

W. P. CAREY SCHOOL  
OF BUSINESS



# Economic Update August 2009

Implications for the West Valley and all of Arizona

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August 2009



## U.S. Business Cycles Since World War II

*Duration in months*

<b>Peak</b>	<b>Trough</b>	<b>Recession Peak to Trough</b>	<b>Length of Preceding Expansion</b>
<b>Dec. 2007</b>	<b>Sept. 2009</b>	<b>22</b>	<b>73</b>
Mar. 2001	Nov. 2001	8	120
July 1990	Mar. 1991	8	92
July 1981	Nov. 1982	16	12
Jan. 1980	July 1980	6	58
Nov. 1973	Mar. 1975	16	36
Dec. 1969	Nov. 1970	11	106
Apr. 1960	Feb. 1961	10	24
Aug. 1957	Apr. 1958	8	39
July 1953	May 1954	10	45
Nov. 1948	Oct. 1949	11	37
<b>Average</b>		<b>10</b>	<b>57</b>

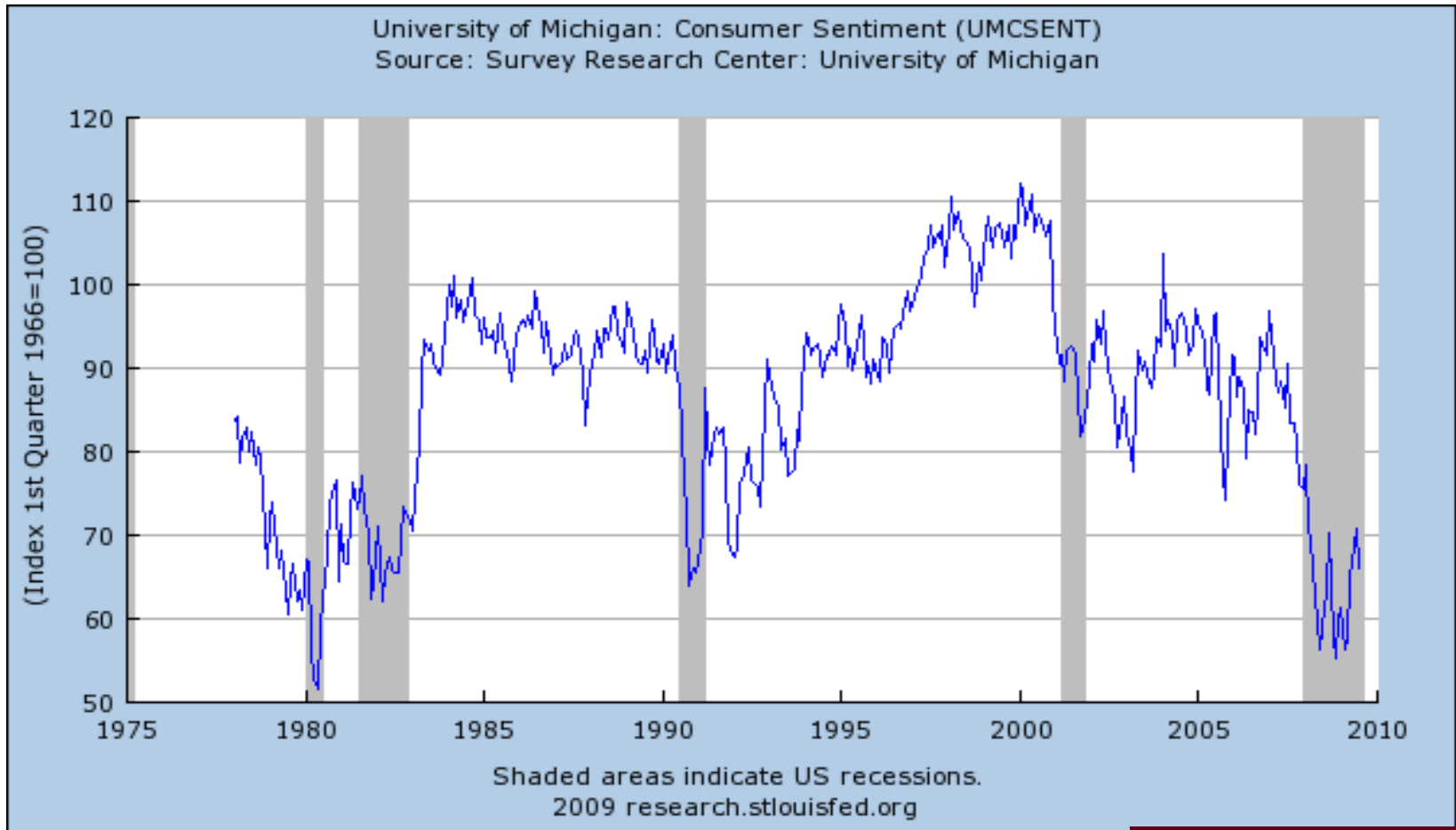
*Sources: NBER, BEA, FRB, BLS, Moody's Economy.com*

**U.S. Business Cycles Since World War II**  
*Peak-to-trough % change*

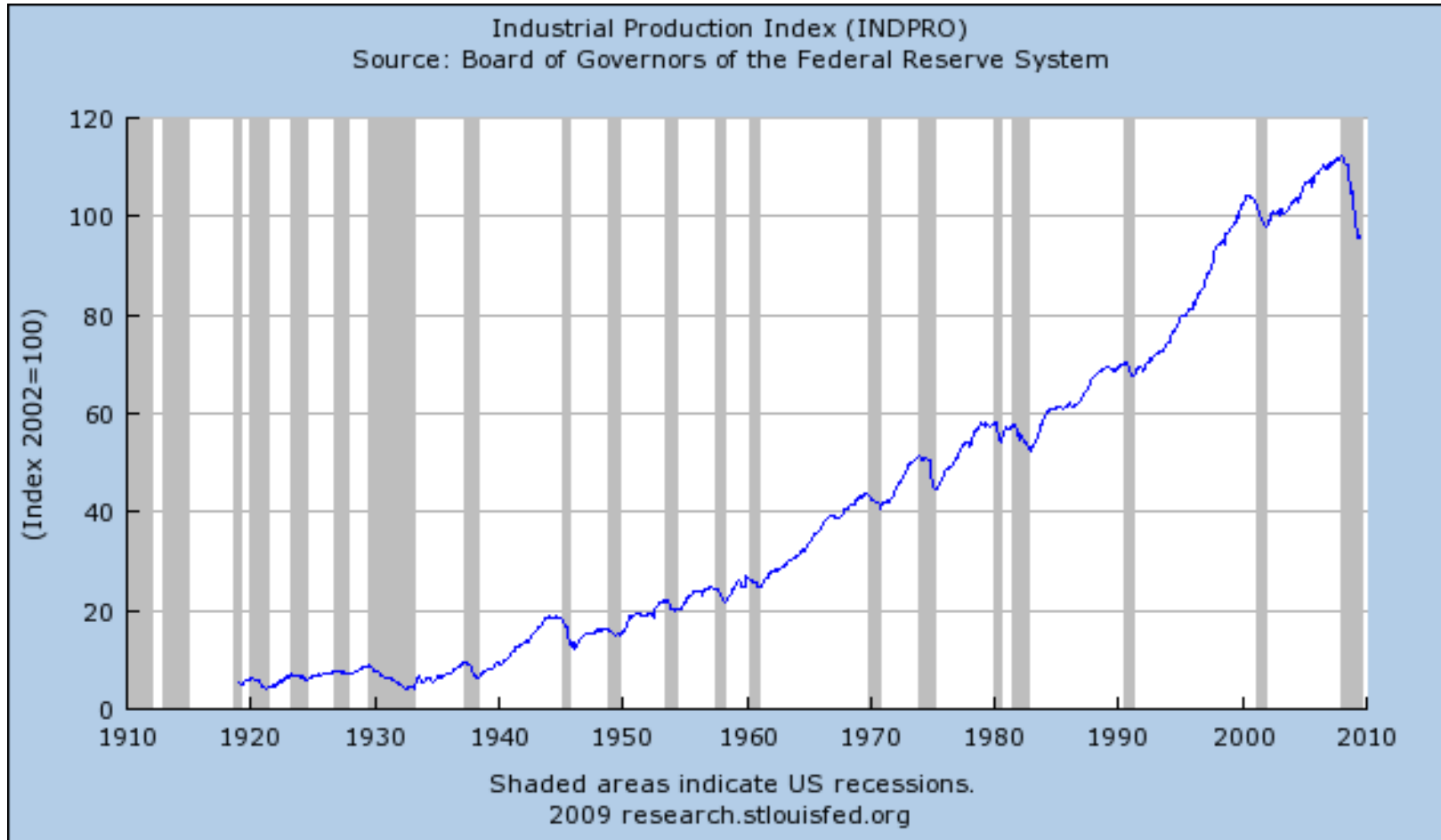
Peak	Trough	Real GDP	Industrial Production	Nonfarm Employment	Jobless Rate		
					Low	High	Change
<b>Dec. 2007</b>	<b>Sept. 2009</b>	<b>-3.9%</b>	<b>-19.2%</b>	<b>-5.5%</b>	<b>4.4%</b>	<b>10.1%</b>	<b>5.7%</b>
Mar. 2001	Nov. 2001	-0.4%	-6.3%	-2.0%	3.8%	6.3%	2.5%
July 1990	Mar. 1991	-1.3%	-4.3%	-1.5%	5.0%	7.8%	2.8%
July 1981	Nov. 1982	-2.9%	-9.5%	-3.1%	7.2%	10.8%	3.6%
Jan. 1980	July 1980	-2.2%	-6.2%	-1.3%	5.6%	7.8%	2.2%
Nov. 1973	Mar. 1975	-3.1%	-14.8%	-2.7%	4.6%	9.0%	4.4%
Dec. 1969	Nov. 1970	-1.0%	-5.8%	-1.4%	3.4%	6.1%	2.7%
Apr. 1960	Feb. 1961	-1.3%	-6.2%	-2.3%	4.8%	7.1%	2.3%
Aug. 1957	Apr. 1958	-3.8%	-12.7%	-4.4%	3.7%	7.5%	3.8%
July 1953	May 1954	-2.7%	-9.0%	-3.3%	2.5%	6.1%	3.6%
Nov. 1948	Oct. 1949	-1.7%	-8.6%	-5.1%	3.4%	7.9%	4.5%
<b>Average</b>		<b>-2.0%</b>	<b>-8.3%</b>	<b>-2.7%</b>	<b>4.4%</b>	<b>7.6%</b>	<b>3.2%</b>

