

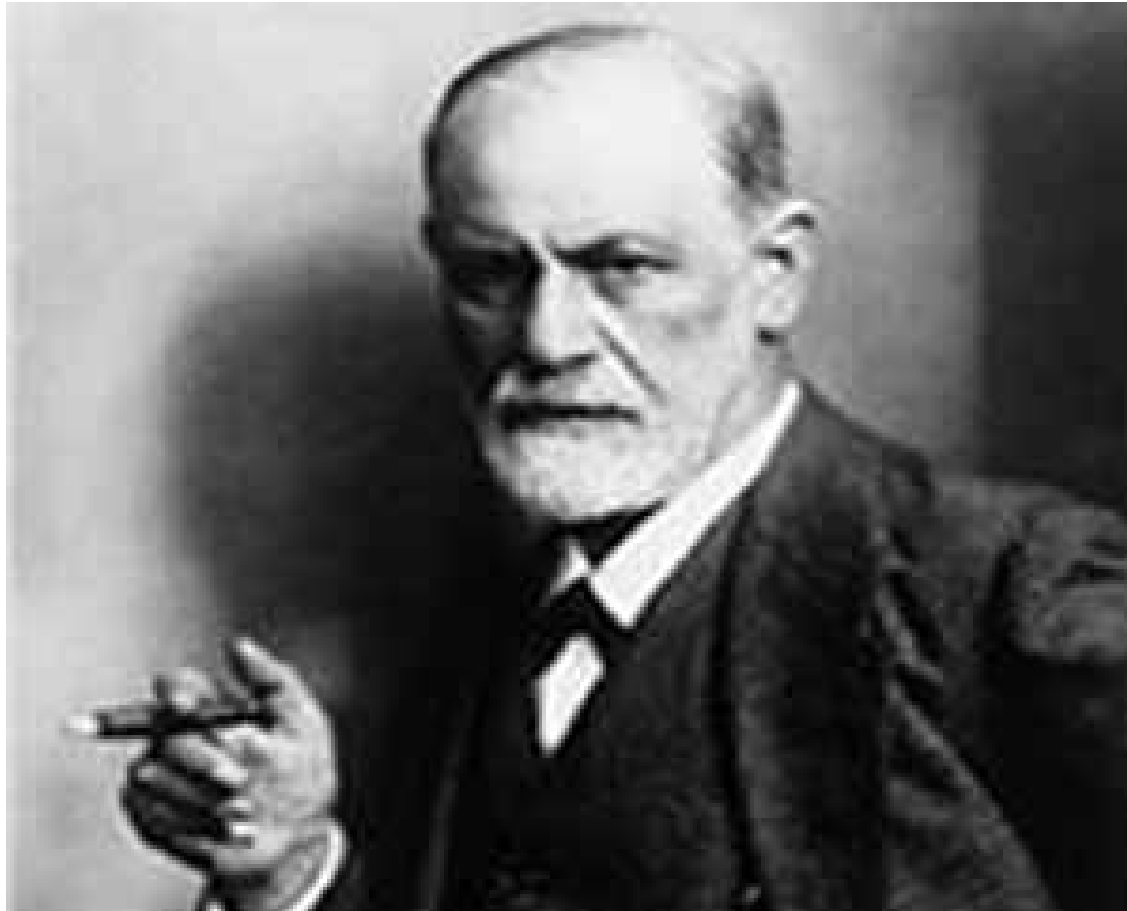


Economic Update: 2008 & 2009

**Presented to:
ATRA 2008 Outlook Conference**

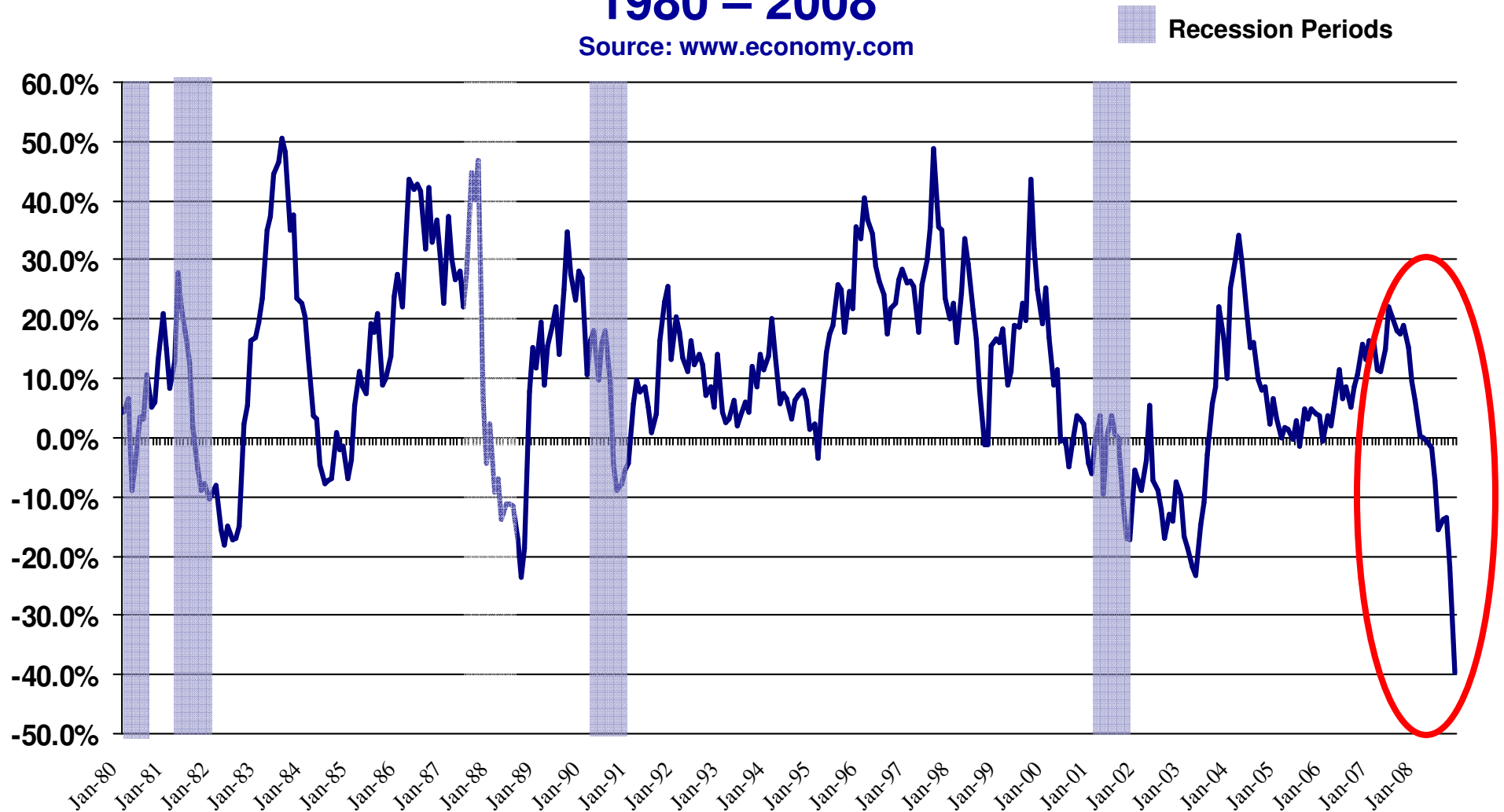
**By:
Jim Rounds
November 21, 2008**

Economics vs. Psychology



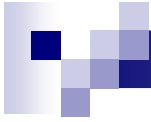
Dow Jones Stock Prices Percent Change Year Ago 1980 – 2008*

Source: www.economy.com



Elliot D. Pollack & Company

*Data through October 27, 2008



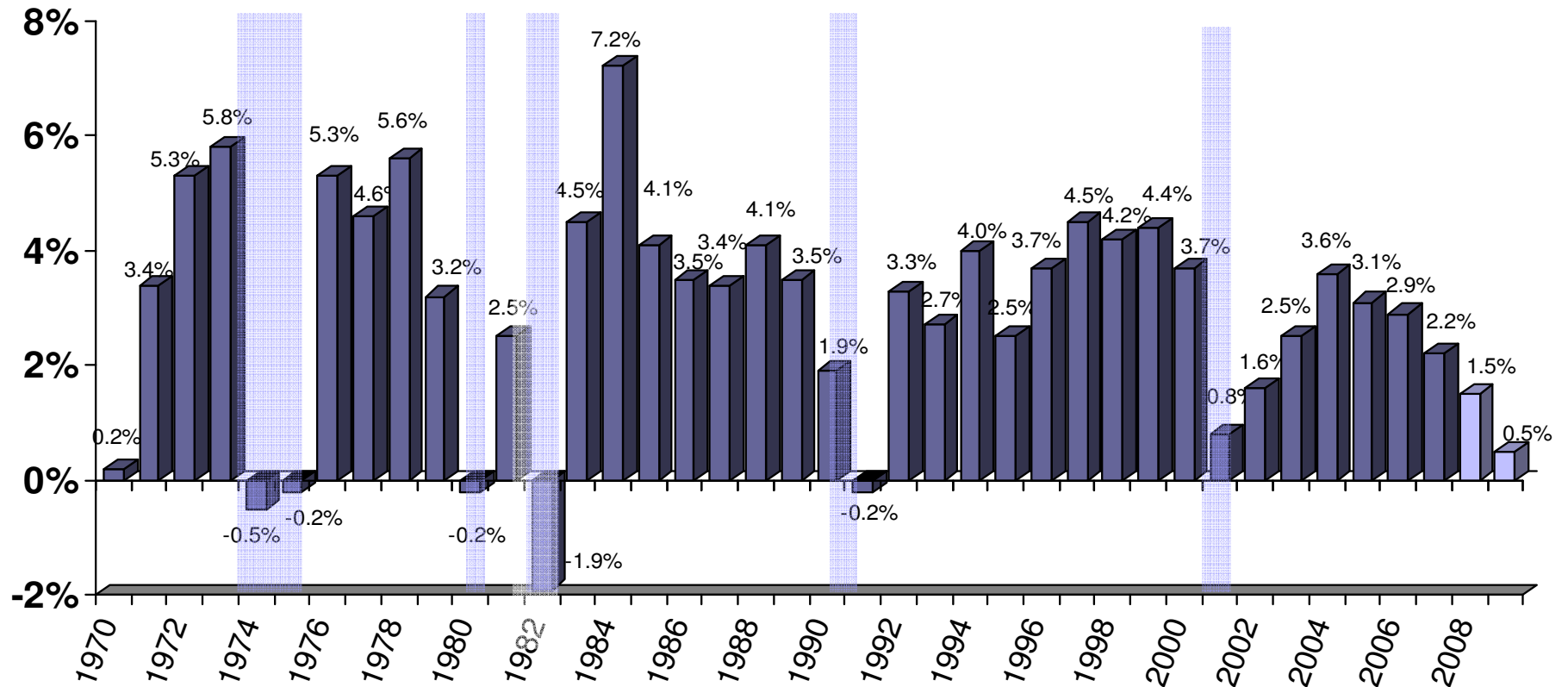
Economic Fundamentals:



United States Real Gross Domestic Product*

Annual Growth 1970 - 2009**

Source: U.S. Bureau of Economic Analysis & *Blue Chip Economic Indicators*



* Based on chained 2000 dollars.

** 2008 - 2009 are forecasts from the Blue Chip Economic Indicators, October 2008

 **Recession Periods**



Elliot D. Pollack & Company



Why Do Recessions Occur?

Due to *imbalances*, combined with *shocks*, exacerbated by *bad decisions*.



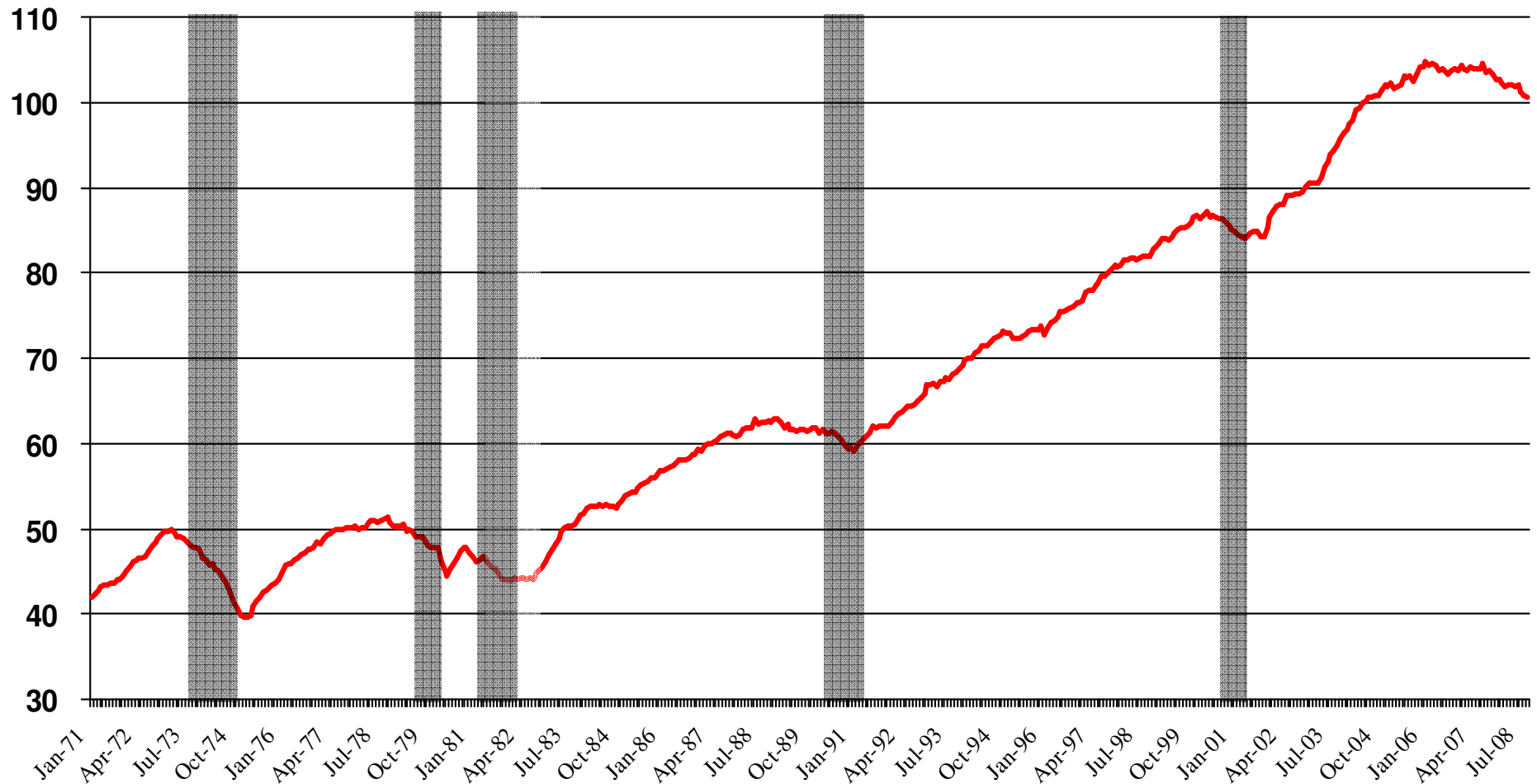
What have we been contending with this time?

