

US Economic Outlook

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The University of Alabama

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Overview: U.S. Economy

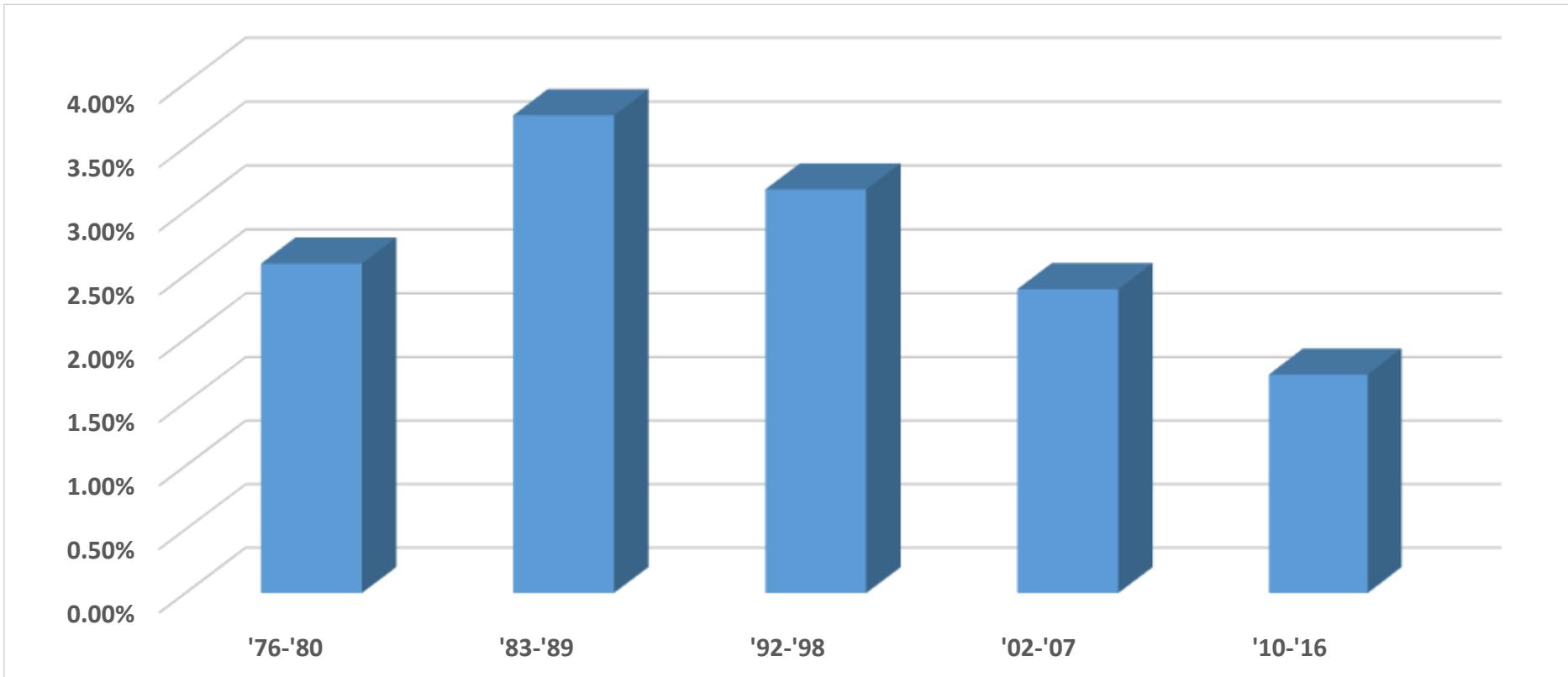
- The current economic recovery (now into its 8thyear) has been the slowest recovery in postwar history.
- Compared to its peak in 4th quarter 2007, GDP is only about 12 percent higher while the number of employed is only 3.5 million higher.
- Advance estimate of inflation adjusted GDP growth in the first quarter of 2017 was only 0.7 percent – the weakest in three years, with consumer spending and inventory accumulation slowing sharply.
- Growth in second half is expected to be around 3.4 percent, led primarily by consumer spending. For the year, the rate of growth is estimated to be around 2.2 percent, followed by approximately 2.7 percent in 2018. The economy grew by 1.6 percent in 2016.
- Consumer spending will remain the main source of growth, rising by 2.5 percent in 2017.
- After dropping by 0.5 percent, nonresidential business spending will increase by 4.5 percent in both 2017 and 2018. .
- However, weak wage growth in some sectors of the economy and relatively high debt levels (**\$12.7 trillion**) will continue to keep consumers cautious, despite the job growth seen in recent months, historically employment growth is still relatively sluggish, and most of the jobs being added are either temporary (about 30 to 40 percent), part-time and/or in low wage sectors of the economy.
- After a 1.2 percent drop in 2016, industrial production index will rise 1.9 percent in 2017 and 2.9 percent in 2018. Industrial production in paper and related products will rise by 0.7 percent in 2017, following a 2.6 percent drop in 2016. Payroll employment in paper and related products industry will rise 0.4 percent, at about the same pace as 2016.

Post-recession Average Real GDP Growth

Time period	Average growth
1976 - 1980	2.59%
1983 - 1989	3.75%
1992 - 1998	3.17%
2002 - 2007	2.39%
2010 - 2016	1.72%

Source: U.S. Bureau of Economic Analysis

Post-recession Average Real GDP Growth



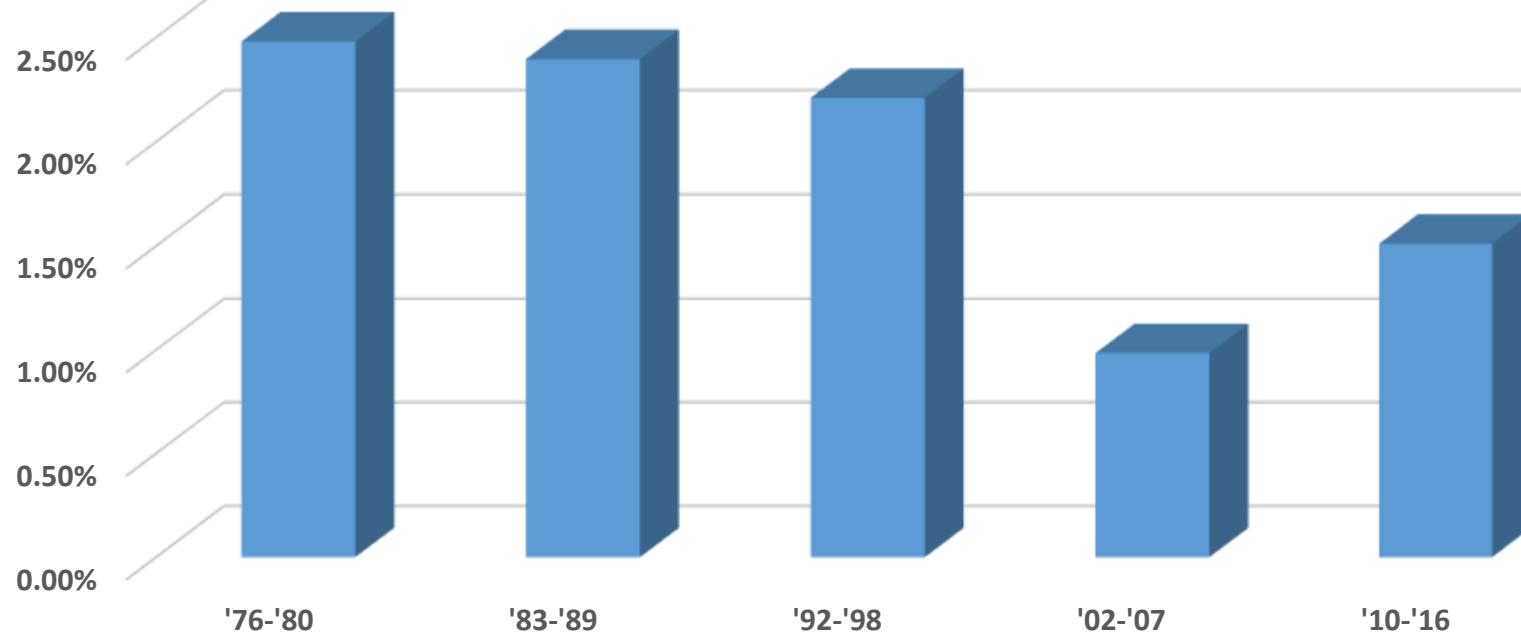
Source: U.S. Bureau of Economic Analysis

Post-recession Average Employment Growth

Time period	Average growth
1976 - 1980	2.48%
1983 - 1989	2.40%
1992 - 1998	2.21%
2002 - 2007	0.99%
2010 - 2016	1.51%