*Sources: NBER, BEA, FRB, BLS, Moody's Economy.com*

# Consumer Sentiment Plummets



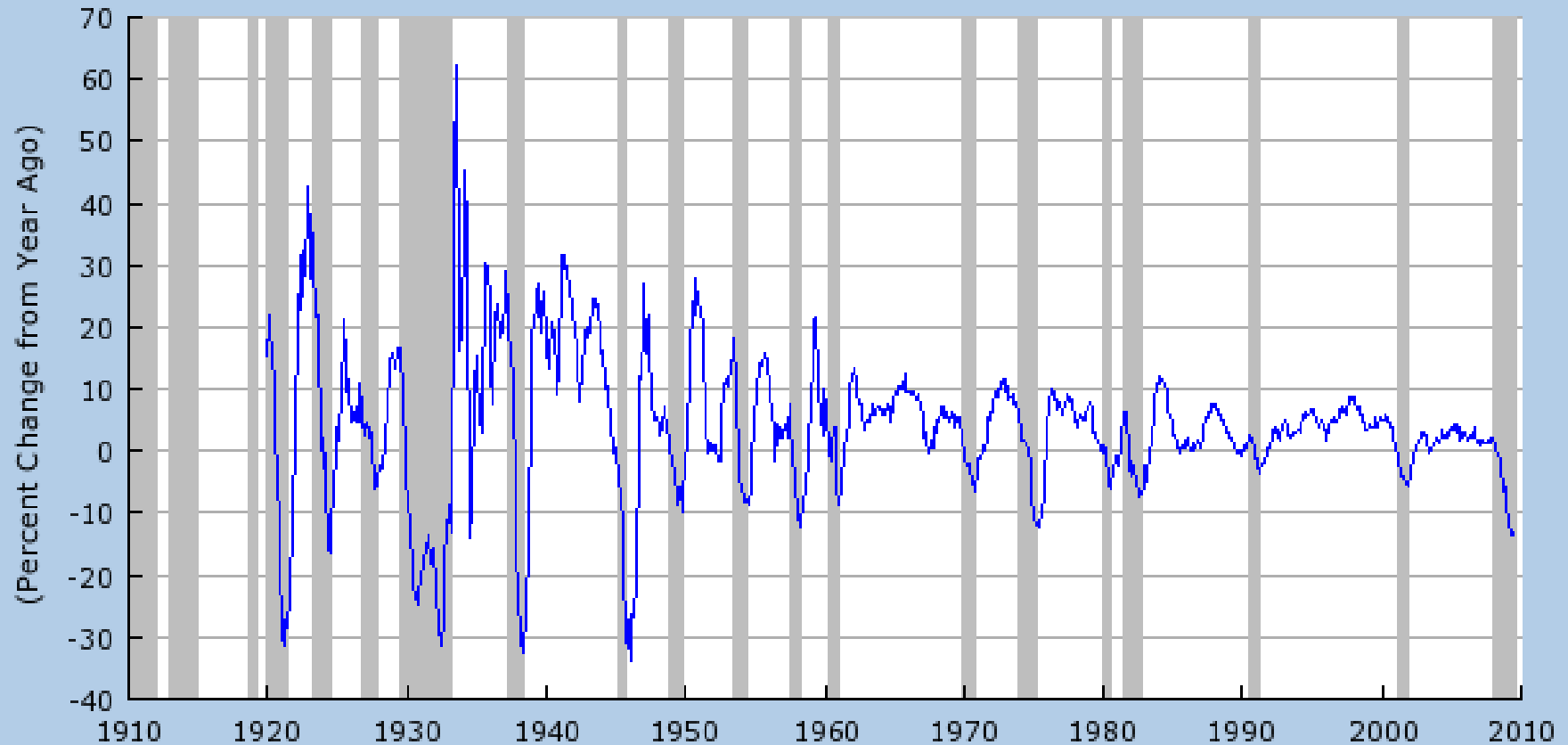
# Industrial Production



# Industrial Production

Industrial Production Index (INDPRO)

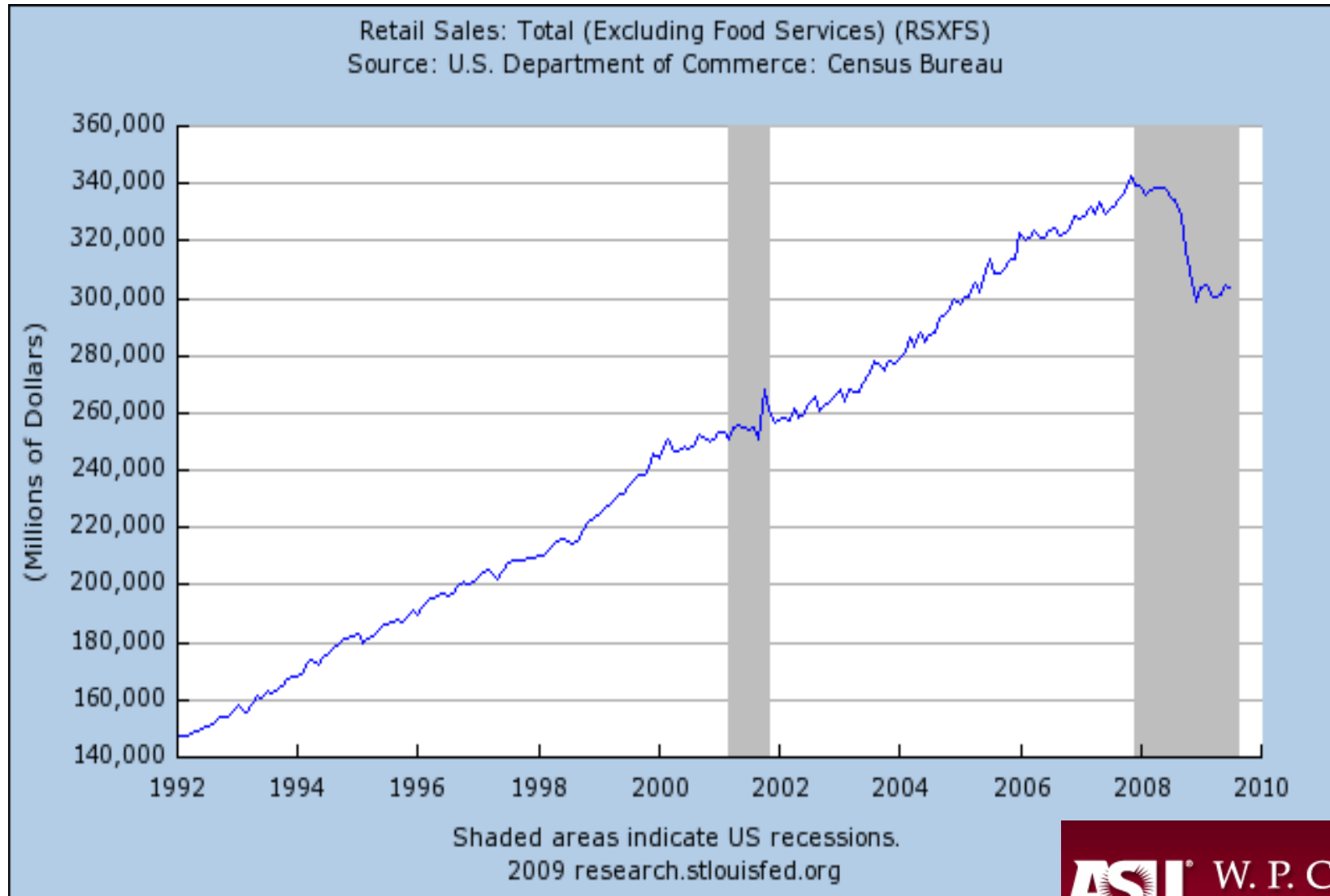
Source: Board of Governors of the Federal Reserve System



