Economic Overview/Update—U.S. and Regions

Midwestern Intergovernmental Audit Forum
September 8, 2017

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Federal Reserve Bank Chicago

Outline

- U.S. Economy
- Midwest
  - Regions in longer term perspective
  - Current Analysis of Midwest Performance

Main Economic Indicators

Year-over-year Comparison

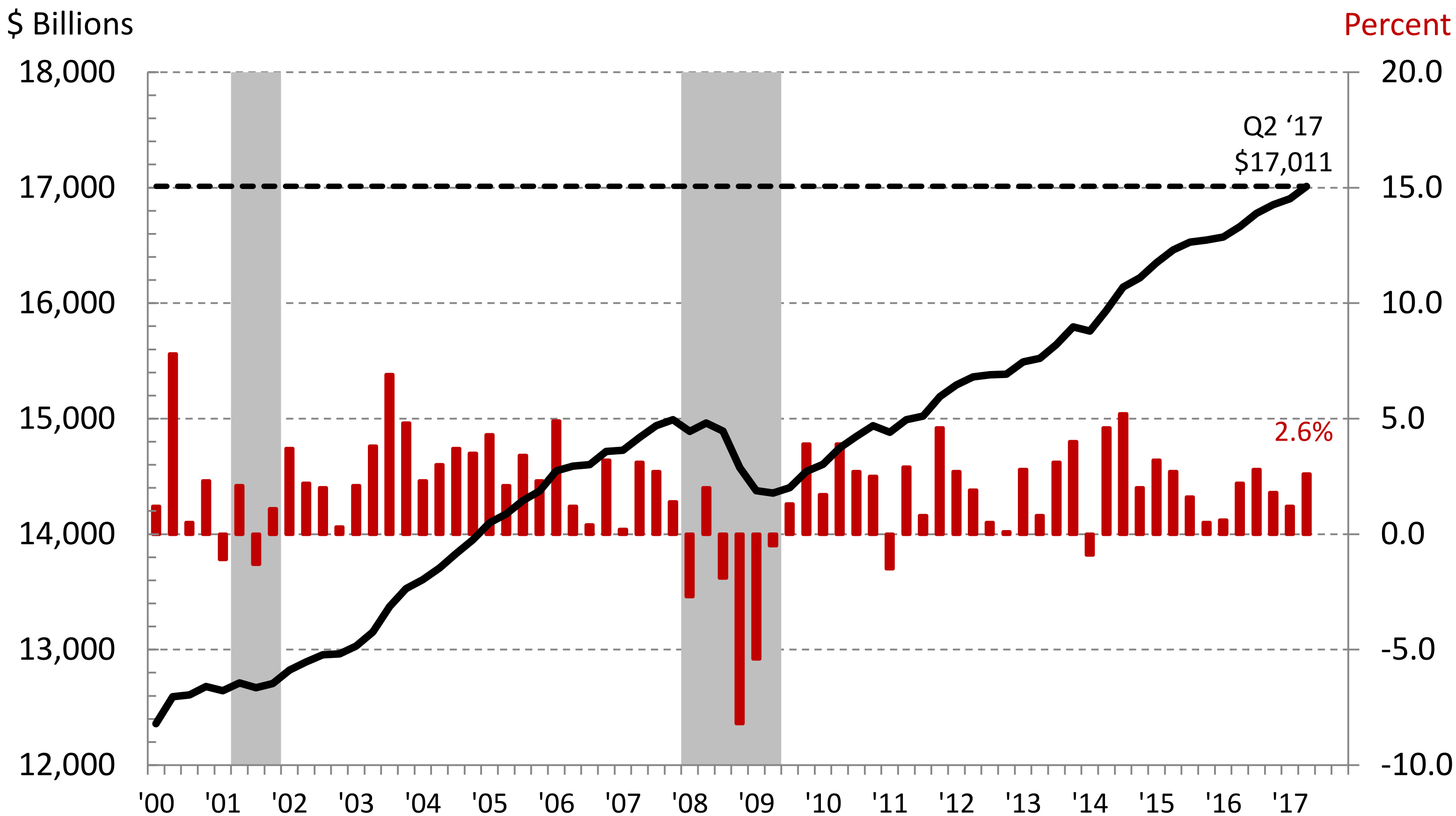
	2015	2016	2017
GDP – Annual Growth Rate [1]	1.9%	2.0%	2.1%
Unemployment Rate [2]	5.3%	4.9%	4.5%
Participation Rate [2]	62.7%	62.8%	62.9%
Nonfarm Job Growth [3]	226.1	186.7	184.3
PCE Inflation – All Items Yr. / Yr. [4]	0.4%	1.1%	1.8%

1. 2015 & 2016 - Q4/Q4, 2017 – Q2 ‘16 / Q2 ‘17
2. Annual Average & July 2017 YTD
3. Average Monthly Job Growth in Thousands- SA, July 2017 YTD
4. Annual Average Percent Change Year-over-year & June 2017 YTD

Source: U.S. Bureau of Economic Analysis, Census Bureau and Bureau of Labor Statistics

U.S. Real GDP

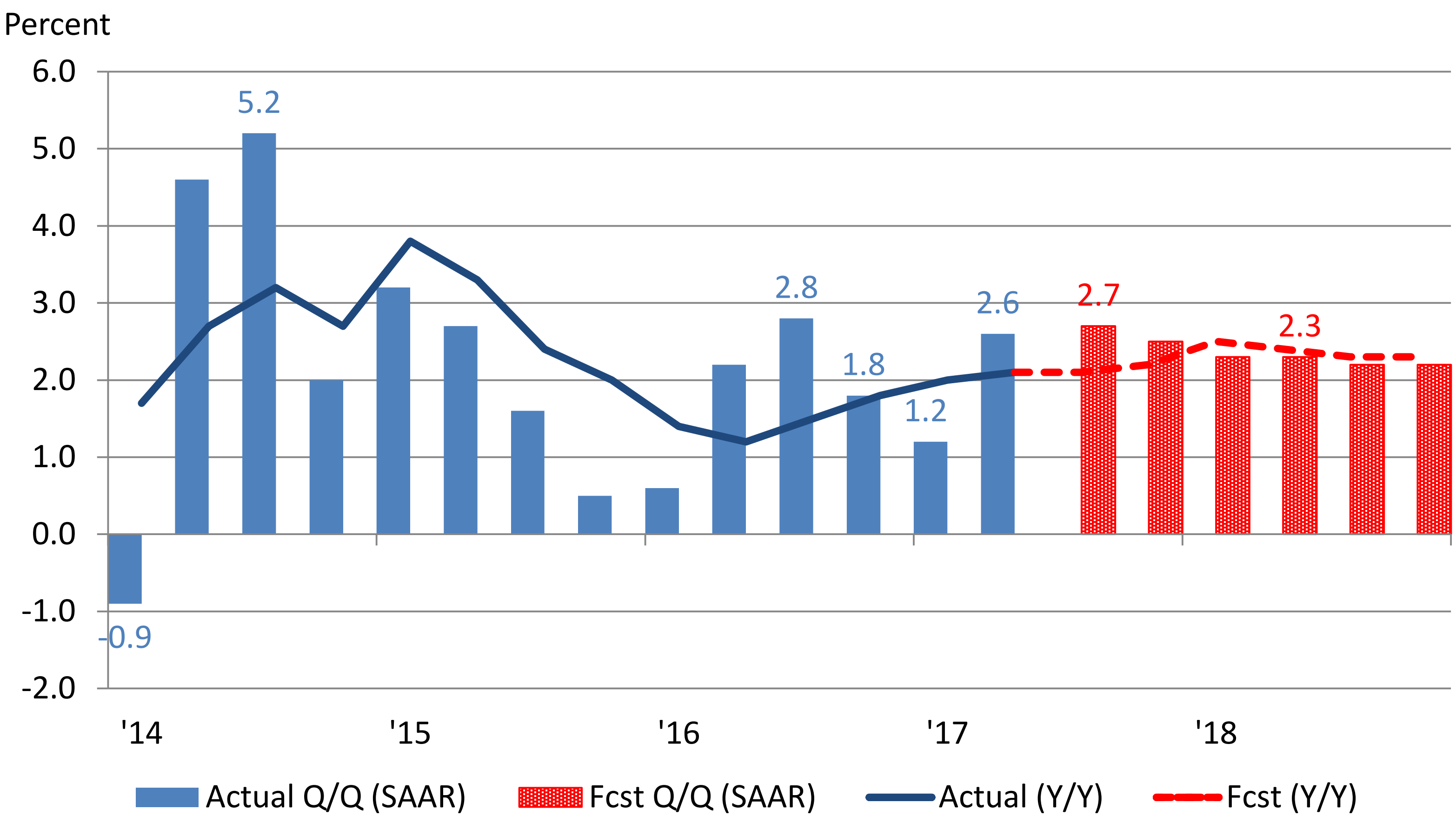
Billions Chained $2009, % Change Q/Q at SAAR



Source: U.S. Bureau of Economic Analysis

U.S. Real GDP Blue Chip Forecast

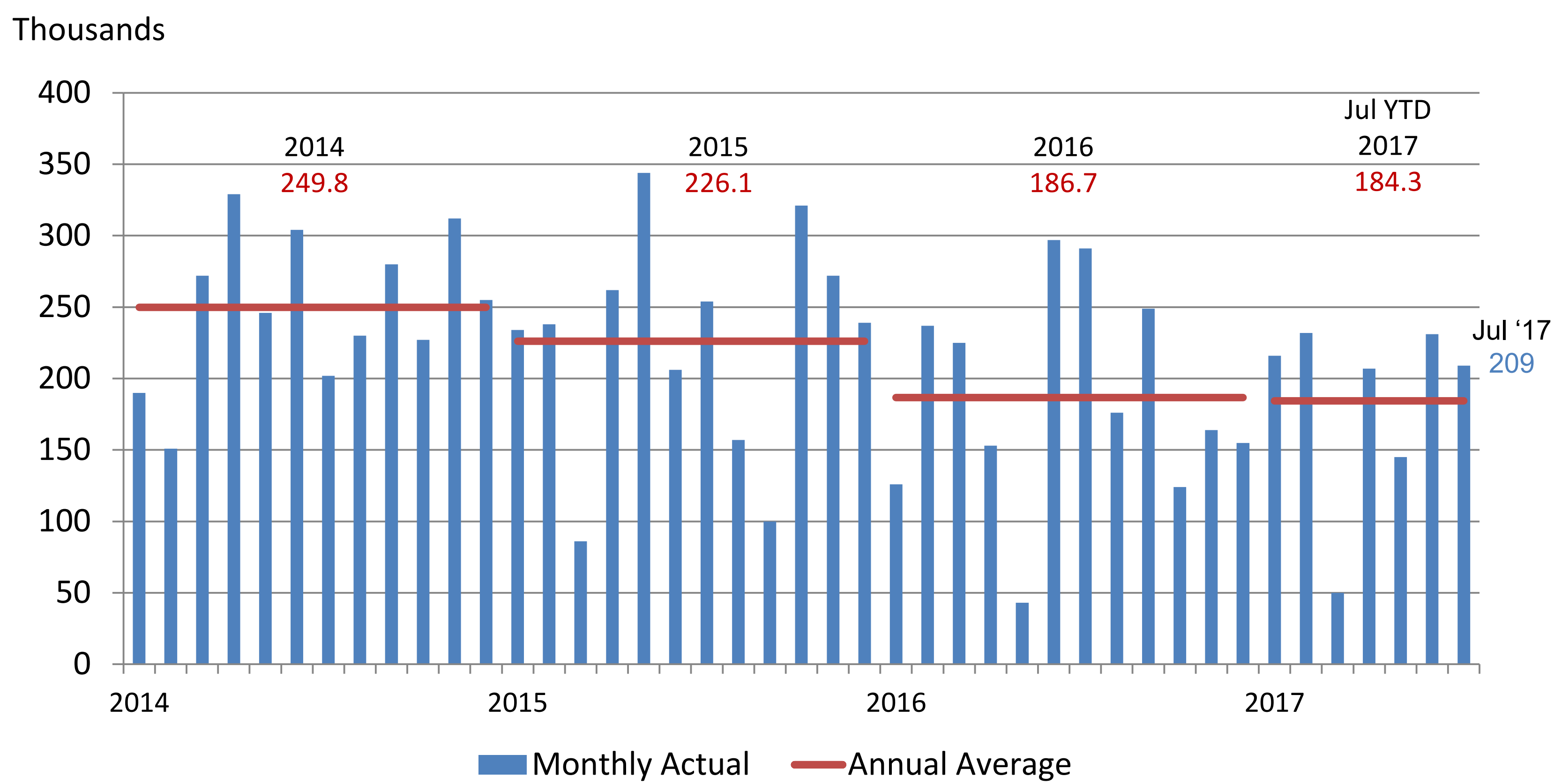
Percent Change – Billions of Chained $2009