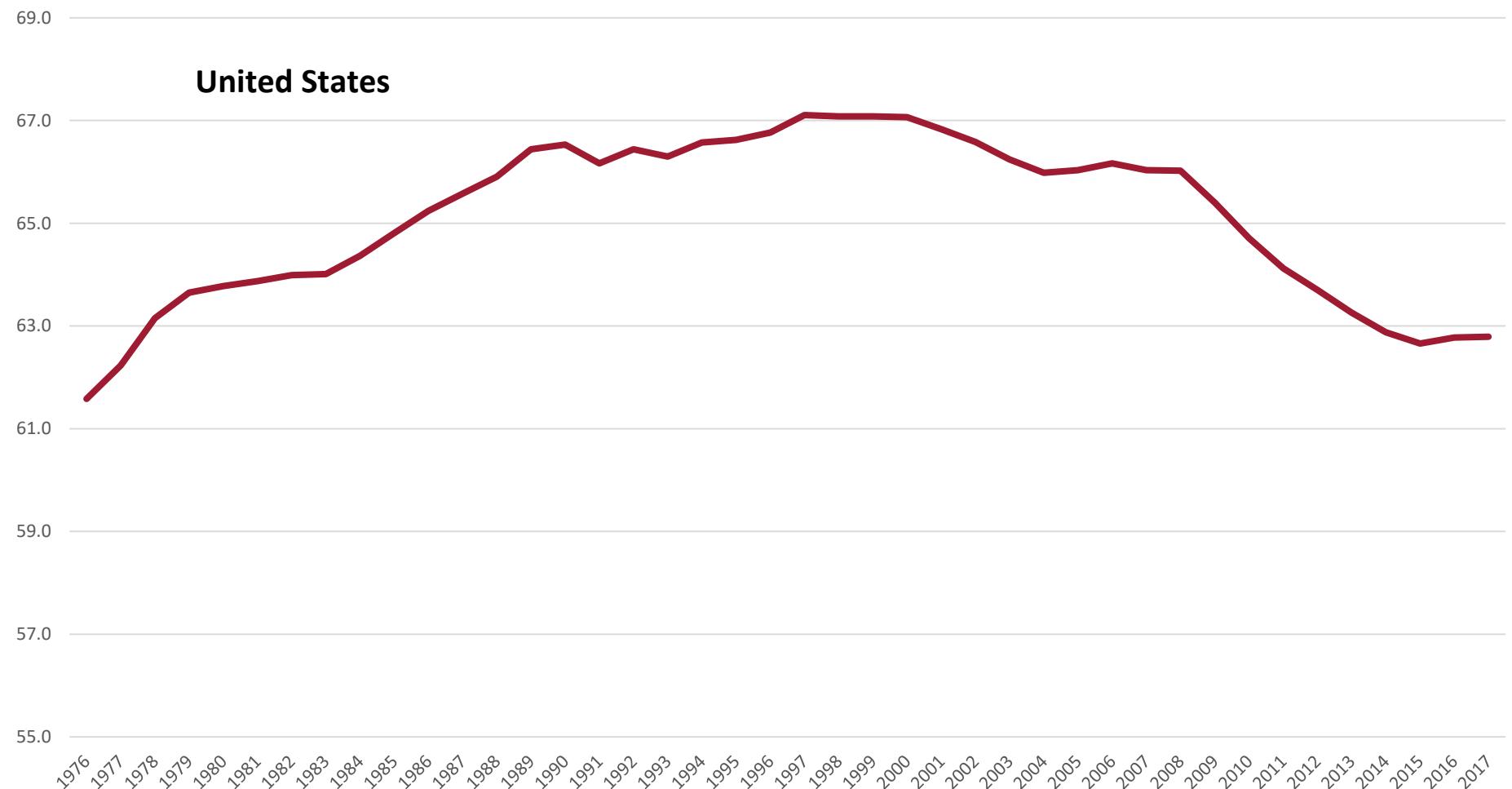
Source: U.S. Bureau of Labor Statistics

Post-recession Average Employment Growth



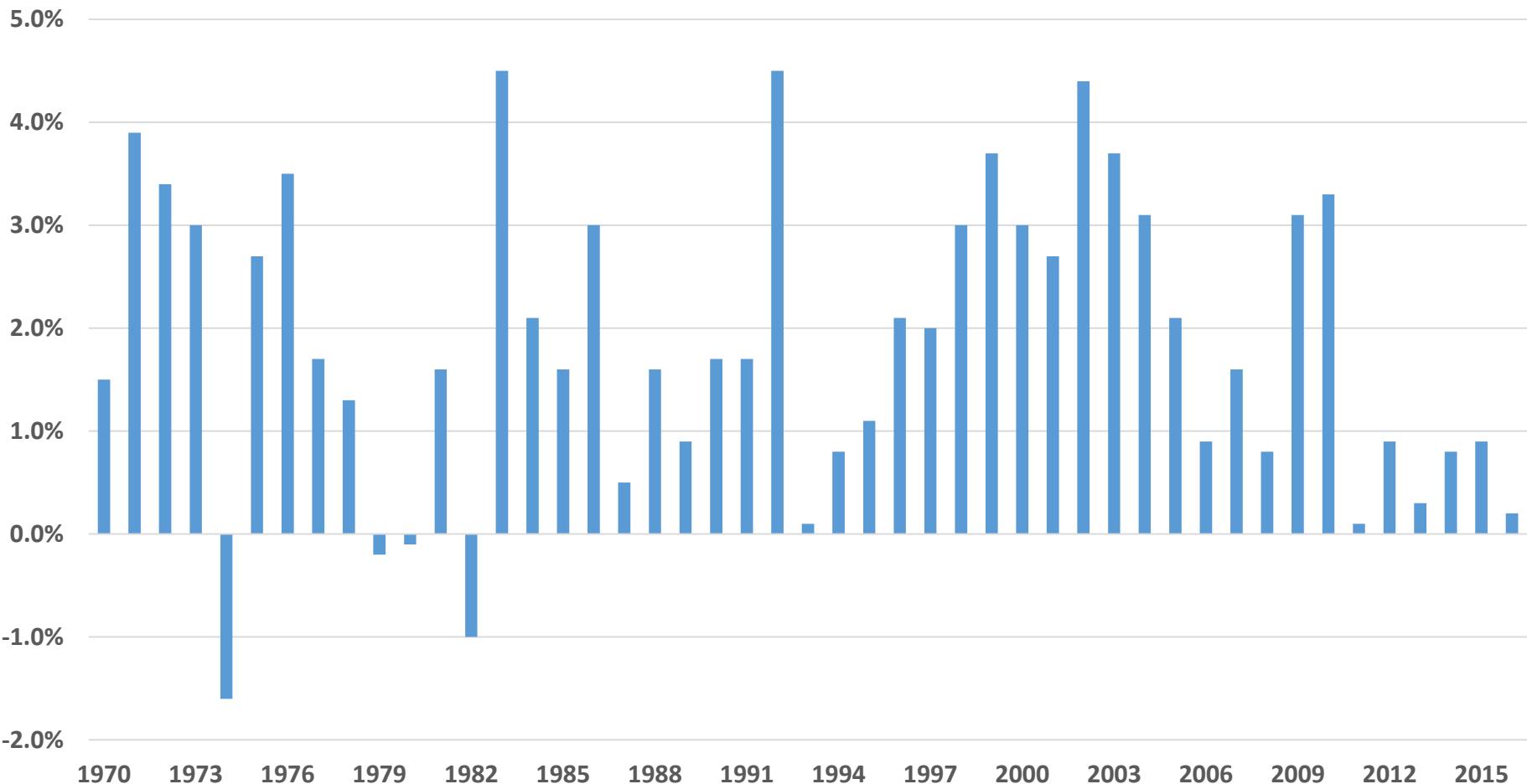
Source: U.S. Bureau of Labor Statistics

Labor Force Participation Rate



Source: Bureau of Labor Statistics

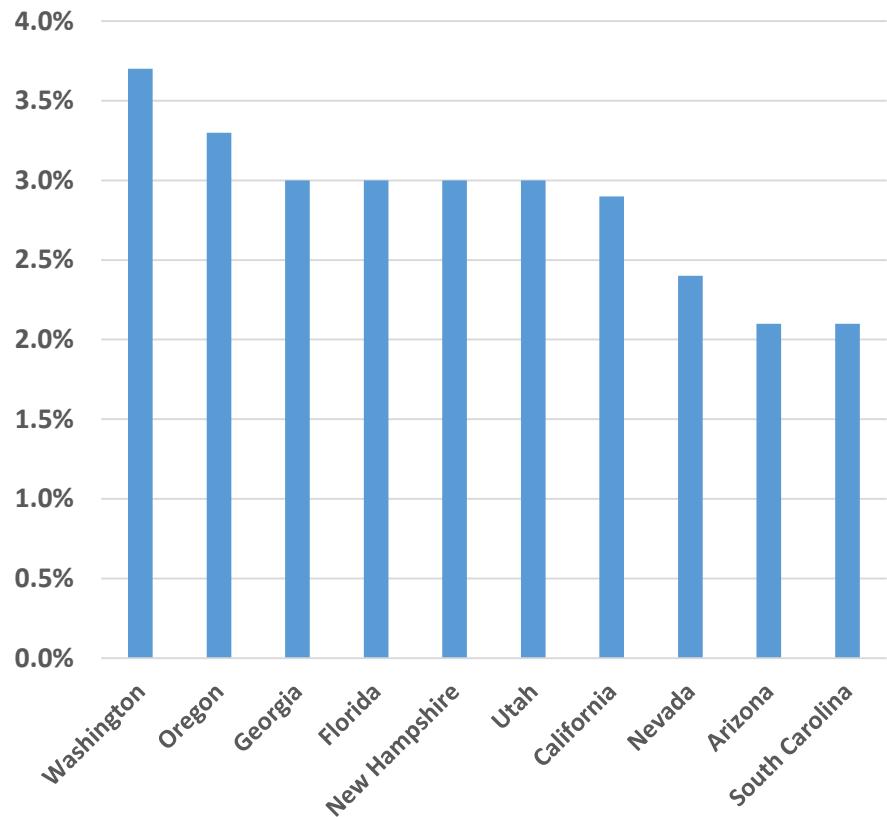
Labor Productivity in the U.S.



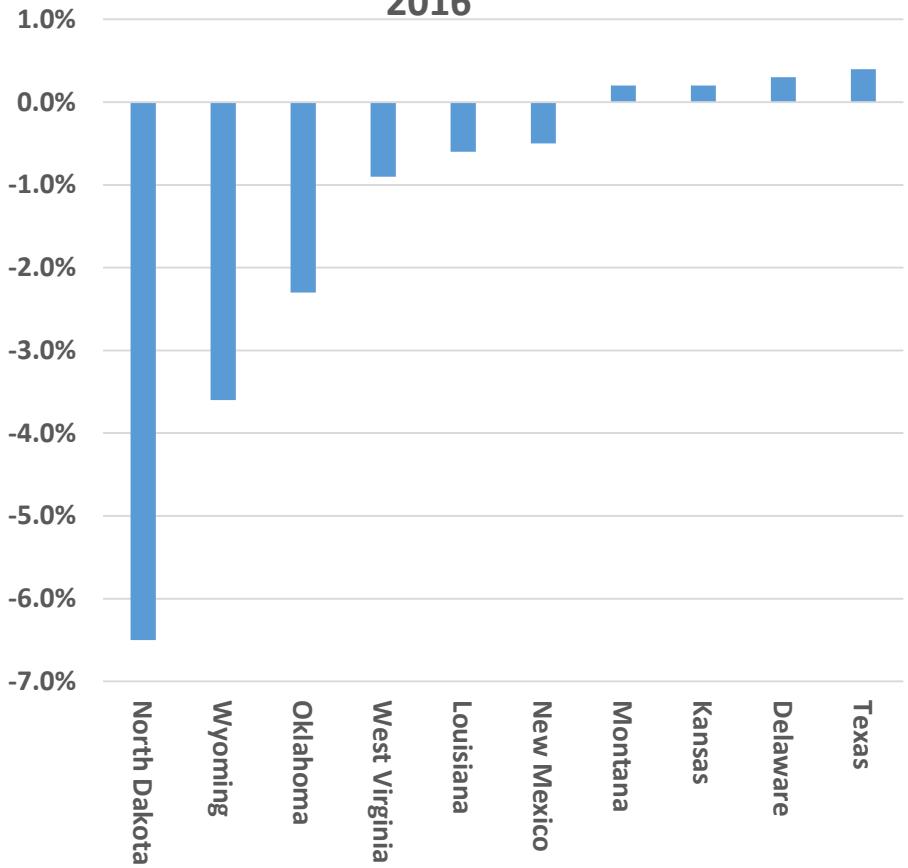
Source: Bureau of Labor Statistics and Bureau of Economic Analysis Data