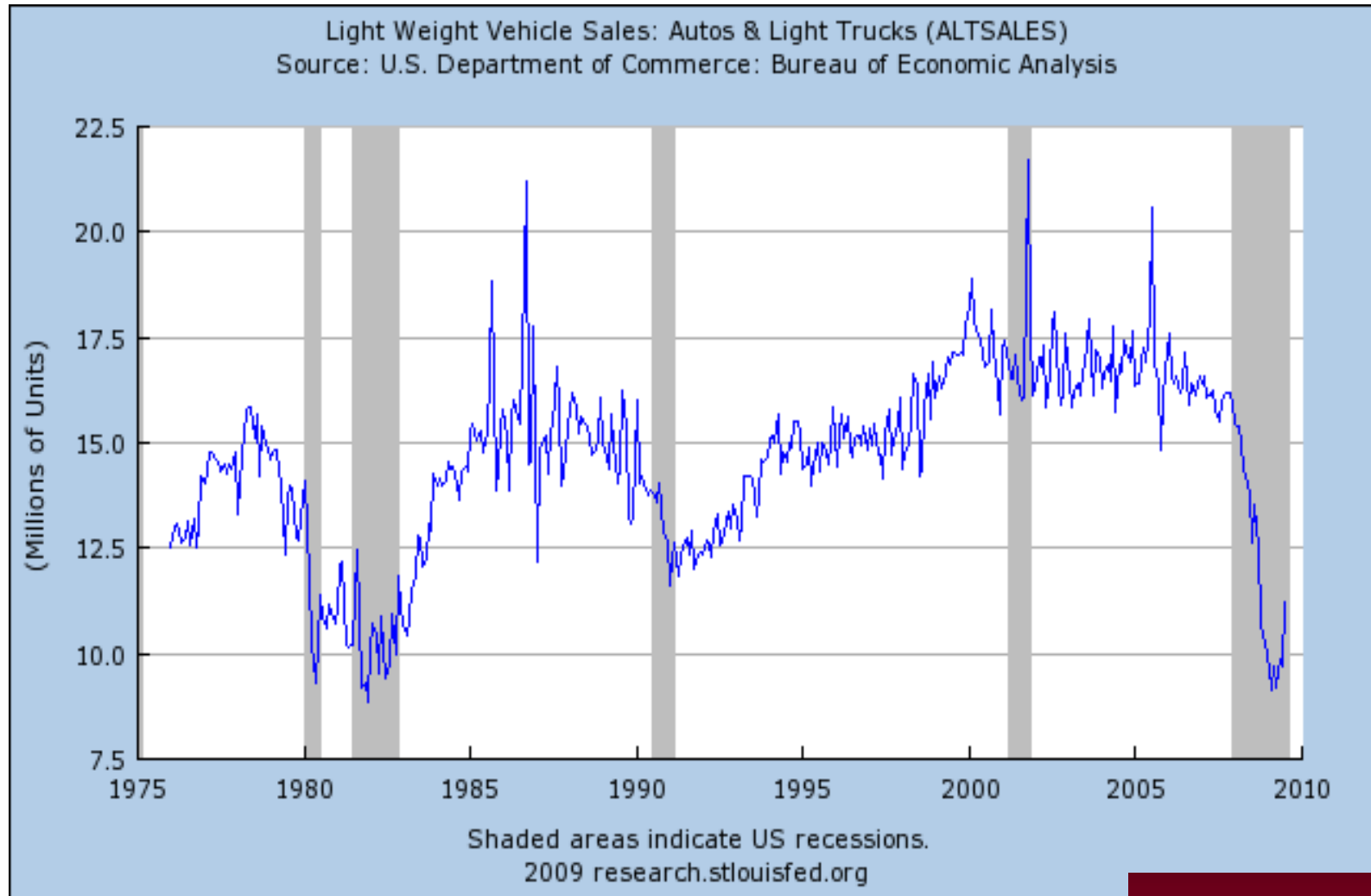
Shaded areas indicate US recessions.

2009 [research.stlouisfed.org](http://research.stlouisfed.org)

# Retail Sales Contract



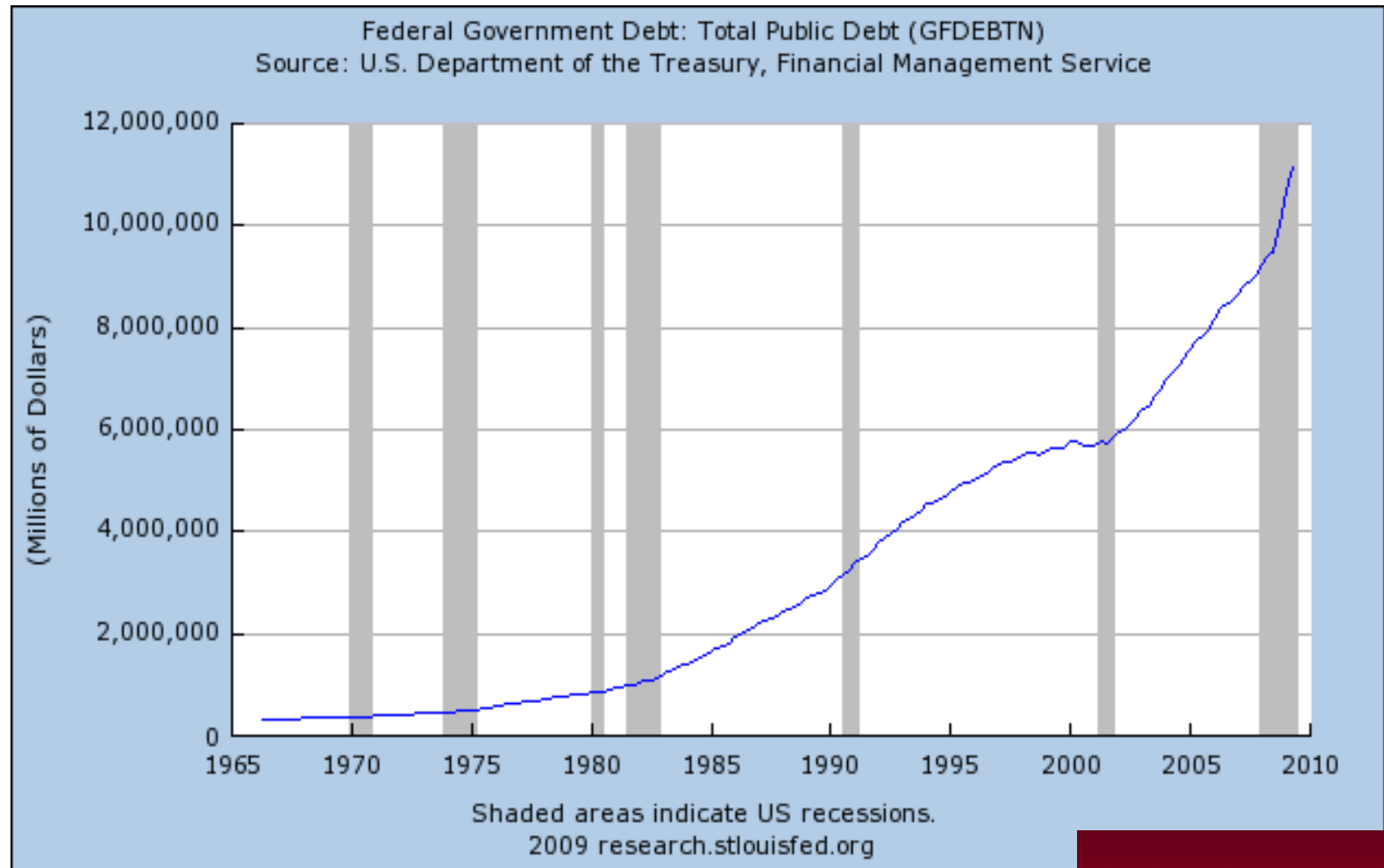
# Auto Sales Slump



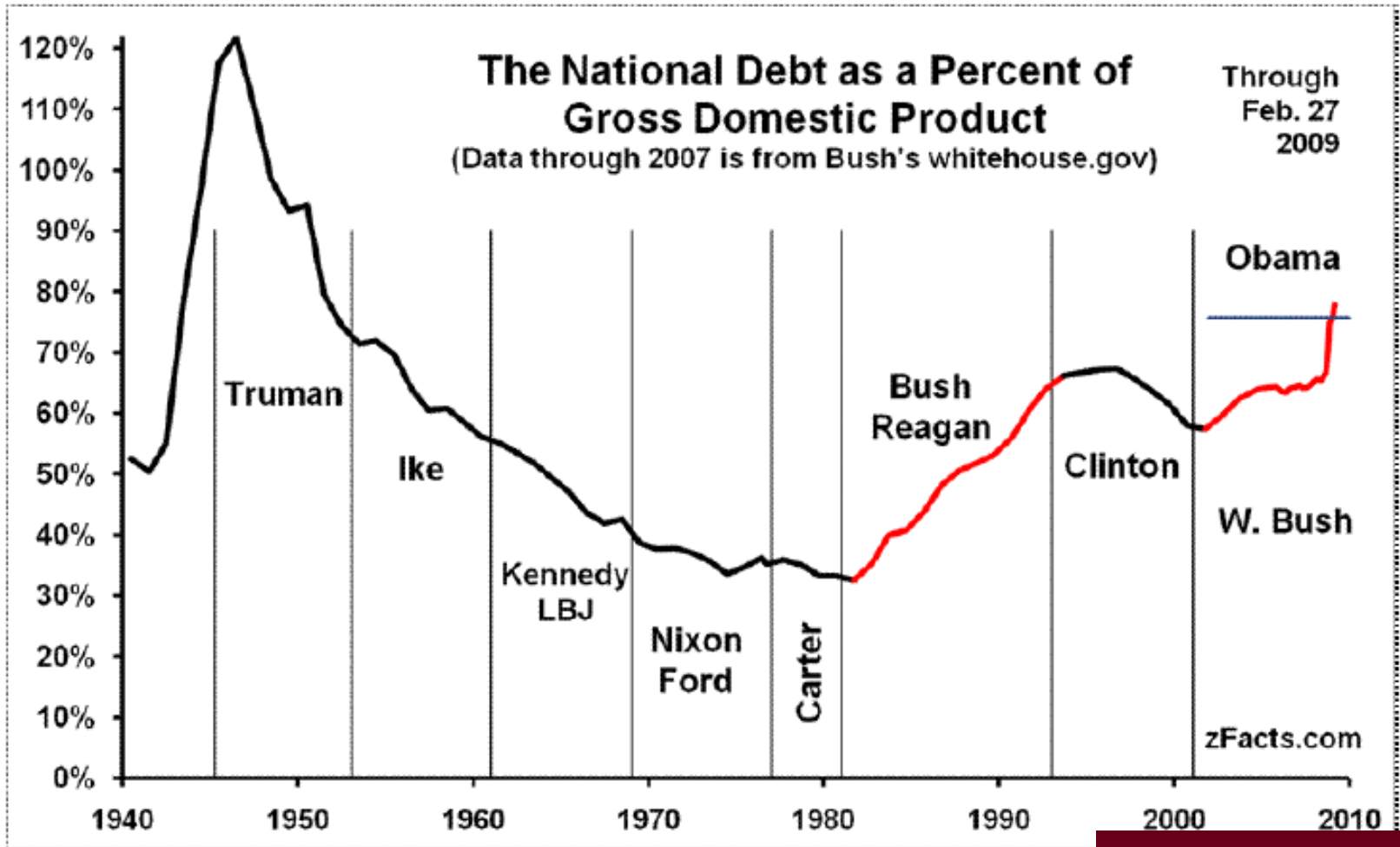
# So What Do we do about it ?