Source: BEA and July Blue Chip Economic Indicators

U.S. Nonfarm Payrolls

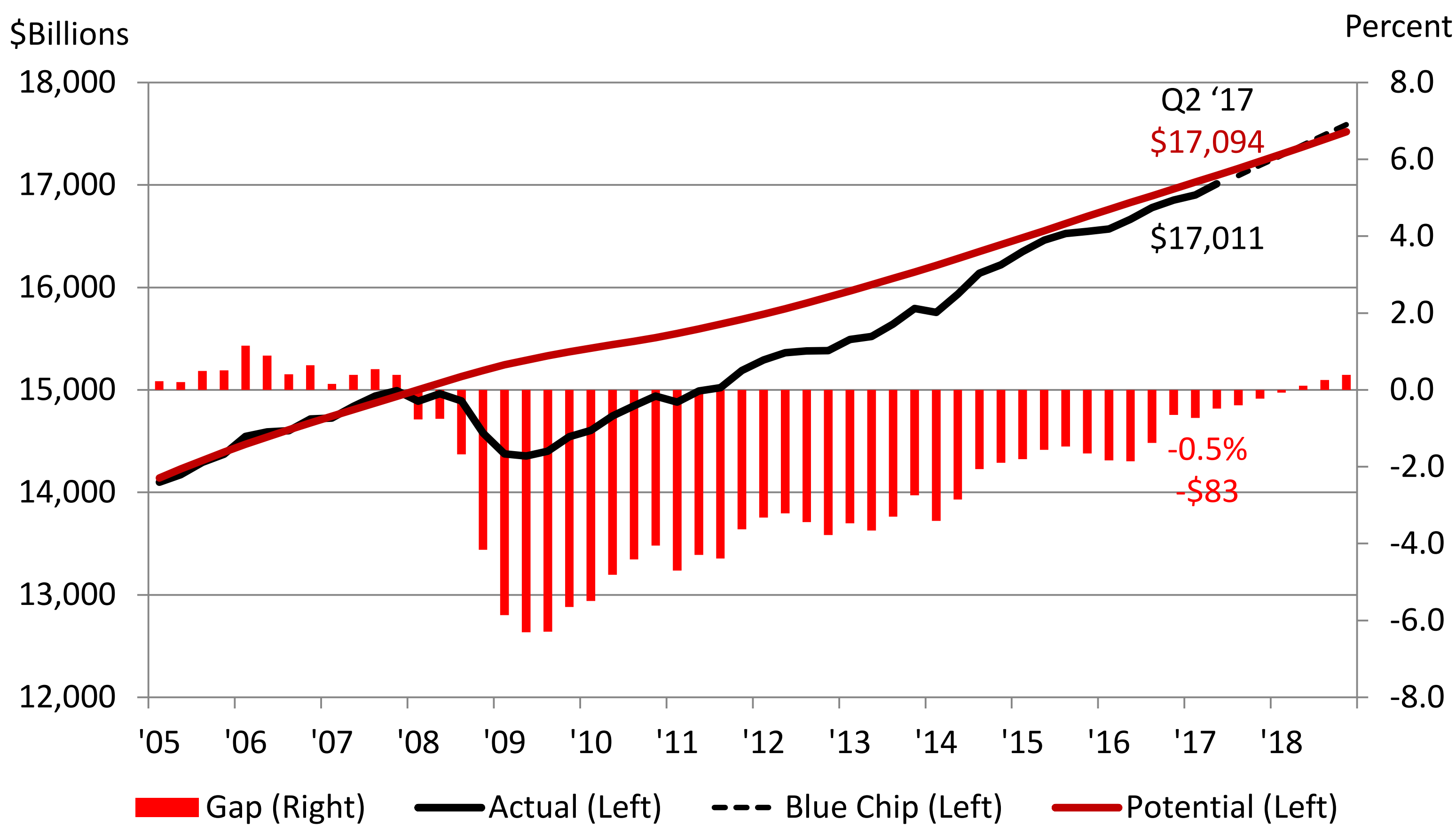
Monthly and Annual Average Job Change – In Thousands



Source: U.S. Department of Labor: Bureau of Labor Statistics

U.S. Real GDP – Actual and Potential

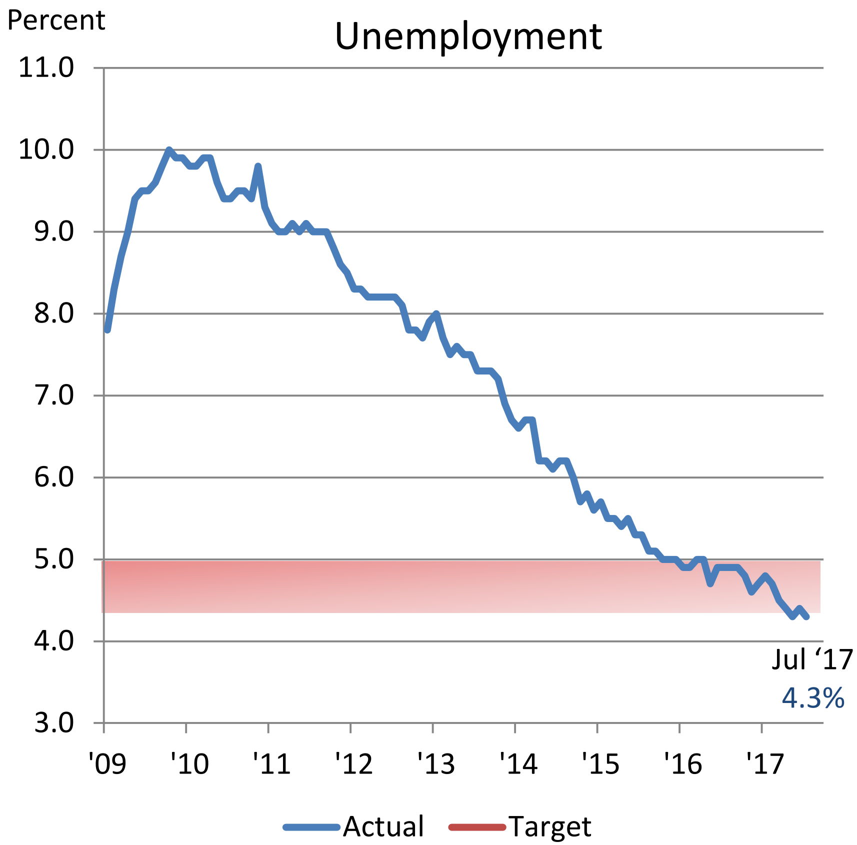
Billions Chained $2009 and Percent of Actual

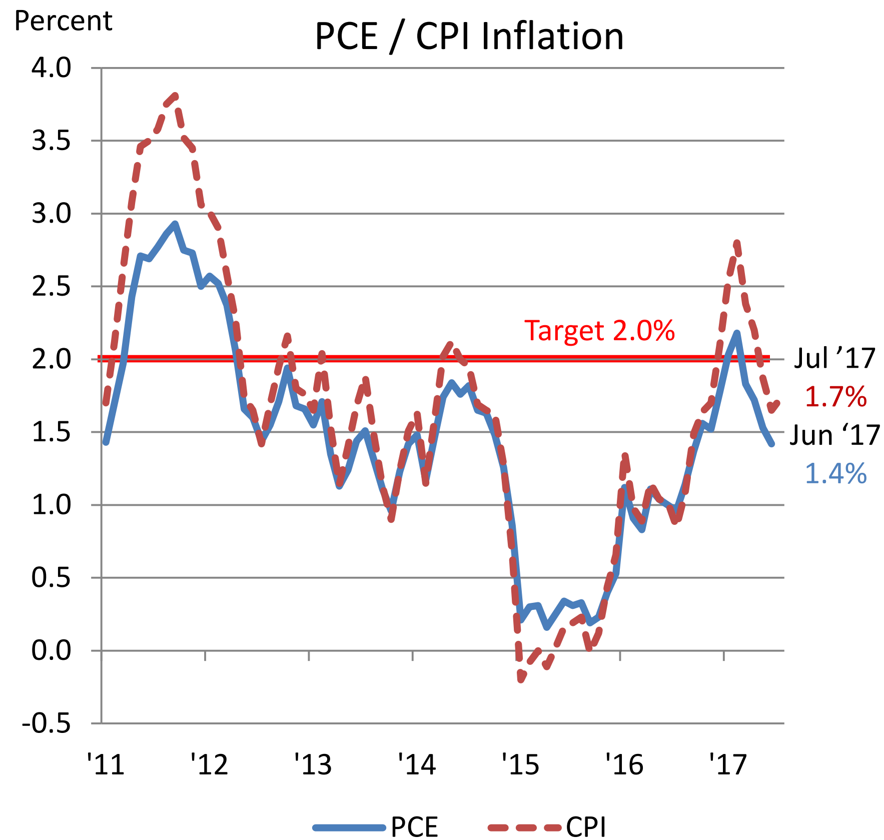


Source: Bureau of Economic Analysis and the U.S. Congressional Budget Office

Unemployment Rate & Prices

Percent Unemployed, PCE / CPI % Change Yr./Yr.

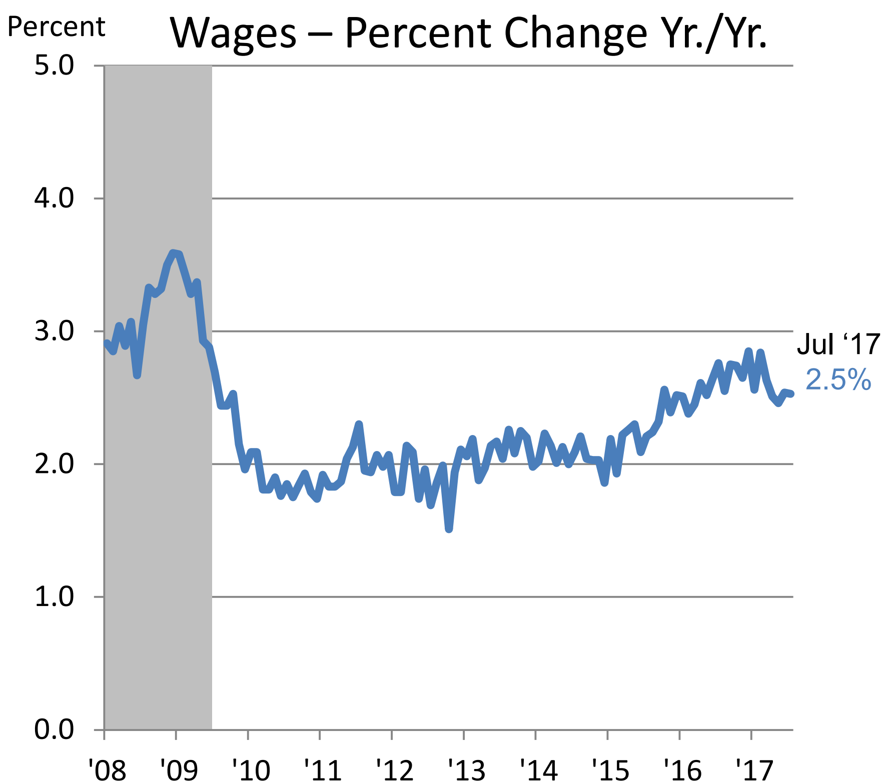


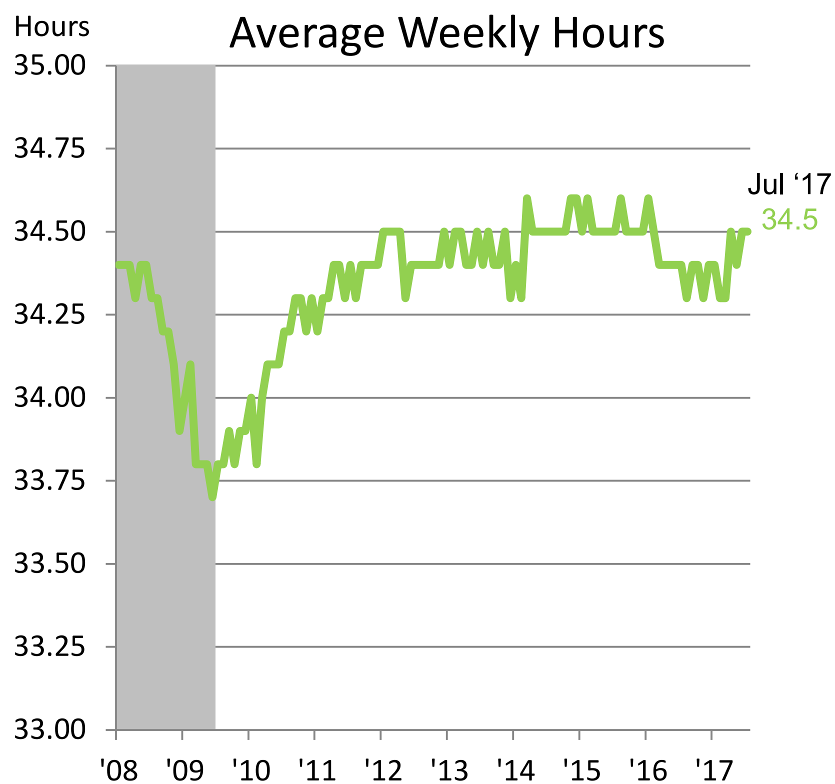


Source: U.S. Department of Labor: Bureau of Labor Statistics , Bureau of Economic Analysis and the Federal Reserve