- Credit crisis.
- Excess supply of housing.
- Oil prices?
- Inflation pressure?



U.S. Leading Indicators 1971 – 2008 (through September)

Source: The Conference Board



Elliot D. Pollack & Company



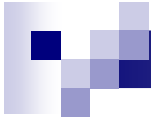
Recession Periods



How is a recession defined?

It's not just about
GDP!





Recession Indicators:

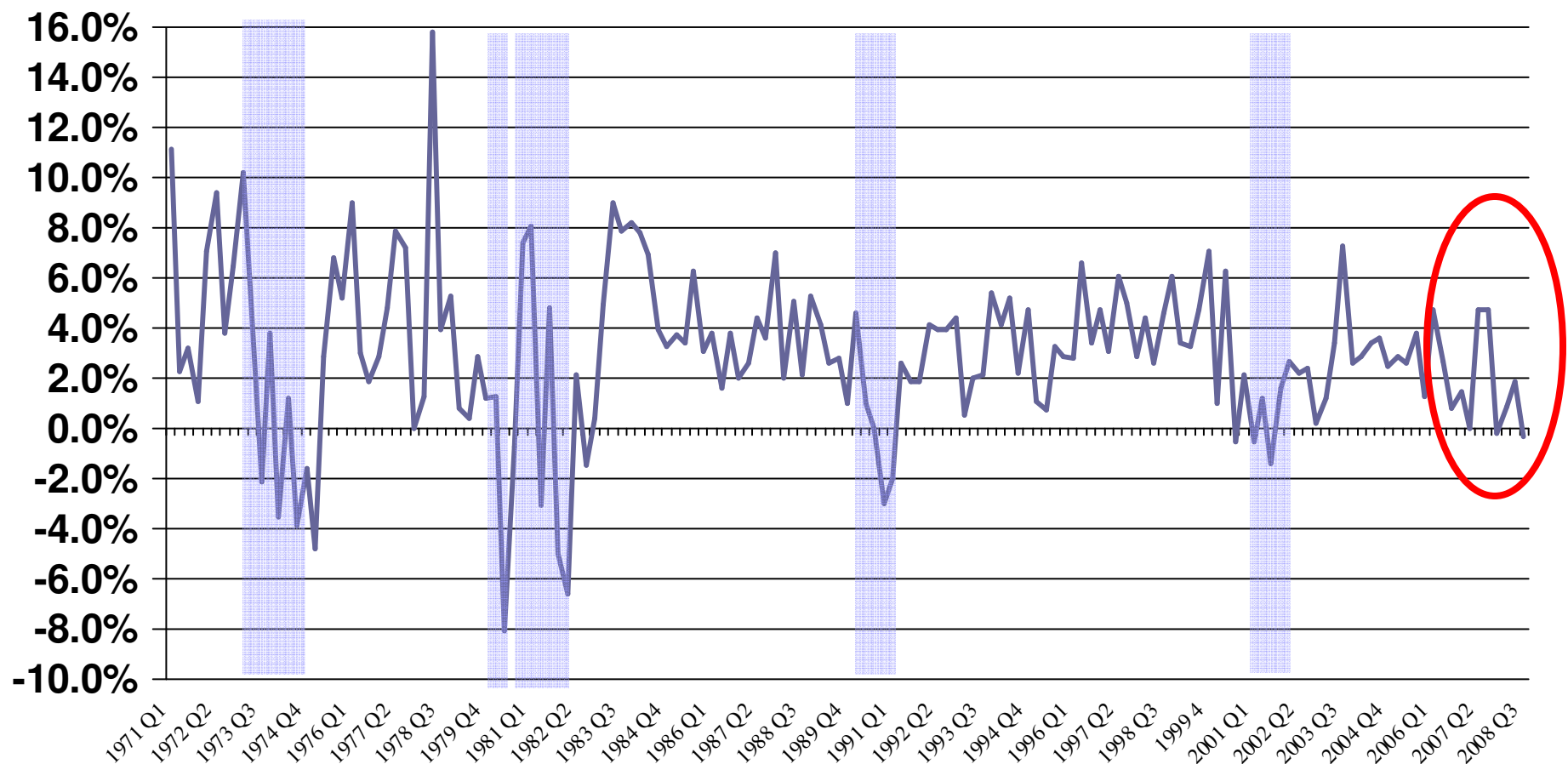
- Real GDP
- Real Income
- Employment
- Industrial Production
- Wholesale – Retail Sales



Real Gross Domestic Product Percent Change Quarter Ago, Annualized 1971 – 2008*

Source: Bureau of Economic Analysis

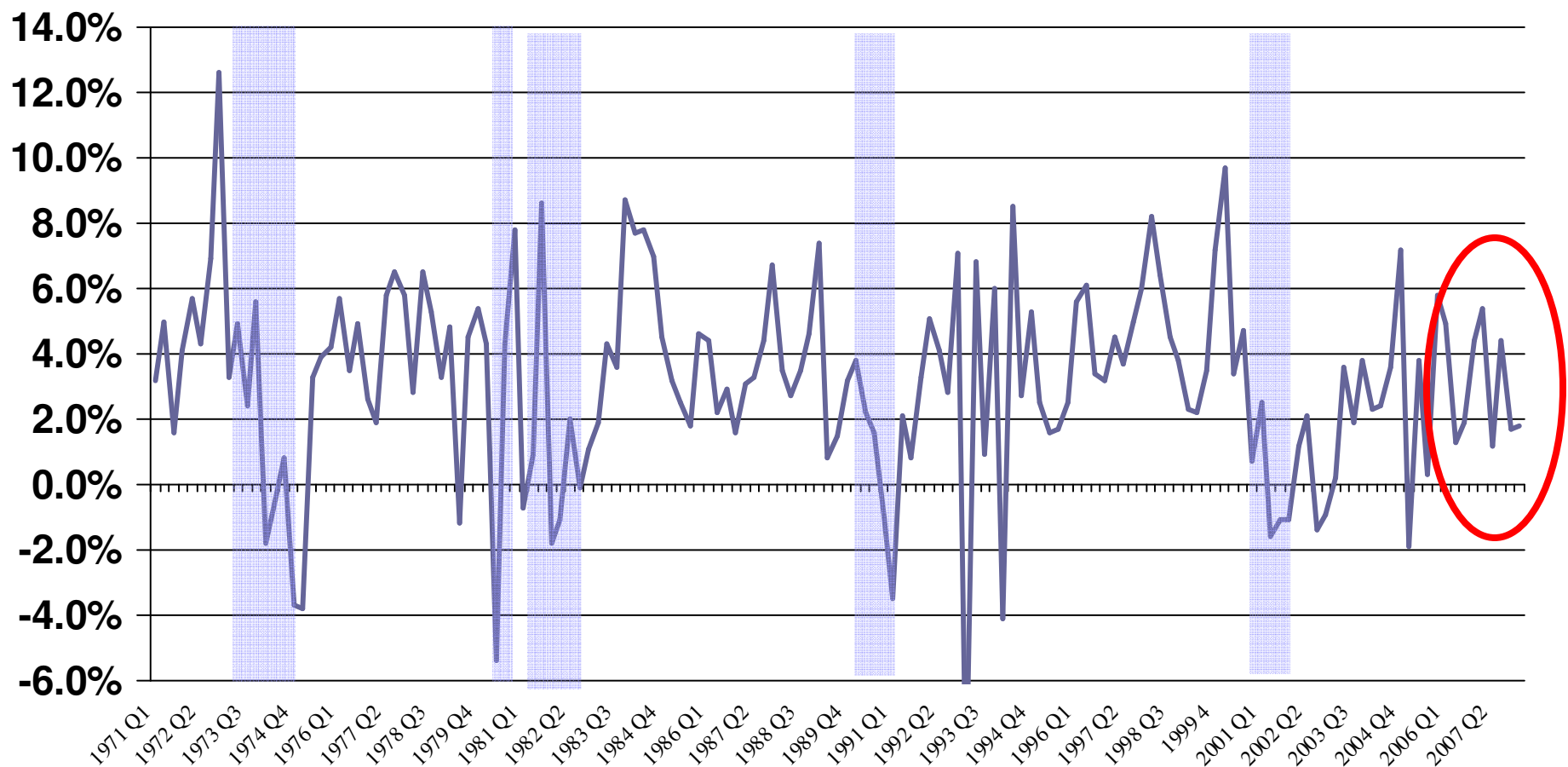
Recession Periods



Real Personal Income Net of Government Transfers Percent Change Quarter Ago, Annualized 1971 – 2008*

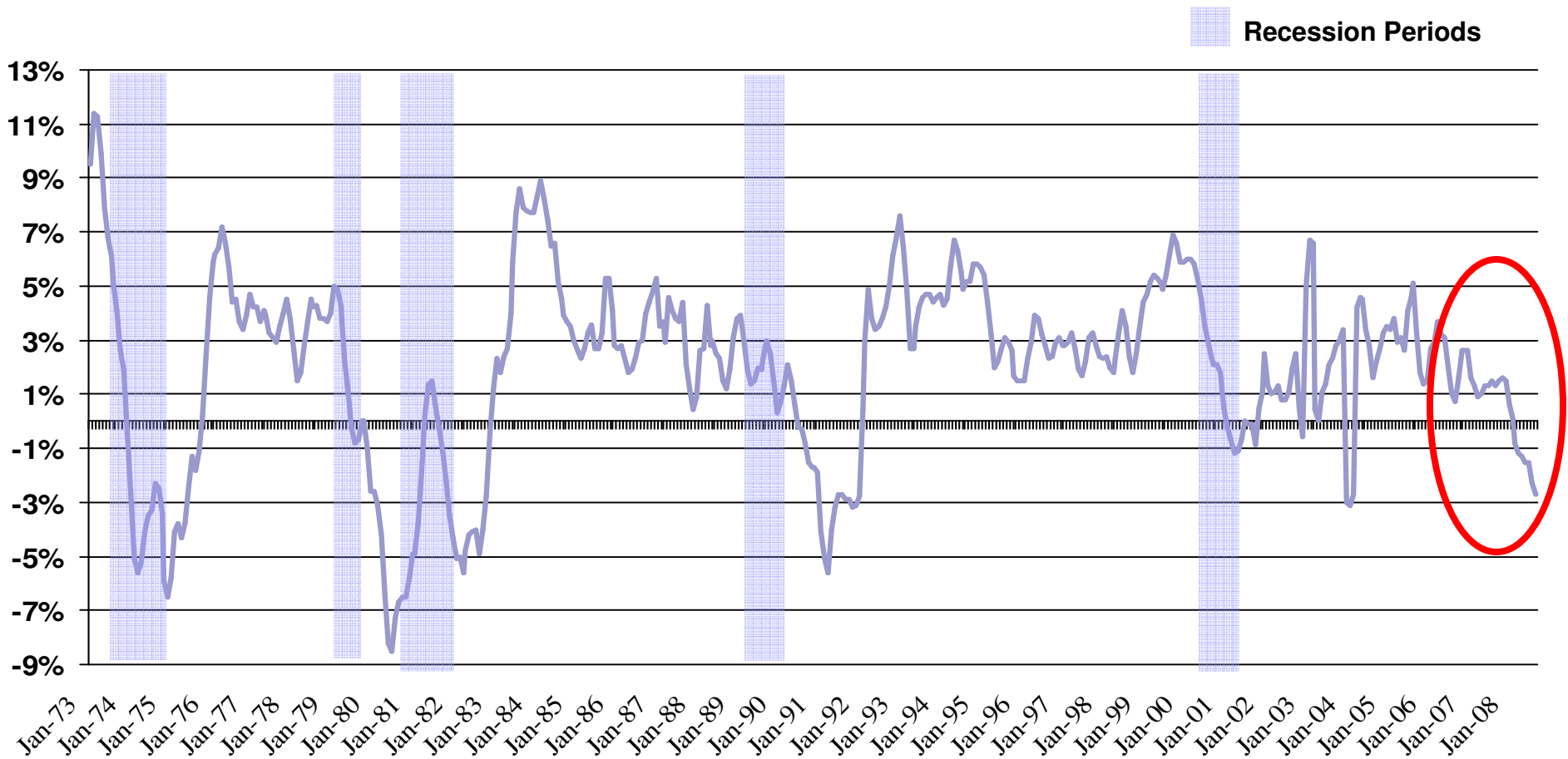
Source: Bureau of Economic Analysis

Recession Periods



Real Retail Sales U.S. Percent Change Year Ago 1973 – 2008*

Source: Federal Reserve



*Data through August 2008

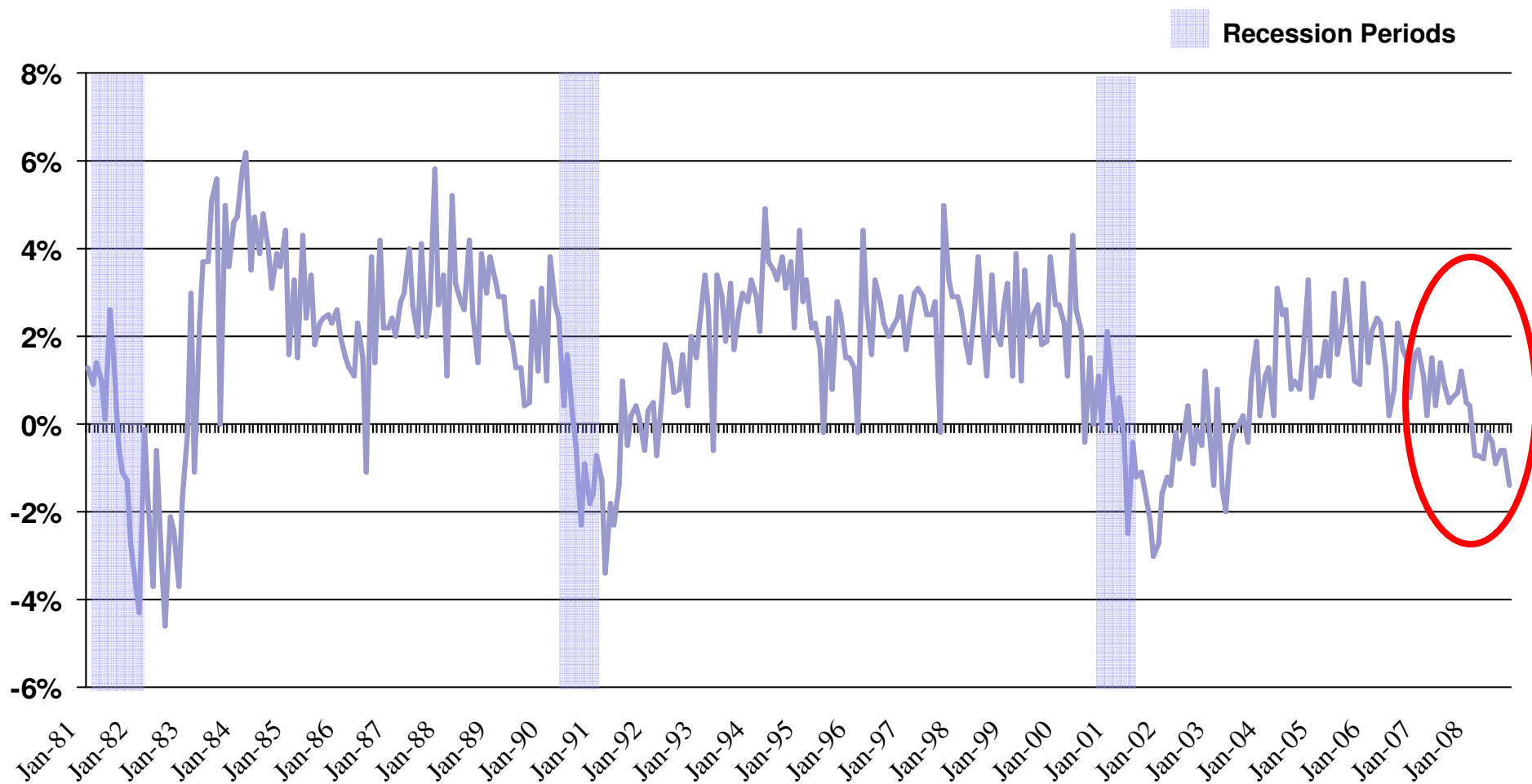
**Three-month moving average



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National Employment Percent Change Month Ago, Annualized (S/A) 1981 – 2008*