- Bail-outs
- Stimulus
- Do Nothing?? Just Wait it out.

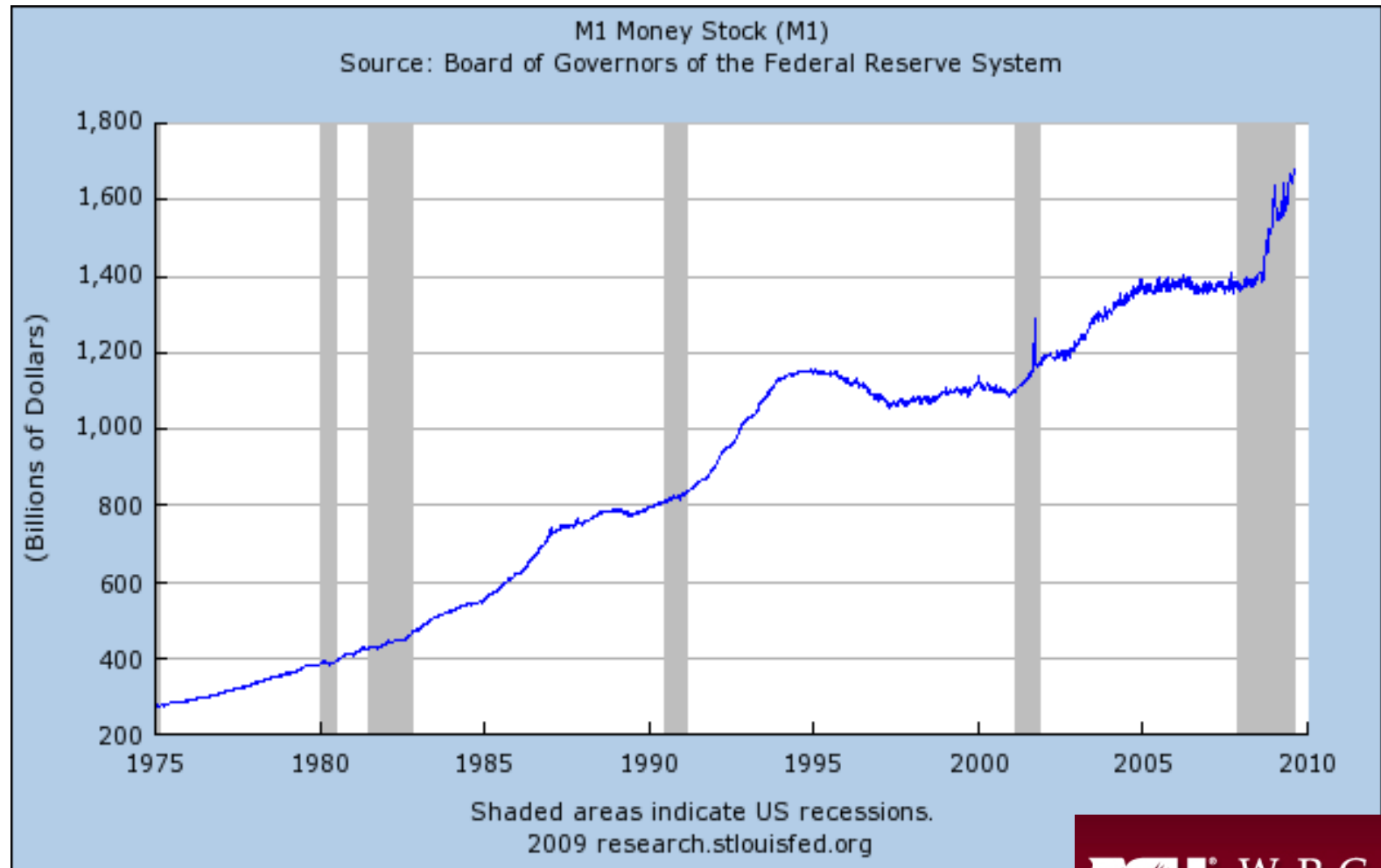
# Government Debt Sky-Rockets



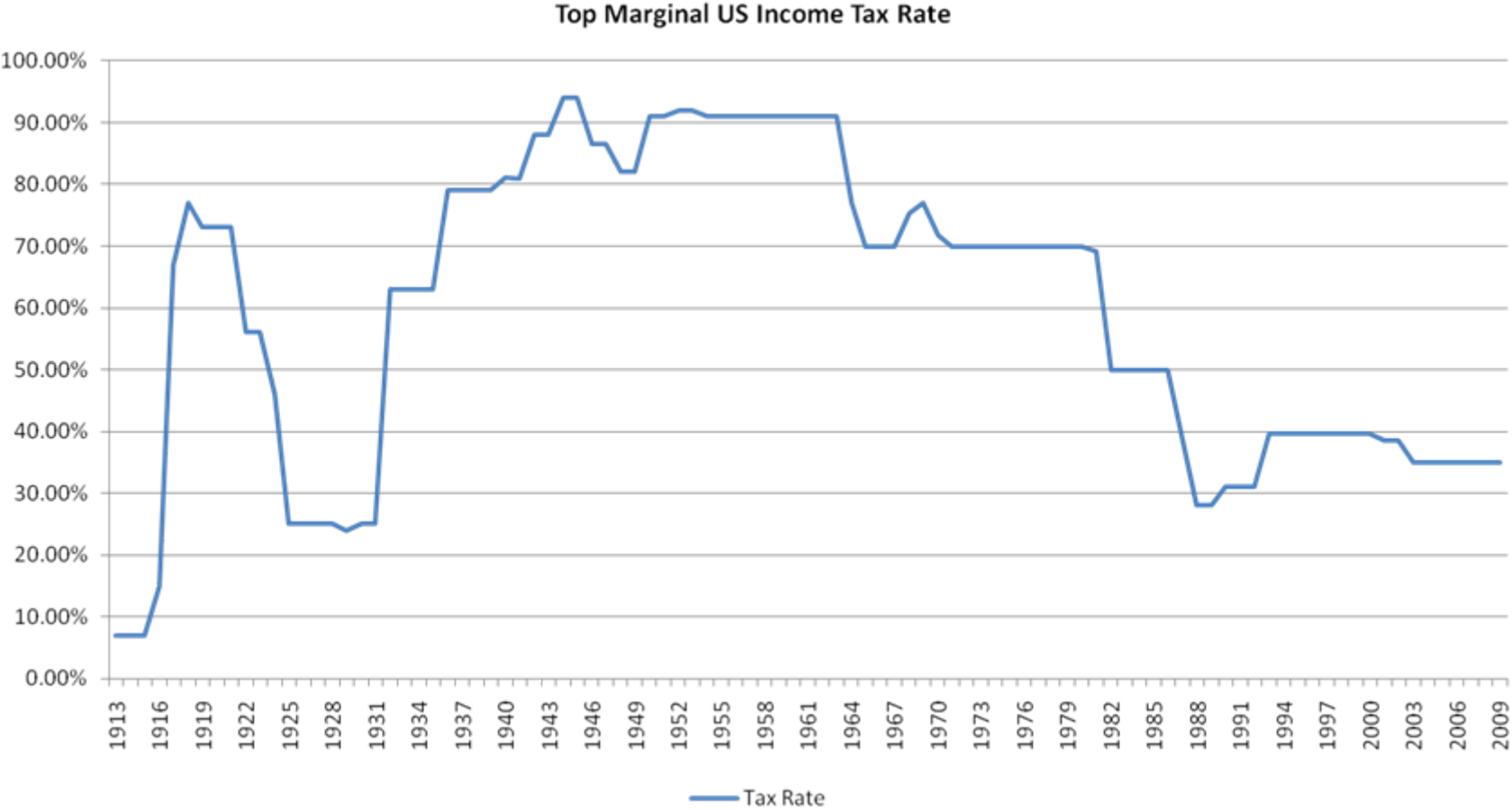
# Biggest Debt Run-Up in History??