Wages and Hours

Total Private – All Employees

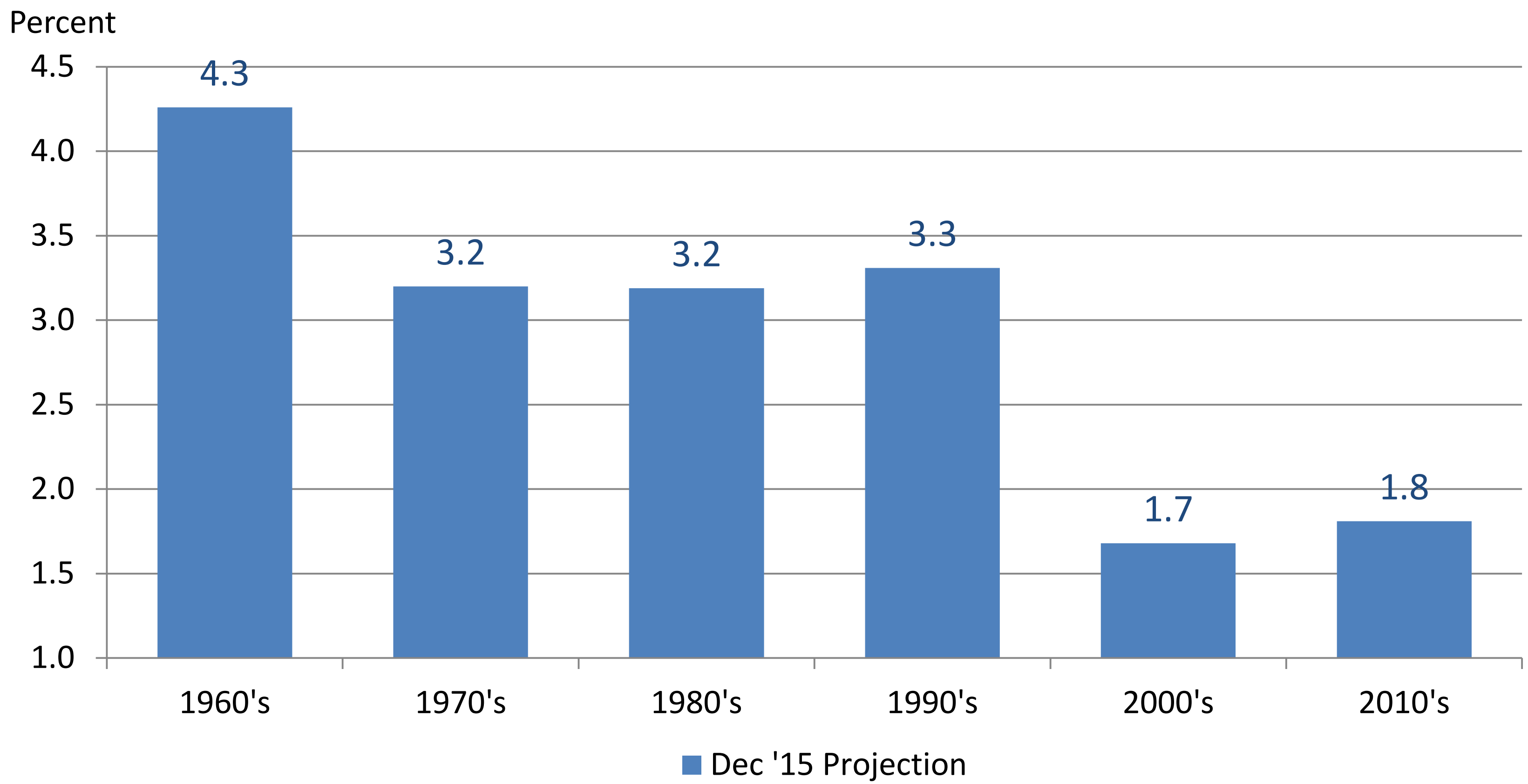




Source: U.S. Department of Labor: Bureau of Labor Statistics , Bureau of Economic Analysis and the Federal Reserve

Economic Potential by Decade

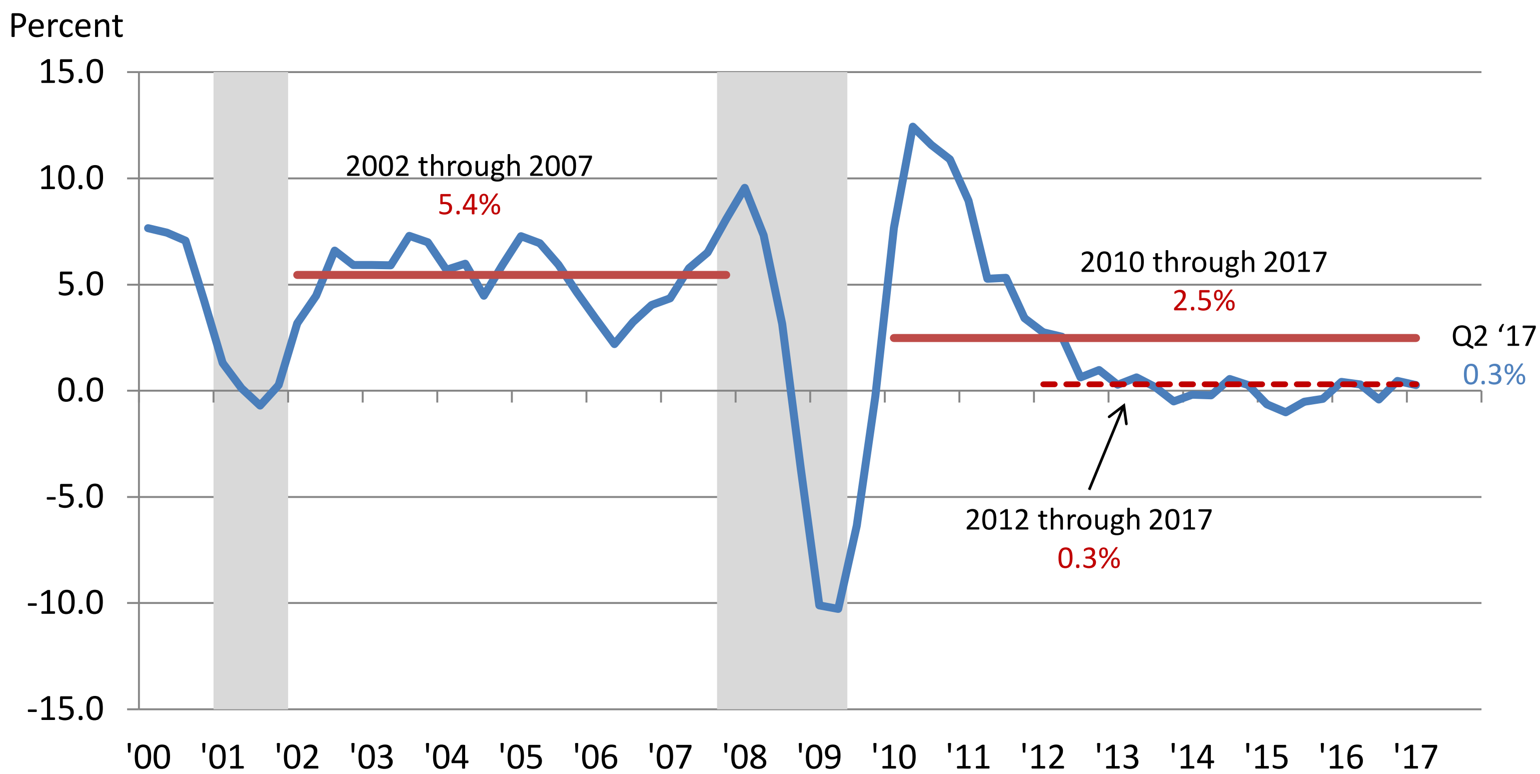
Real GDP Percent Change – Annual Average



Source: U.S. Congressional Budget Office

Manufacturing Sector Productivity

Real Output Per Hour All Employees – Percent Change from Year Ago



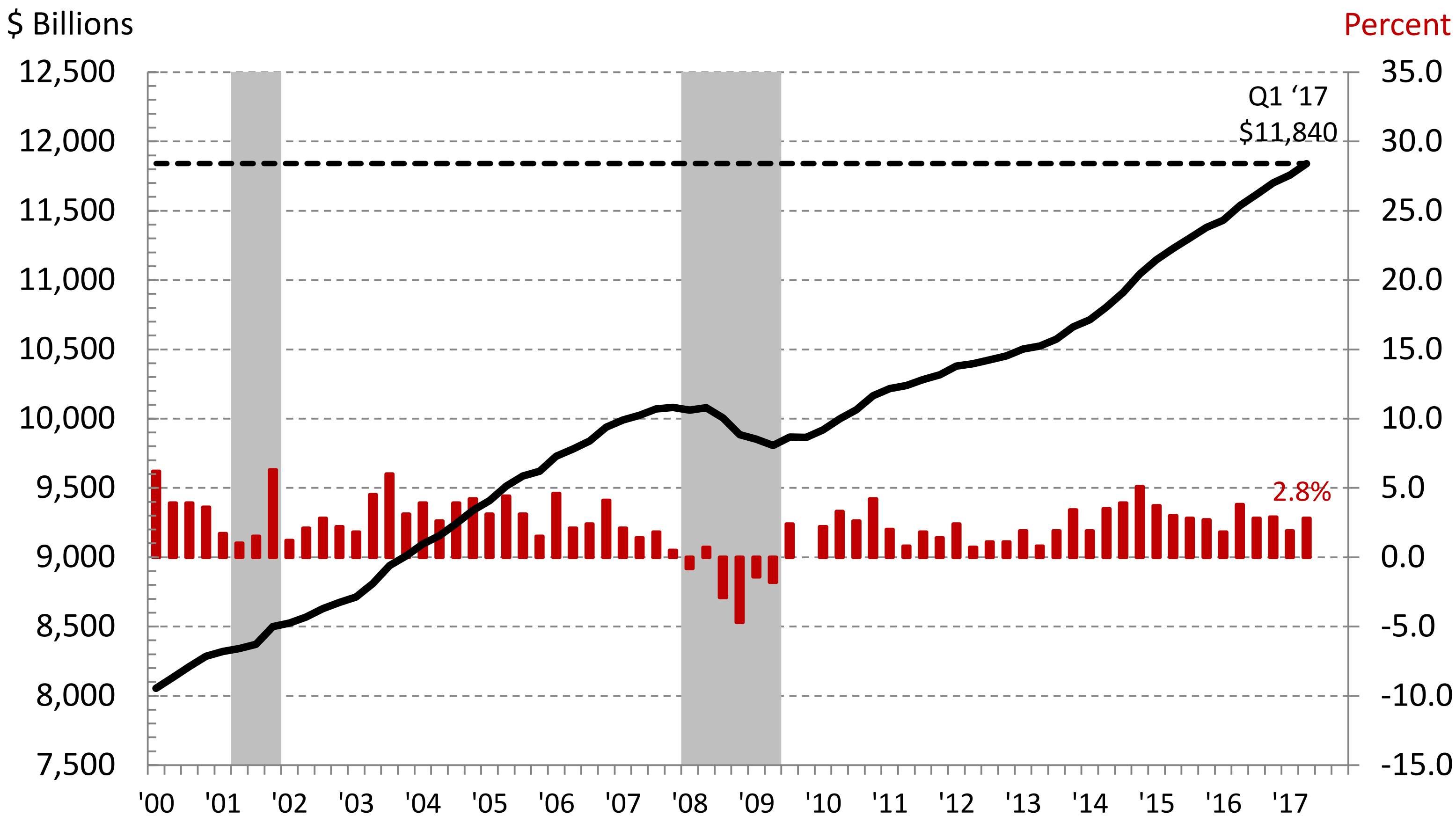
Note: Average expansionary real manufacturing sector productivity 1990 through 2008 equals 4.3%.

Source: U.S. Bureau of Labor Statistics

U.S. Consumer

Real Personal Consumption Expenditures

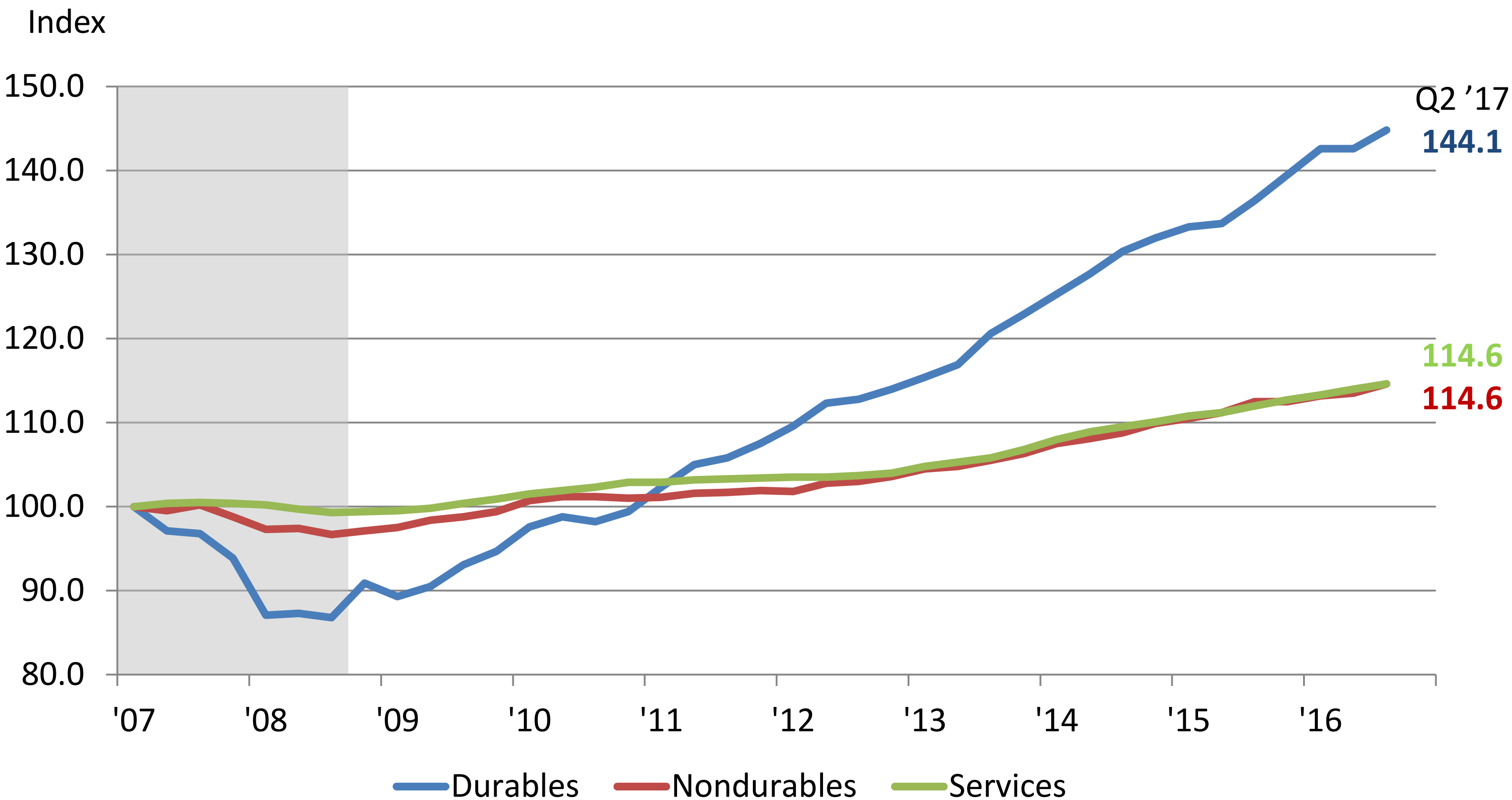
Billions Chained $2009, % Change Q/Q at SAAR