GDP Growth

10 States with highest GDP growth in
2016

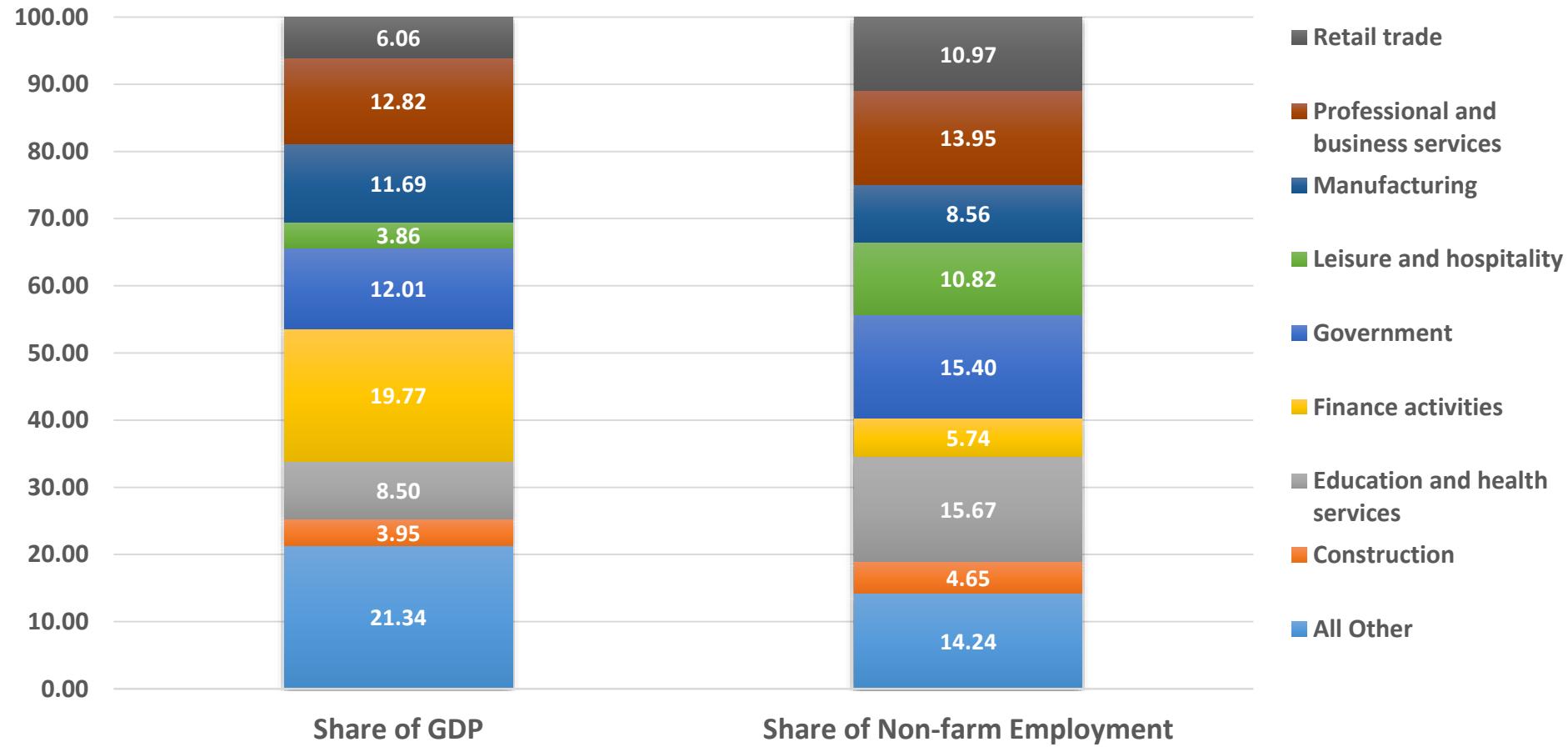


10 States with lowest GDP growth in
2016



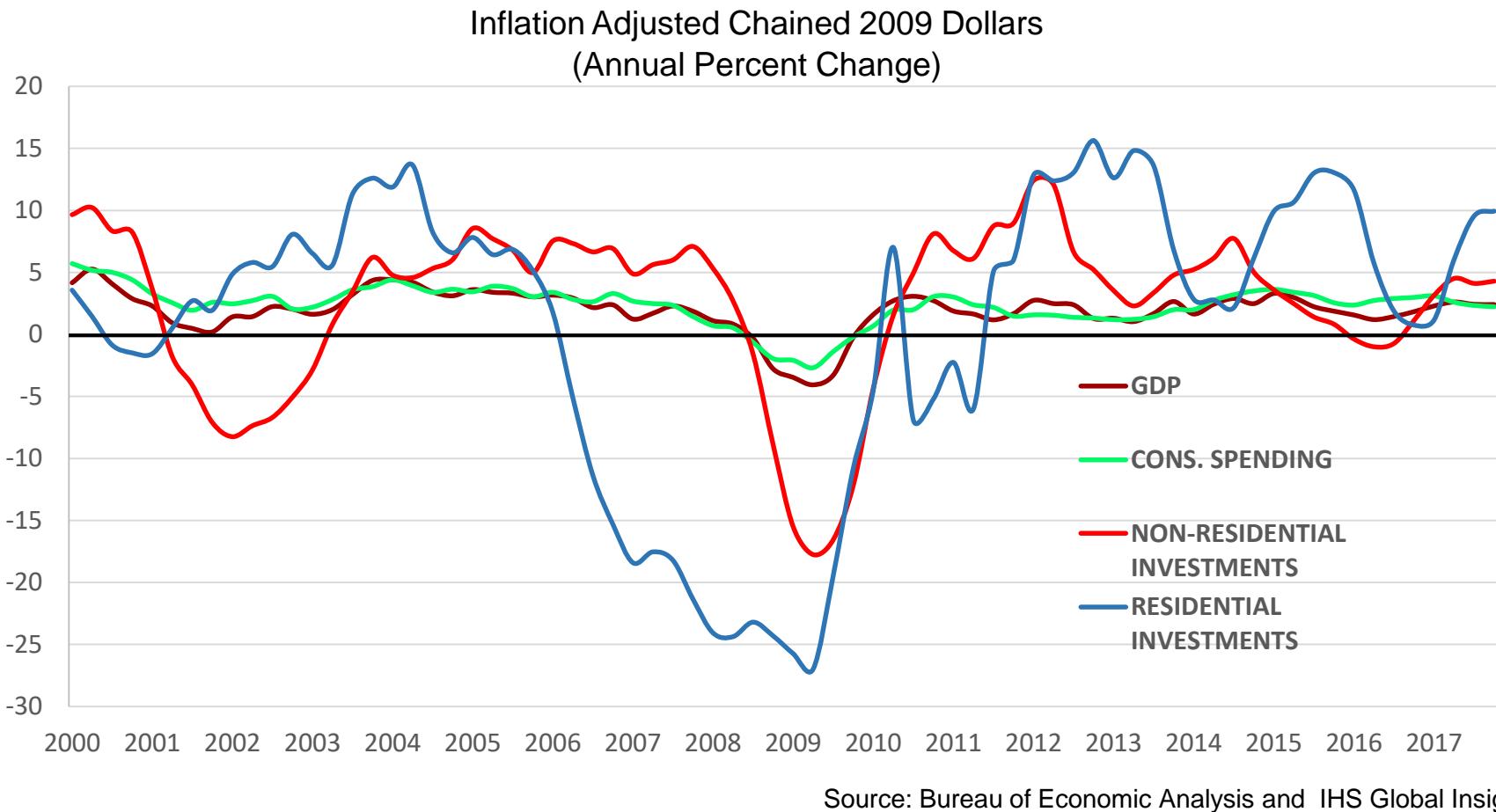
Source: Bureau of Economic Analysis

Shares of U.S. Gross Domestic Product and Nonfarm Employment by Industry (2016)



Source: Estimates based on Bureau of Labor Statistics and Bureau of Economic Analysis Data

U.S. Economy (GDP, Consumer Spending and Investments)



Gross Domestic Product: Expansion remains on Track (Inflation Adjusted Annual Percent Change)



Source: U.S. Department of Commerce and IHS Global Insight.

Consumer Spending, Total and Nondurables

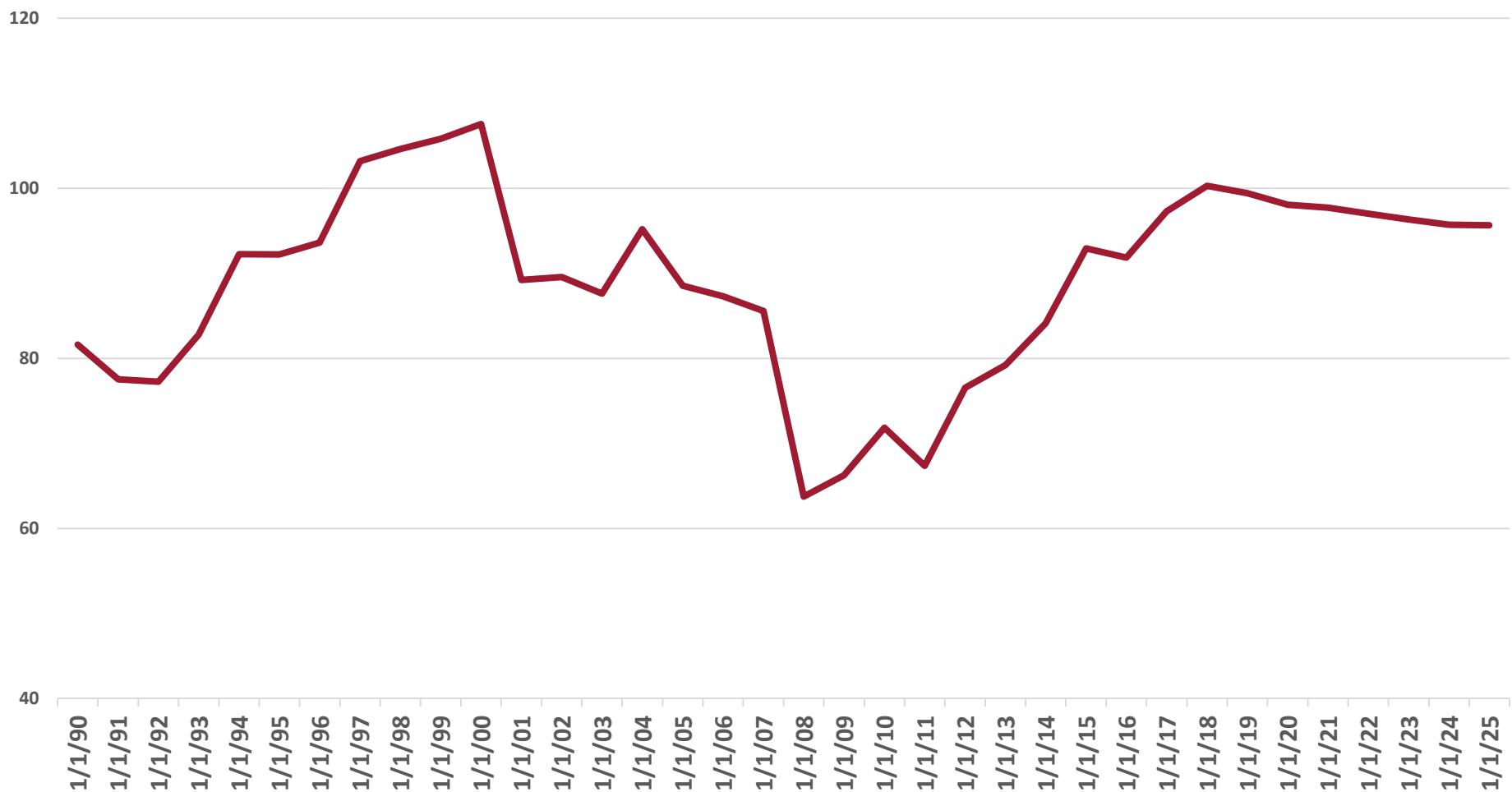
(Annual Percent Change, 2009 Chained Dollars)



Source: U.S. Department of Commerce and IHS Global Insight.

Consumer Sentiment Index

(supported by improving household finances)