# The Fed has Responded



# History of US Income Tax Rates



# Where do we go From Here?

- Great Recession
- Inflation
- Implications for Arizona

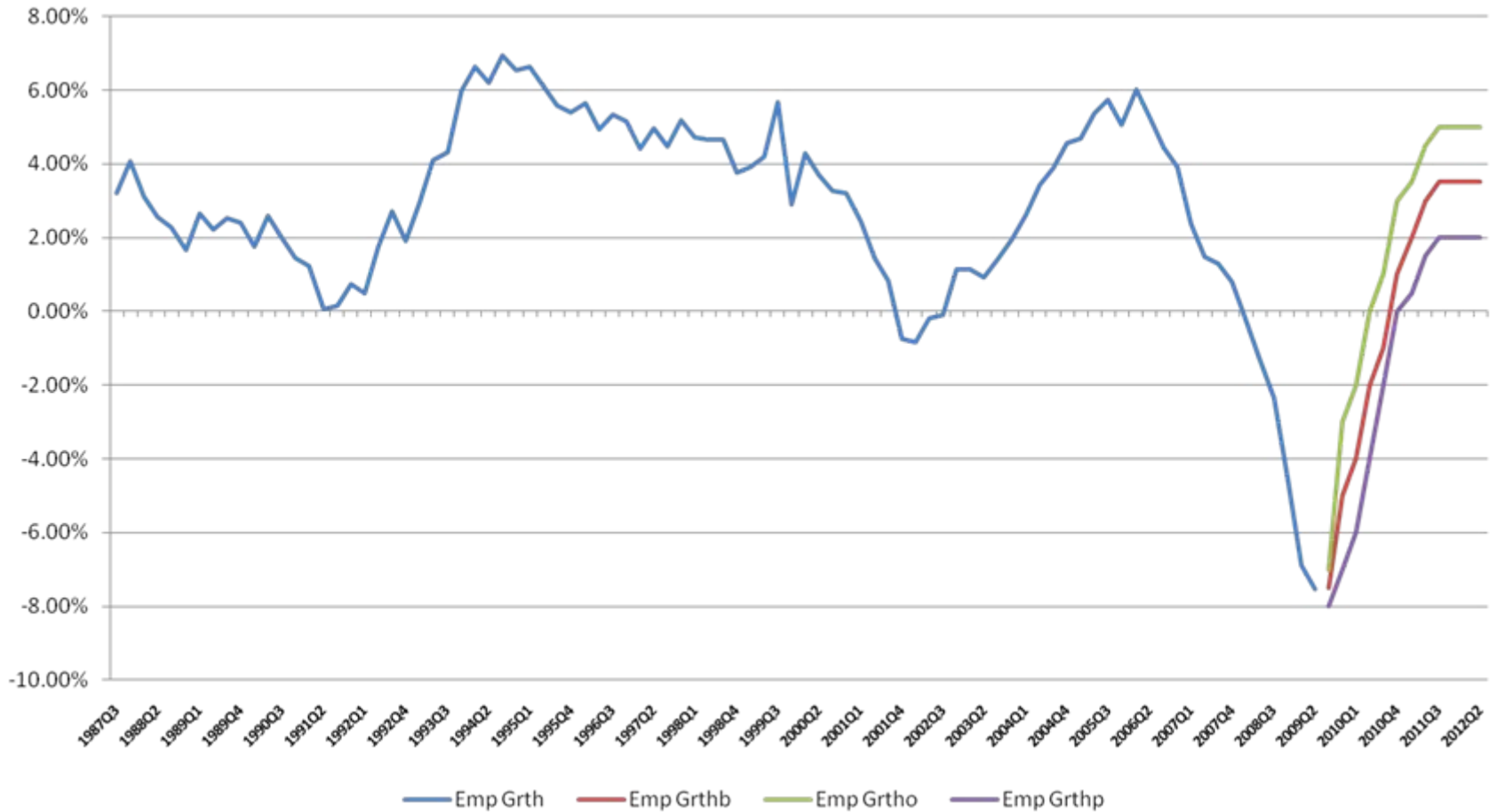
# Metro Phx and West Valley Outlook

## 2010 Forecast

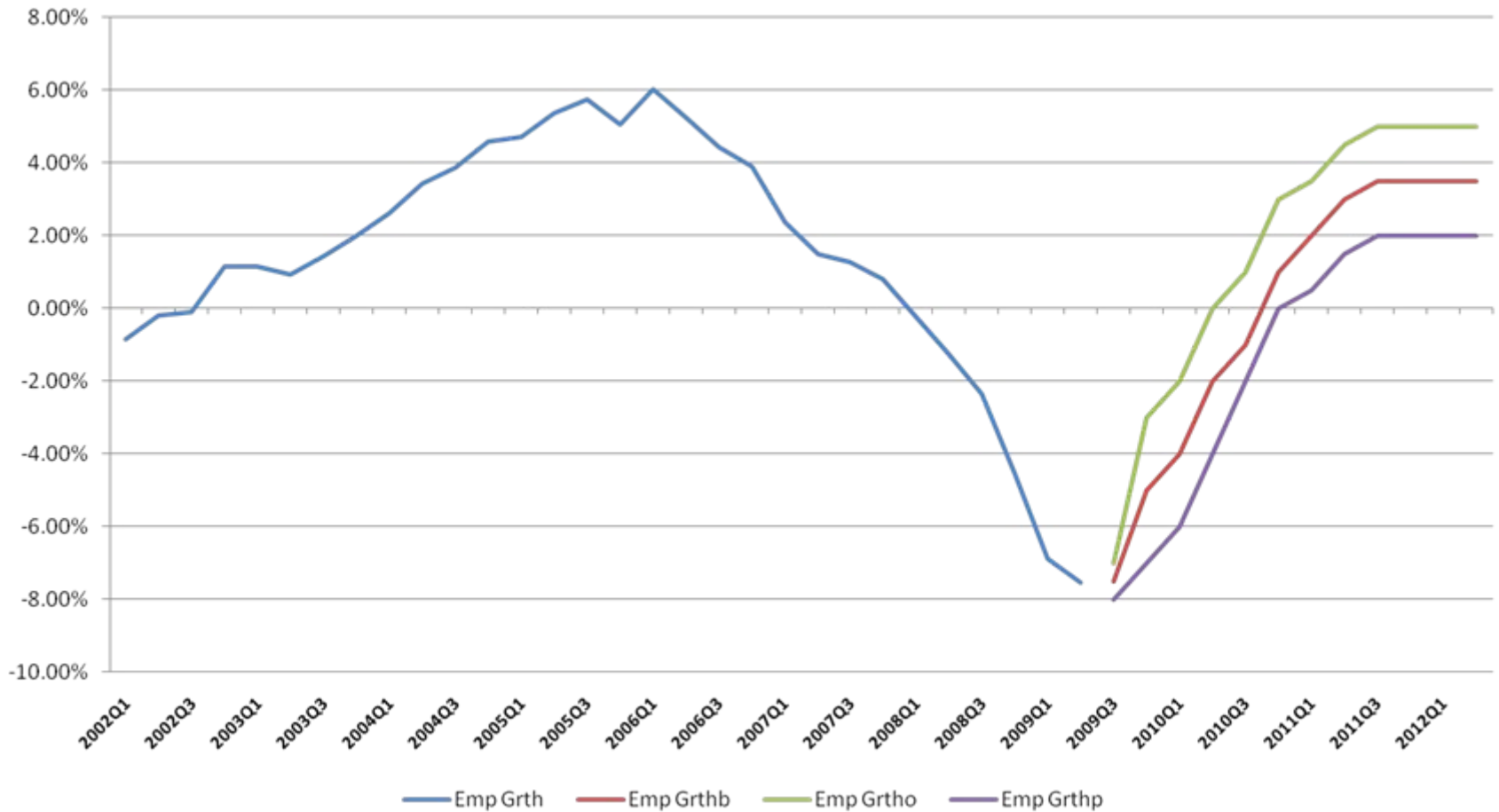
### Annual Percent Change 2010 from 2009

	Population	Personal Income	Retail Sales	Wage & Salary Empl.	Manufacturing Empl.	Construction Empl.
Arizona Department of Commerce	2.3 H	3.2	4.0	0.9	-0.4	0.7
Arizona Public Service	1.0 L	5.0	6.0 H	1.5	0.0	-5.0
ASU - Economic Outlook Center	2.0	1.0	5.0	-1.0	-2.5 L	2.0
ECON-LINC	2.2	3.4	3.4	1.8	1.2	5.0
EconLit LLC	2.2	3.8	2.6	0.1	0.0	0.0
Elliott D. Pollack and Co.	1.8	2.5	5.0	-1.0	2.0 H	0.0
Joint Legislative Budget Committee	1.9	3.0	2.0 L	0.5	0.0	0.0
The Maguire Company	2.0	2.5	5.0	2.0 H	2.0 H	0.0
Salt River Project	1.6	1.8	3.3	0.8	-0.3	-5.0
Southwest Growth Partners	1.6	2.1	2.5	0.5	1.5	-5.0
U of A - Eller College	1.6	-1.5 L	5.8	-4.4 L	-2.2	-24.7 L
VisionEcon/Governing Star Group	2.2	5.2 H	4.7	1.6	2.0 H	8.0 H
<b>Consensus</b>	<b>1.9</b>	<b>2.7</b>	<b>4.1</b>	<b>0.3</b>	<b>0.3</b>	<b>-2.0</b>