Source: U.S. Bureau of Labor Statistics



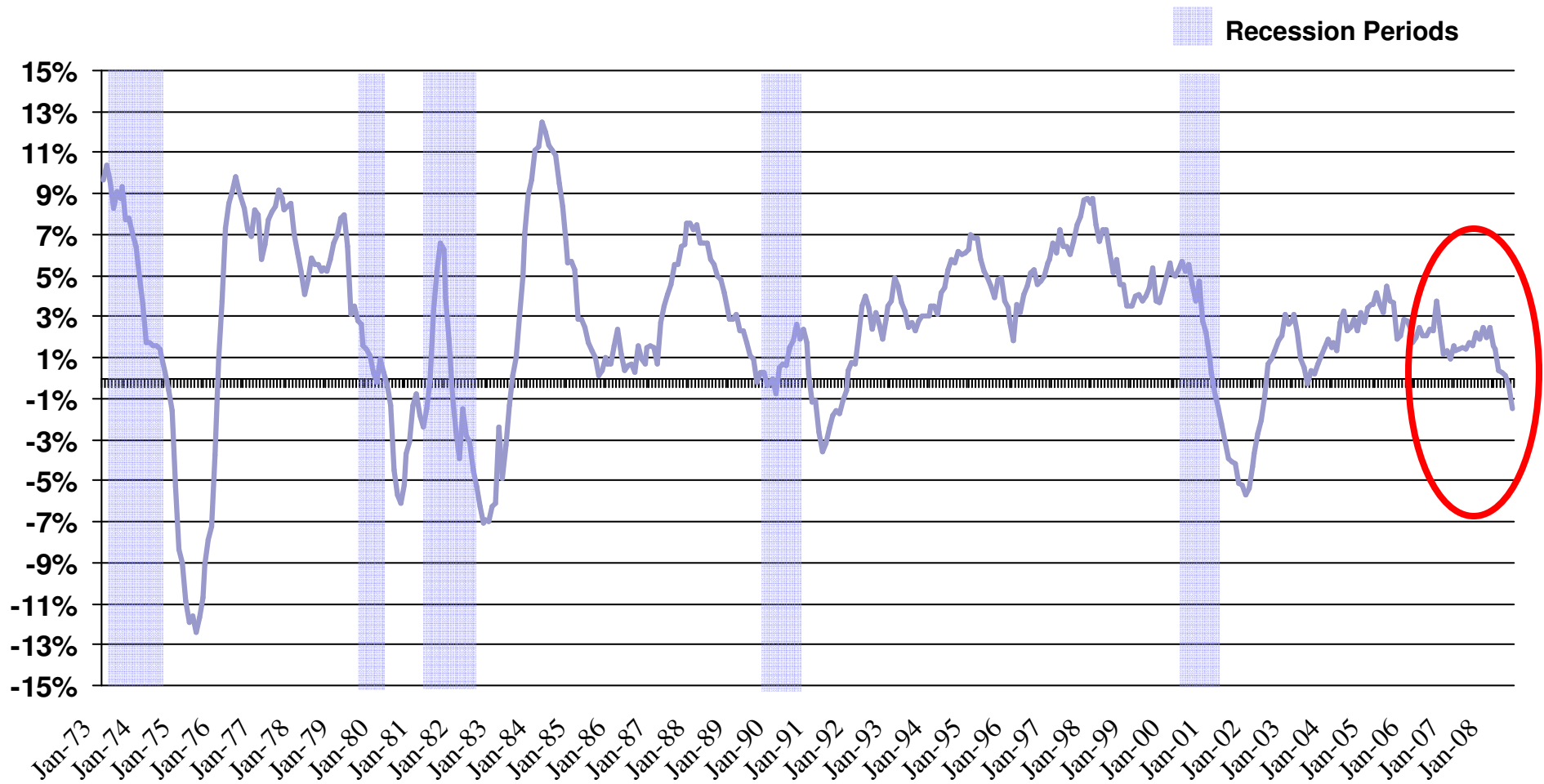
*Data through September 2008



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Industrial Production Percent Change Year Ago 1973 – 2008*

Source: The Conference Board



*Data through August 2008



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NBER Recession Indicators

- Real GDP ↓
- Real Income ↑ ; soon to be ↔
- Employment ↓
- Industrial Production ↓
- Wholesale – Retail Sales ↓



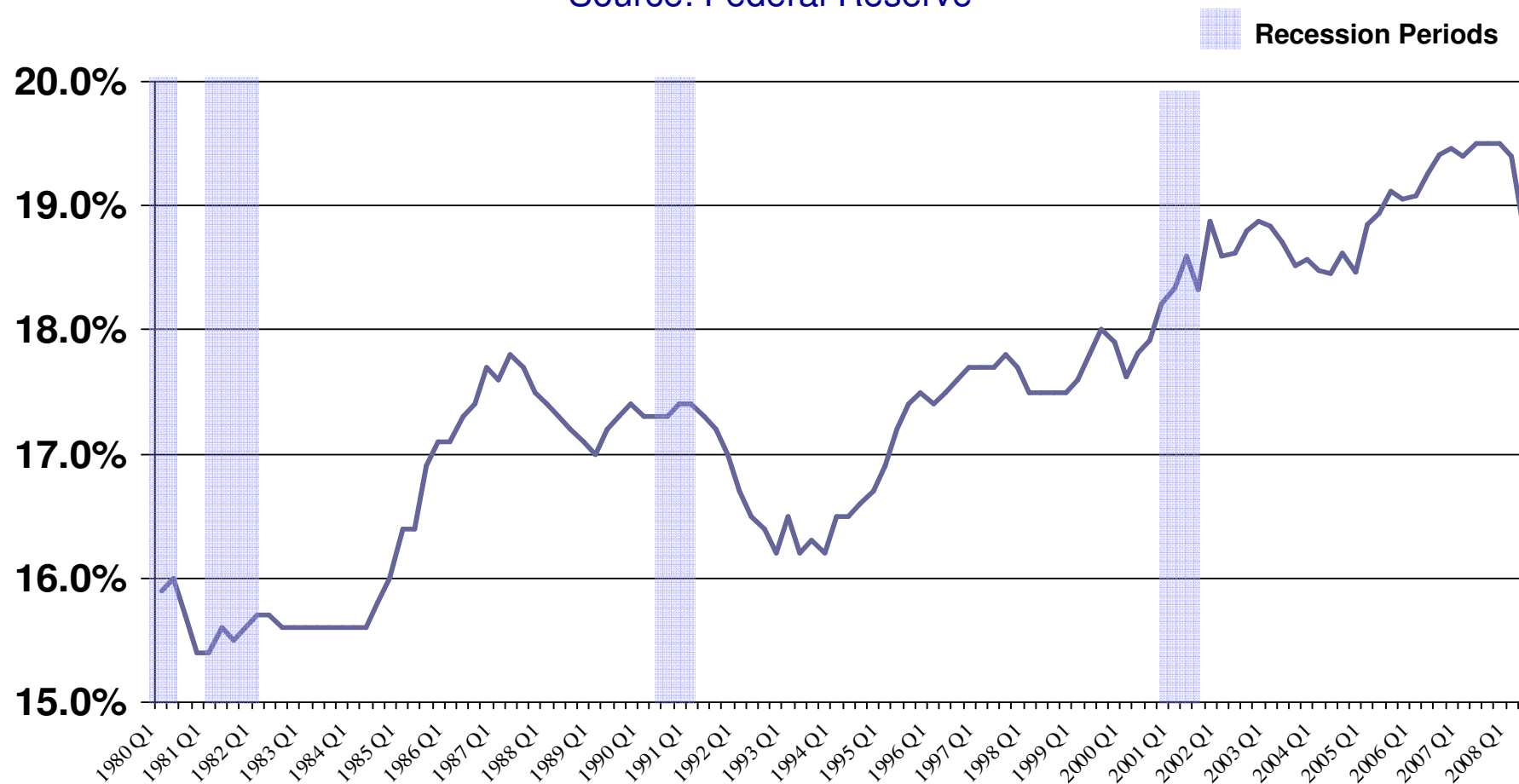
The Consumer



Financial Obligation Ratio**

1980 – 2008*

Source: Federal Reserve



*Data through second quarter 2008

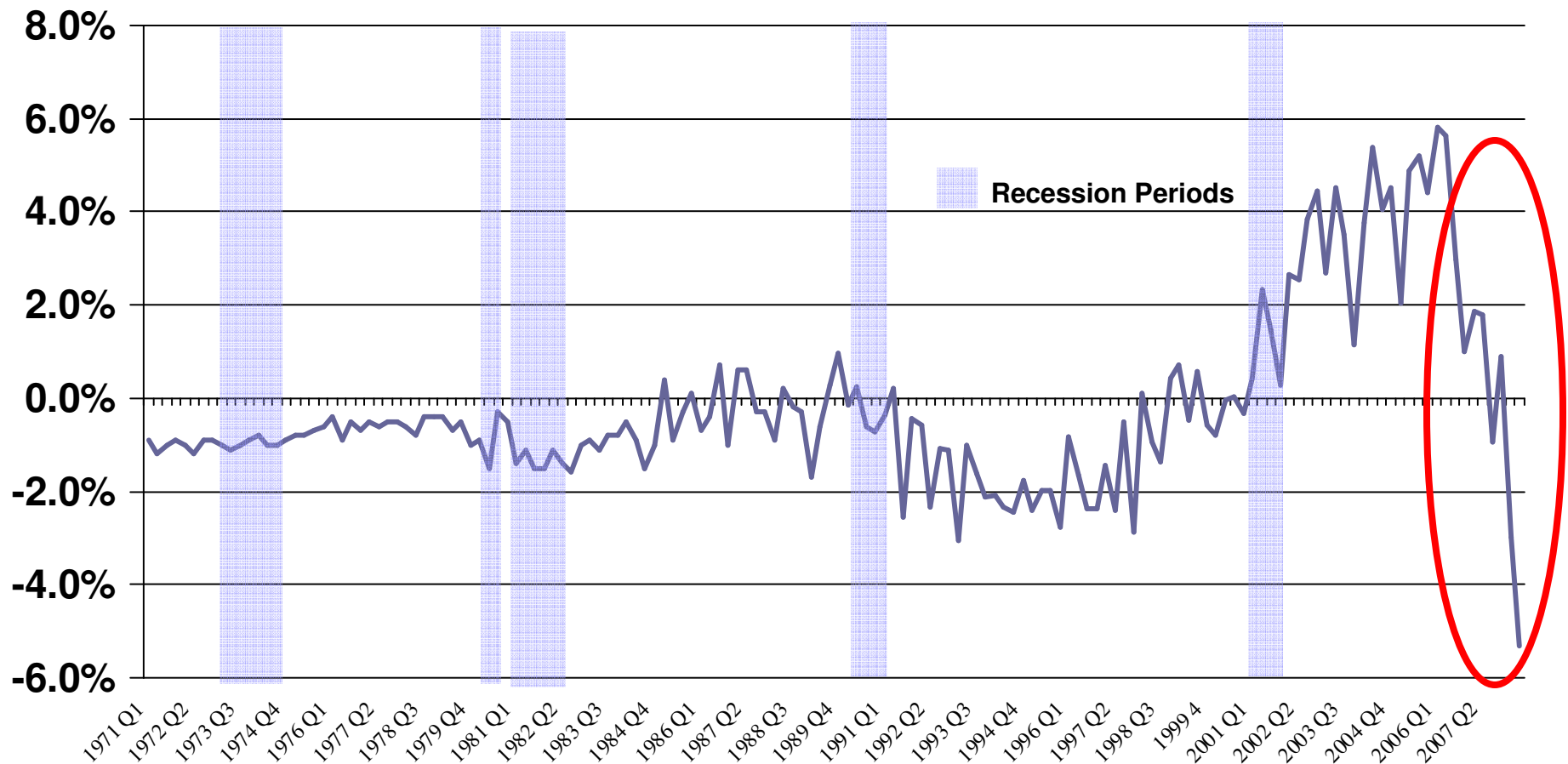
**Ratio of mortgage and consumer debt (including auto, rent and tax payments) to disposable income.



