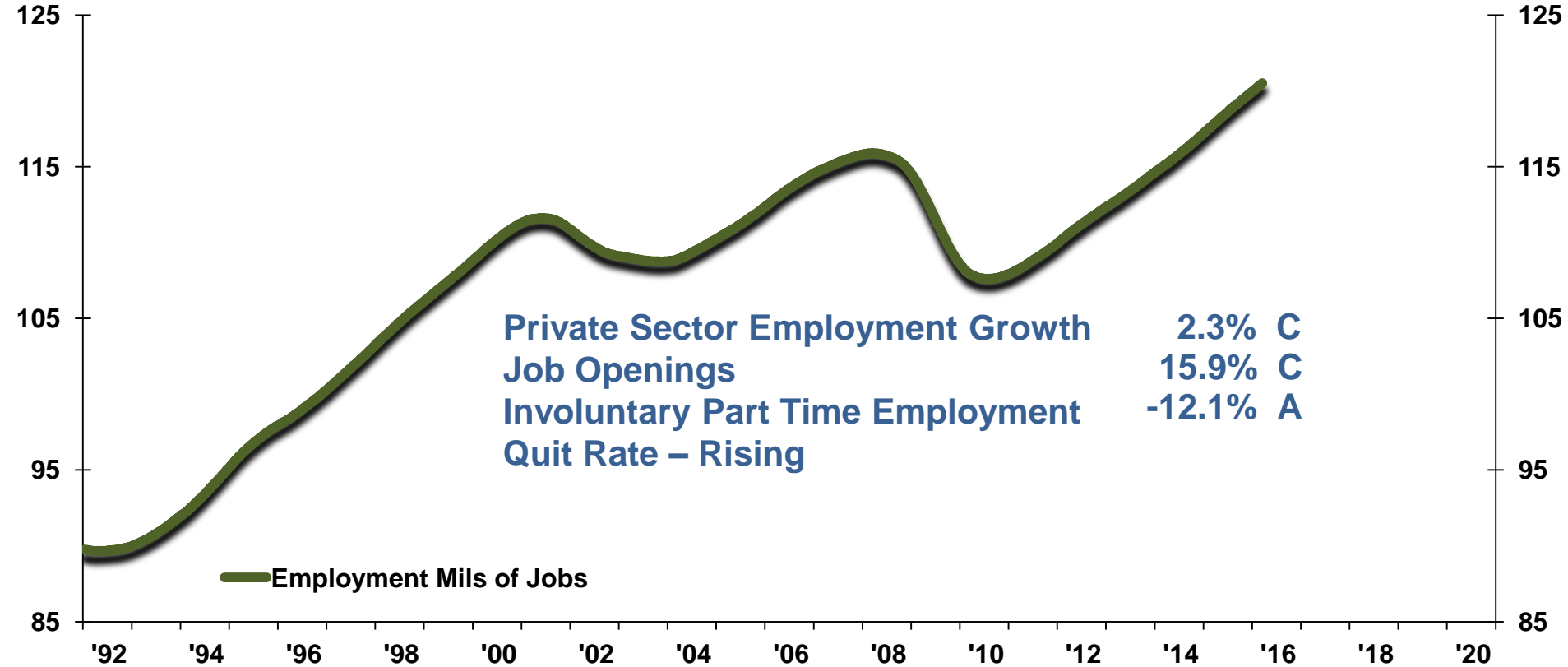
# Business Cycle Drivers



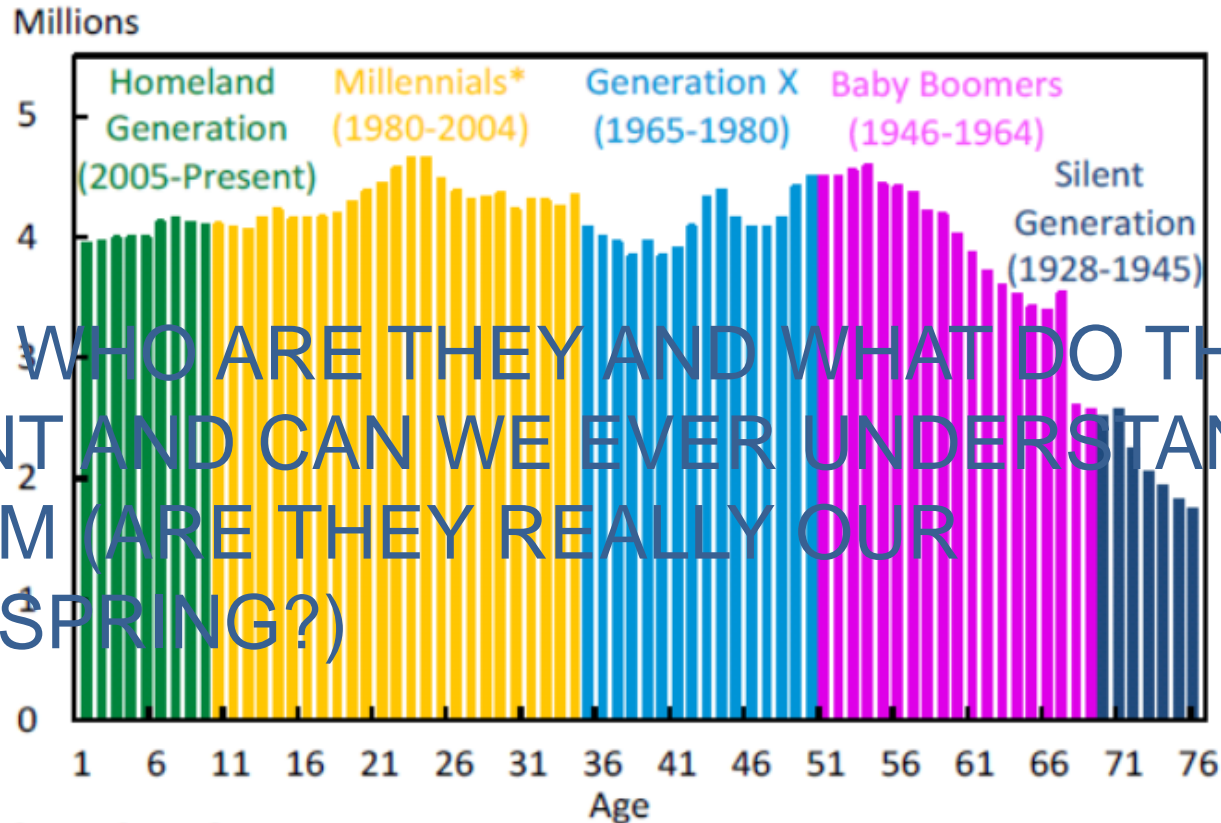
# Consumer Price Index



# Employment – Private Sector



# Millennials: US Population Distribution by Age, 2013



BUT WHO ARE THEY AND WHAT DO THEY WANT AND CAN WE EVER UNDERSTAND THEM (ARE THEY REALLY OUR OFFSPRING?)

Source: Census Bureau.