Source: U.S. Bureau of Economic Analysis

Real Personal Consumption Expenditures

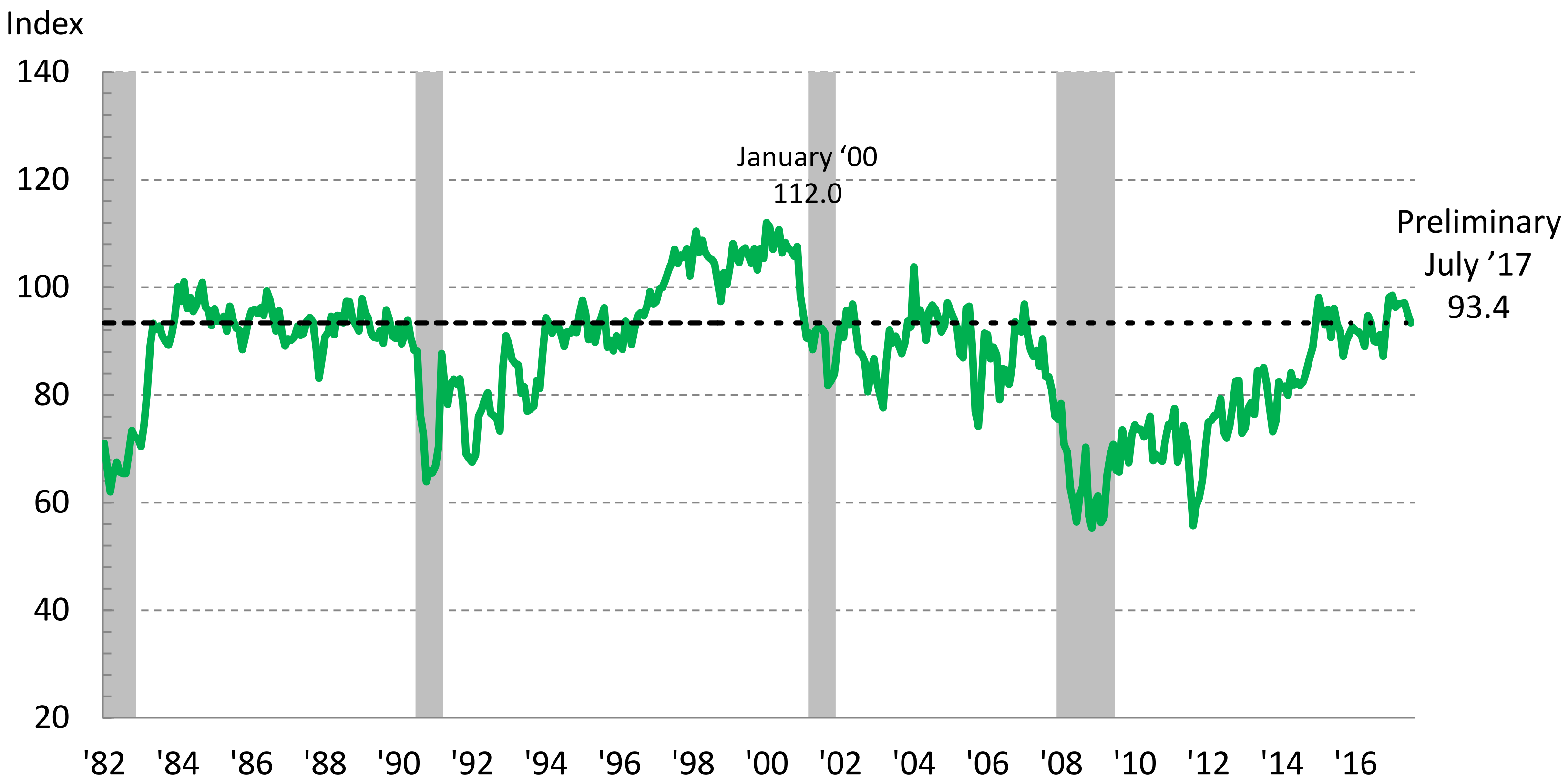
Index, Q4 2007 = 100



Source: Author’s calculations using data from the BEA

Consumer Sentiment

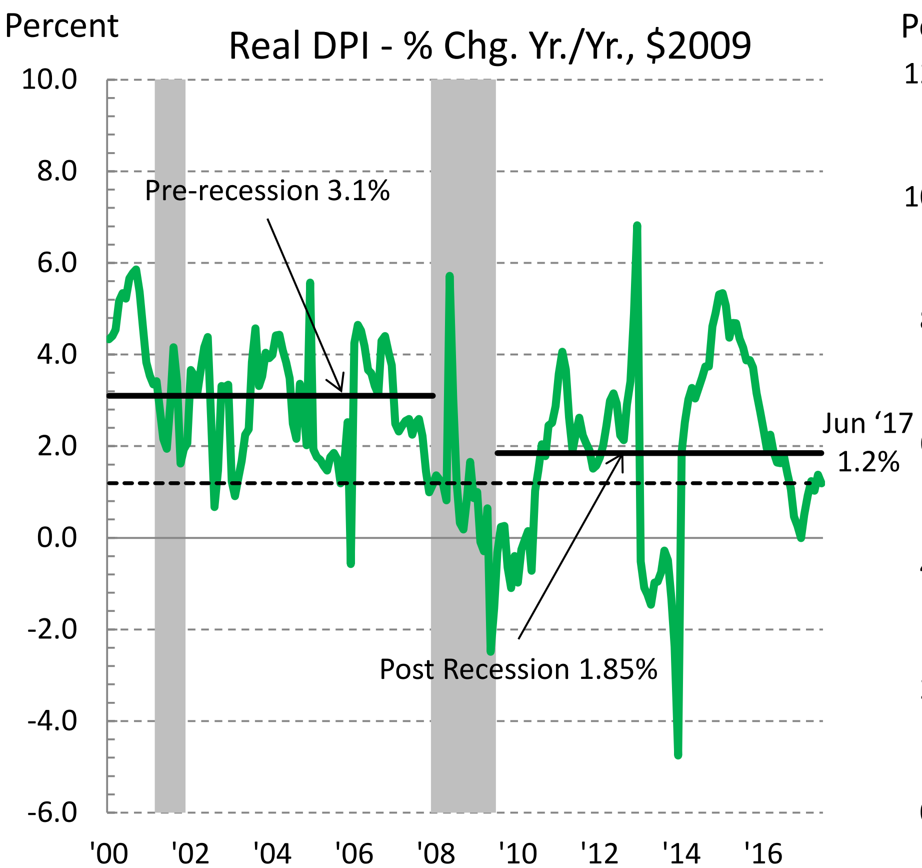
University of Michigan

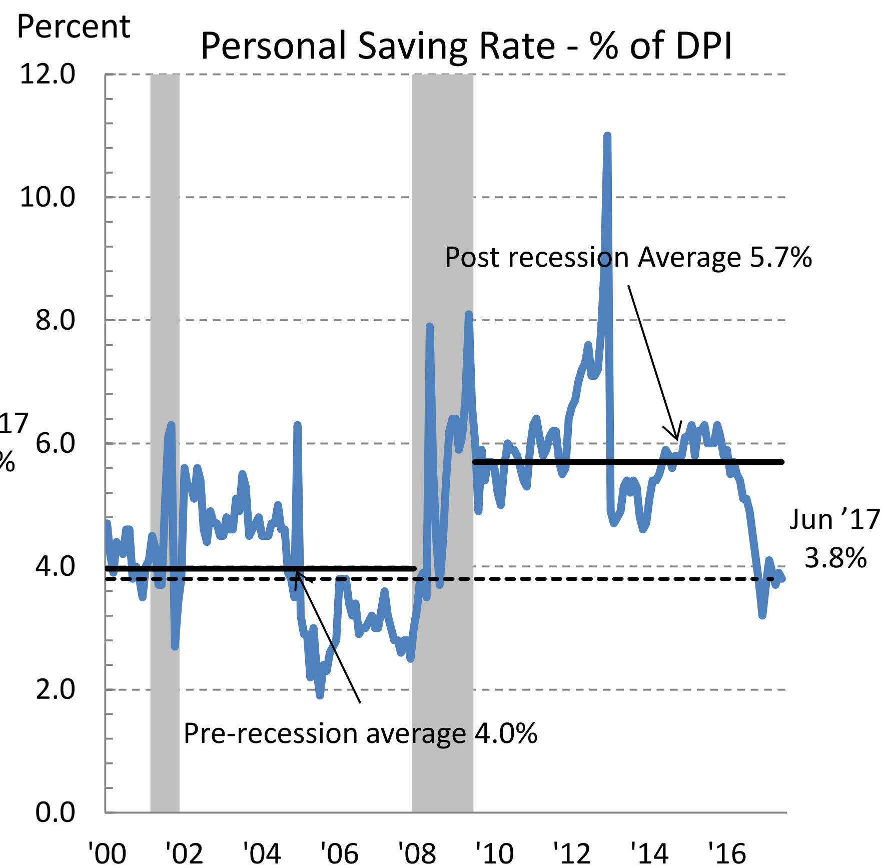


Source: Thomson Reuters / University of Michigan

Income and Savings Rate

Percent Change and Percent of DPI

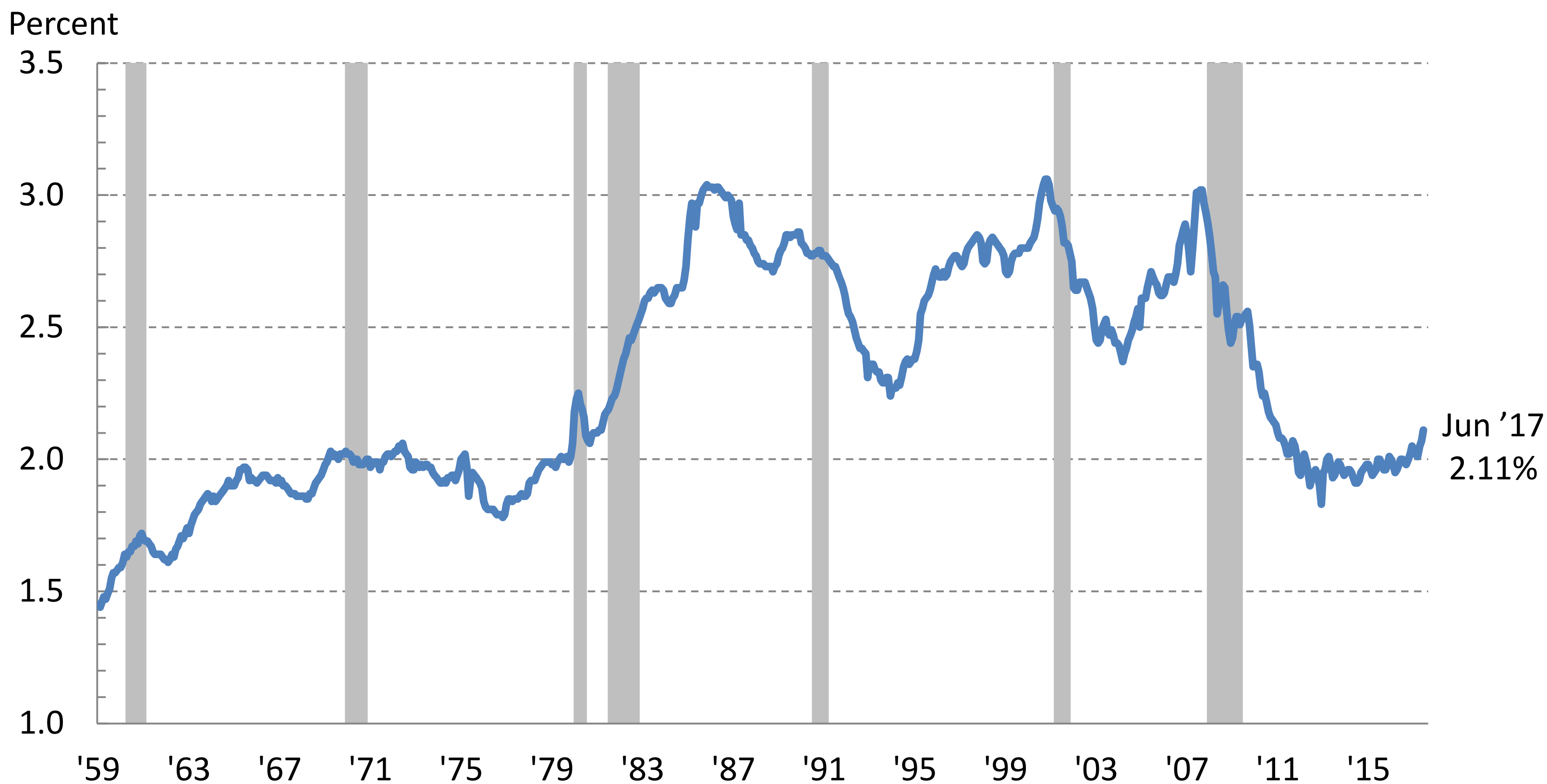




Source: U.S. Bureau of Economic Analysis

Interest Payments

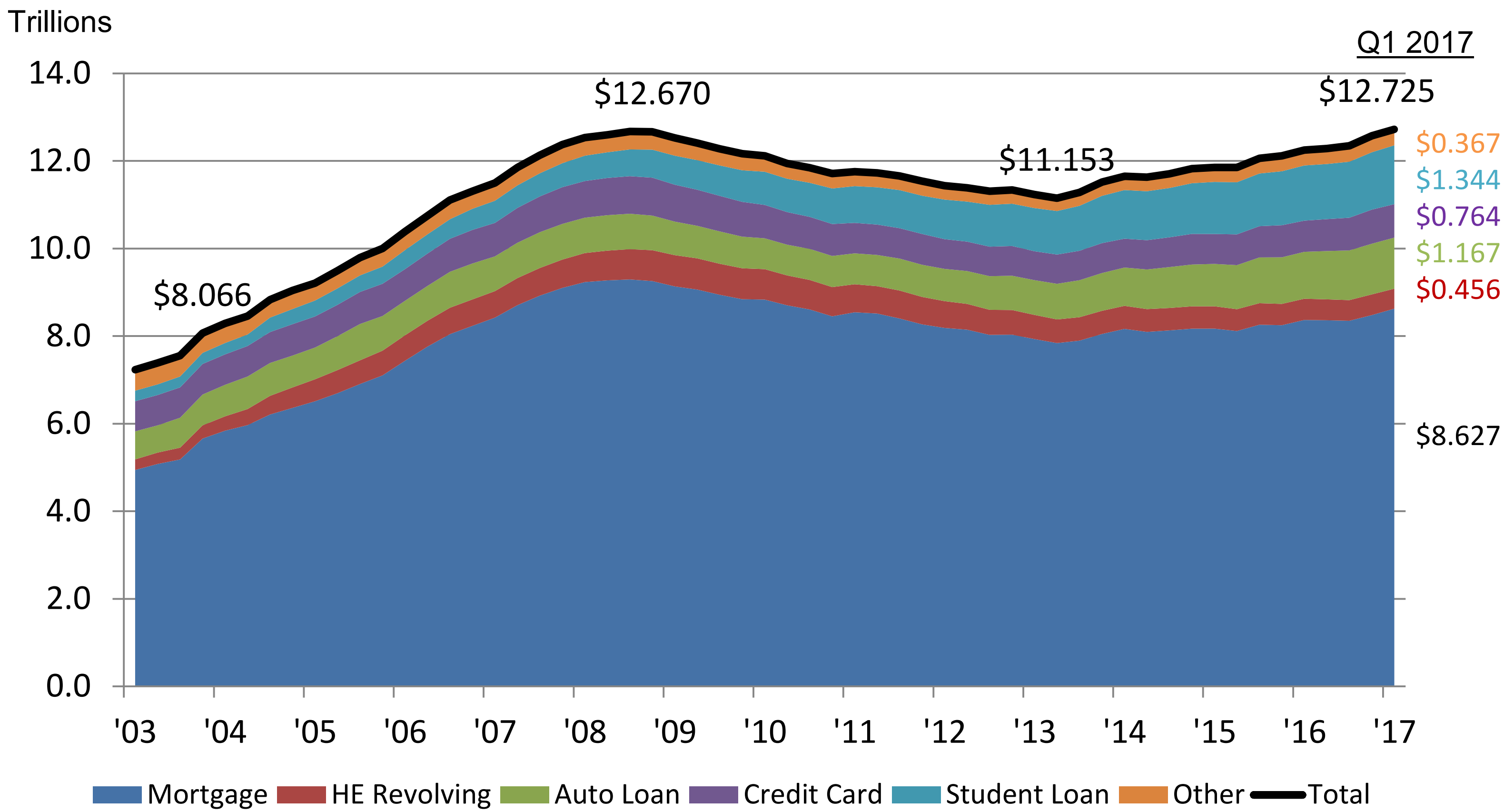