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Mortgage Equity Withdrawal as a share of Disposable Income U.S.: 1971 – 2008*

Source: Bureau of Economic Analysis

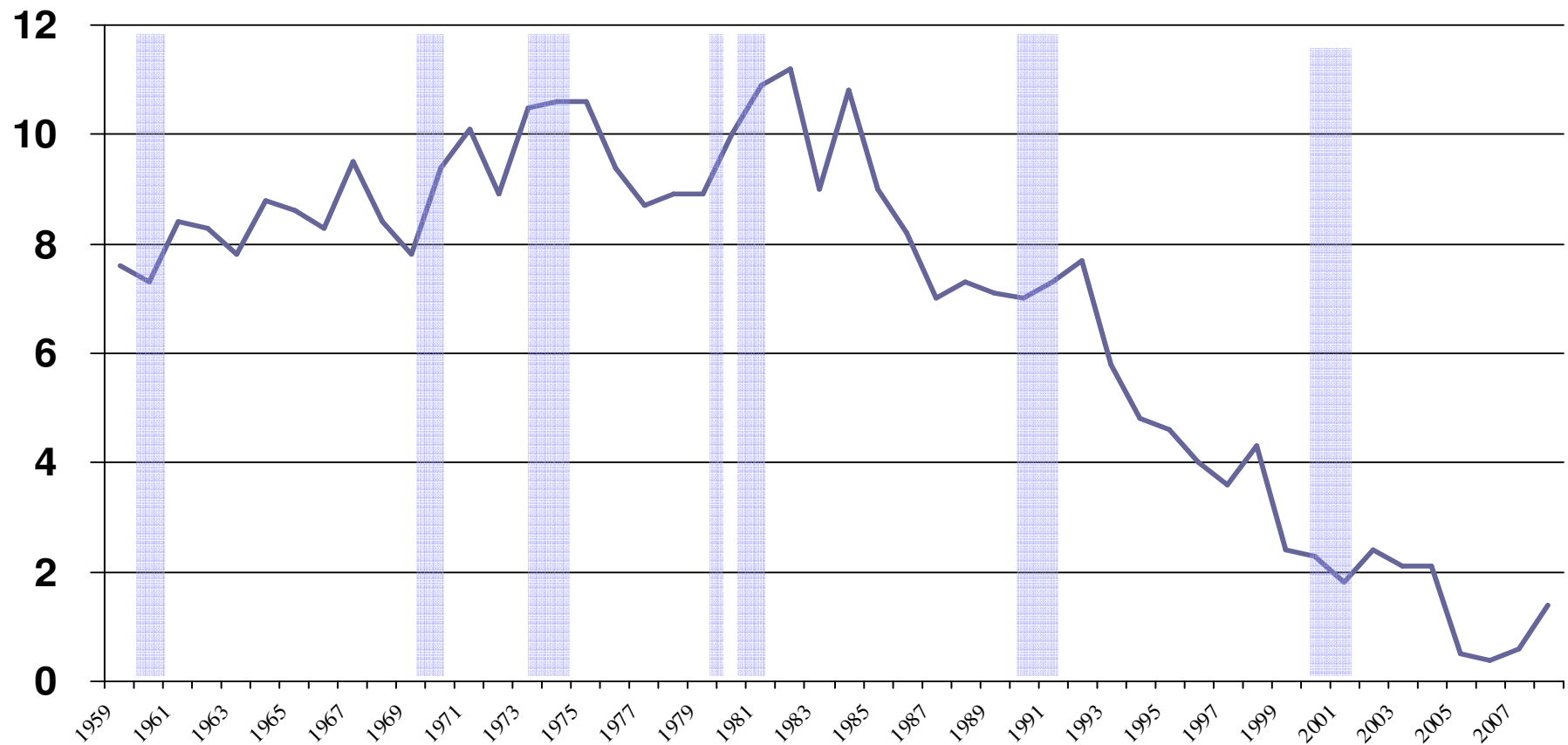




Savings Rate 1980 – 2008*

Source: Federal Reserve

 Recession Periods



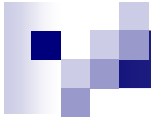
*Data through second quarter 2008



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Business: Finally taking it on the chin?





**The extent depends on
the industry...**



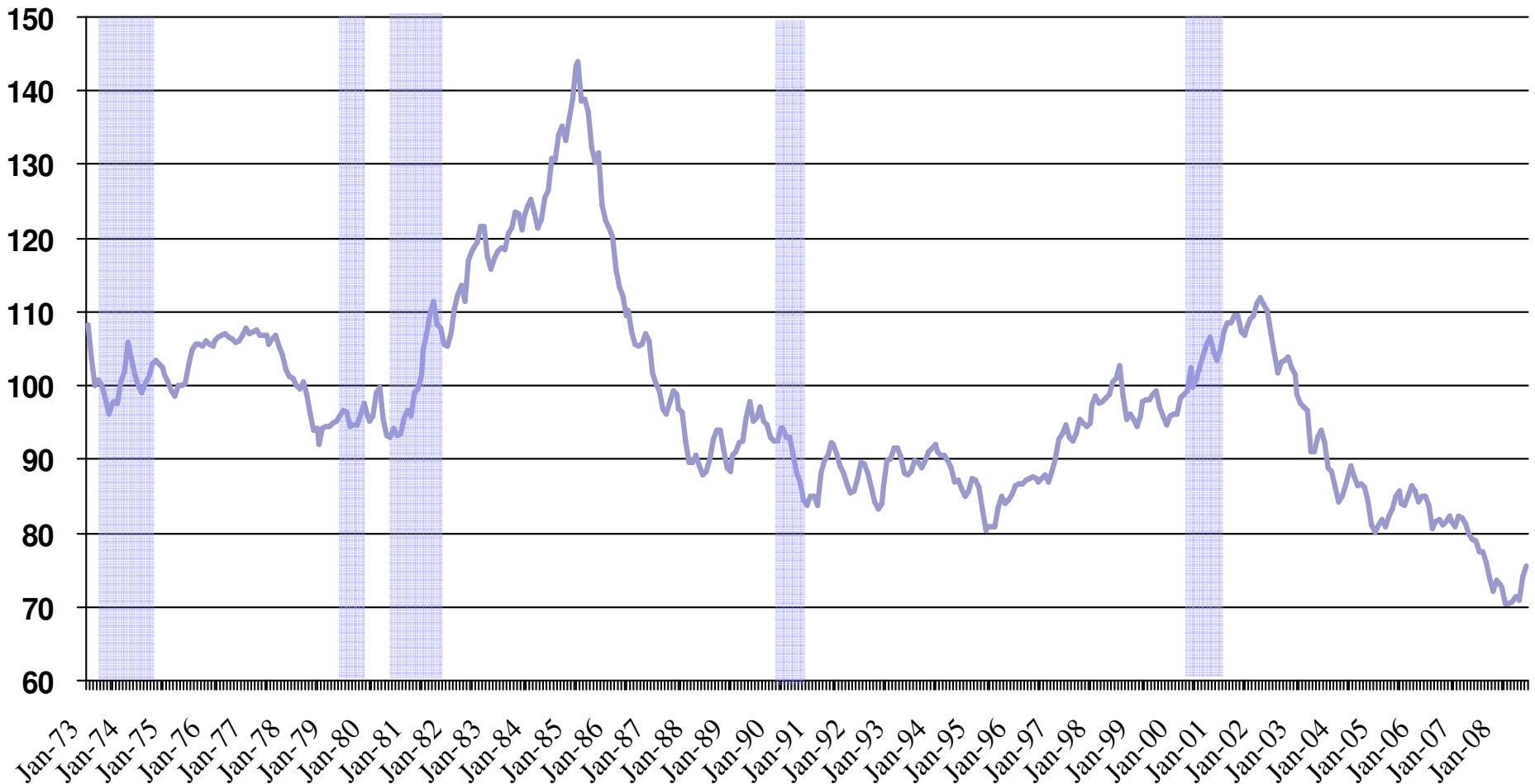
The weak dollar actually helped.



US Dollar Trade Weighted Exchange v. Major Currencies (1973 = 100) 1973 – 2008*

Source: The Federal Reserve

Recession Periods



*Data through September 2008

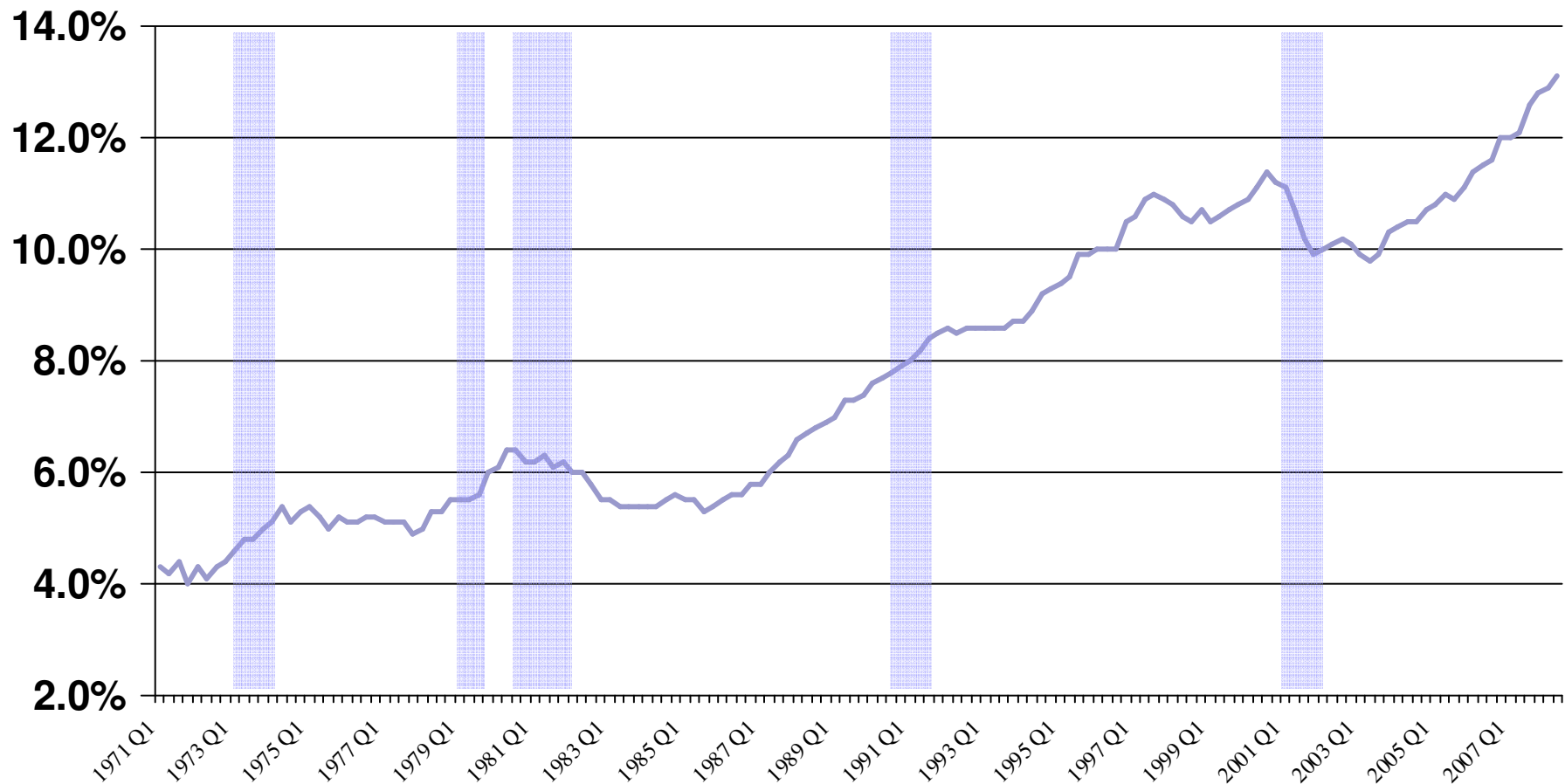


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U.S. Real Exports as a Percent of Real GDP 1971 – 2008*

Source: Bureau of Economic Analysis

 Recession Periods



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*Data through second quarter 2008

Predictable Danger Ahead?



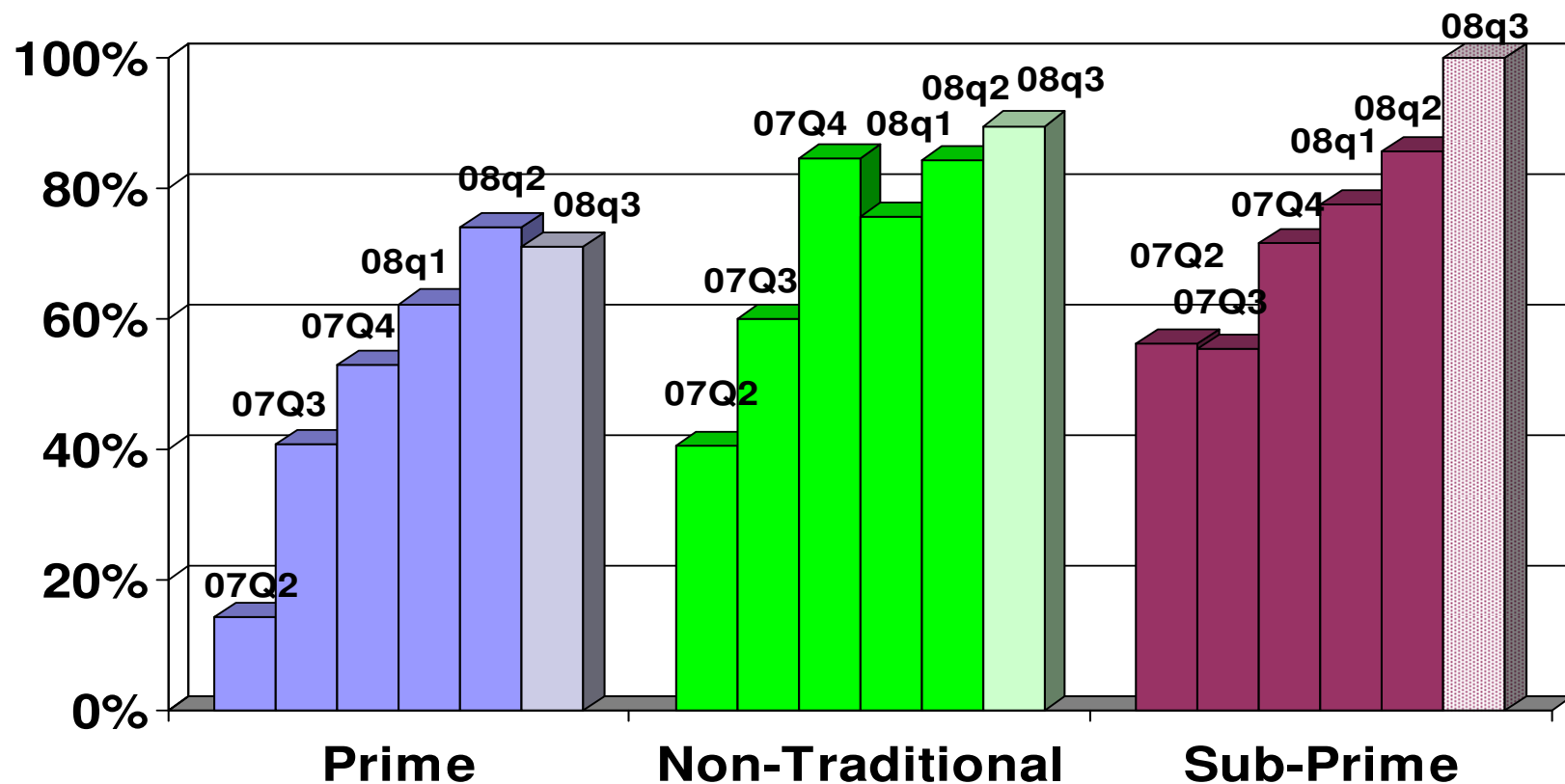
Is credit still tightening?