**They are:**

**CONFIDENT**

**VALUE TRANSPARENCY**

**CONNECTED**

**WANT TO FIND A BETTER WAY**

**NOT MUCH MONEY**

## Subject to peer “influence”

Don't enjoy feeling taken for granted

Want important leadership roles even though  
they can't contribute financially

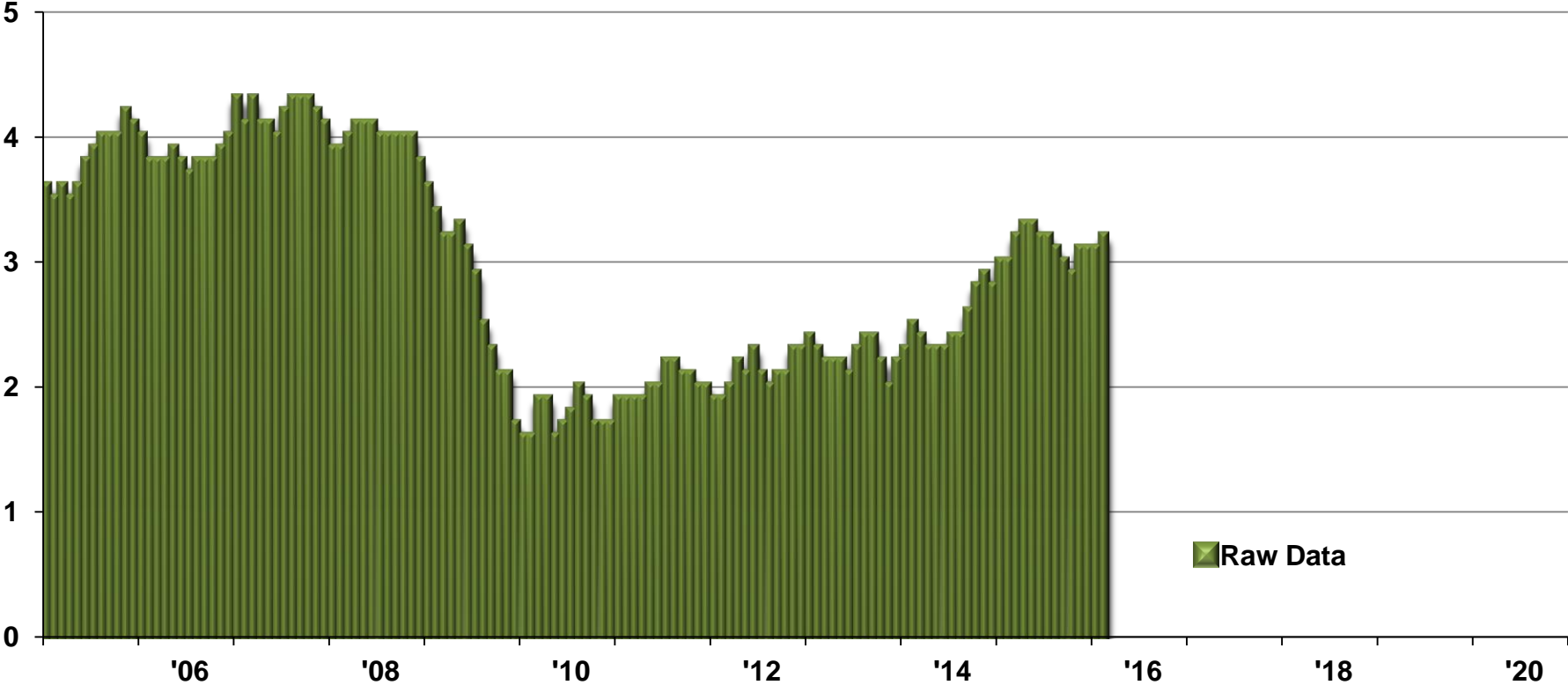
**Need a continuum re: utilizing their professional skills**