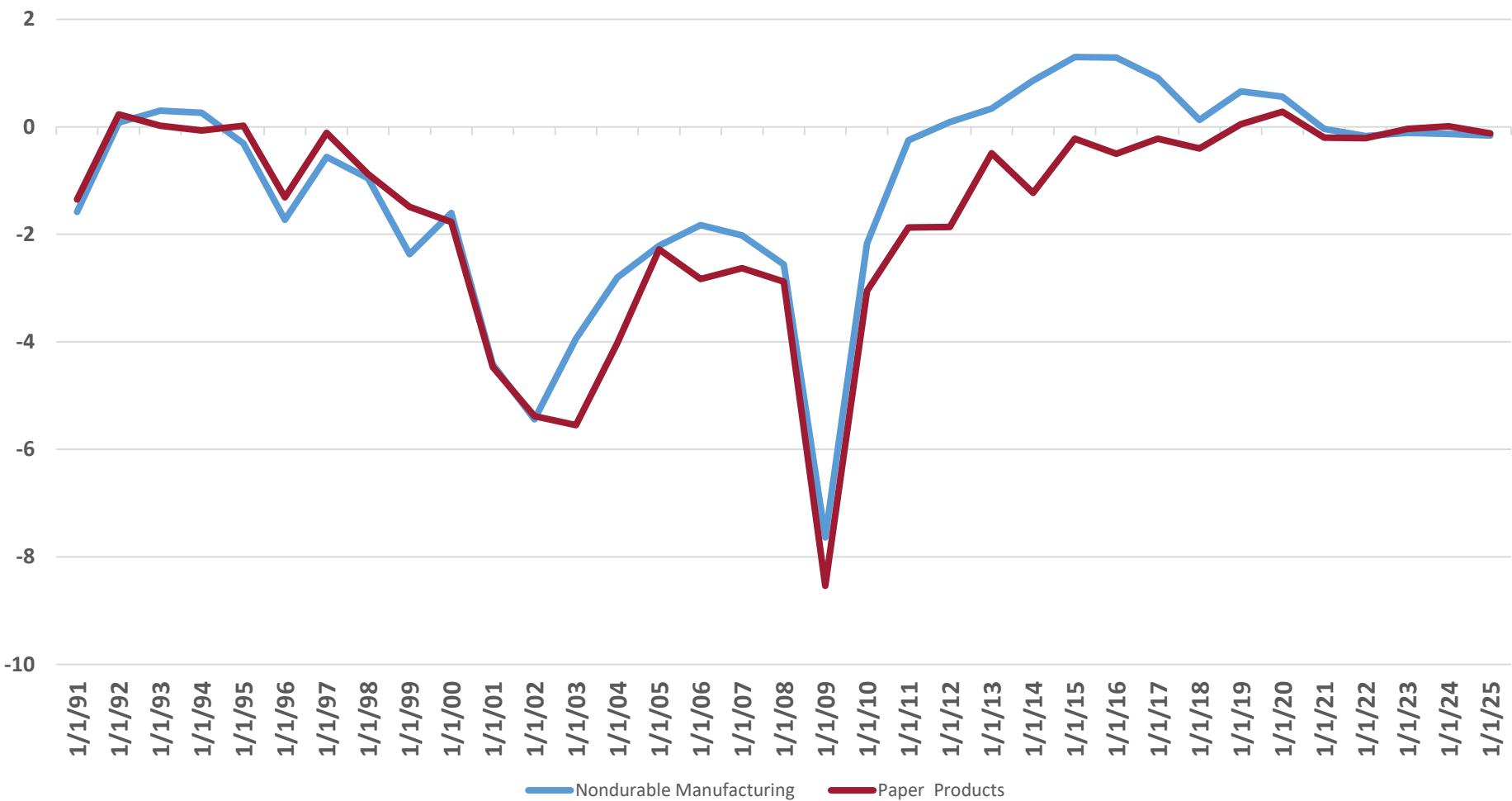


Source: University of Michigan and IHS Global Insight

Factors Affecting Consumer Spending

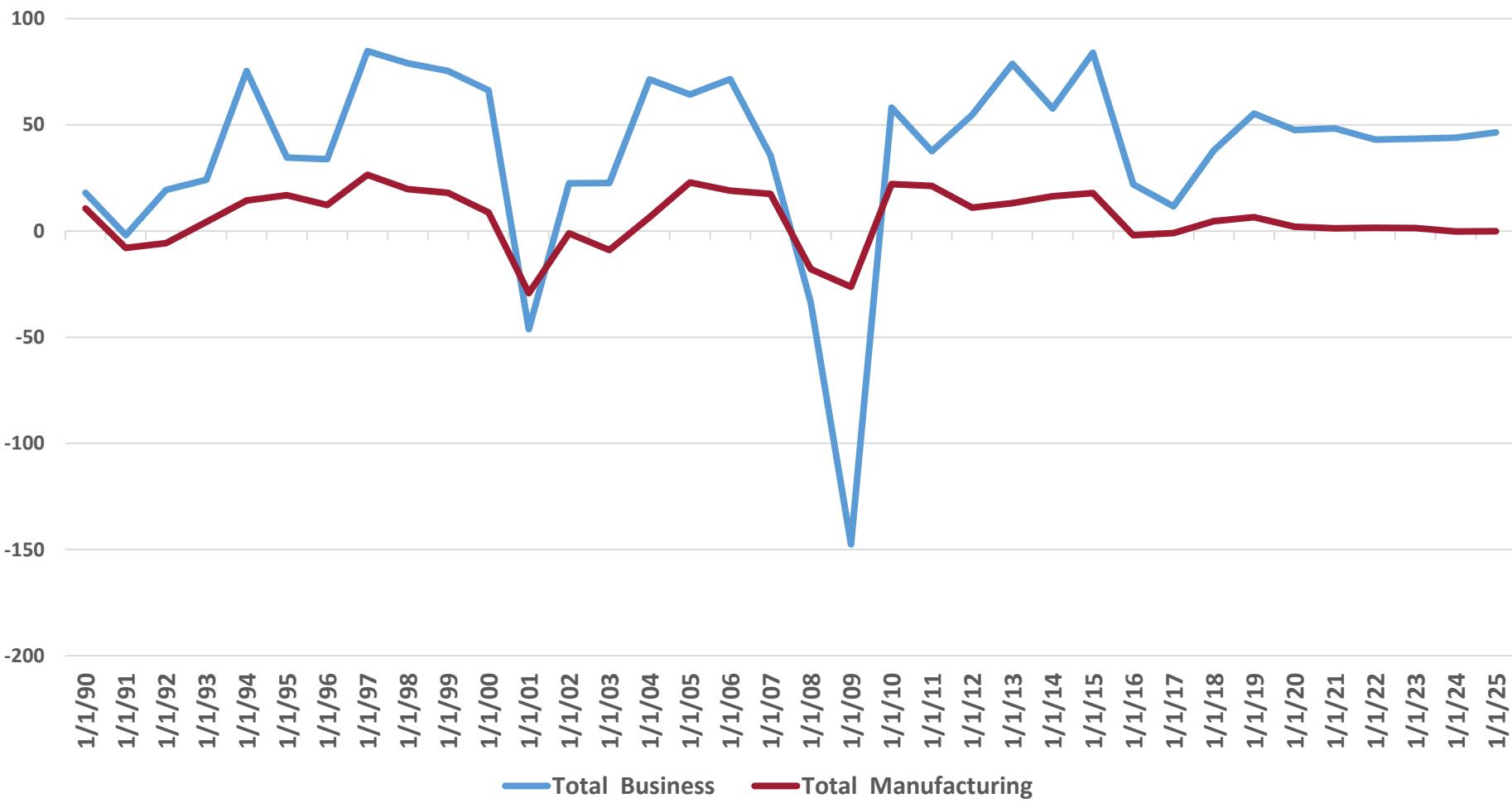
- Positive
 - Employment growth
 - Wage acceleration
 - Rising asset Values
 - Income tax cuts in 2018
 - Expansion of e-commerce sales
 - Positive
- Negative
 - High consumer and student debt burdens
 - Payroll cycle economics
 - Asset and income inequality (significant increase in part-time and temporary jobs)

Nonfarm Employment, Nondurable Goods and Paper Product (Annual Percent Change)



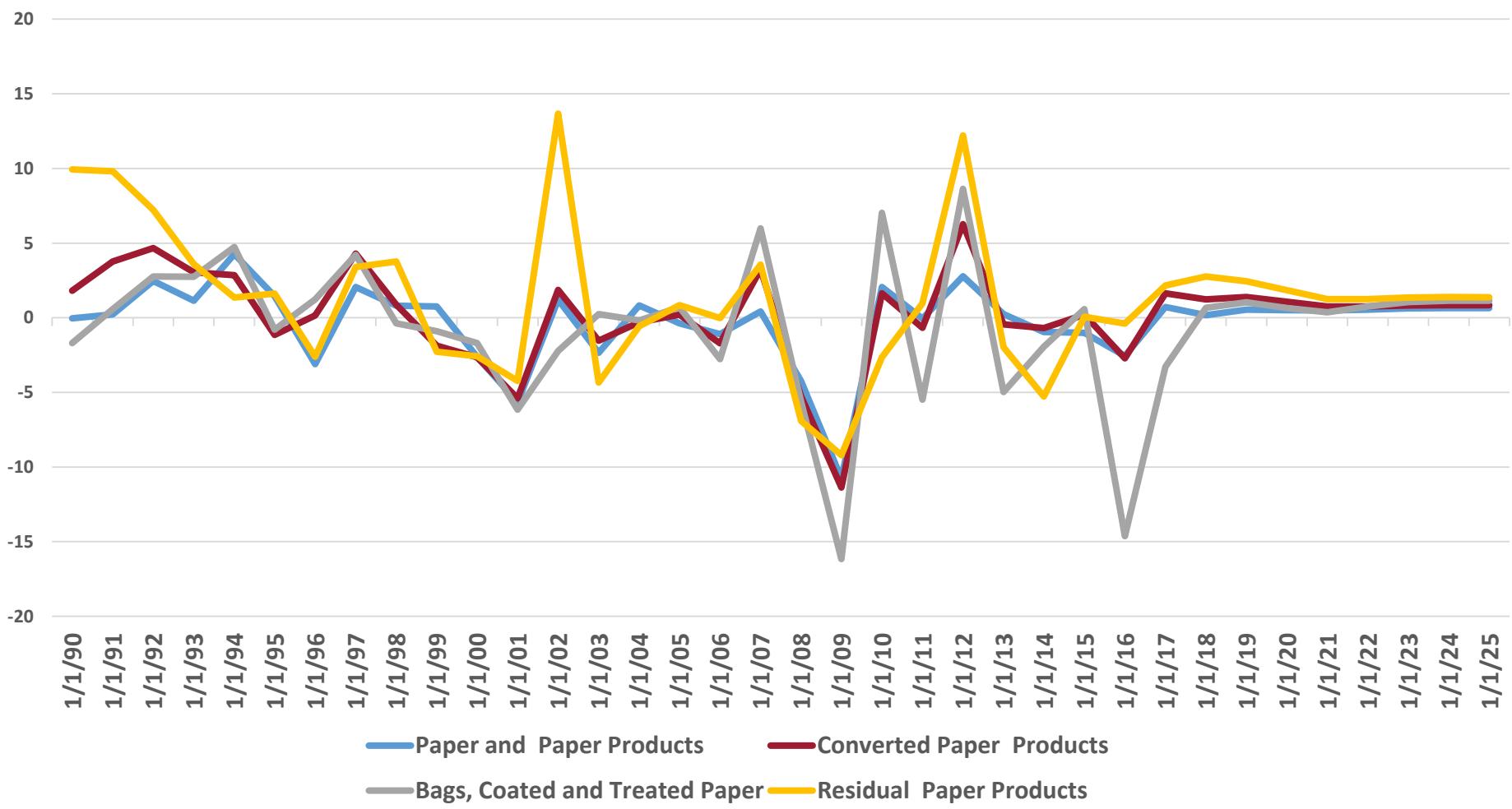
Source: U.S. Department of Commerce and IHS Global Insight.

Change in Inventories, Total and Manufacturing (Billions of Chained 2009 Dollars)



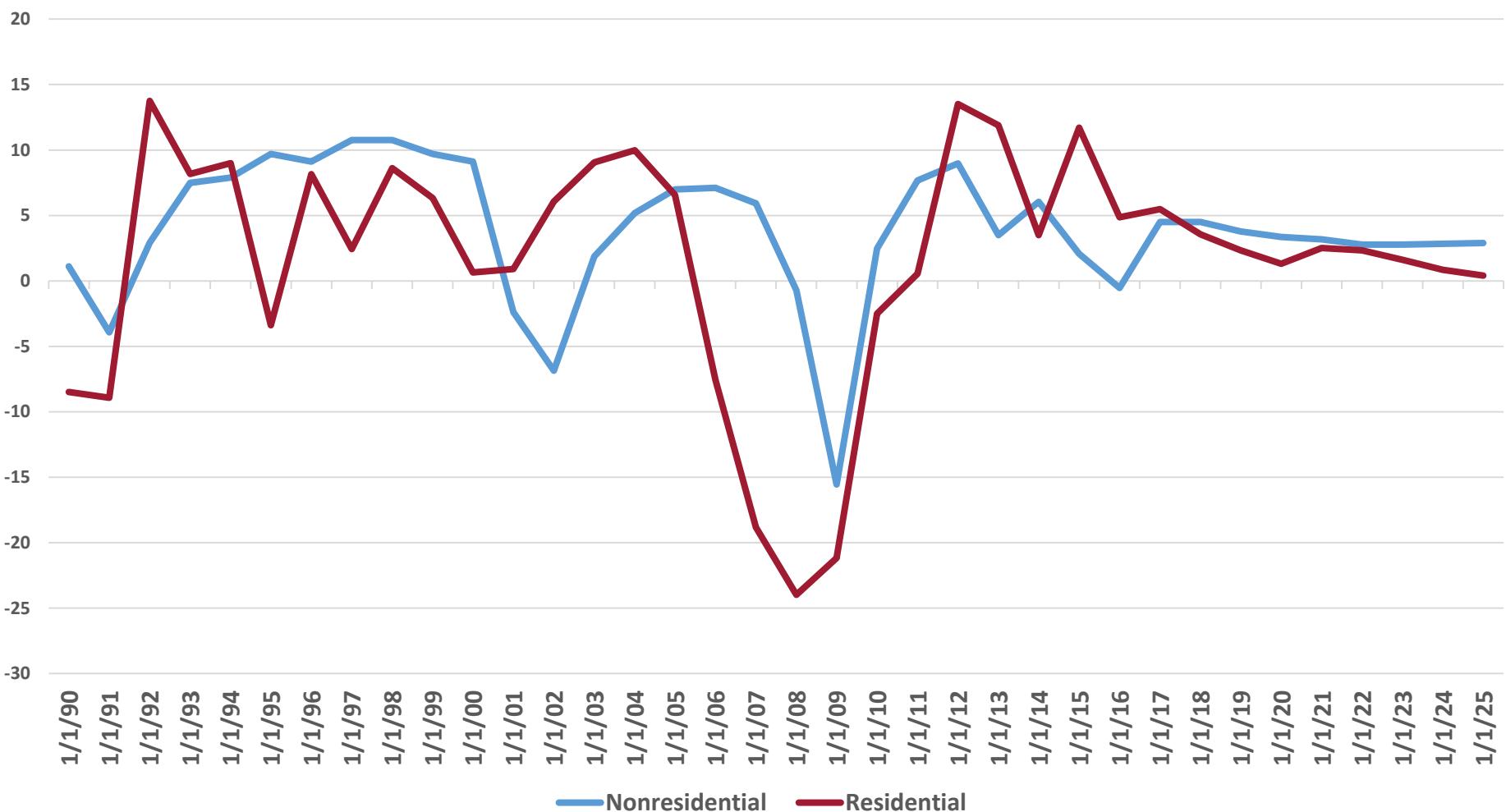
Source: U.S. Department of Commerce and IHS Global Insight.