As a Percent of Disposable Personal Income



Source: Federal Reserve Bank - Board of Governors

Total Consumer Debt by Composition

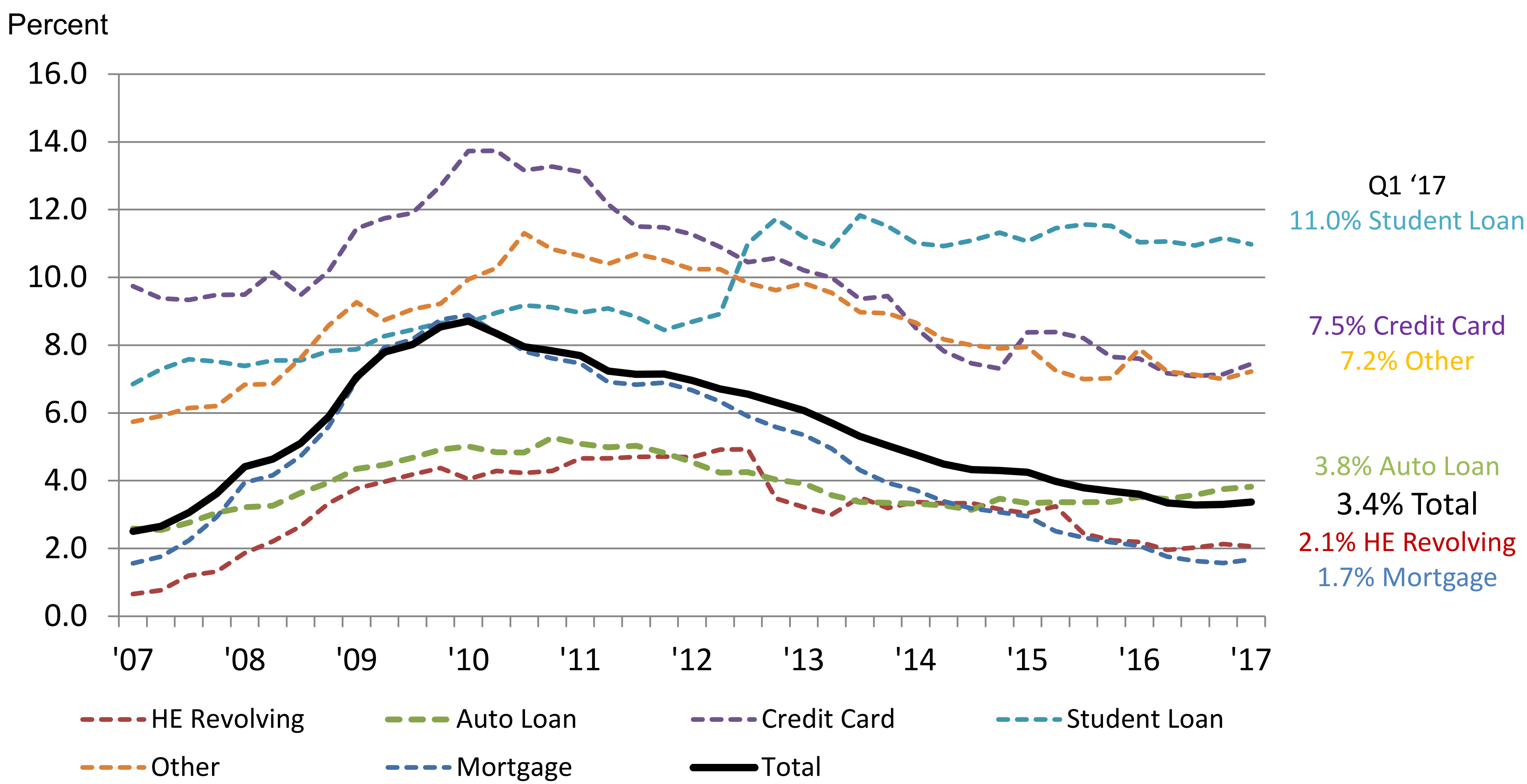
Trillions of Current Dollars



Source: Federal Reserve Bank of New York and Equifax

Household Debt 90+ Days Delinquent

Percent of Balance by Loan Type

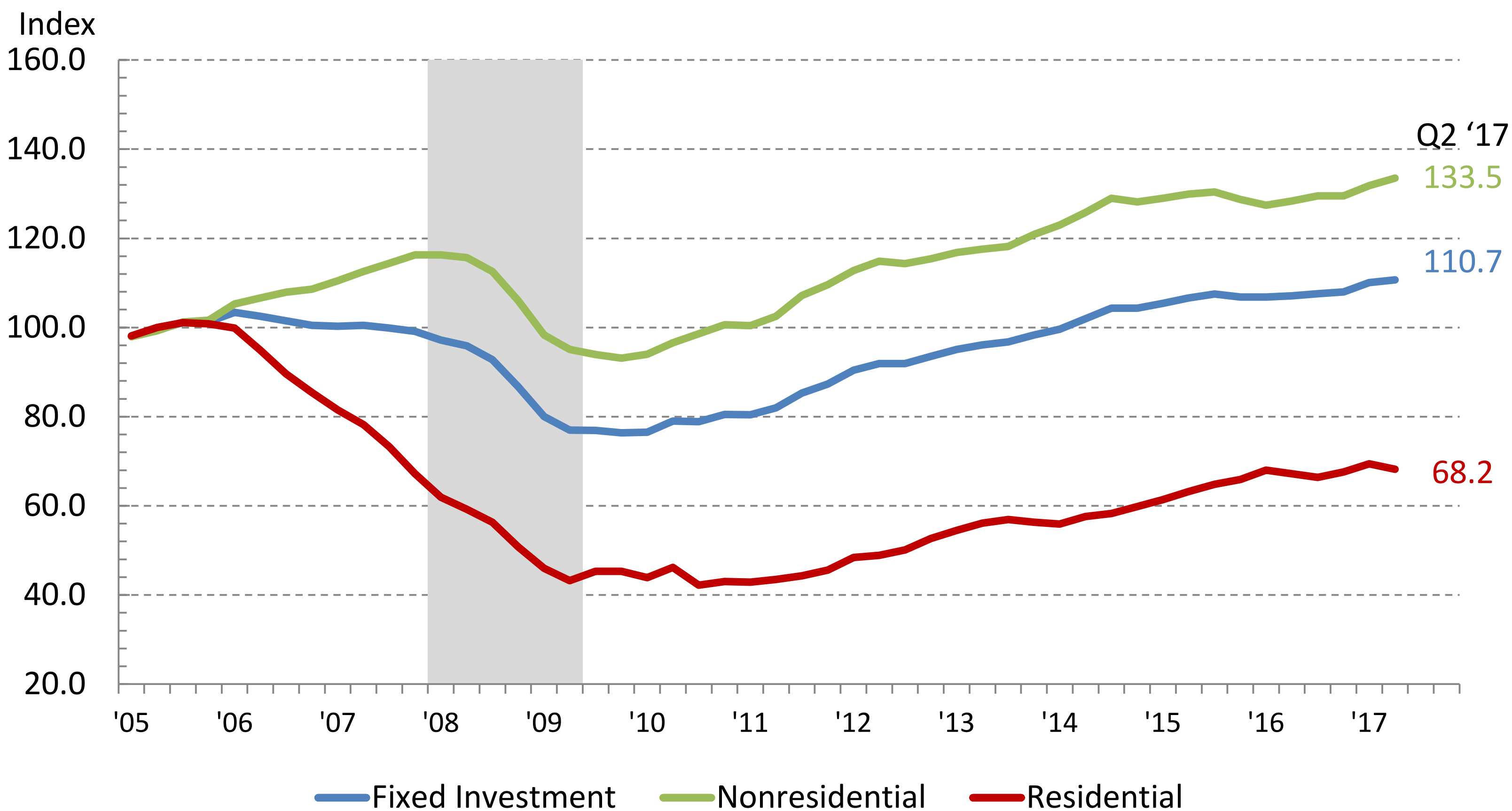


Source: Federal Reserve Bank of New York and Equifax

Investment

Real Private Fixed Investment

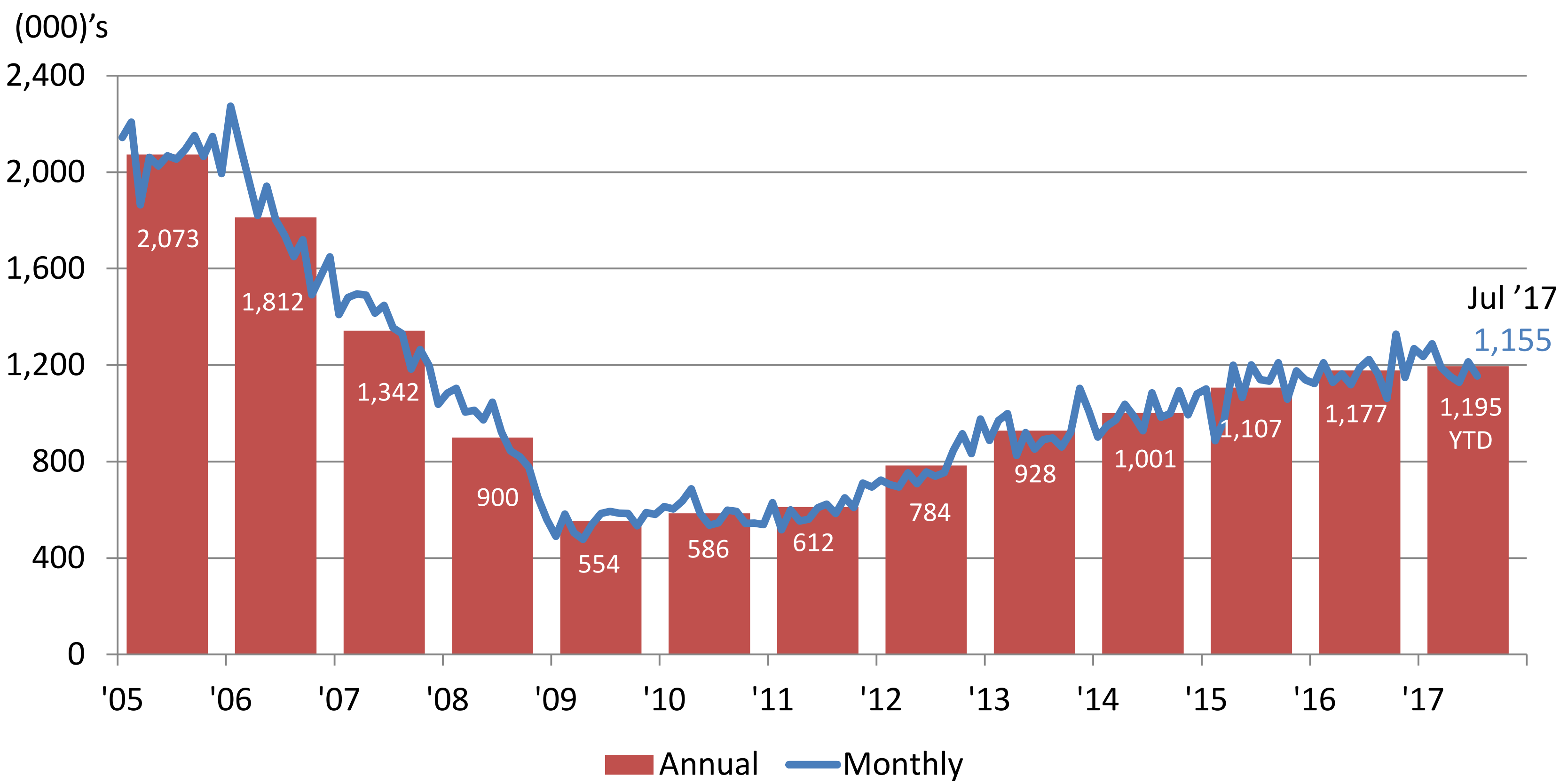
Billions Chained $2009, Index – 2005 = 100