Equally important: Time = Money = Assets

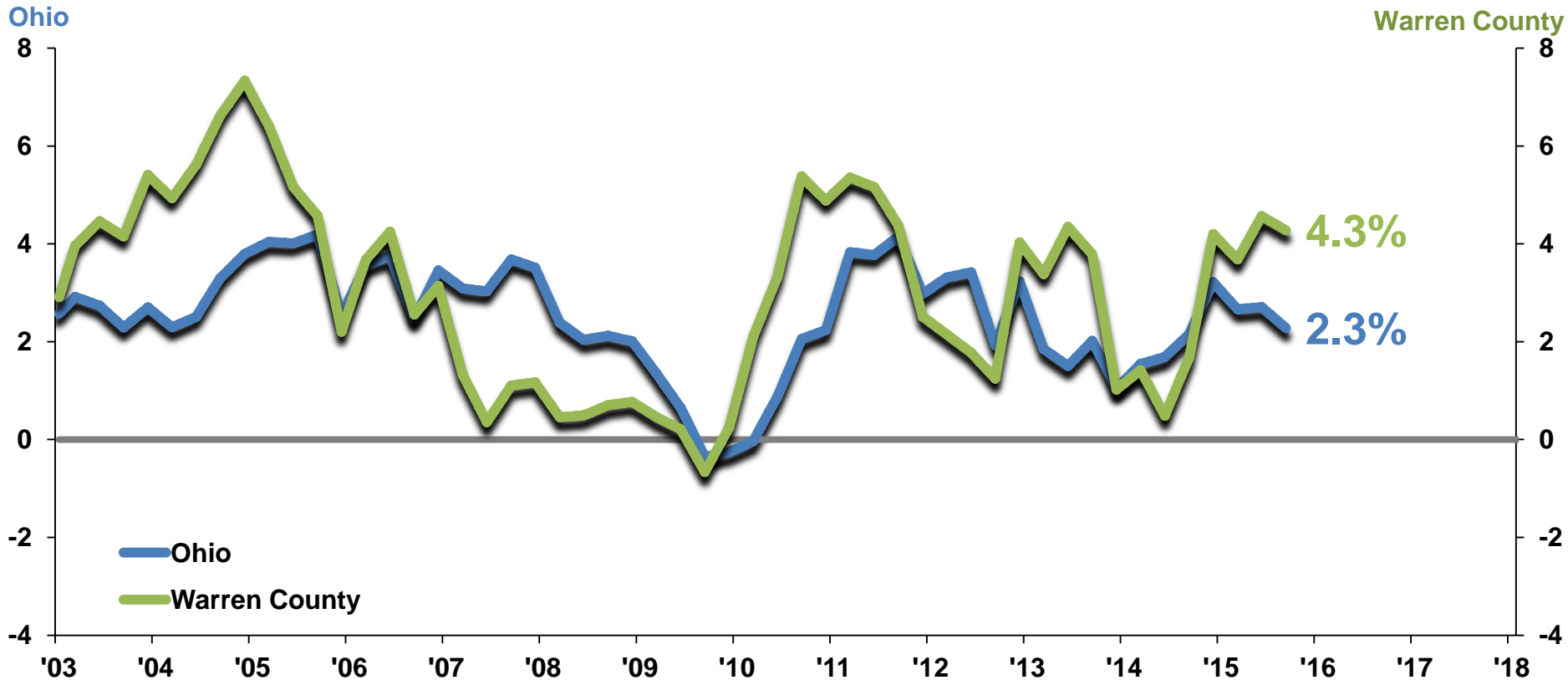
**Do-Gooders**



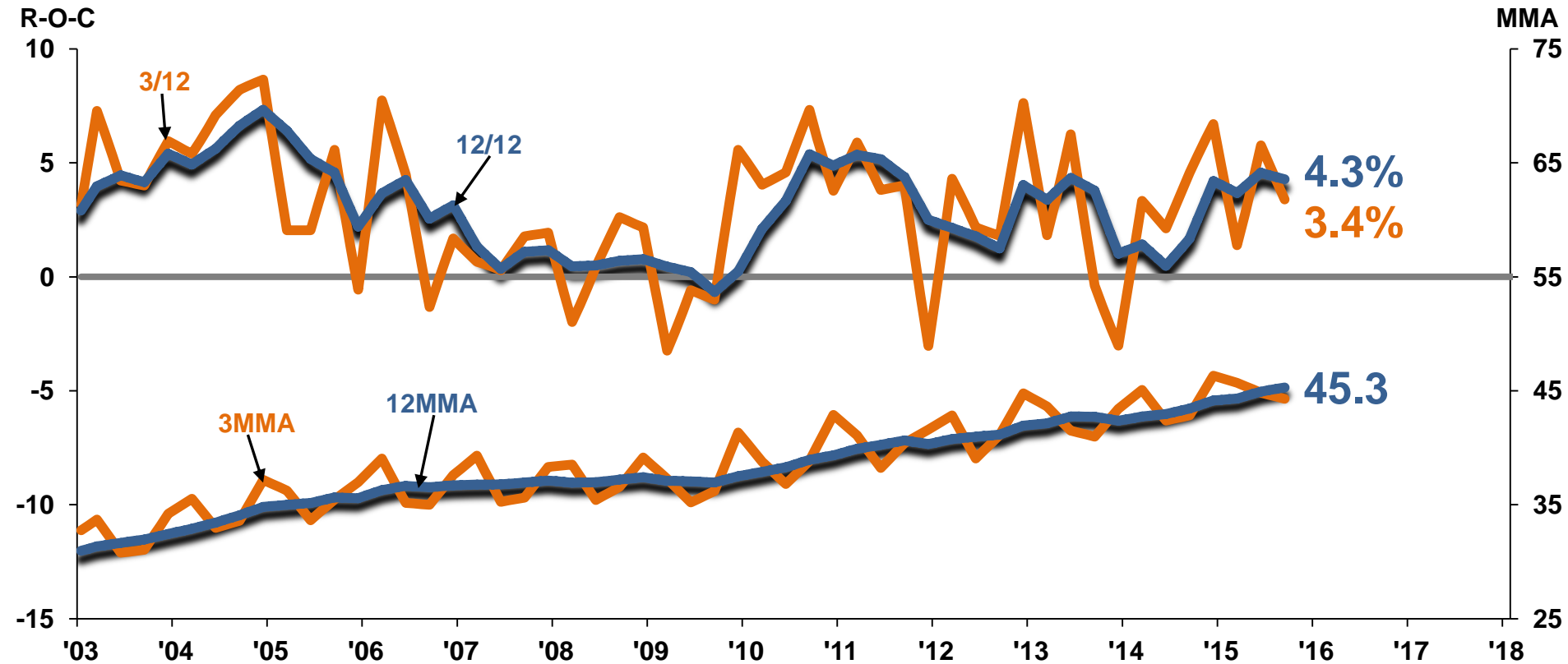
# US Overall Wage Growth



# Ohio to Warren County Average Annual Wages



# Warren County Average Annual Wages



## Living Wage Analysis

	<u>1 Adult Working w/1 Child</u>	<u>2 Adults w/ 2 Children</u>
<b>Warren County</b>	<b>\$20.07</b>	<b>\$13.46</b>
<b>Ohio</b>	<b>\$19.93</b>	<b>\$13.39</b>
<b>USA</b>	<b>\$22.21</b>	<b>\$14.74</b>