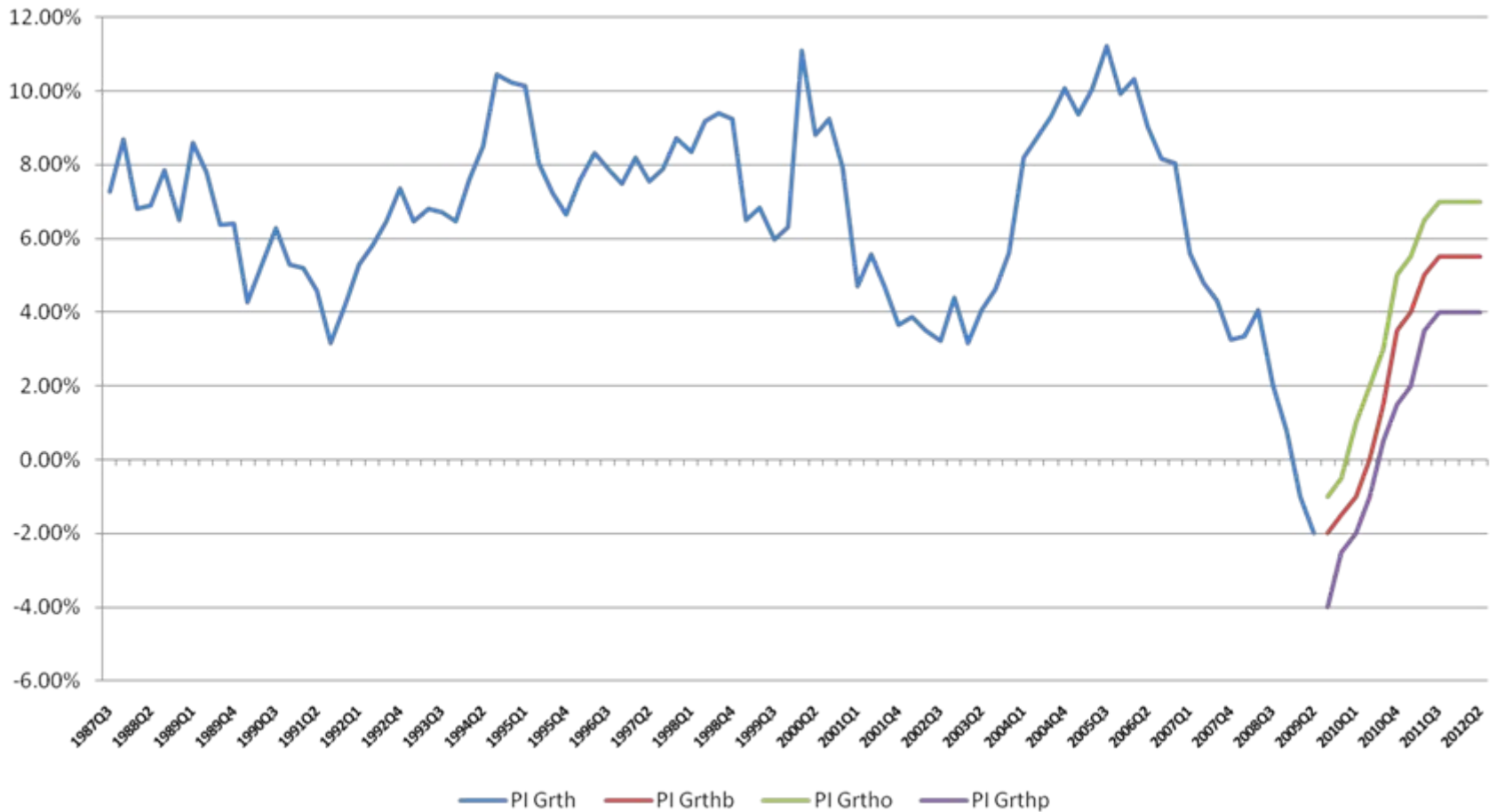
# Employment for the State



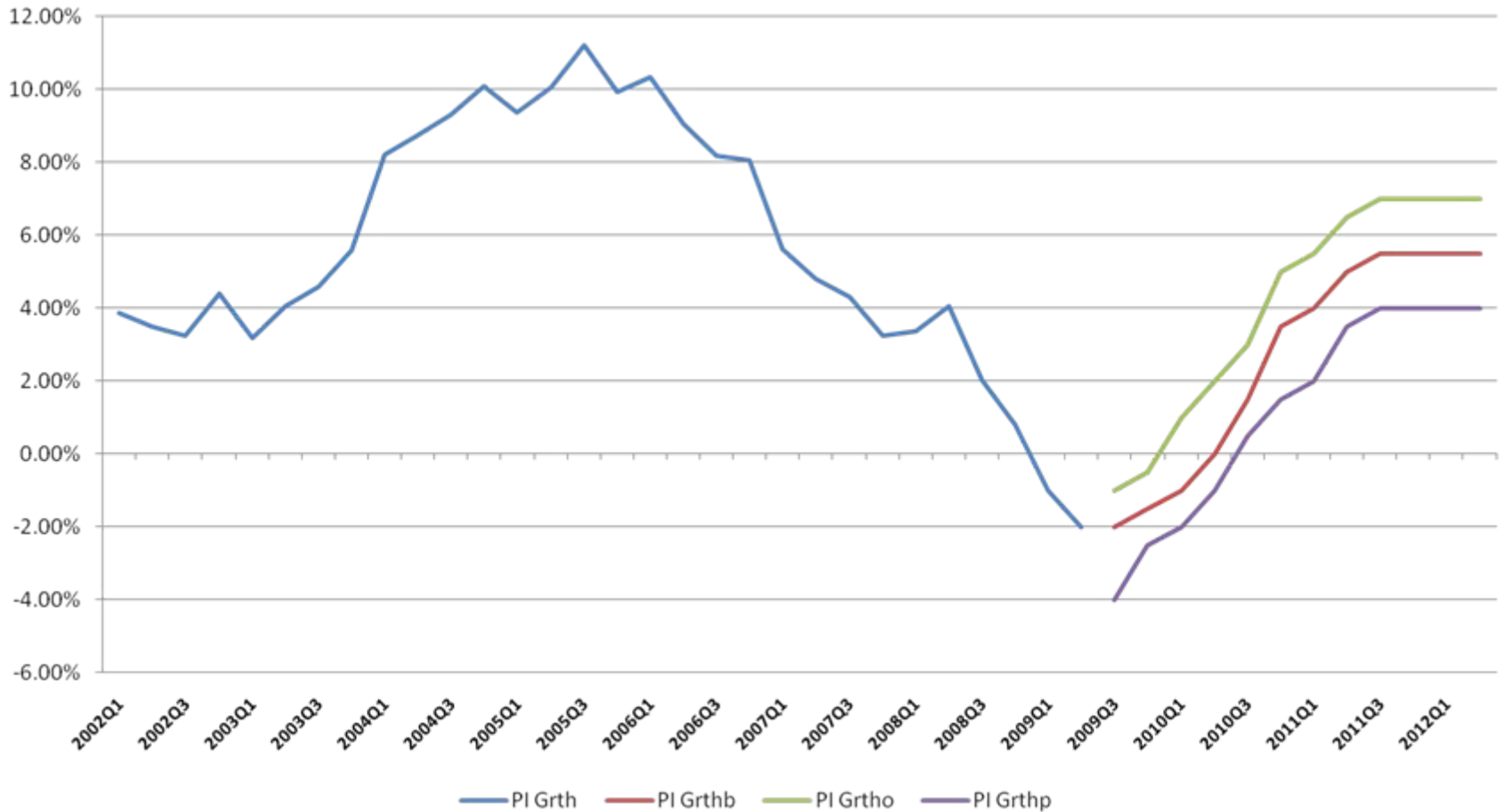
# Employment for the State



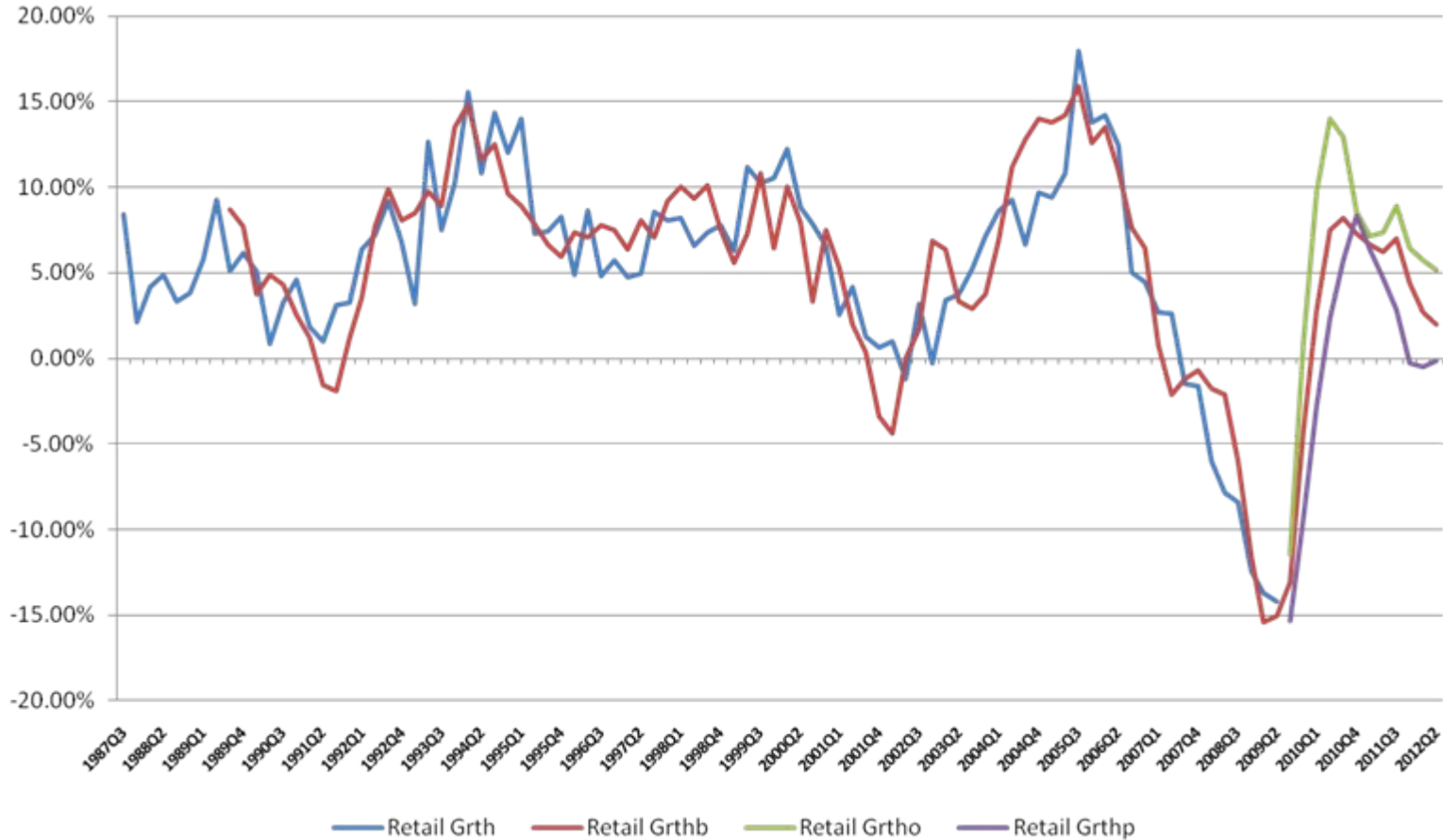
# Personal Income for the State



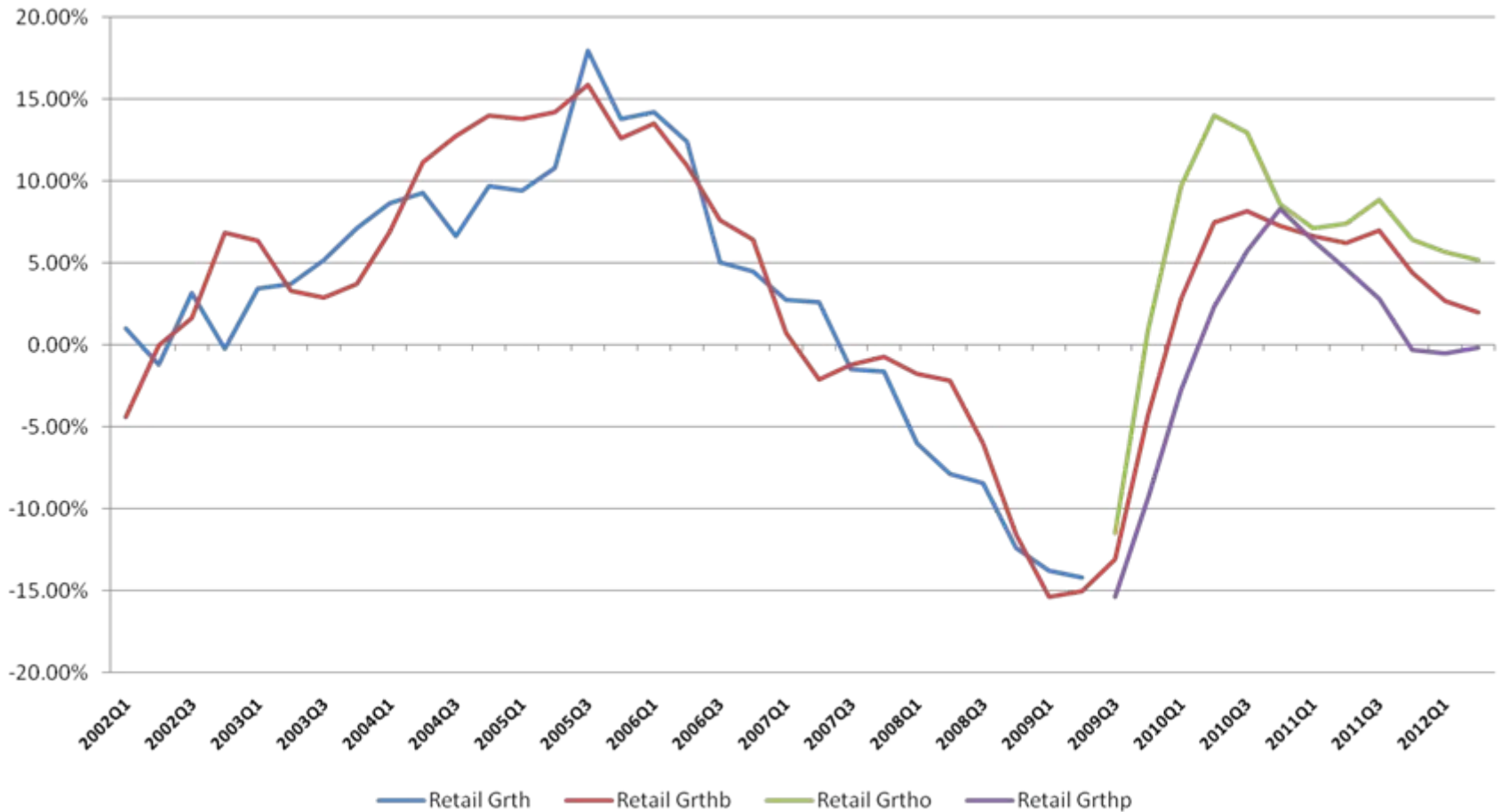
# Personal Income for the State



# Taxable Retail Sales for the State



# Taxable Retail Sales for the State



# Challenges for all of Arizona

- Education and skills in the workforce
- Education Funding
- State Budget
- Leadership

## Percentage Point Difference Between Arizona and the United States in the Proportion Having Earned an Associate's Degree or More Education

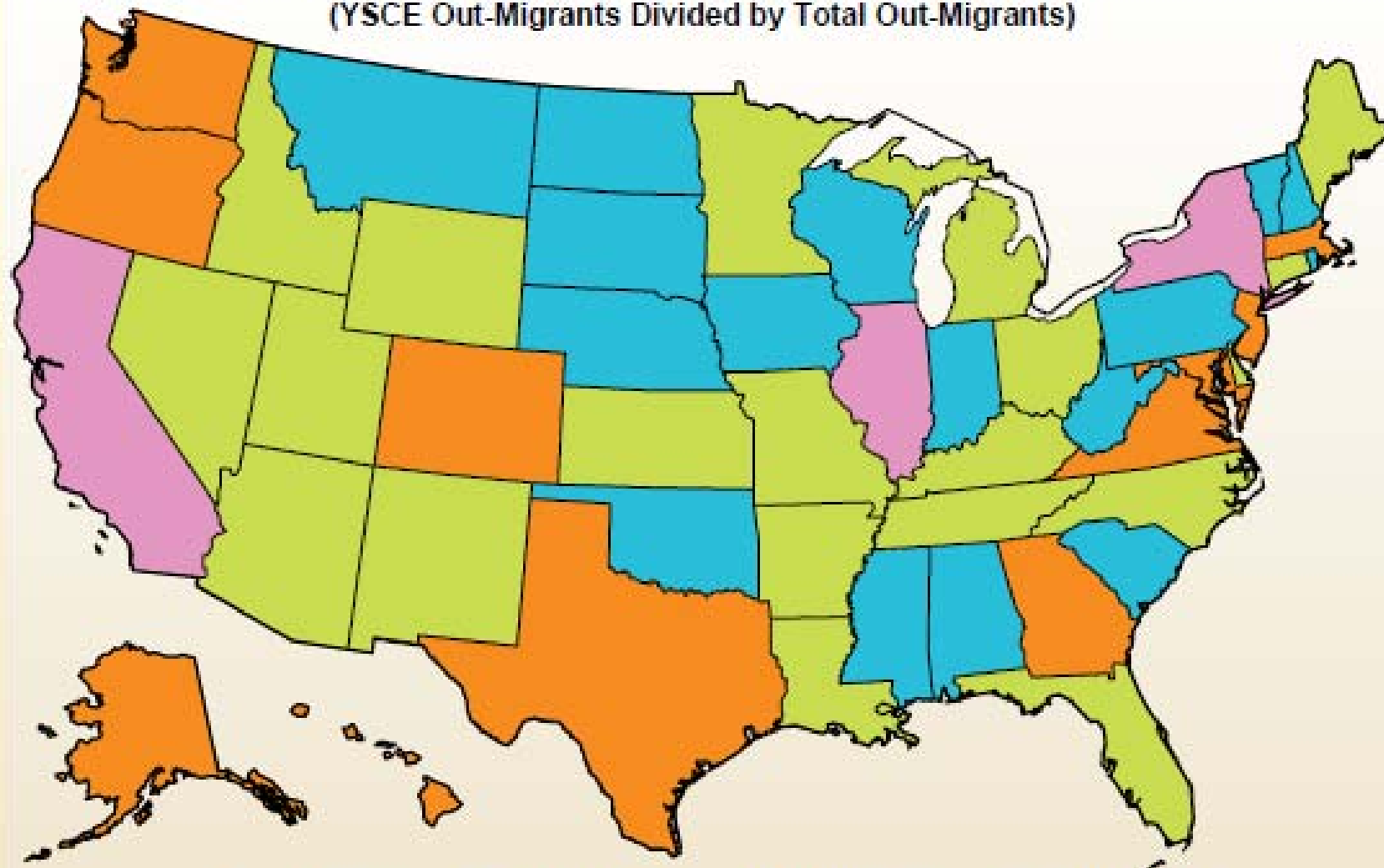


Source: U.S. Department of Commerce, Census Bureau, 2000 Census

[www.arizonaindicators.org](http://www.arizonaindicators.org)

## Young, Single and College-Educated (YSCE) Domestic Migrants Between 1995 and 2000

(YSCE In-Migrants Divided by Total In-Migrants) Minus  
(YSCE Out-Migrants Divided by Total Out-Migrants)