Net Percentage of Large U.S. Banks Reporting Tougher Standards versus Eased Standards on Residential Mortgage Loans

2007 – 2008q3

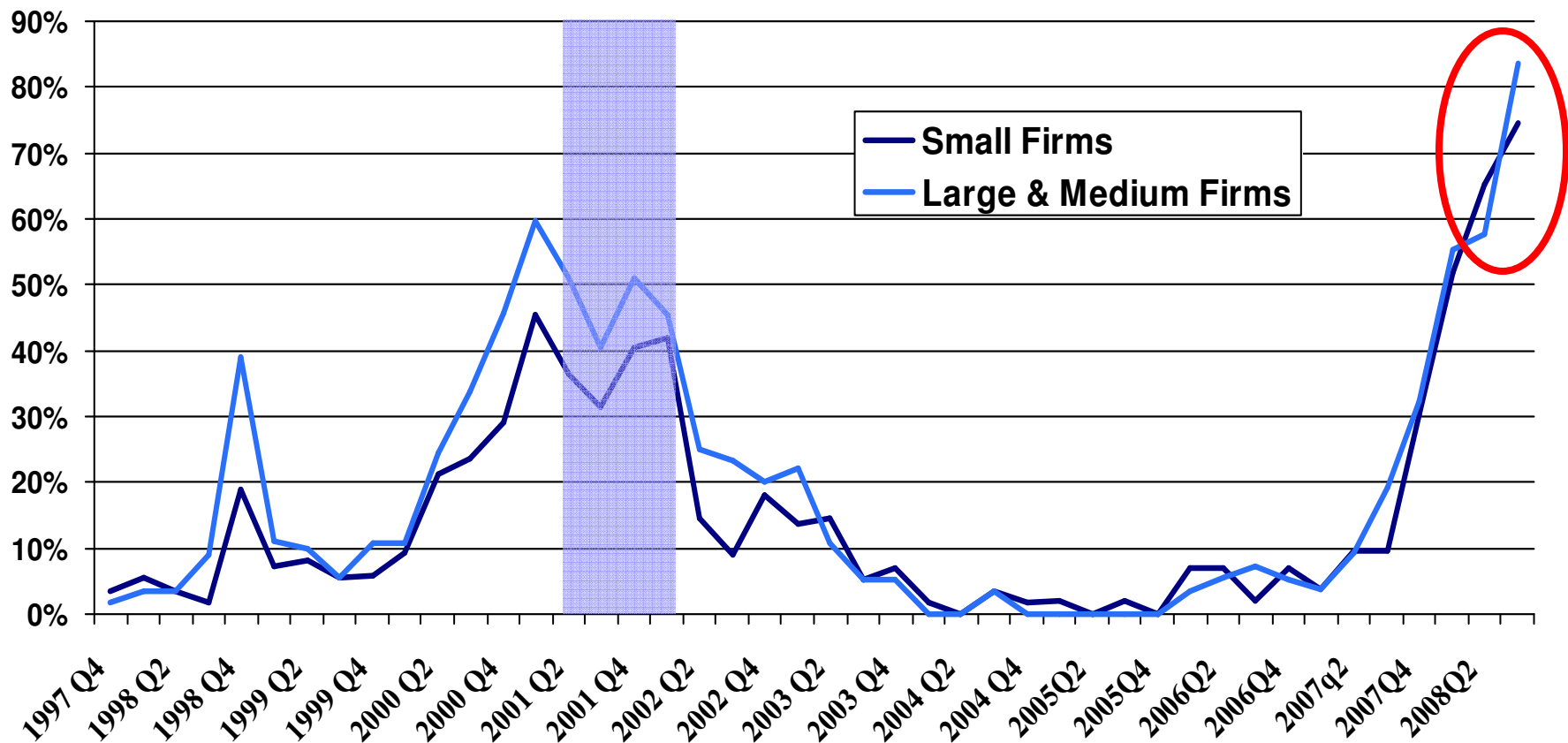
Source: Federal Reserve, Board of Governors



Percentage of Large U.S. Banks Reporting Tougher Standards on Business Loans 1997 – 2008*

Source: Federal Reserve, Board of Governors

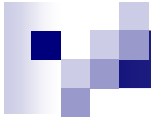
 Recession Periods



* Data as of October 2008 survey.



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U.S. Summary:

We ARE in a recession, only the exact dates are left to be determined.





U.S. Summary:

The economy will be very weak for the remainder of 2008; not so great in 2009; still below average in 2010.

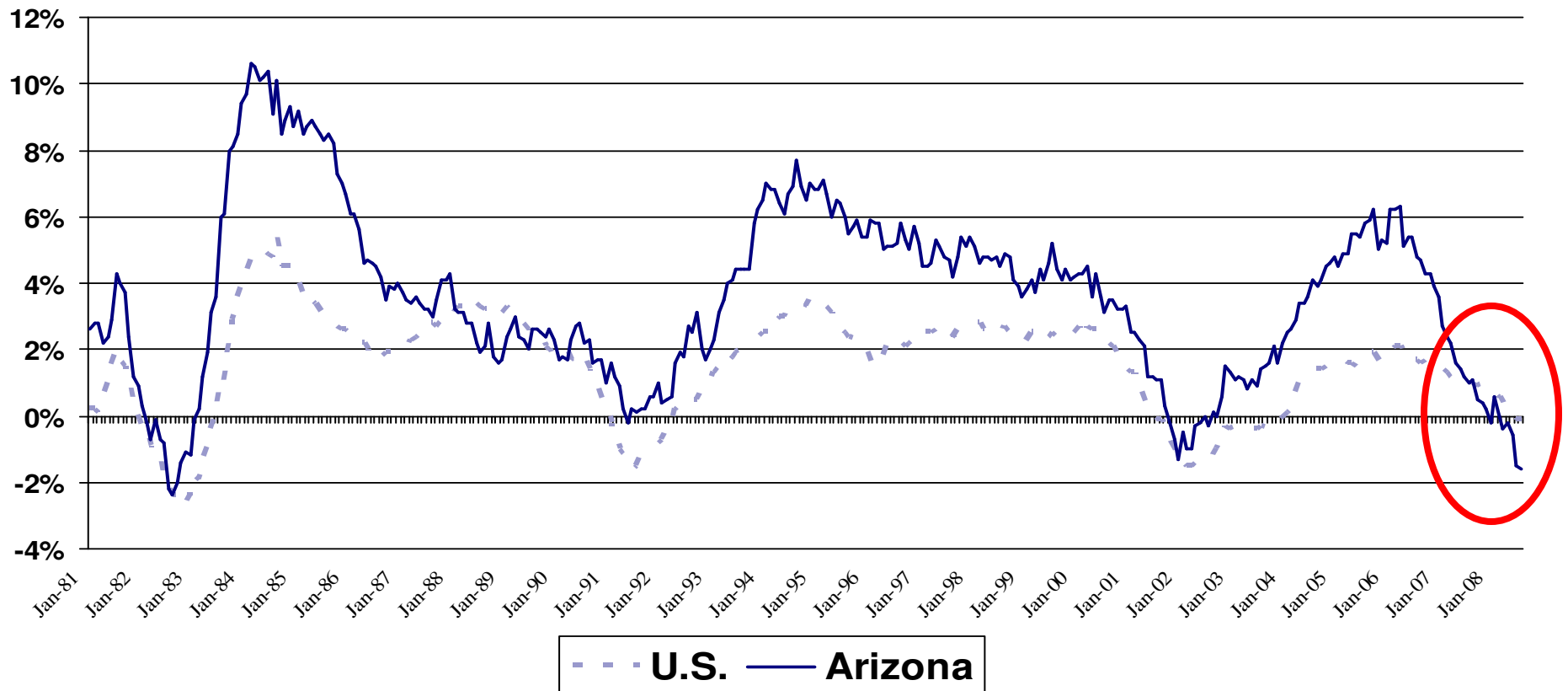


What's Happening in Arizona?



Arizona & US Move Together

(Nonfarm Employment Percent Change 1980 - 2008)



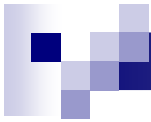


A map of the United States with states colored in green, orange, or red. Green states are numbered 1 through 10. Orange states are numbered 11 through 22. Red states are Michigan and Louisiana. Hawaii is shown in a separate box at the bottom left.

Color	State Number	State Name
Green	1	Montana
Green	2	Arizona
Green	3	Utah
Green	4	Nevada
Green	5	Idaho
Green	6	Texas
Green	7	Wyoming
Green	8	Virginia
Green	9	Oregon
Green	10	Washington
Orange	11	New Mexico
Orange	12	Colorado
Orange	13	Nebraska
Orange	14	Kansas
Orange	15	Oklahoma
Orange	16	Minnesota
Orange	17	North Dakota
Orange	18	South Dakota
Orange	19	Wisconsin
Orange	20	Illinois
Orange	21	Indiana
Orange	22	California
Red	-	Michigan
Red	-	Louisiana
Orange	-	Hawaii

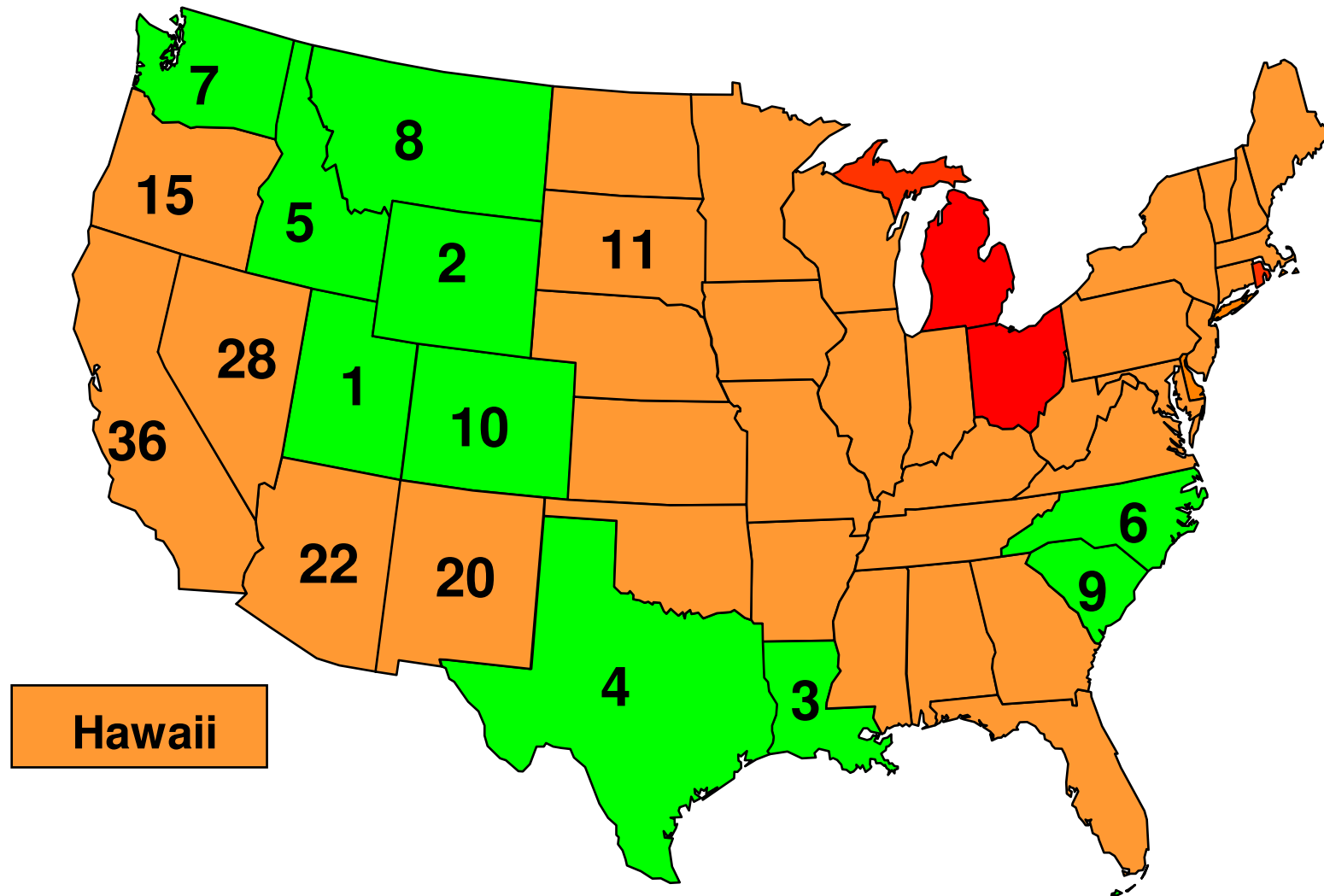


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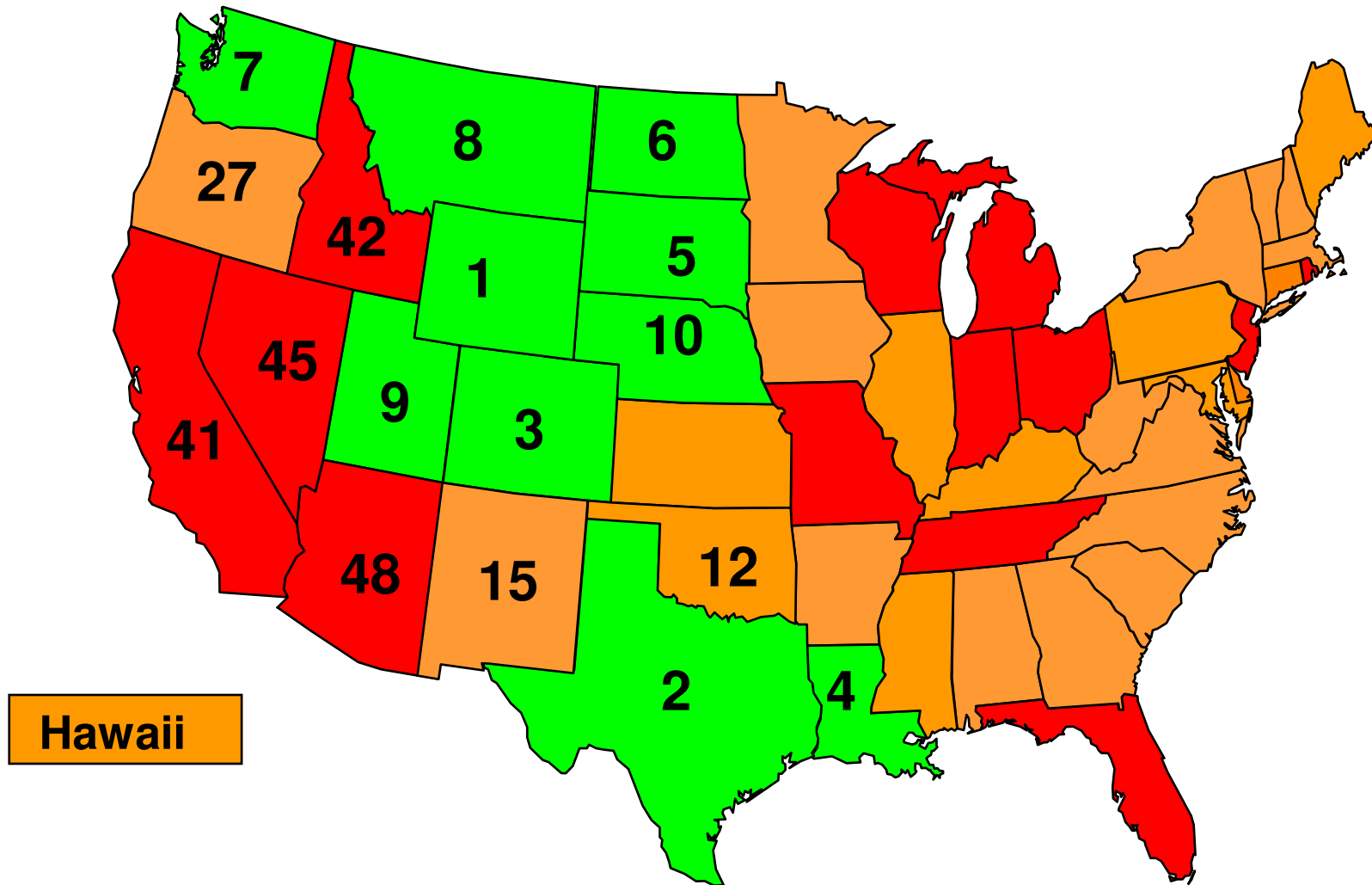
Job Growth 2007