Industrial Production Index (Annual Percent Change)



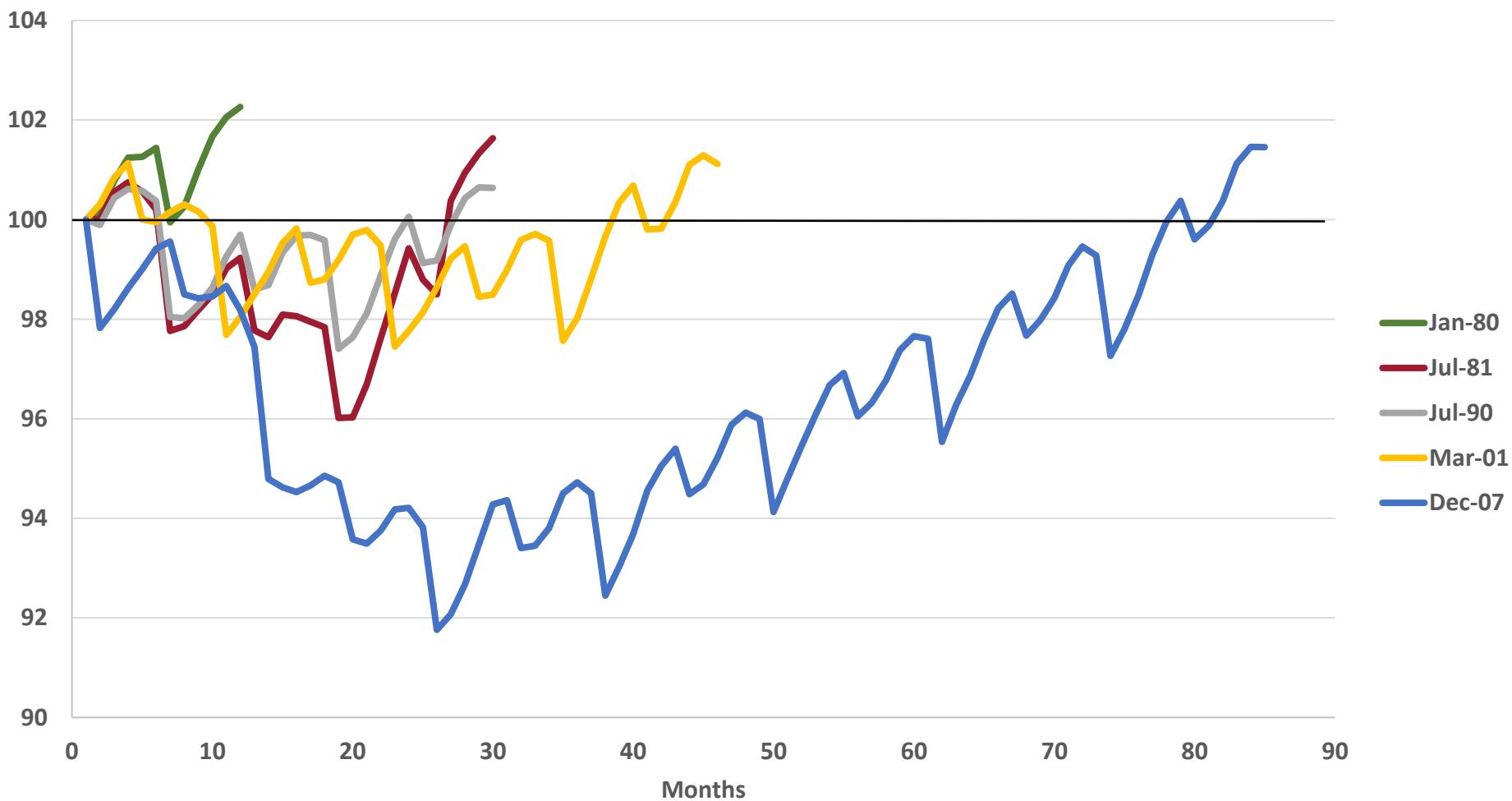
Source: U.S. Department of Commerce and IHS Global Insight.

Nonresidential and Residential Business Investments (Annual Percent Change, Chained 2009 Dollars)



Source: U.S. Department of Commerce and IHS Global Insight.

U.S. Recessions: Total Non-farm Employment



Source: Estimates based on Bureau of Labor Statistics Data

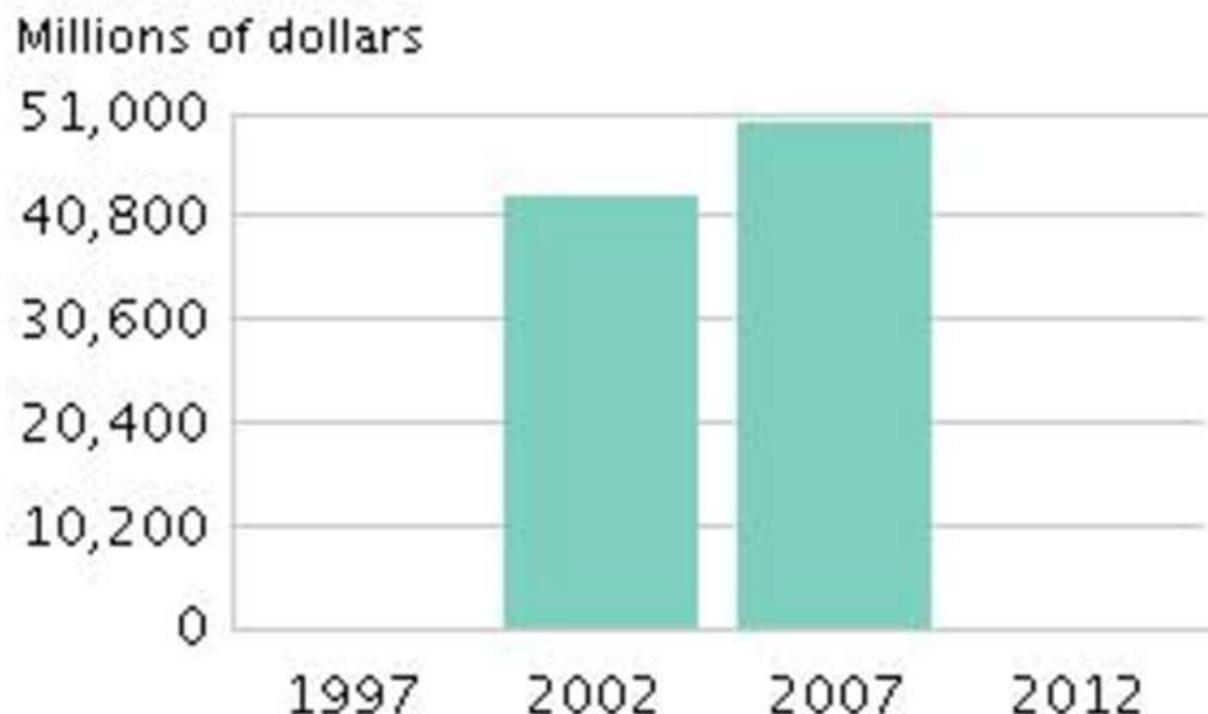
U.S. Economic Forecast

(Percent change unless otherwise noted)	2016	2017	2018	2019	2020
Real GDP	1.6	2.2	2.7	2.4	2.2
Consumption	2.7	2.5	3.2	2.8	3.2
Residential Investment	3.5	11.7	4.7	2.7	3.1
Commercial, Healthcare Structures	12.9	10.1	15.4	6.1	5.1
Nonresidential Fixed Investment	6.0	2.1	-0.2	4.6	4.5
Federal Government	-2.5	0.0	0.7	0.3	-0.8
State & Local Government	0.2	2.9	0.9	0.8	1.4
Exports	4.3	0.1	-0.3	3.1	3.1
Imports	4.4	4.6	1.2	4.9	4.9
Payroll Employment	1.9	2.1	1.7	1.2	1.2
Unemployment Rate	6.2	5.3	4.9	4.7	4.7
CPI Inflation	1.6	0.1	1.2	2.5	2.5
Light Vehicle Sales (Millions)	16.44	17.39	17.47	17.78	17.78

Paperboard Manufacturing Snapshot

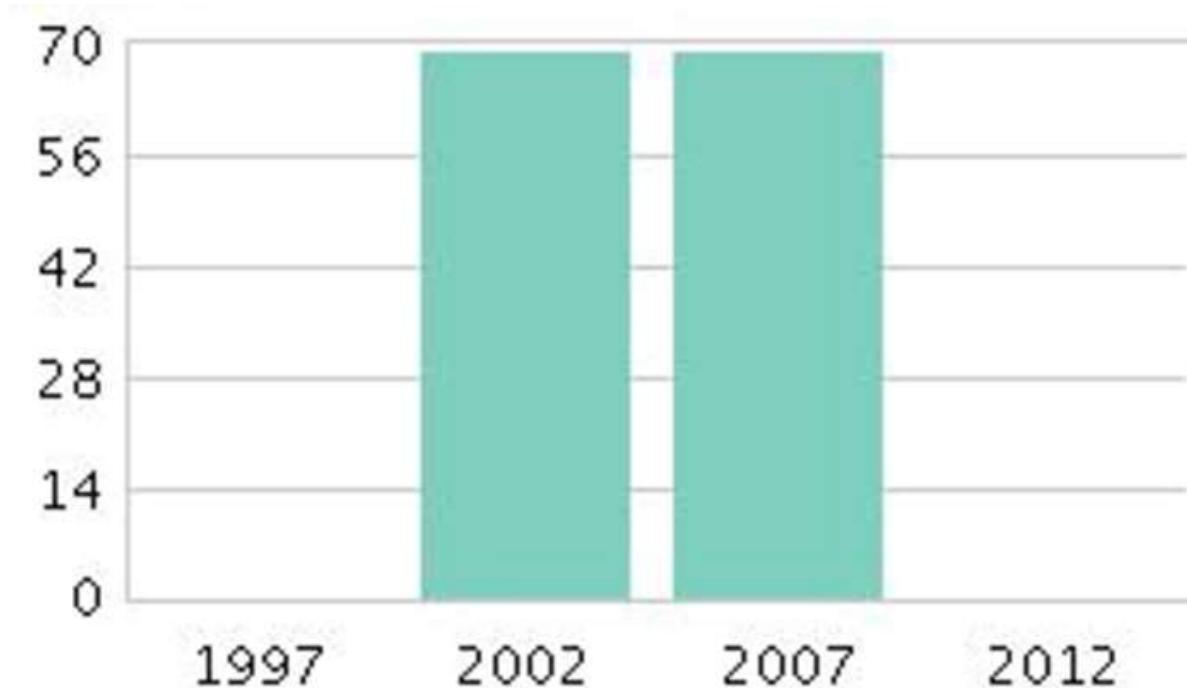
	2002	2007
Number of establishments	2,669	2,409
Value of shipments (\$ Millions)	43,494	50,935
Annual payroll (\$ Millions)	7,091	7,385
Total employment	184,884	165,978
Value of shipments per establishment (\$1,000)	16,296	21,144
Value of shipments per employee (\$1,000)	235	307
Value of shipments per \$ of payroll (\$)	6.13	6.9
Payroll per employee (\$)	38,355	44,493
Employees per establishment	69.27	68.9
Value of shipments per capita (\$)	151	169
Population per establishment	107,765	125,044