■ -2.0 or less

■ -1.9 to 0.0

■ 0.1 to 1.9

■ 2.0

## Per Pupil Amounts for Current Spending of Public Elementary-Secondary School Systems by State:2006-07 (Dollars)

Geographic area	Total	Salaries and wages	Employee benefits	Instruction		
				Total	Salaries and wages	Employee benefits
United States.....	9,666	5,923	1,973	5,867	4,003	1,316
Arizona.....	7,196	4,468	1,232	4,102	2,924	791
California.....	9,152	5,747	1,827	5,508	3,735	1,125
Colorado.....	8,167	5,229	1,223	4,748	3,385	782
Florida.....	8,514	5,105	1,550	5,074	3,234	944
Georgia.....	9,127	5,802	1,878	5,816	3,991	1,365
Nevada.....	7,993	4,765	1,608	4,842	3,047	1,050
New Mexico.....	8,635	5,254	1,538	4,912	3,480	995
Oregon.....	9,000	4,885	2,306	5,280	3,213	1,465
Texas.....	7,818	5,332	904	4,666	3,605	581
Utah.....	5,683	3,423	1,430	3,604	2,370	990
Washington.....	8,377	5,298	1,654	5,018	3,492	1,048

SOURCE: 2007 Census of Governments Survey of Local Government Finances - School Systems