Source: US BLS



Job Growth Update: Arizona Falls to 48th

YTD September 2008 vs YTD September 2007 - BLS



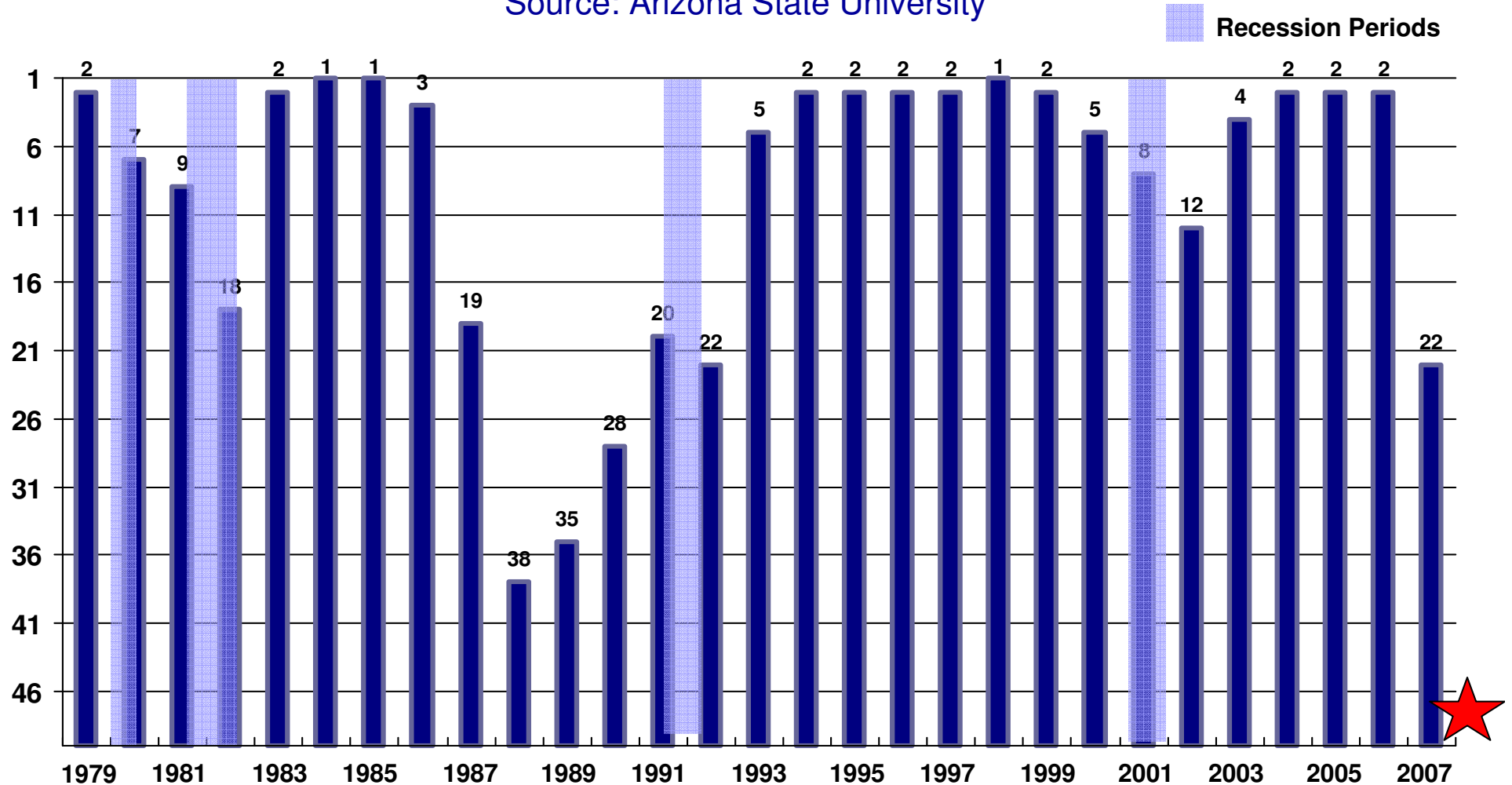
Hawaii



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Arizona Employment Rank Among 50 States 1979 – 2008 Growth Over Previous Year

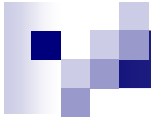
Source: Arizona State University



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= YTD Sept = 48



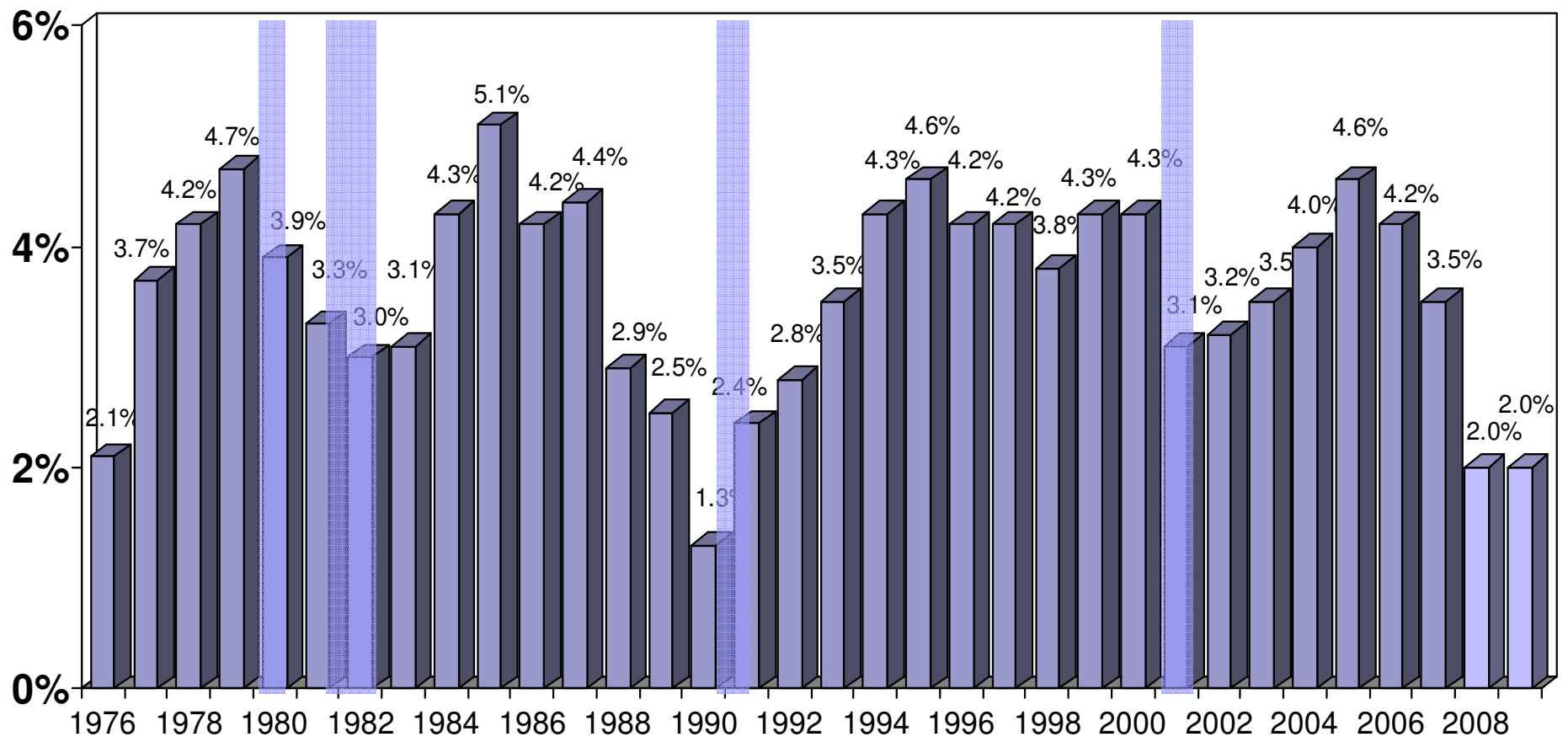
Greater Phoenix



Elliot D. Pollack & Company

Greater Phoenix Population Annual Percent Change 1976–2009*

Source: Arizona State University & Department of Commerce, Research Administration



2006 and 2007 are estimates put out by ADES and may be subject to substantial revision.

* 2008 & 2009 forecast is from *Elliott D. Pollack & Co.*

 **Recession Periods**

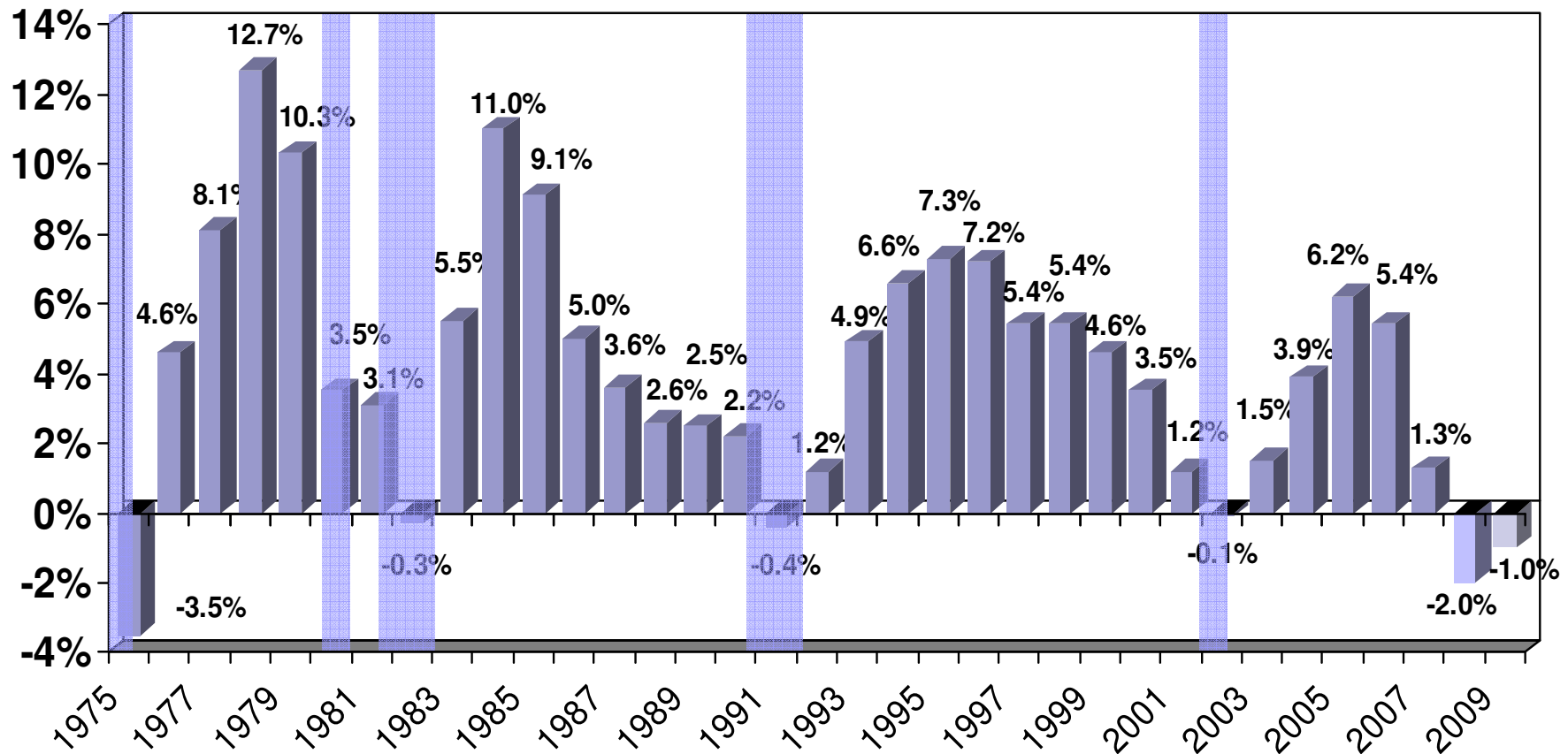


Elliot D. Pollack & Company

Phoenix-Mesa MSA Employment*

Annual Percent Change 1975–2009**

Source: Department of Commerce, Research Administration



*Non-agricultural wage & salary employment. Changed from SIC to NAICS reporting in 1990.