Value of Shipments: United States

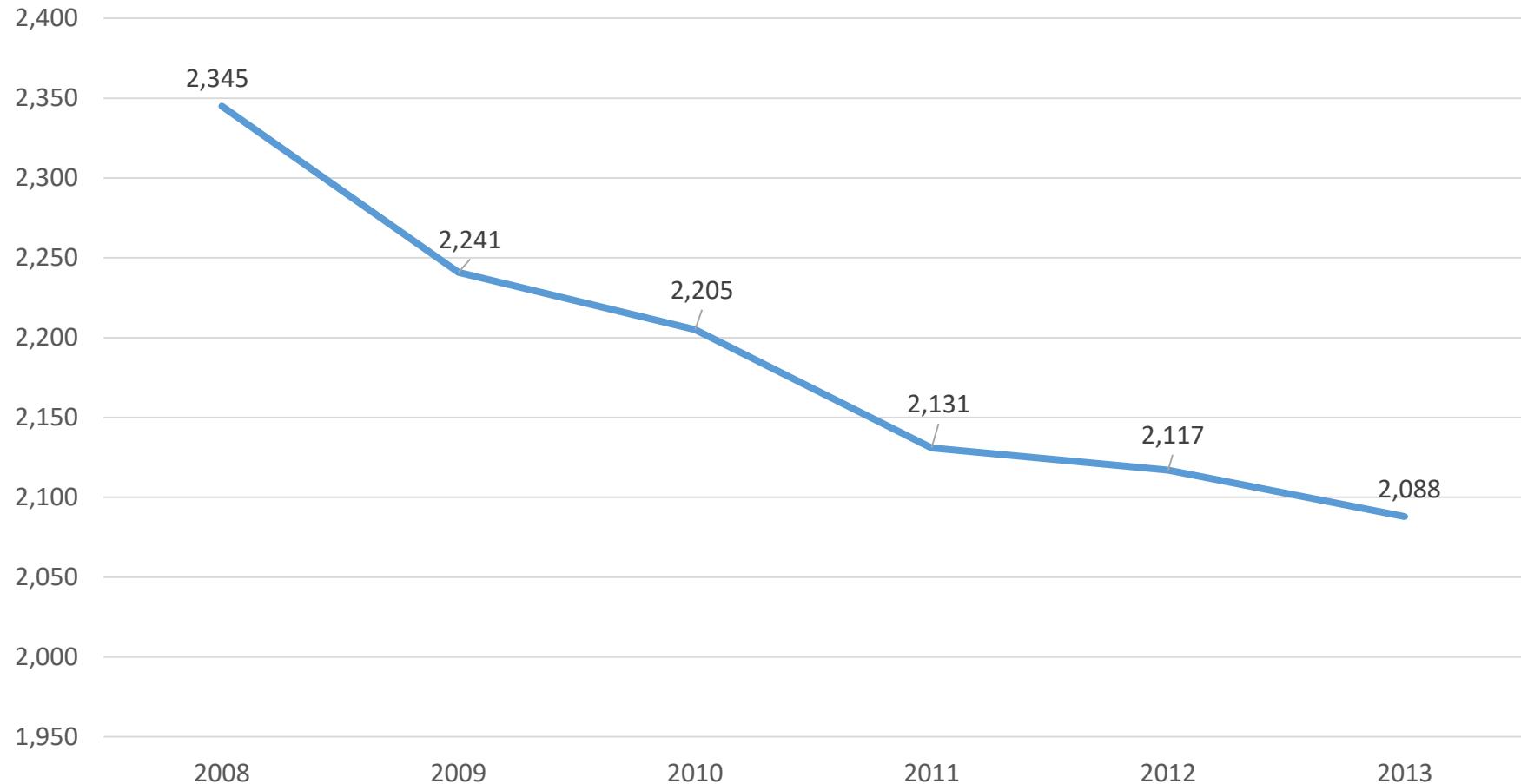


Source: U.S. Census Bureau

Employees Per Establishments: United States

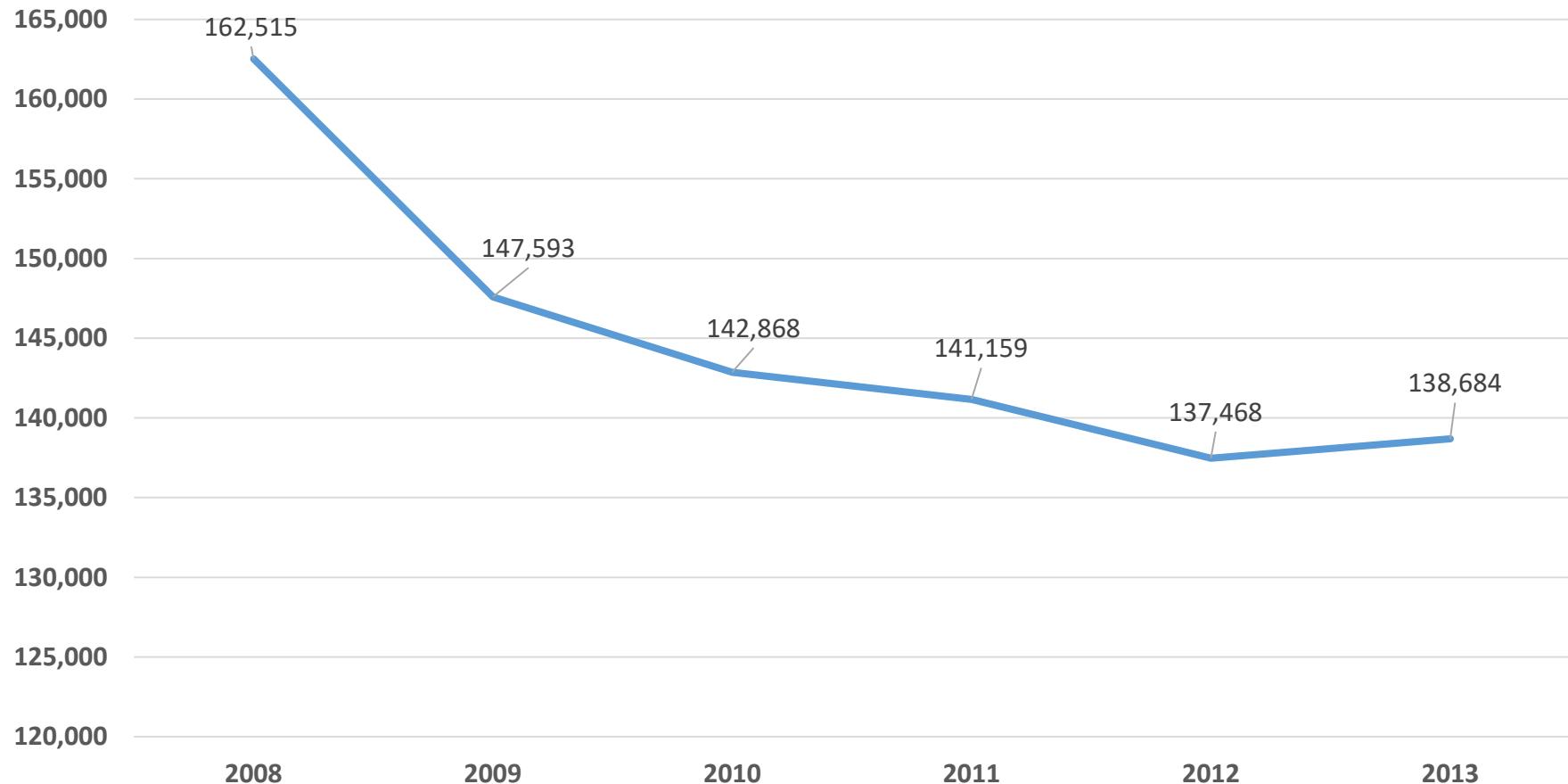


Number of Establishments: United States



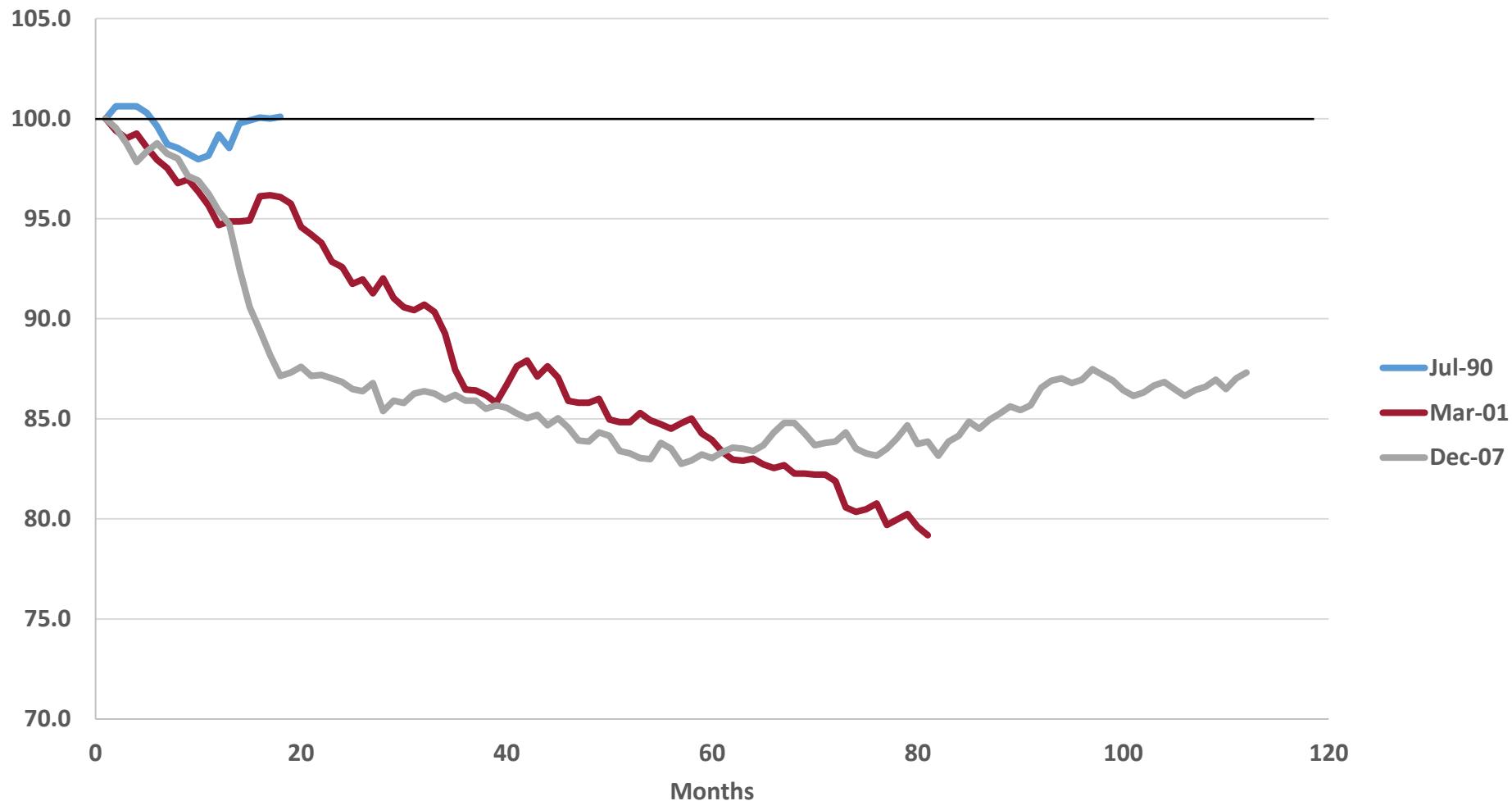
Source: U.S. Census Bureau

Number of Employees: United States



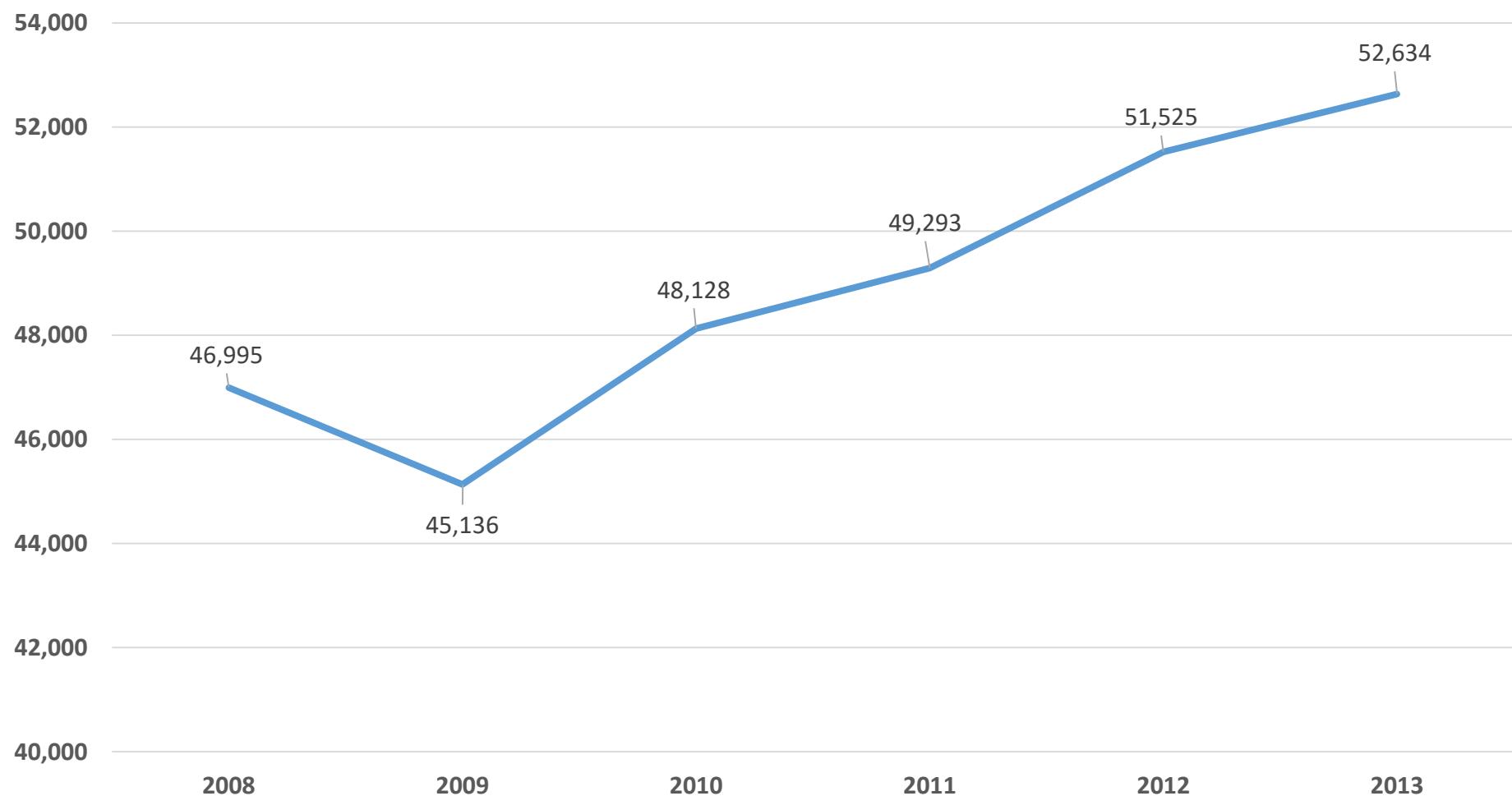
Source: U.S. Census Bureau

U.S. Recessions- Paperboard Container Manufacturing Employment



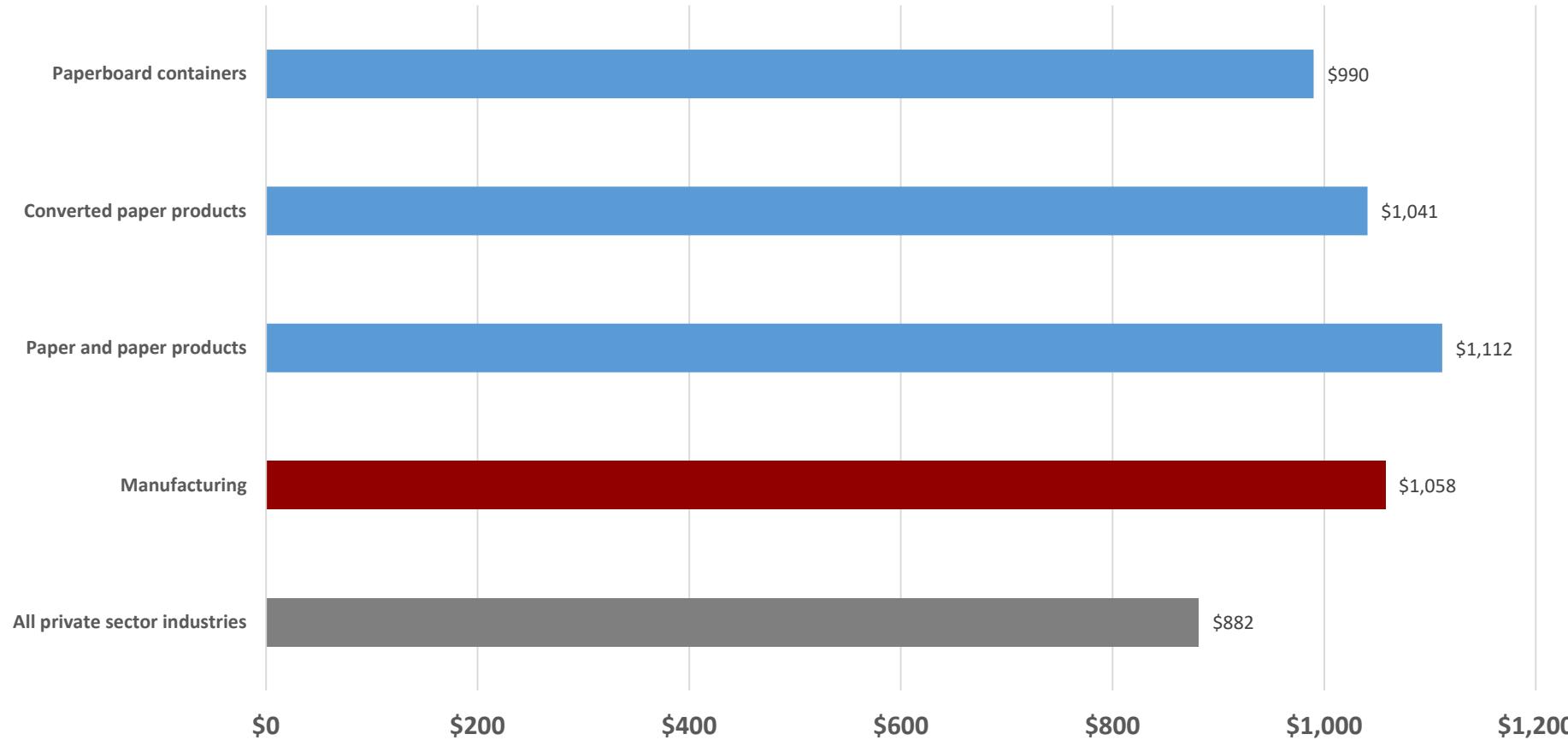
Source: Estimates based on Bureau of Labor Statistics Data

Payroll per Employee: United States (Dollars)



Source: U.S. Census Bureau

Average Weekly Earnings, 2016