Warren County = 2.74 persons per household

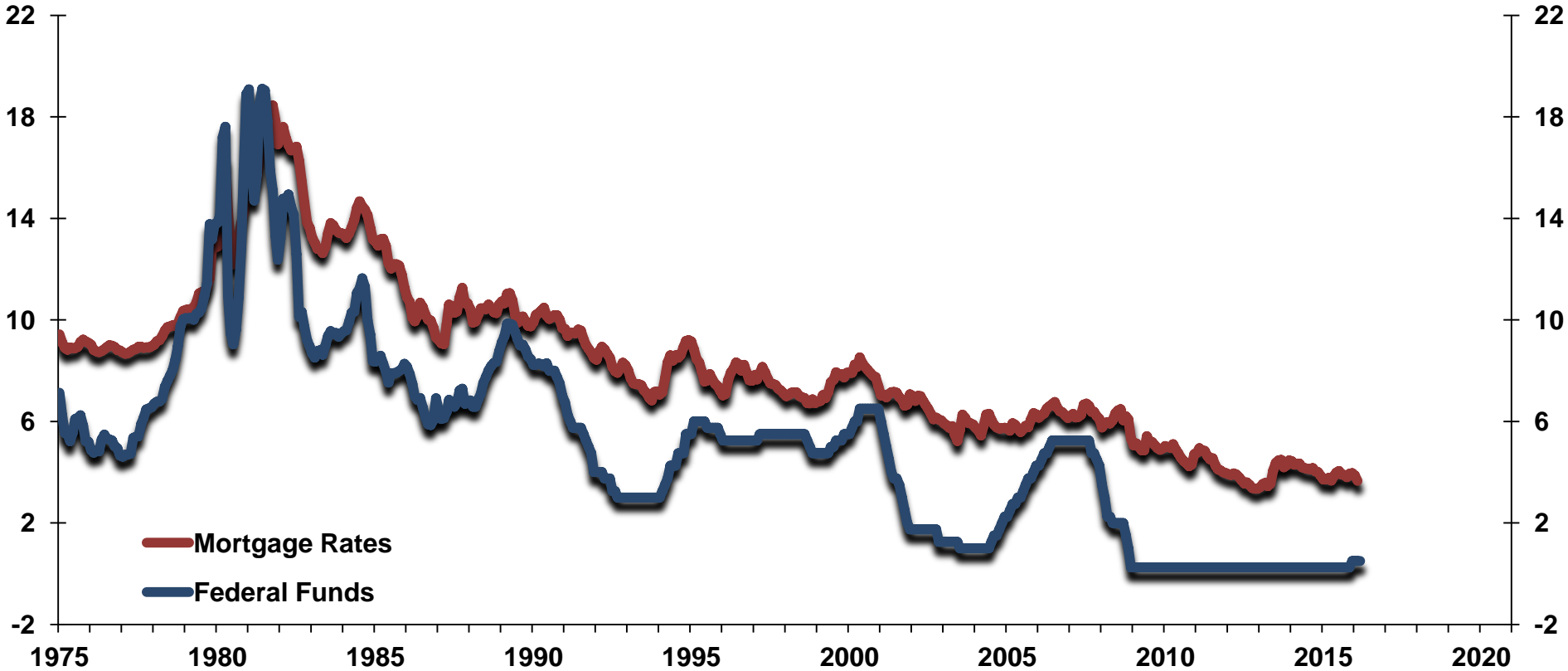
Makes the County a top 10 as a State

OH 2.46 persons per household

## Living Wage Analysis