** 2008 and 2009 forecast is from *Elliott D. Pollack & Co.*

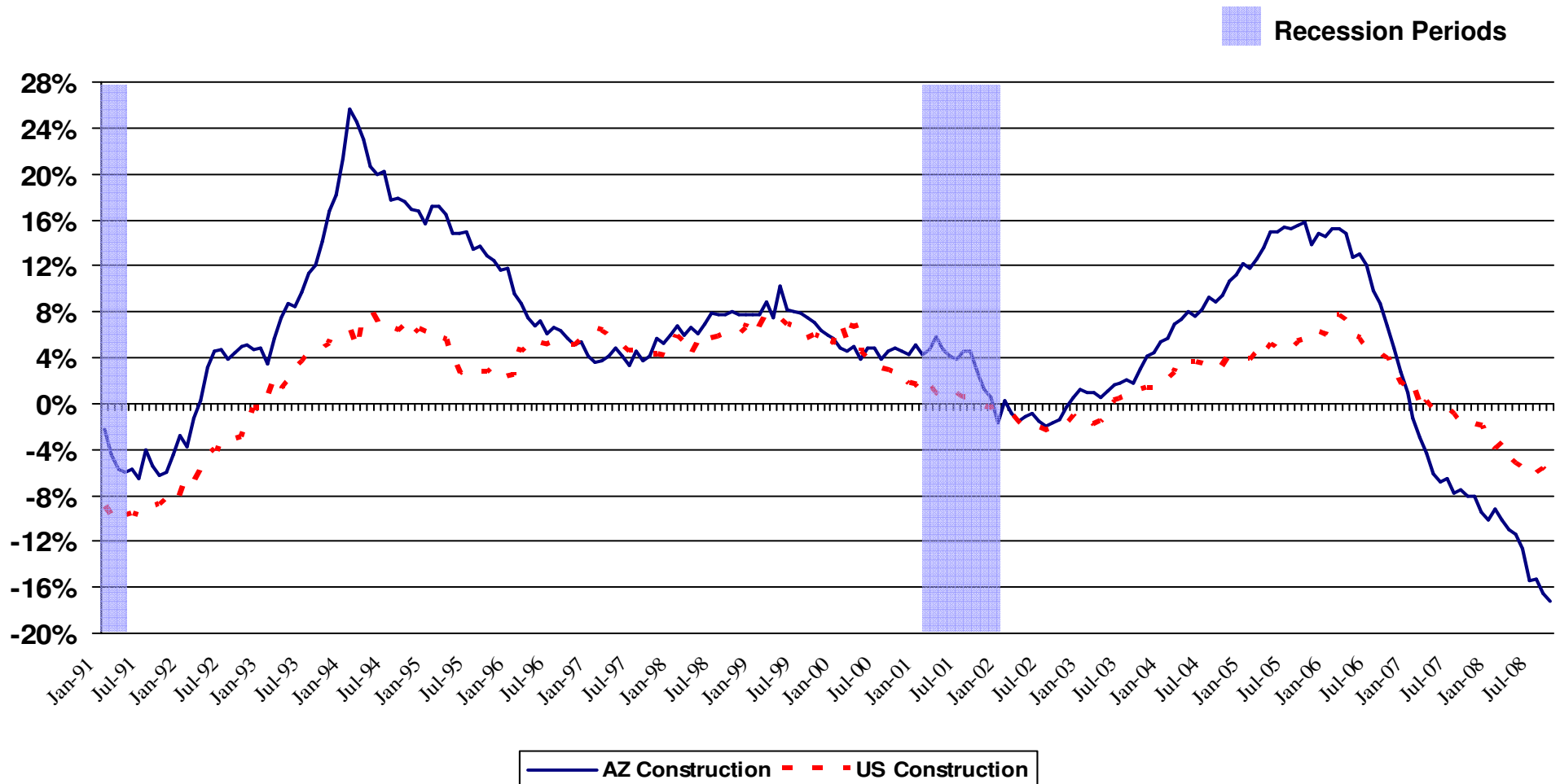
 Recession Periods



Elliot D. Pollack & Company

Construction Employment: Arizona v. U.S. Percent Change Year Ago 1991 – 2008*

Source: Bureau of Labor Statistics

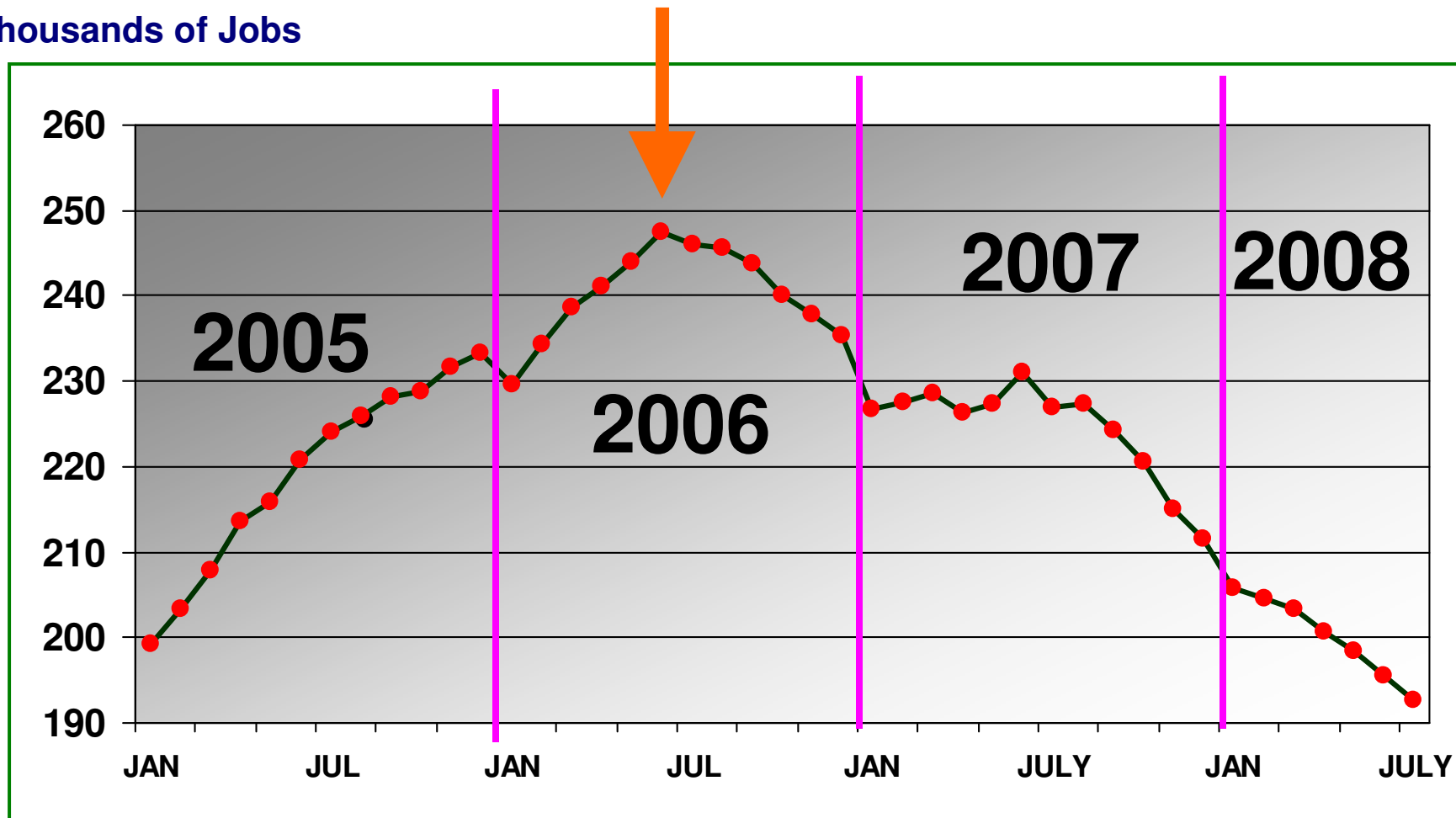


Elliot D. Pollack & Company

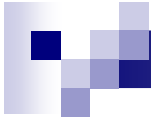
• Data through September 2008.

55,000 Arizona Construction Jobs Lost Since Summer of 2006

Thousands of Jobs



Elliot D. Pollack & Company



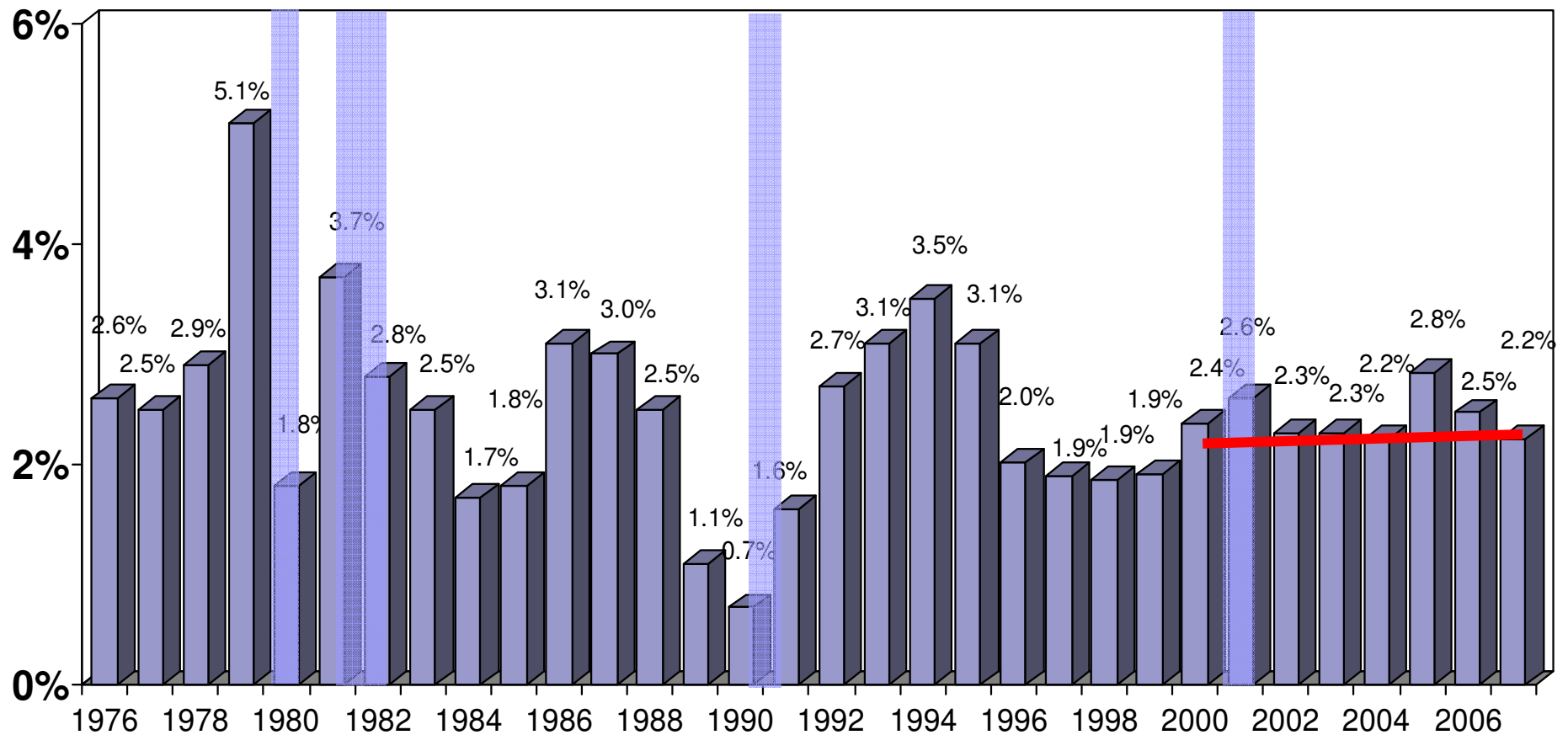
Greater Tucson



Elliot D. Pollack & Company

Greater Tucson Population Annual Percent Change 1976–2007

Source: Arizona Department of Commerce, Research Administration



2006 and 2007 are estimates put out by ADOC and may be subject to substantial revision..

 Recession Periods

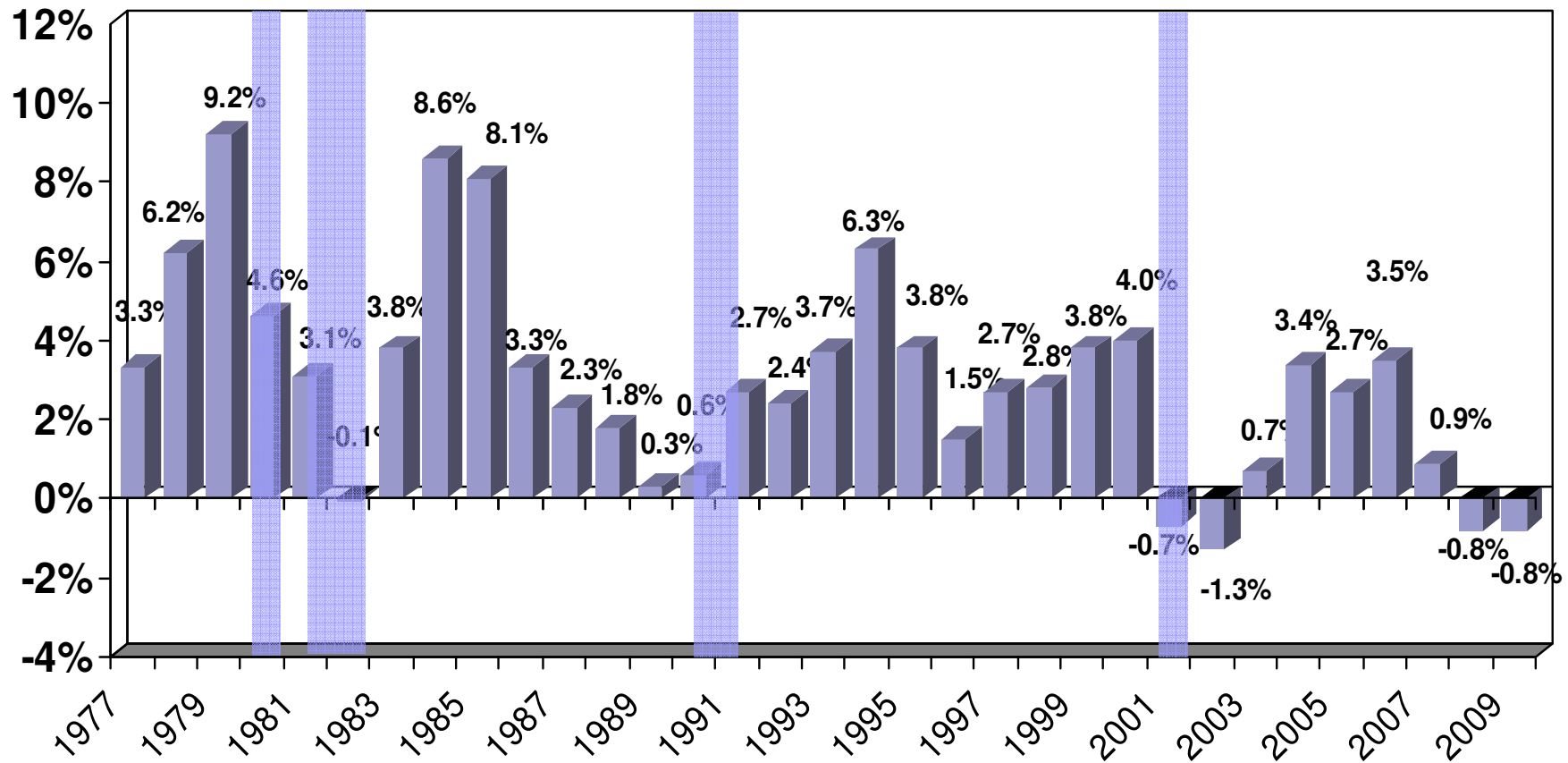


Elliot D. Pollack & Company

Greater Tucson MSA Employment*

Annual Percent Change 1975–2008**

Source: Department of Commerce, Research Administration



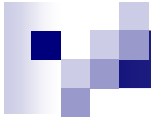
*Non-agricultural wage & salary employment. Changed from SIC to NAICS reporting in 1990.