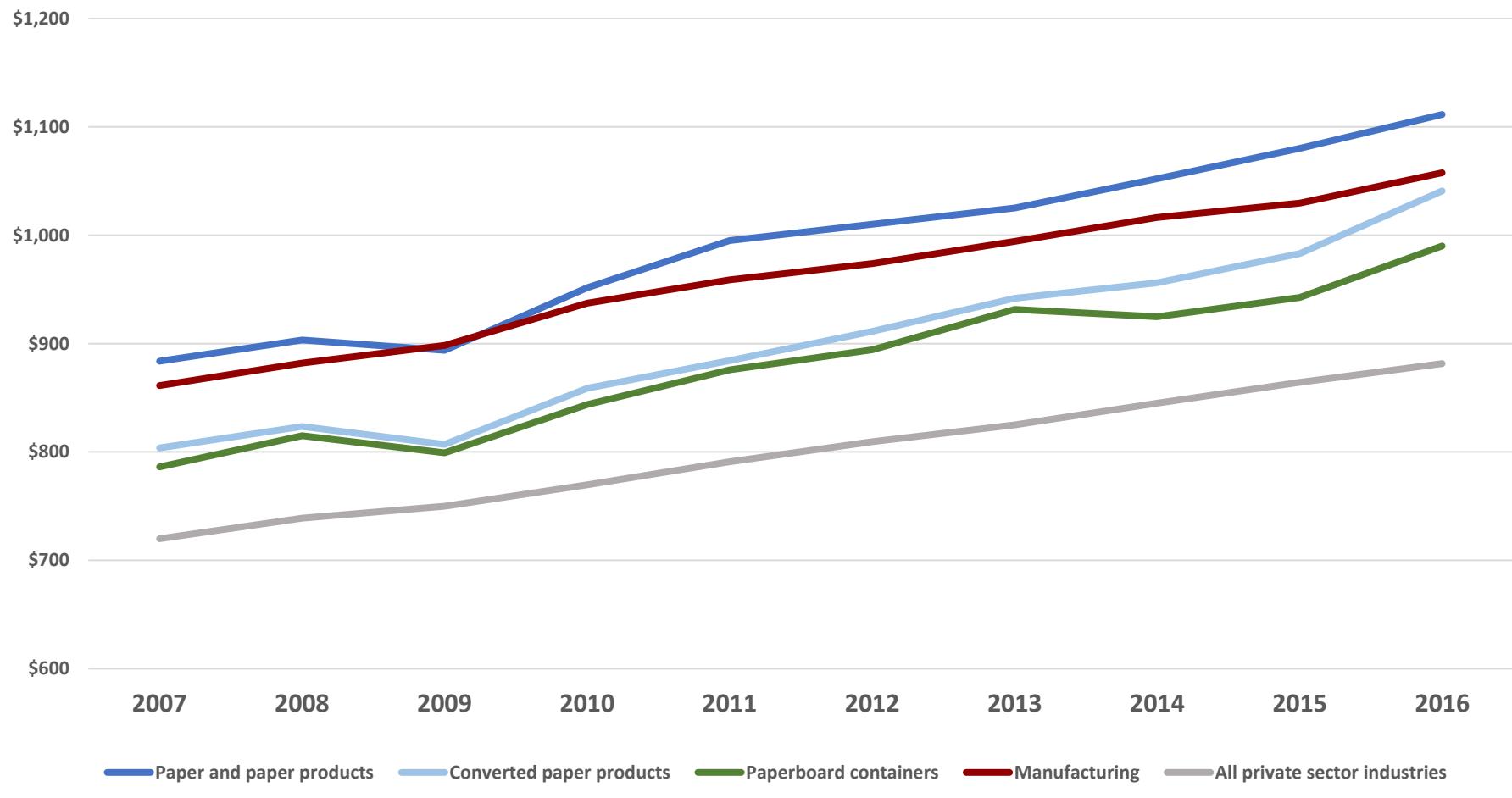
Source: Bureau of Labor Statistics, CES

Average Weekly Earnings by Industry, 2016

Year	Paper and paper products	Converted paper products	Paperboard containers	Manufacturing	All private sector industries
2007	\$884	\$804	\$786	\$861	\$720
2008	\$903	\$823	\$815	\$882	\$739
2009	\$894	\$807	\$799	\$898	\$750
2010	\$952	\$859	\$844	\$937	\$770
2011	\$995	\$884	\$876	\$959	\$791
2012	\$1,010	\$911	\$894	\$974	\$810
2013	\$1,025	\$942	\$932	\$994	\$825
2014	\$1,052	\$956	\$925	\$1,016	\$845
2015	\$1,080	\$983	\$943	\$1,030	\$864
2016	\$1,112	\$1,041	\$990	\$1,058	\$882
2007-2016	25.8%	29.5%	25.9%	22.8%	22.5%
	\$228	\$237	\$204	\$197	\$162