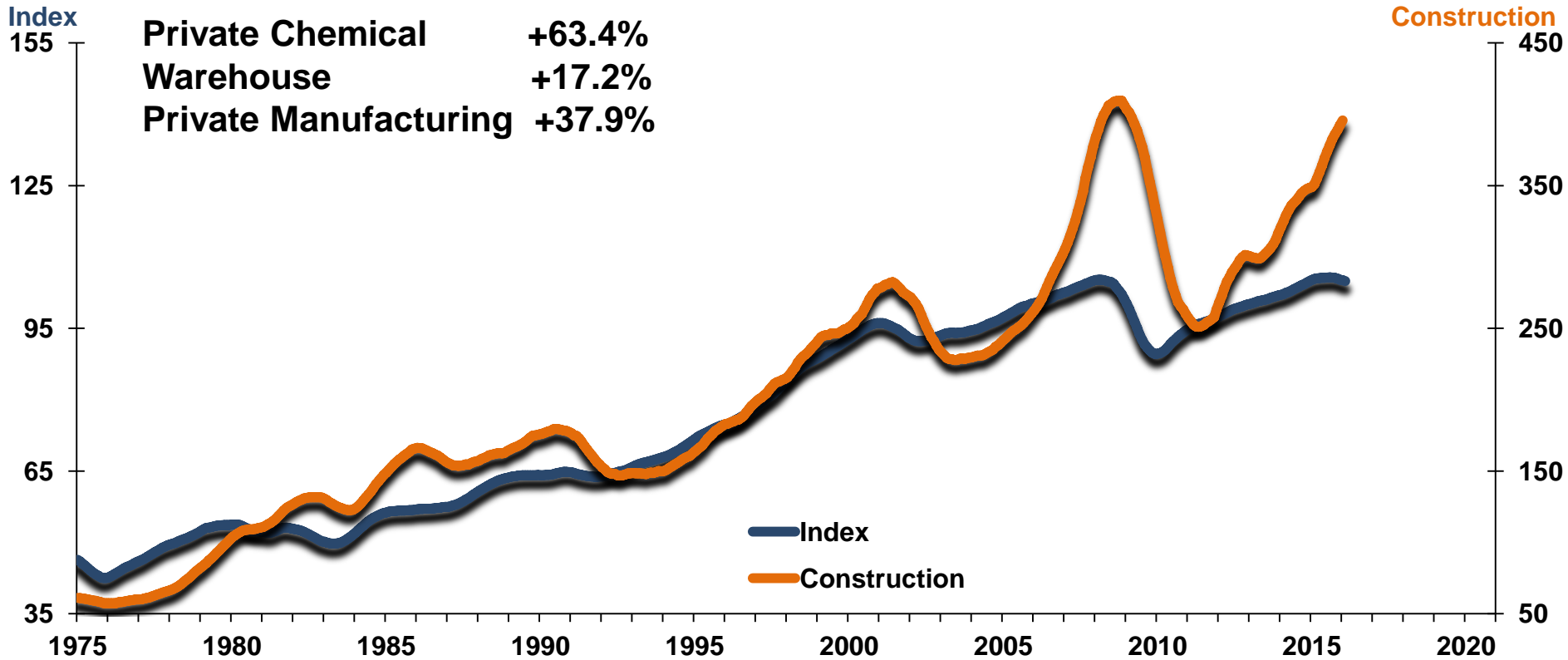
	<u>Professional Manager</u>	<u>Bus/Fin Operations</u>
<b>Warren County</b>	<b>\$88,050</b>	<b>\$59.950</b>
<b>USA</b>	<b>\$91,488</b>	<b>\$61,543</b>