Source: U.S. Bureau of Economic Analysis

U.S. Housing Starts

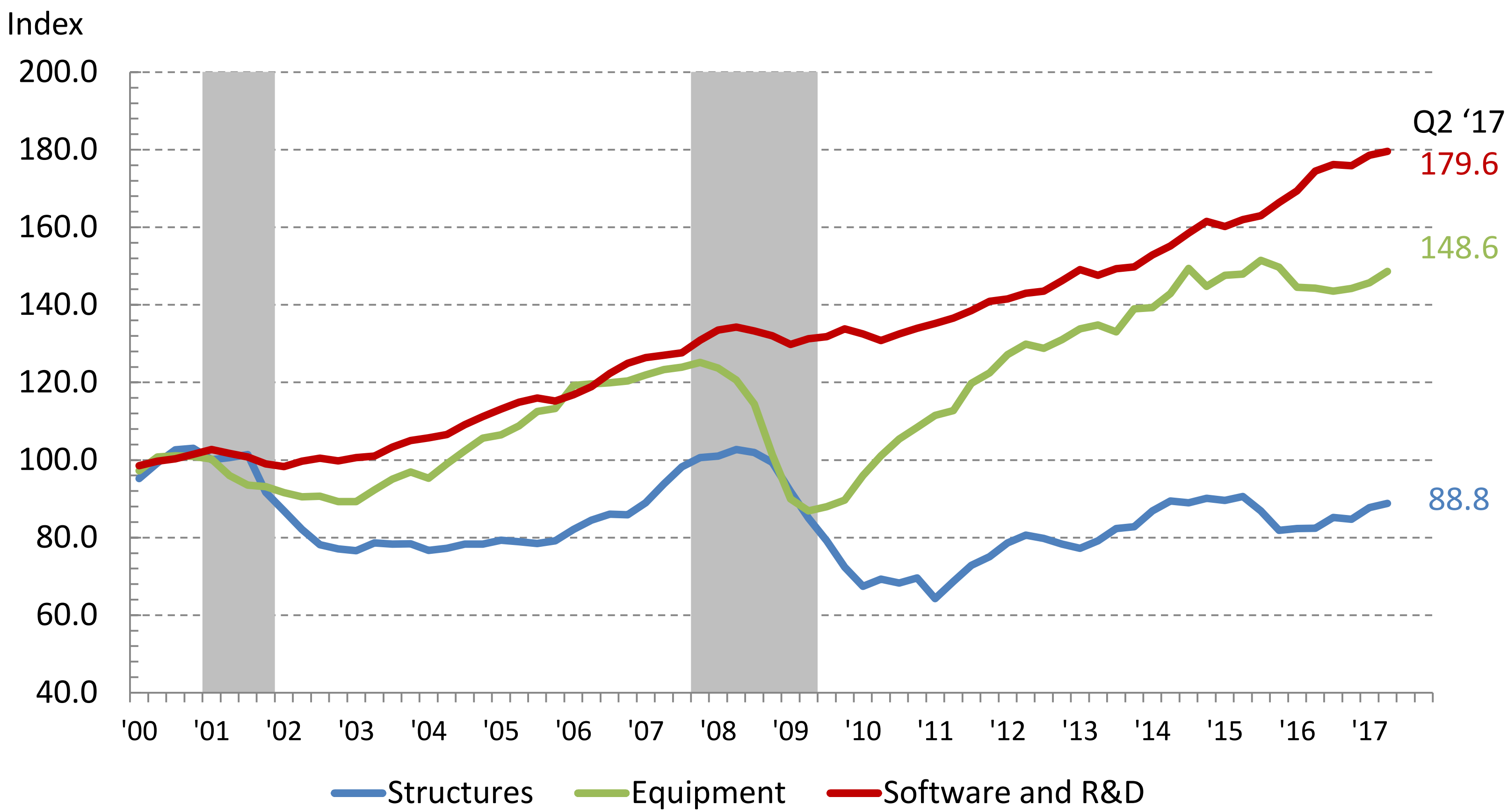
In Thousands of Units (SAAR) – Annual Average & Monthly Data