## Per Pupil Amounts for Current Spending of Public Elementary-Secondary School Systems by State:2006-07 (Dollars)

Geographic area	Support services				
	Total	Pupil support	Staff support	General administration	School administration
United States.....	3,410	516	473	182	535
Arizona.....	2,739	491	207	106	366
California.....	3,315	430	578	87	614
Colorado.....	3,124	370	434	140	557
Florida.....	3,063	395	570	82	483
Georgia.....	2,869	419	475	117	539
Nevada.....	2,876	284	235	152	525
New Mexico.....	3,365	825	249	183	642
Oregon.....	3,401	629	372	125	572
Texas.....	2,762	386	430	119	435
Utah.....	1,729	200	255	65	348
Washington.....	2,951	555	371	100	500

SOURCE: 2007 Census of Governments Survey of Local Government Finances - School Systems

**Expenditures per Student  
2007**

	Instruction Exp	Total Current Exp	Capital Exp	Total Exp
United States.....	\$5,867	\$9,666	\$1,323	\$10,989
Arizona.....	\$4,102	\$7,196	\$1,481	\$8,678
California.....	\$5,508	\$9,152	\$1,614	\$10,767
Colorado.....	\$4,748	\$8,167	\$1,370	\$9,537
Florida.....	\$5,074	\$8,514	\$2,256	\$10,770
Georgia.....	\$5,816	\$9,127	\$1,395	\$10,523
Nevada.....	\$4,842	\$7,993	\$1,730	\$9,722
New Mexico.....	\$4,912	\$8,635	\$1,210	\$9,845
Oregon.....	\$5,280	\$9,000	\$523	\$9,524
Texas.....	\$4,666	\$7,818	\$1,474	\$9,292
Utah.....	\$3,604	\$5,683	\$1,149	\$6,832
Washington.....	\$5,018	\$8,377	\$1,583	\$9,960

**Source: Public Education Finance Report, US Census, July 2007**

**Expenditures per \$1000 of Personal Income  
2007**

	Instruction Exp	Total Current Exp	Capital Exp	Total Exp
<b>United States.....</b>	\$26.25	\$43.02	\$5.84	\$48.85
<b>Arizona.....</b>	\$19.94	\$34.99	\$7.20	\$42.19
<b>California.....</b>	\$23.99	\$39.70	\$6.96	\$46.66
<b>Colorado.....</b>	\$19.99	\$34.35	\$5.76	\$40.11
<b>Florida.....</b>	\$20.16	\$33.83	\$8.96	\$42.79
<b>Georgia.....</b>	\$31.58	\$49.50	\$7.55	\$57.04
<b>Nevada.....</b>	\$21.21	\$35.01	\$7.58	\$42.59
<b>New Mexico.....</b>	\$23.32	\$49.78	\$6.97	\$56.75
<b>Oregon.....</b>	\$24.21	\$41.07	\$2.37	\$43.44
<b>Texas.....</b>	\$25.63	\$42.95	\$8.10	\$51.05
<b>Utah.....</b>	\$24.03	\$37.90	\$7.66	\$45.56
<b>Washington.....</b>	\$20.95	\$34.98	\$6.61	\$41.59

Source: Public Education Finance Report, US Census, July 2007

## Rate of Decline in State Tax Revenues 2009 vs. 2008

	First 3 Fiscal Quarters	April and May Only
<b>United States.....</b>	-4.3%	-20.0%
<b>Arizona.....</b>	-11.2%	-39.2%
<b>California.....</b>	-9.1%	-28.4%
<b>Colorado.....</b>	-2.8%	-28.0%
<b>Florida.....</b>	-8.3%	-14.8%
<b>Georgia.....</b>	-8.2%	-17.7%
<b>Nevada.....</b>	-2.2%	na
<b>New Mexico.....</b>	-1.1%	na
<b>Oregon.....</b>	21.5%	-36.4%
<b>Texas.....</b>	-0.6%	30.0%
<b>Utah.....</b>	-8.3%	-18.9%
<b>Washington.....</b>	-6.1%	-9.9%

Source: Rockefeller Inst. and US Census

## Arizona Compared with other States

**Table 1. Percent Change in Personal Income Tax**

State	PIT as % of Total Taxes, FY 2008	PIT % change, Jan.-April 2008-09
Arizona	25.3%	-54.9%
South Carolina	39.5%	-38.6%
Michigan	28.7%	-34.4%
California	47.5%	-33.8%
Vermont	24.5%	-33.1%
New York	55.9%	-31.8%
Rhode Island	39.5%	-30.4%
New Jersey	41.2%	-30.1%
Massachusetts	57.2%	-28.5%
Idaho	39.4%	-28.3%
Ohio	38.9%	-27.8%
Oregon	68.5%	-27.0%
<i>United States</i>	<i>35.9%</i>	<i>-26.0%</i>

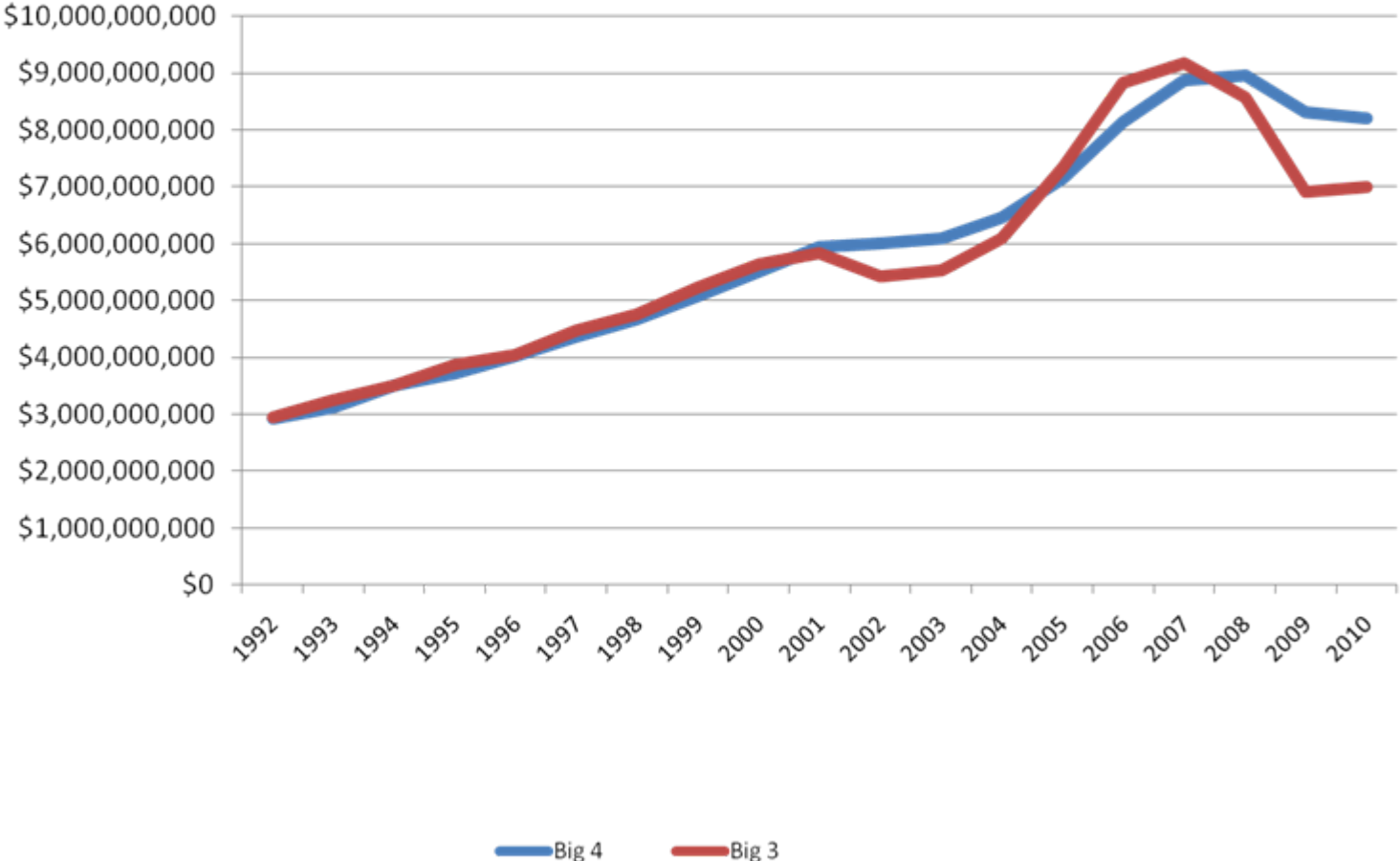
## Hypothetical Big 3 vs. Big 4

Basics: About 95% of the General Fund is generated by the Big 3, TPT, Individual Income and Corporate Income. Compare a Big 3 with the existing base with a modified Big 4. Add a state wide property tax with a uniform assessment ratio with rates set to yield \$500 million based on 2008 assessments.

Then modify the base of the current Big 3 as follows.

- Sales and use tax: Eliminate the volatile contracting sector from the tax base. Replace it with a tax on certain services and on food to be consumed at home. The selective sales tax on alcoholic beverages also could be increased.
- Individual income tax: Replace the existing rate structure with a flat tax based on Arizona adjusted gross income excluding the extremely volatile capital gains income.
- Corporate income tax: Reduce the reliance on this tax by cutting the tax rate to be equal to the individual income tax's flat tax rate.

**Figure**  
**The Big 3 Revenue Sources Compared with a Hypothetical Big 4 Base**



# The Budget Challenge

- Recent Budget Situation
  - \$10.2 Spend
  - \$7.0 in Revenue
  - \$630 million in cuts

# Latest Budget Proposal

Dept of Ed	\$4,234,423,077	\$4,014,233,077
AHCCCS	\$1,835,414,286	\$1,822,566,386
Universities	\$930,232,558	\$890,232,558
DOC	\$978,667,213	\$918,968,513
DES	\$735,720,588	\$685,691,588
DHS	\$636,382,979	\$606,472,979
CC	\$146,341,892	\$135,512,592
All oth	\$751,009,195	\$620,333,595
sum	\$10,248,191,788	\$9,694,011,288