# Mortgage Rates to Federal Funds





# US Industrial Production to Non-Residential Construction

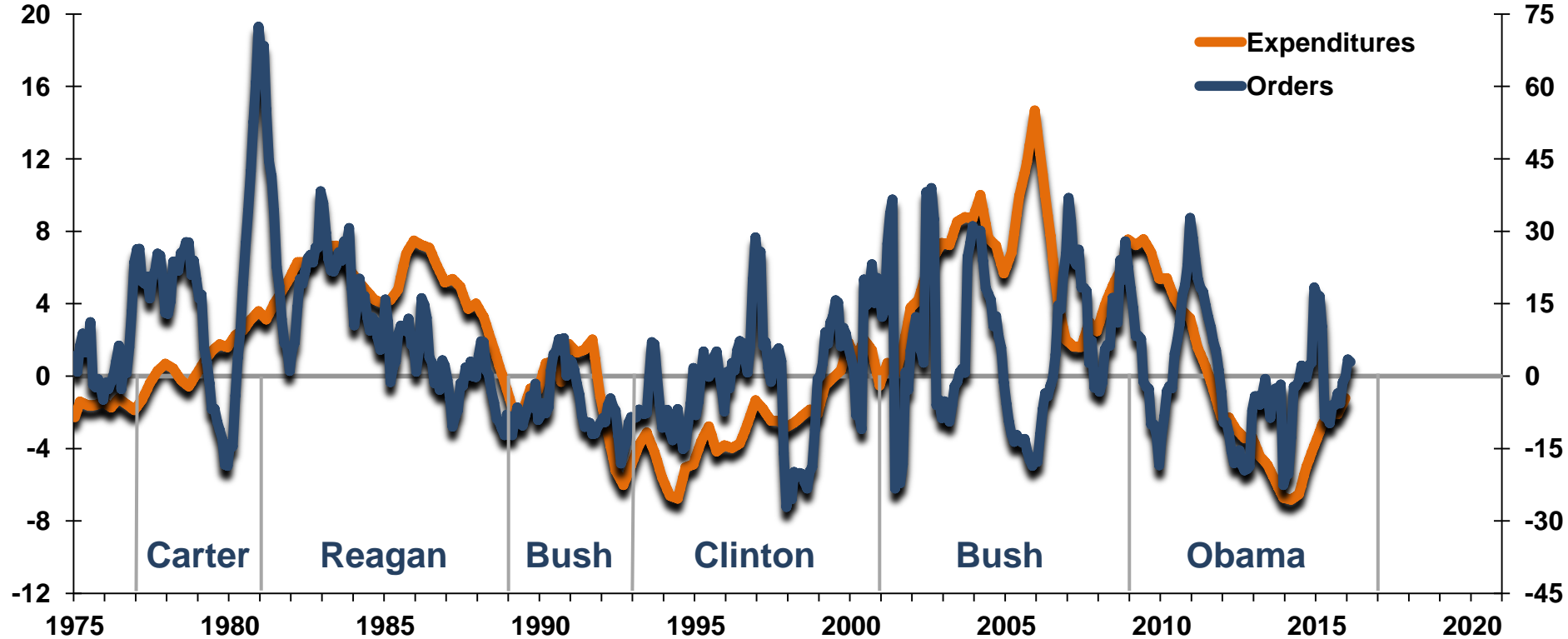




# National Defense Expenditures to Defense Capital Goods New Orders

Expenditures

Orders



# Depression Drivers

- **Demographics**
- **Inflation**
- **Health Care Costs / Entitlements**
- **US National Debt**

# Actions to take in 2016

1. **Budget for continued economic growth driven by the consumer**
2. **Invest in customer market research to reduce price sensitivity**
3. **Make sure your training and retention programs are top notch**
4. **Marketing and advertising spending increasingly effective**
5. **Drive efficiencies with technology**
6. **Hire sales people and leaders**
7. **Lock in costs in early 2016**
8. **Expand credit offerings to garner market share**
9. **Plan for higher wages and higher energy costs**



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**Warren County**