Source: Bureau of Labor Statistics, CES

Average Weekly Earnings by Industry, 2016



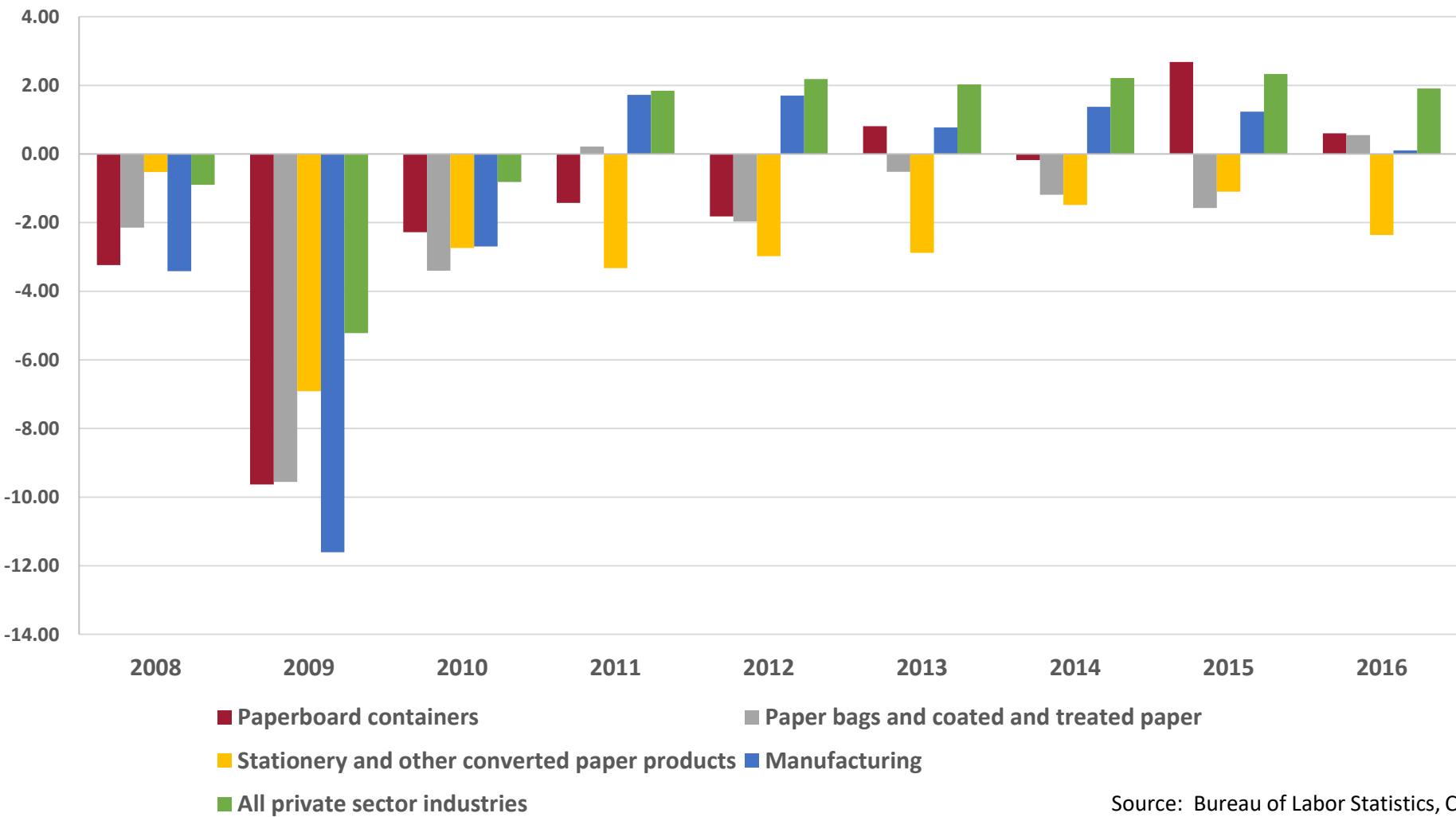
Source: Bureau of Labor Statistics, CES

Employment by Industry (Thousands)

Year	Industries									
	Paper and Paper products	Pulp, paper, and paperboard mills	Converted paper products	Paperboard containers	Corrugated and solid fiber boxes	Folding boxes and miscellaneous paperboard containers	Paper bags and coated and treated paper	Stationery and other converted paper products	Manufacturing	All private sector industries
2007	458	132	326	172	110	62	73	81	13,878	115,778
2008	445	126	318	167	106	60	71	80	13,403	114,737
2009	407	117	290	151	94	56	65	75	11,848	108,747
2010	395	112	282	147	93	54	62	73	11,529	107,864
2011	387	109	278	145	92	53	63	70	11,727	109,848
2012	380	108	272	142	90	52	61	68	11,927	112,251
2013	378	107	271	144	90	53	61	66	12,020	114,531
2014	373	104	269	143	91	52	60	65	12,185	117,062
2015	373	101	271	147	93	54	59	65	12,335	119,789
2016	371	100	271	148	93	55	60	63	12,348	122,077
2007-2016	-19.1%	-24.3%	-17.0%	-14.0%	-15.3%	-11.9%	-18.3%	-22.0%	-11.0%	5.4%
	-87	-32	-55	-24	-17	-7	-13	-18	-1,530	6,300

Source: Bureau of Labor Statistics, CES

Change in Employment (Percent)



Source: Bureau of Labor Statistics, CES

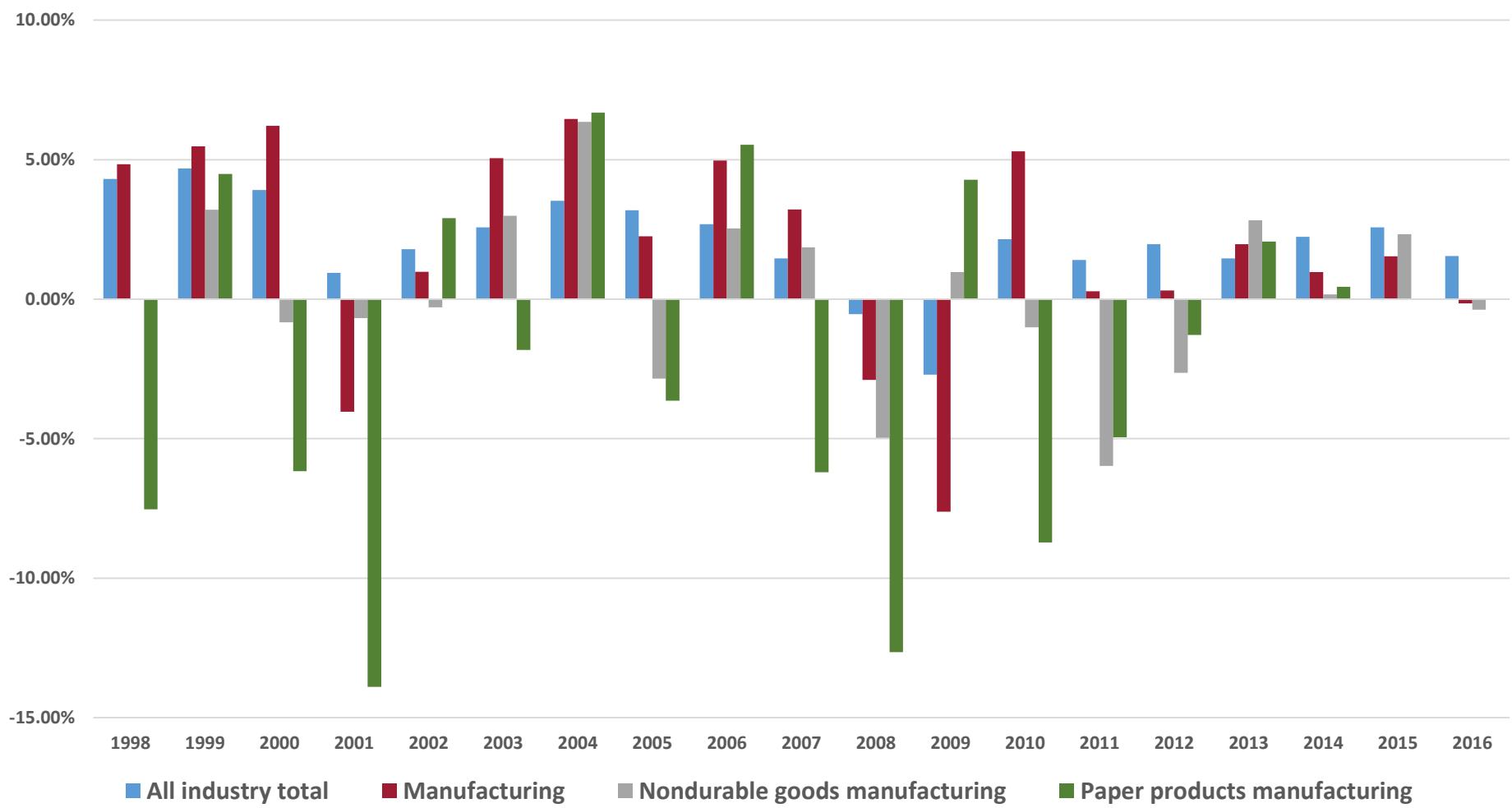
U.S. Selected Industry GDP

(Millions of Chained 2009 Dollars)

Industry	1997	2000	2005	2010	2015	2016
All industry total	11,118,778	12,616,533	14,203,241	14,628,165	16,094,516	16,342,925
Private industries	9,423,885	10,826,183	12,311,123	12,650,146	14,144,240	14,381,838
Manufacturing	1,365,083	1,603,277	1,776,685	1,818,190	1,912,044	1,909,249
Nondurable goods manufacturing	788,393	807,051	850,561	843,845	814,222	811,187
Paper products manufacturing	80,020	72,551	64,885	53,403	51,381	(NA)

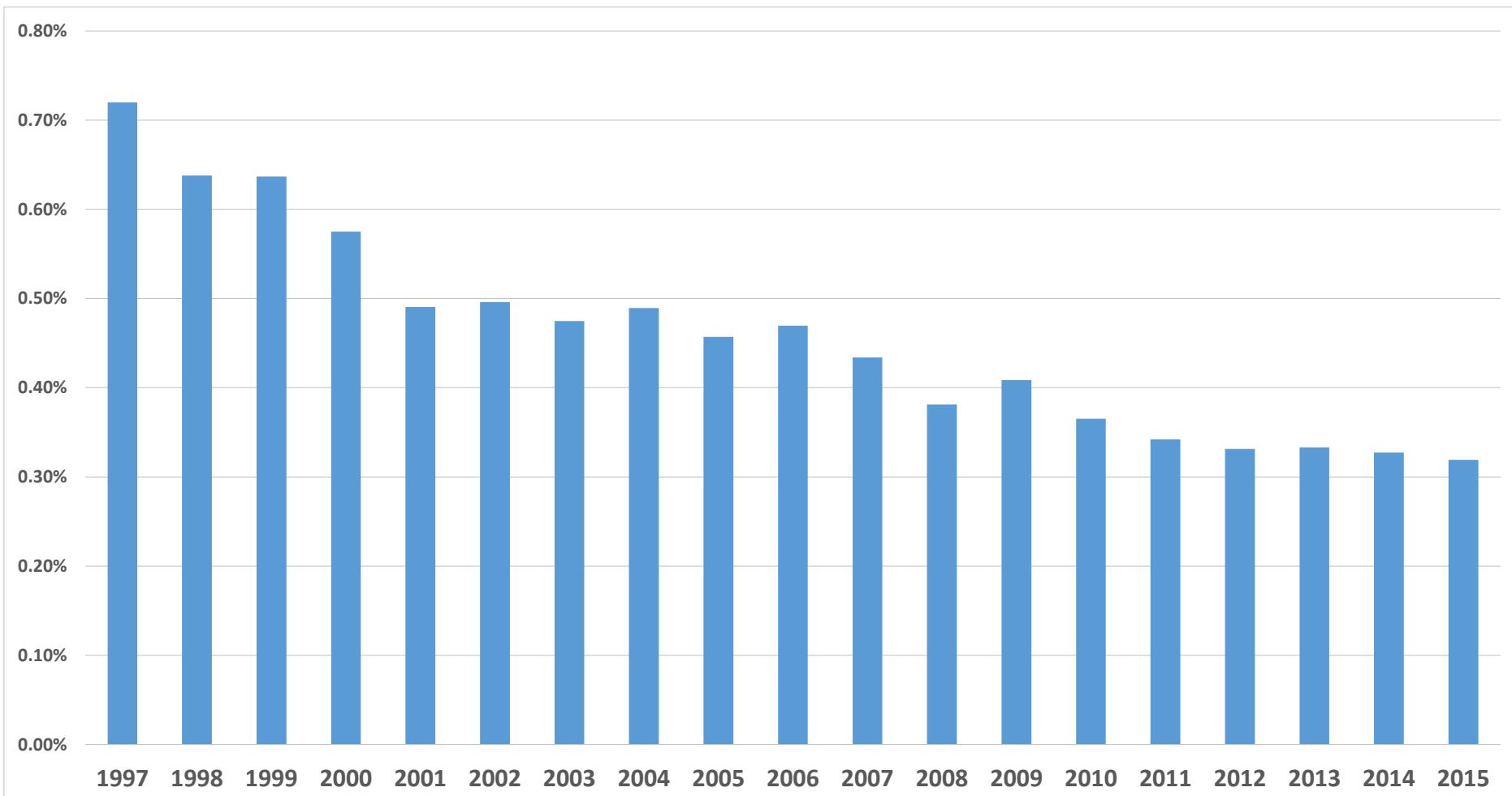
Source: Bureau of Economic Analysis

Annual Percent Change in GDP



Source: Bureau of Economic Analysis

Paper Industry Share of Total GDP (Percent)



Source: Bureau Economic Analysis

Paper Industry Forecast (Industrial Production)

(Percent change unless otherwise noted)	2016	2017	2018	2019	2020
Paper and Paper Products	-2.4	-1.2	0.0	0.7	0.7
Pulp and Paper Mills	-3.3	-2.1	-0.5	0.1	0.3
Converted Paper Products	-1.5	-0.4	0.5	0.9	0.9
Bags, Coated and Treated Paper	-6.3	-2.7	0.4	0.9	1.0
Other Paper Products	-0.4	0.9	1.3	1.7	1.5

Source: IHS Global Insight

Economy will continue to grow at around 2 to 2.5 percent rate for the next two to three years

Thank you

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