Source: U.S. Census Bureau

Real Private Nonresidential Fixed Investment

Billions Chained $2009, Index – 2000 = 100

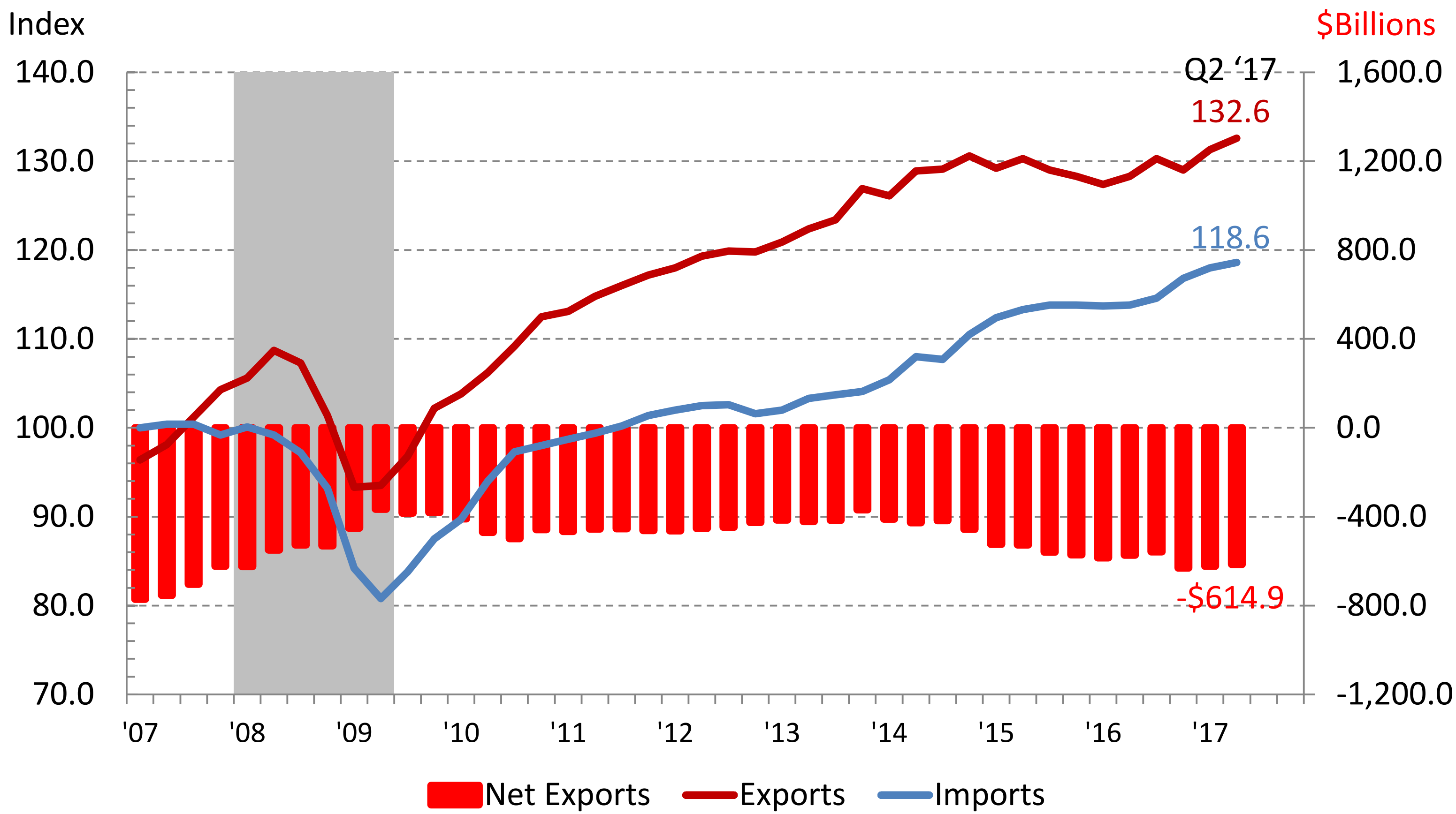


Source: U.S. Bureau of Economic Analysis, NIPA Table 5.3.6

Rest of World

Real Net Exports of Goods & Services

Billions Chained $2009, Index – 2007 = 100

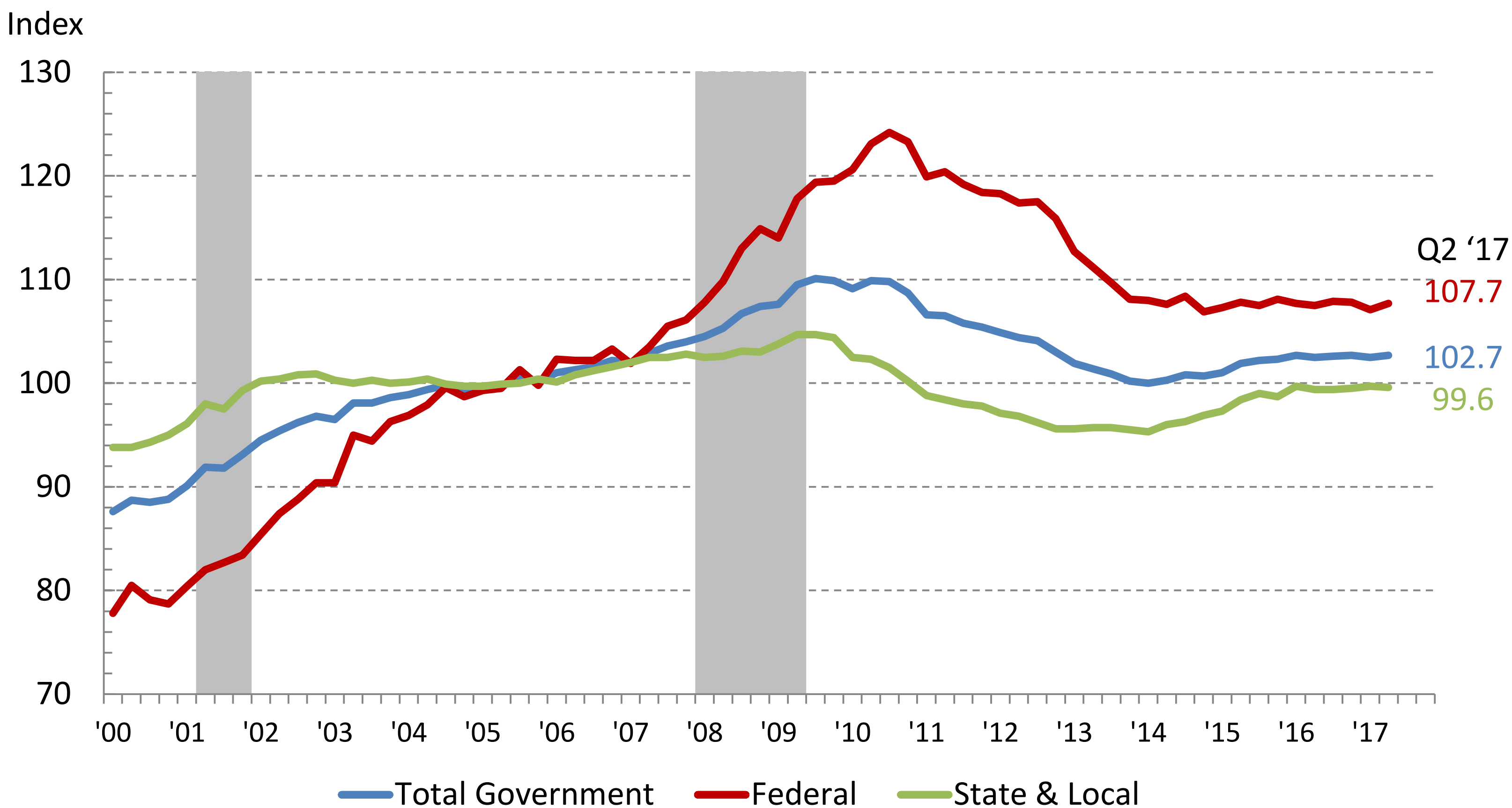


Source: U.S. Bureau of Economic Analysis

Government

Real Government Consumption & Investment

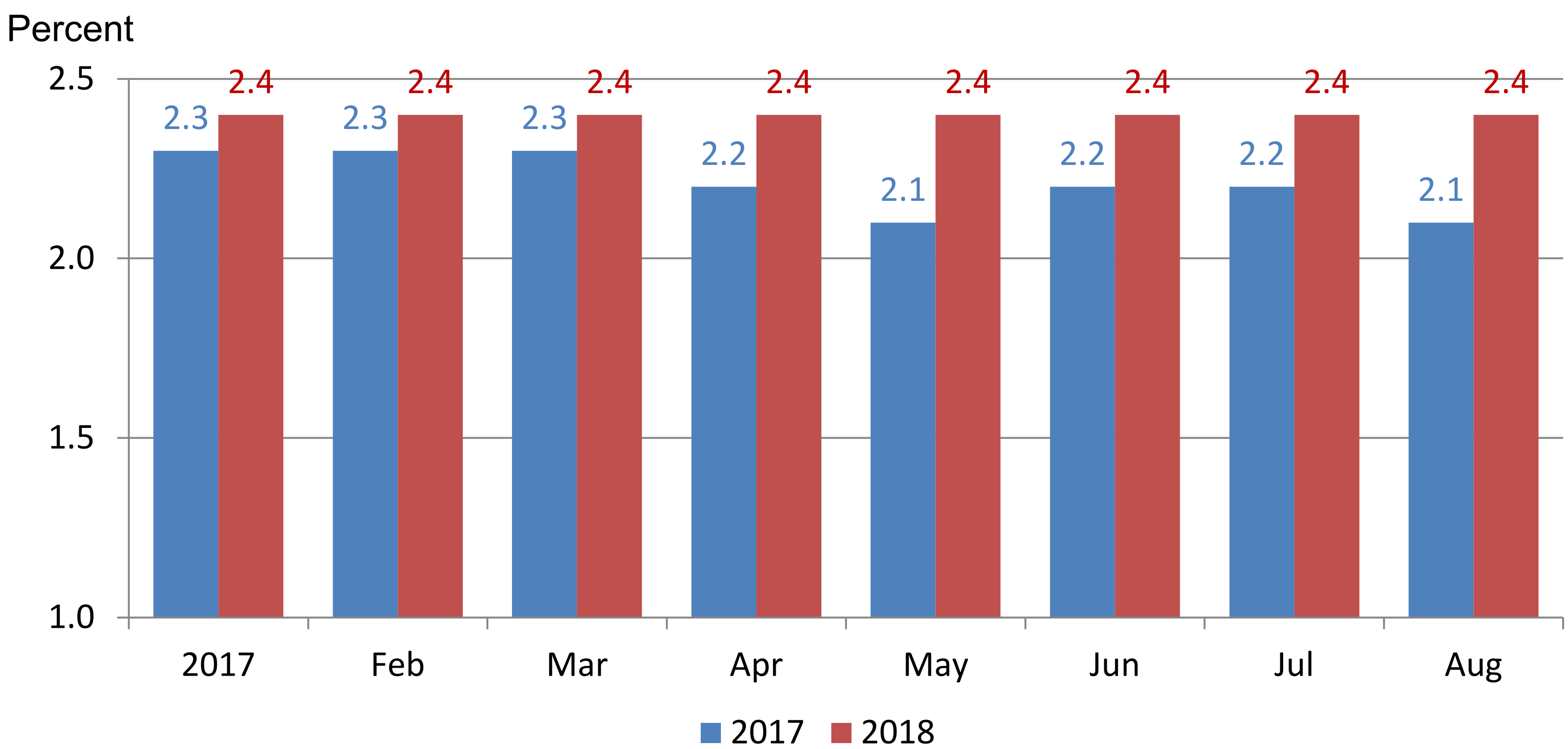
Billions Chained $2009, Index – 2005 = 100



Source: U.S. Bureau of Economic Analysis

U.S. Real GDP Blue Chip Forecast

Annual Percent Change – Billions of Chained $2009



Source: Blue Chip Indicators – May, 2017 Consensus.

Outline

- U.S. Economy
- Midwest
  - Regions in longer term perspective
  - Current Analysis of Midwest Performance

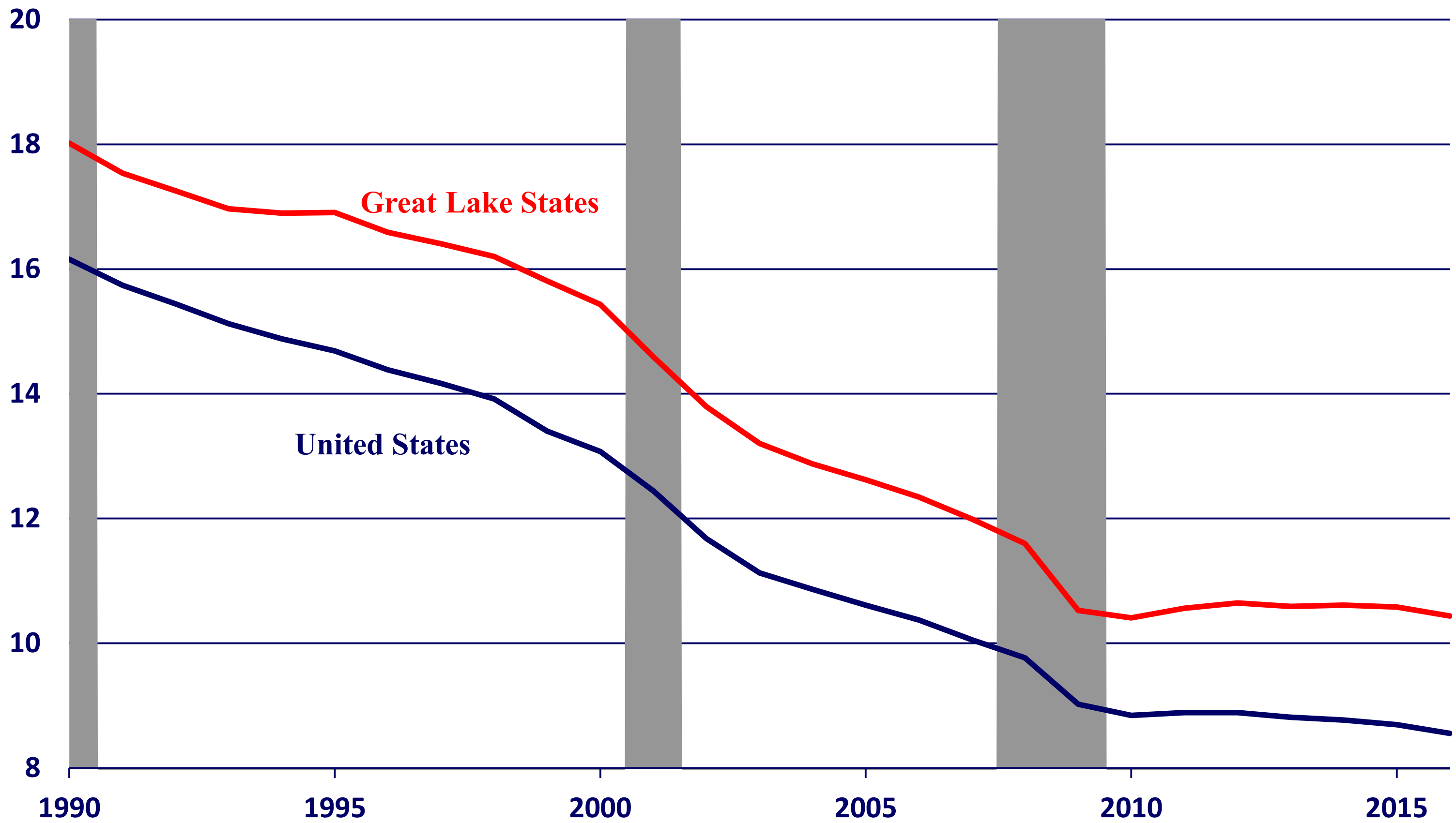
A rich, properous region with world class assets, but challenged

- A populous and diverse region (but Sunbelt migration challenging)
  - Continental spread and globalization/technological changes challenge historic advantages/industries
- Many large cities as legacy from an era of globalization/urbanization (but older industrial cities struggling to become service-oriented)
- Many rural areas disadvantaged by same forces, perhaps more so
- World-class skilled workforce (but aging and becoming closed to immigration on U.S. side)
- World class goods transportation/logistics infrastructure and manufacturing concentration (but threatened by aging infrastructure)


Open Border Policies
Technological changes
Globalization

Manufacturing Employment

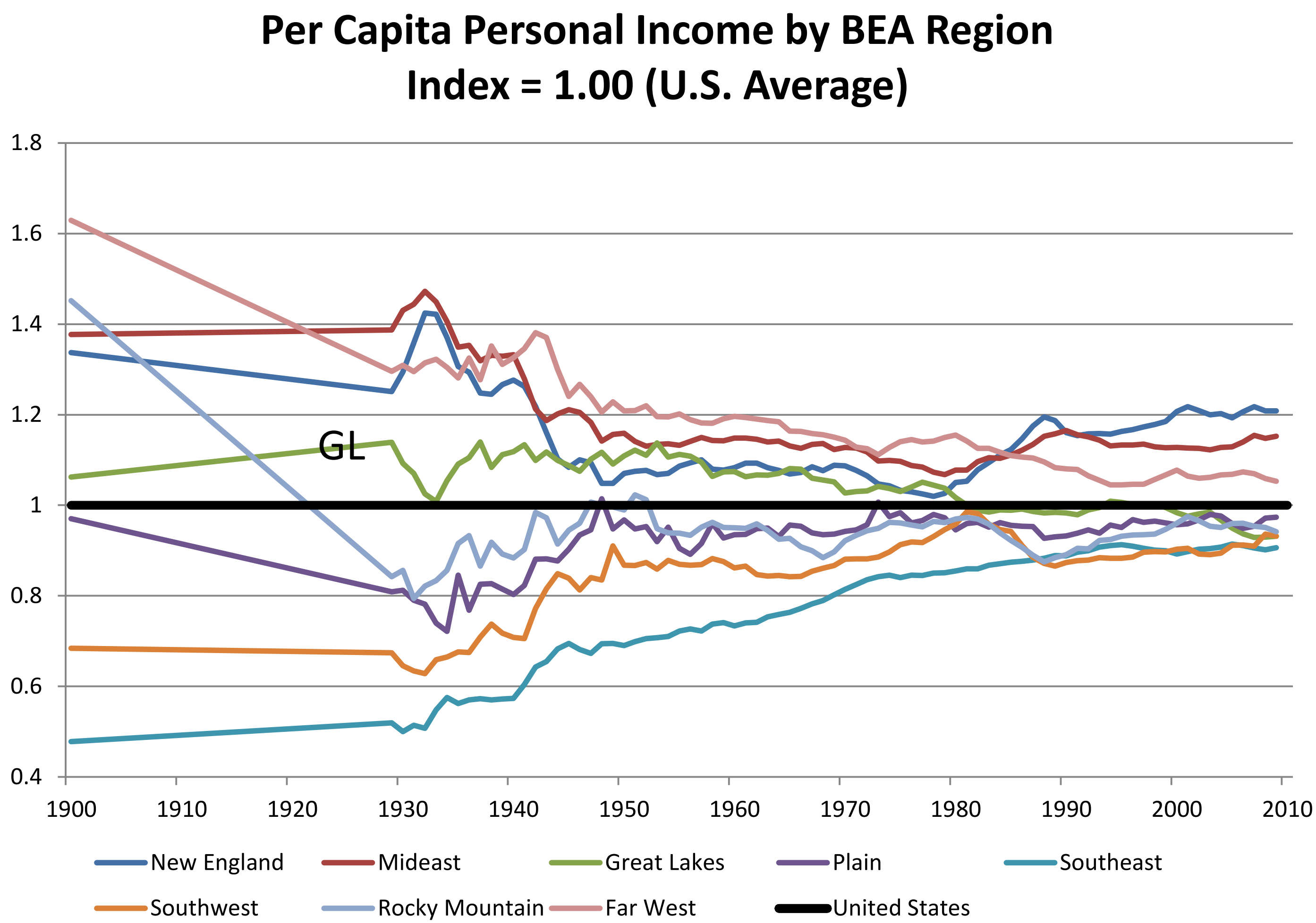
U.S. and Great Lake States
(percent of total employment)



Population share eroding fast

State and GLS Population Versus U.S.					
	Average Percentage Change		Percent Share of U.S. Population		
	1970-2016	2000-2016	1970	2016	Change (pp)
U.S.	1.0	0.9	100%	100%	0.00
WI	0.6	0.5	2%	2%	0.00
MN	0.8	0.7	2%	2%	0.00
IL	0.3	0.2	5%	4%	-0.01
IN	0.5	0.5	3%	2%	-0.01
MI	0.3	0.0	4%	3%	-0.01
OH	0.2	0.1	5%	4%	-0.02
PA	0.2	0.2	6%	4%	-0.02
NY	0.2	0.3	9%	6%	-0.03
GLS	0.3	0.3	36%	26%	-0.10
The values reported here may be subject to rounding error.					

U.S. Regions have Accomplished What the EU Aspires To



	Congressional Delegates			
	1950	2010	Loss	Change (%)
U.S.	437	435	-2	0%
WI	10	8	-2	-20%
MN	9	8	-1	-11%
IL	25	18	-7	-28%
IN	11	9	-2	-18%
MI	18	14	-4	-22%
OH	23	16	-7	-30%
PA	30	18	-12	-40%
NY	43	27	-16	-37%
GLS	169	118	-51	-30%

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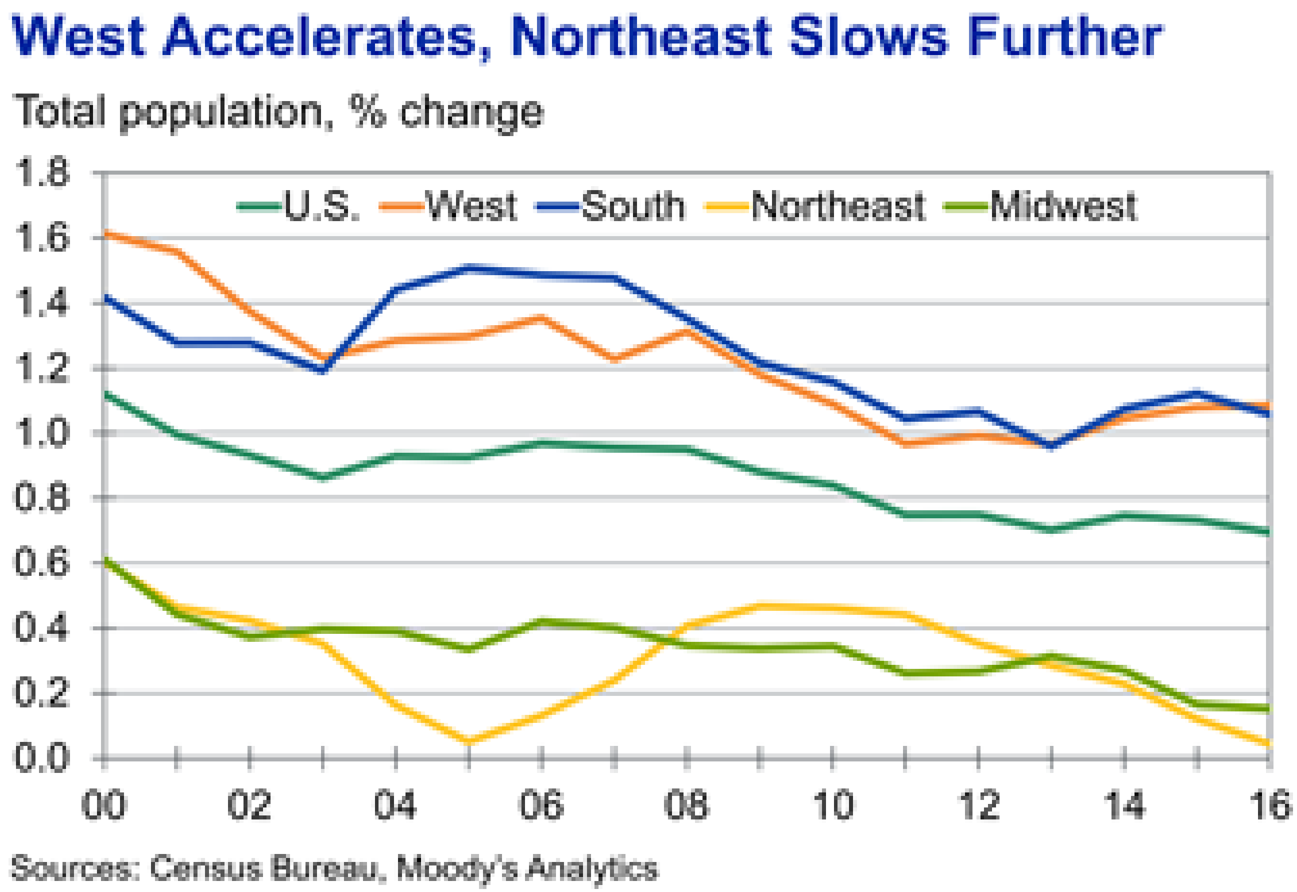
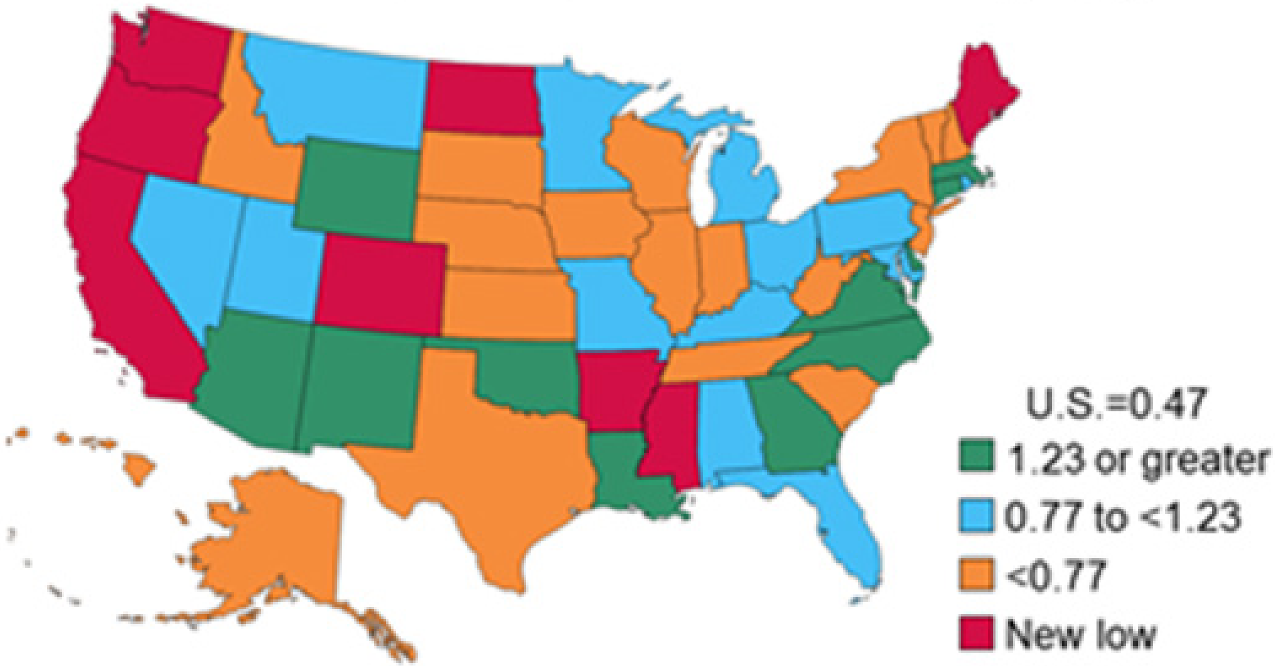
Demographics: Sunbelt trends return



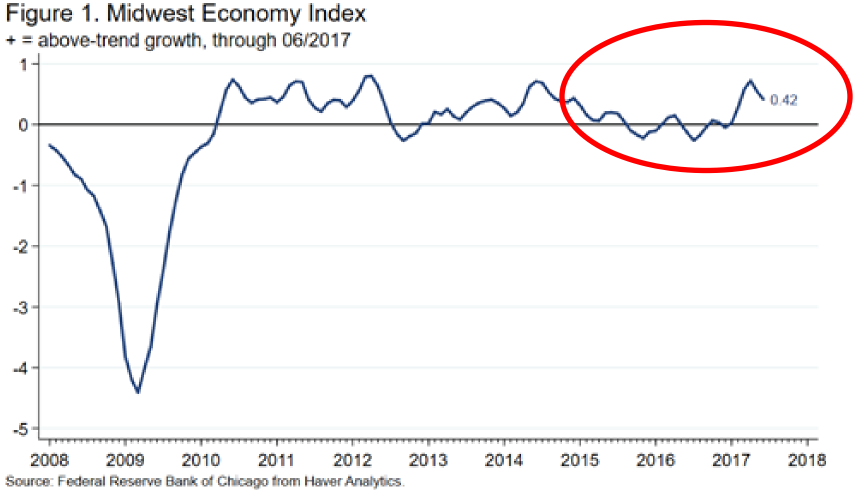
Tight Labor Markets Emerging in All Regions

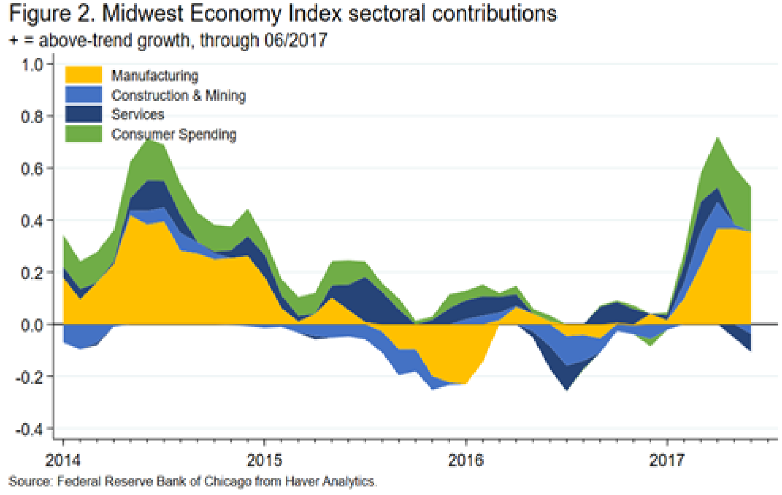
Unemployment rate, 2017Q2, diff. from low of last cycle, ppts



Sources: BLS, Moody's Analytics

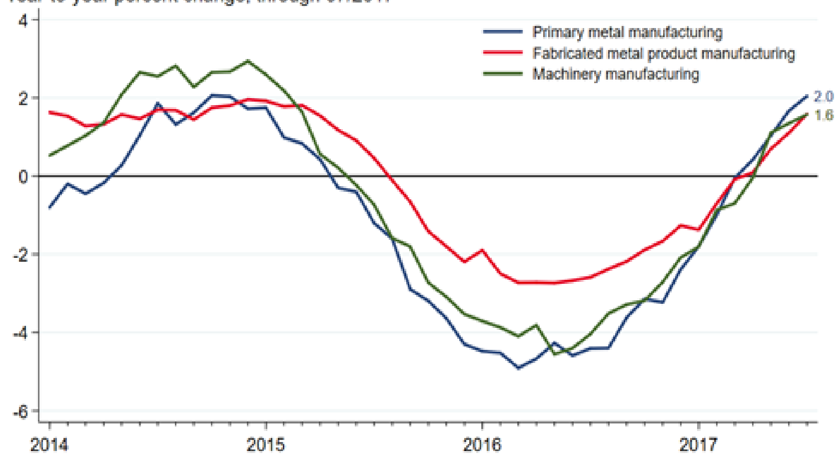
Manufacturing leads a Midwest pickup





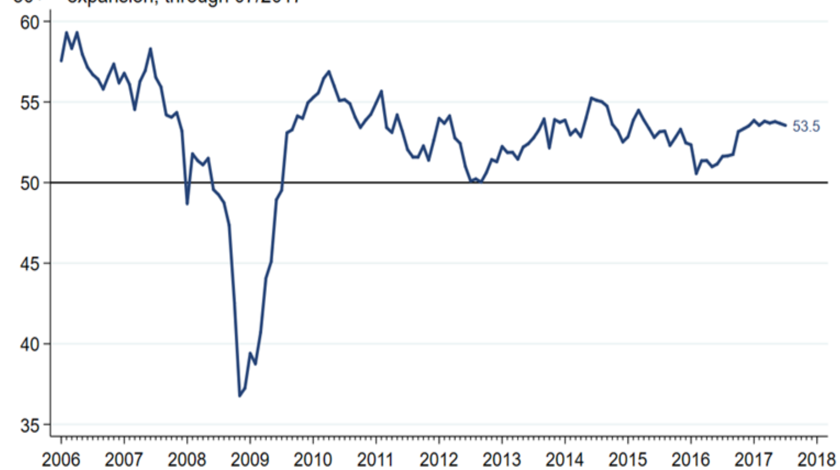
Return of global demand (and energy-mining) behind the surge

Figure 3. U.S. nonfarm payroll employment for selected industries
Year-to-year percent change, through 07/2017



Source: Bureau of Labor Statistics from Haver Analytics.

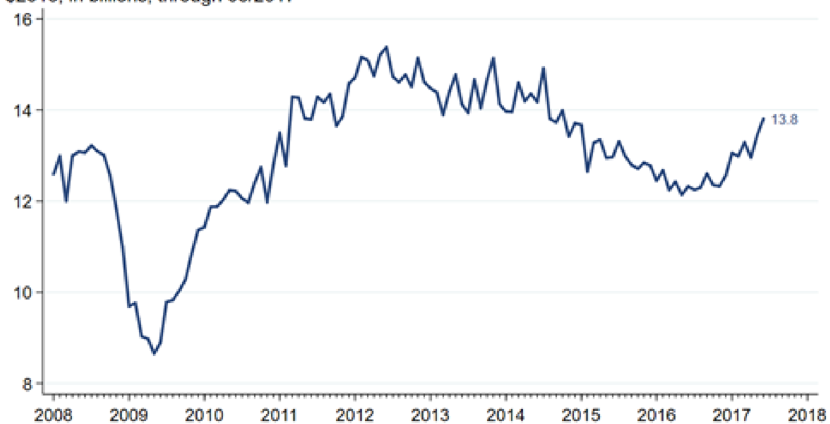
Figure 4. JPMorgan Global Manufacturing & Services PMI
50+ = expansion, through 07/2017



Source: J.P. Morgan and IHS Markit.

Exports rand oil drilling recovering

Figure 5. Seventh District exports of manufactured goods
$2016, in billions, through 06/2017



Source: U.S. Census Bureau from Haver Analytics.

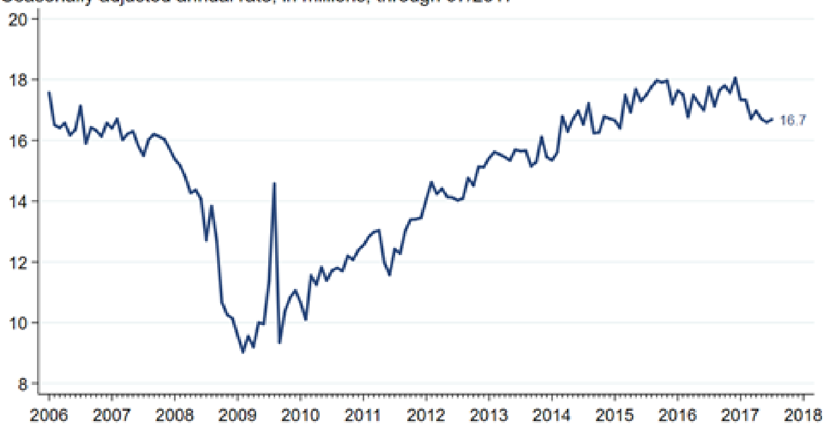
Figure 6. US crude oil field production
Average barrels per day, in millions, through 07/2017

Source: Energy Information Administration from Haver Analytics.

Autos and agriculture are weak spots

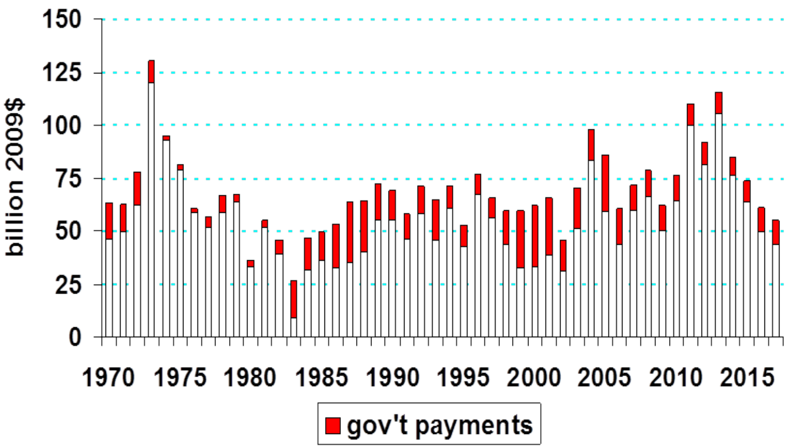
Figure 7. Light vehicle sales

Seasonally adjusted annual rate, in millions, through 07/2017



Source: U.S. Bureau of Economic Analysis from Haver Analytics.

Net farm income to decline 4th year



Thank You!