**2008 & 2009 are forecasts from the University of Arizona

 Recession Periods



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Greater Phoenix Case Study:

Housing

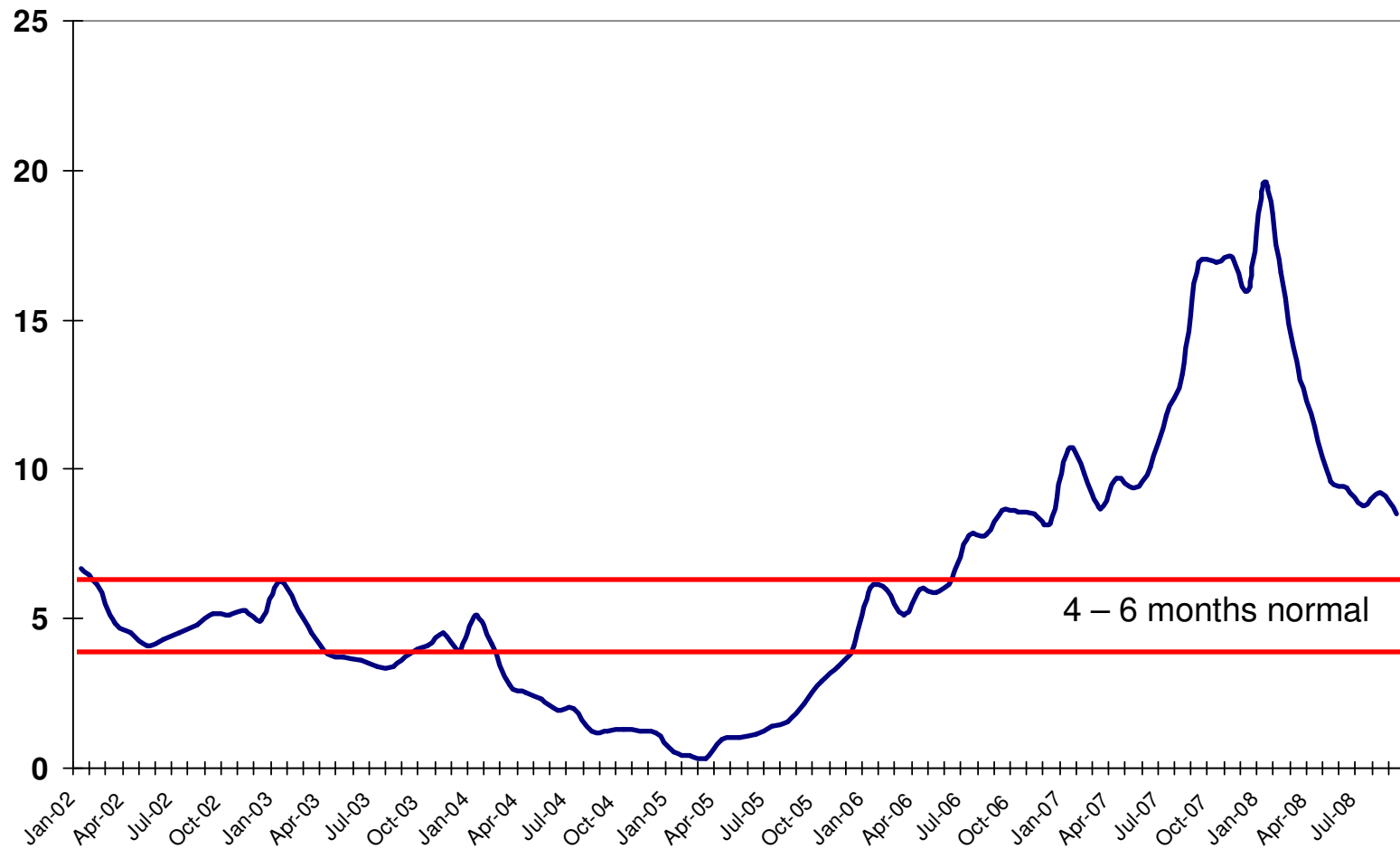




Greater Phoenix Months Supply of Resales

January 2002 - September 2008

Source: AMLS

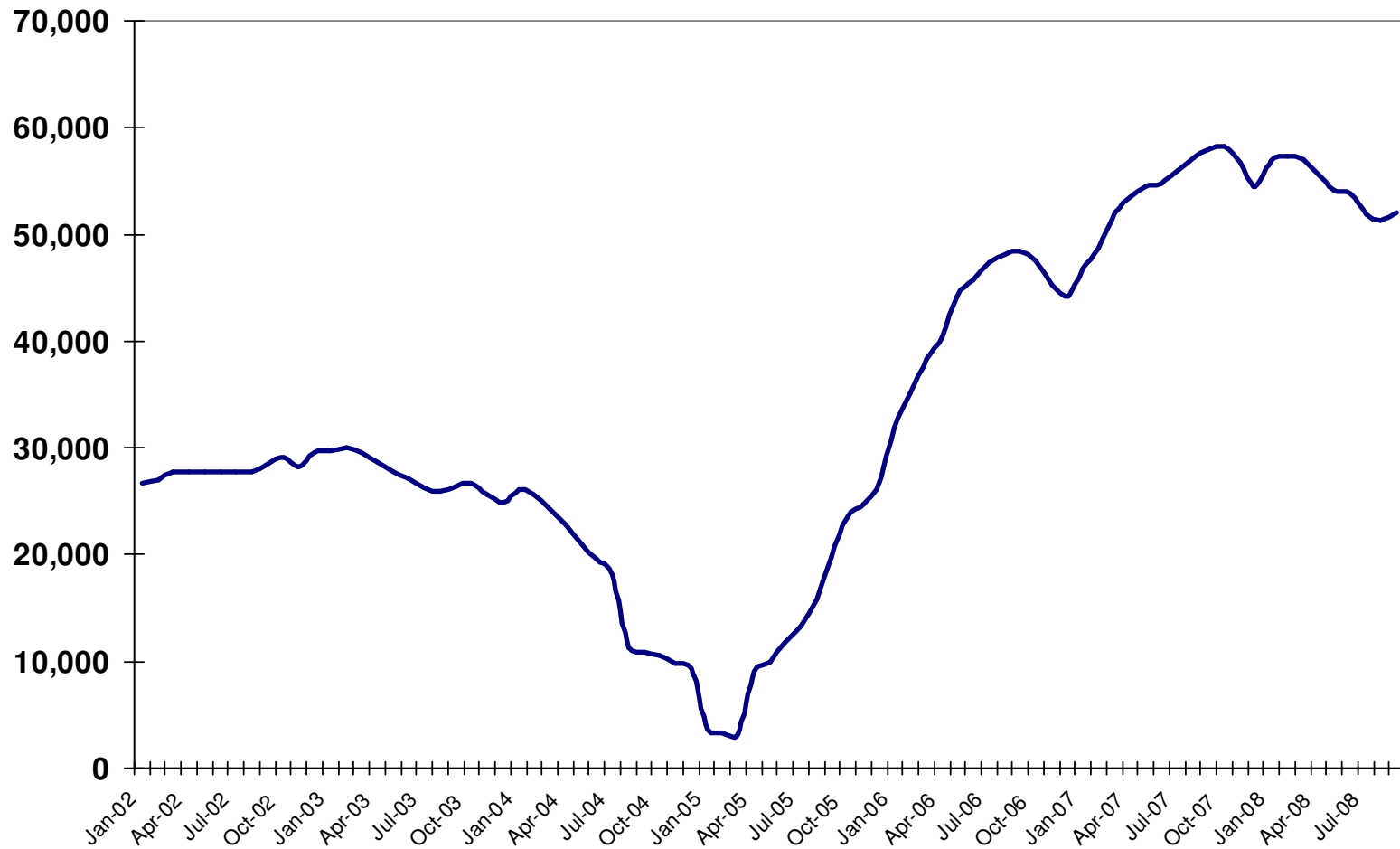




Greater Phoenix Listings

January 2002 - September 2008

Source: AMLS

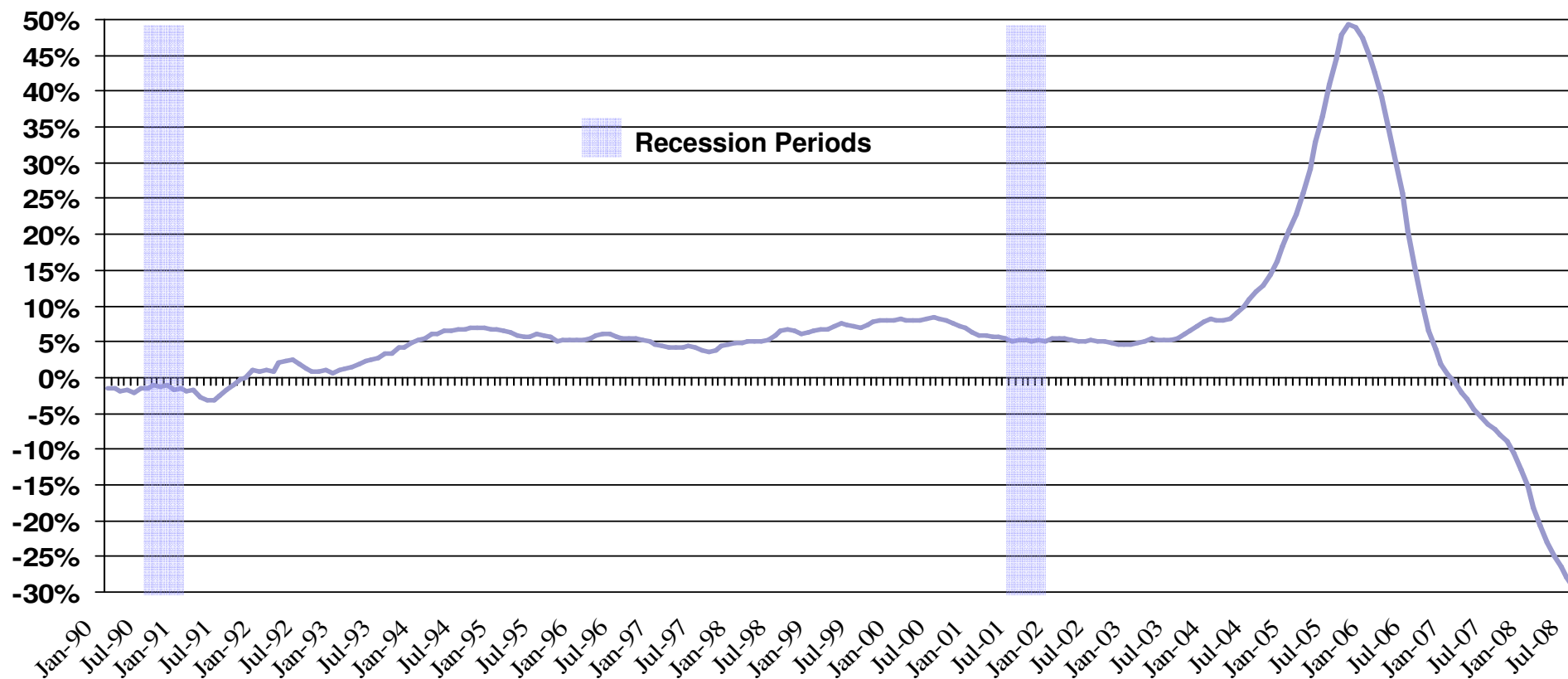


Greater Phoenix S&P/Case-Schiller Home Price Index**

Percent Change Year Ago

1990 – 2008*

Source: Macro Markets, LLC



*Data through July 2008

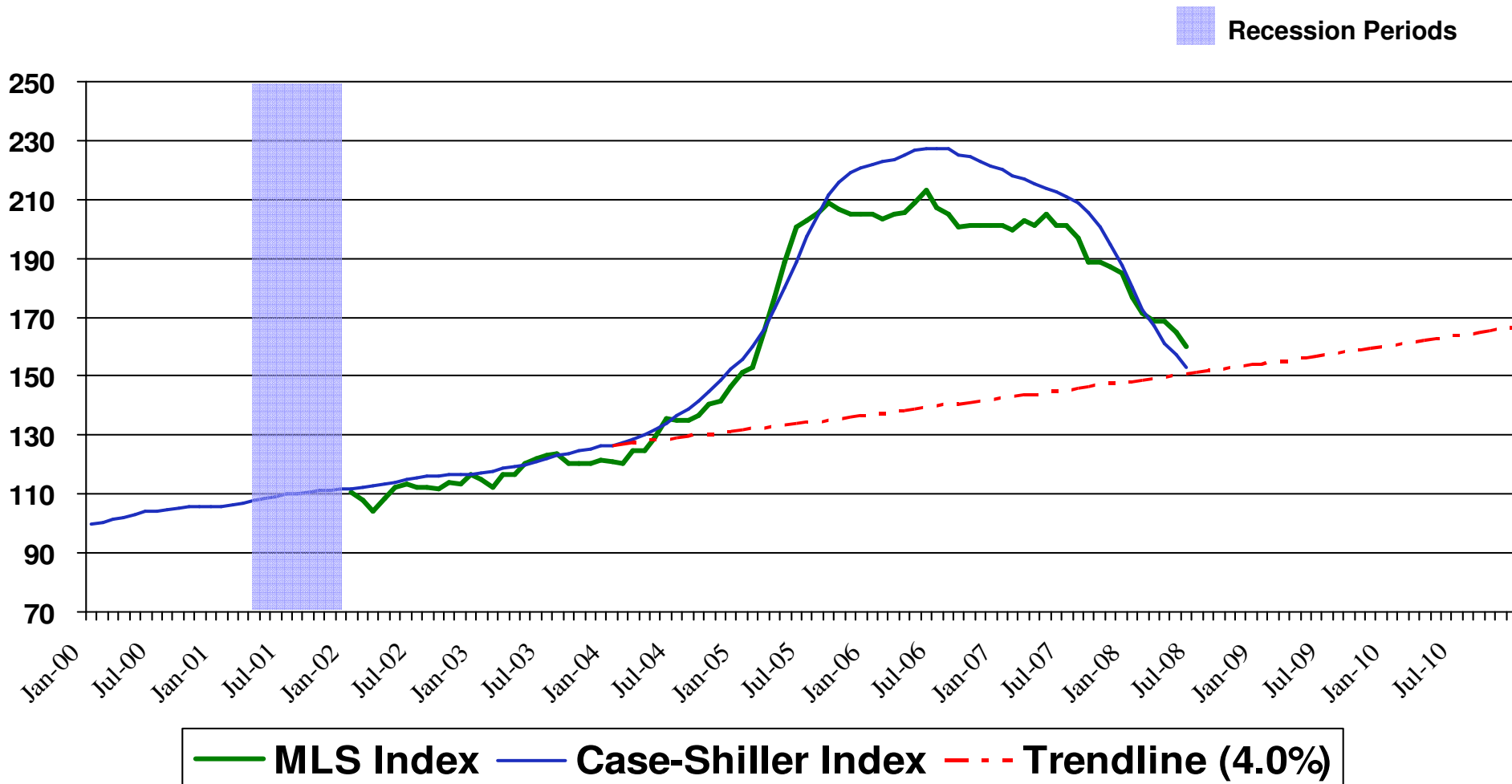
**Measures changes in existing single family home prices given a constant level of quality.

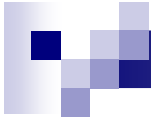


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Home Prices Indices 2000 – 2010

Source: Macro Markets, LLC; AMLS





SUPPLY In Greater Phoenix



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Greater Phoenix Permits

Source: R.L. Brown

<u>Year</u>	<u>Permits</u>	<u>% chg</u>
2002	38,914	7.6 %
2003	47,720	22.6 %
2004	60,872	27.6 %
2005	63,570	4.4 %
2006	42,423	-33.3 %
2007	31,172	-26.5 %
2008YTD^{1/}	11,405	-58.1 %






DEMAND For Greater Phoenix



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**Greater Phoenix long-term
demographics call for
roughly 35,000-40,000
single family units each year.**

**(It will be less in the next 2-3 years
though)**





**This implies that we could have
overbuilt by as many as 75,000
units between 2003 and 2006.**

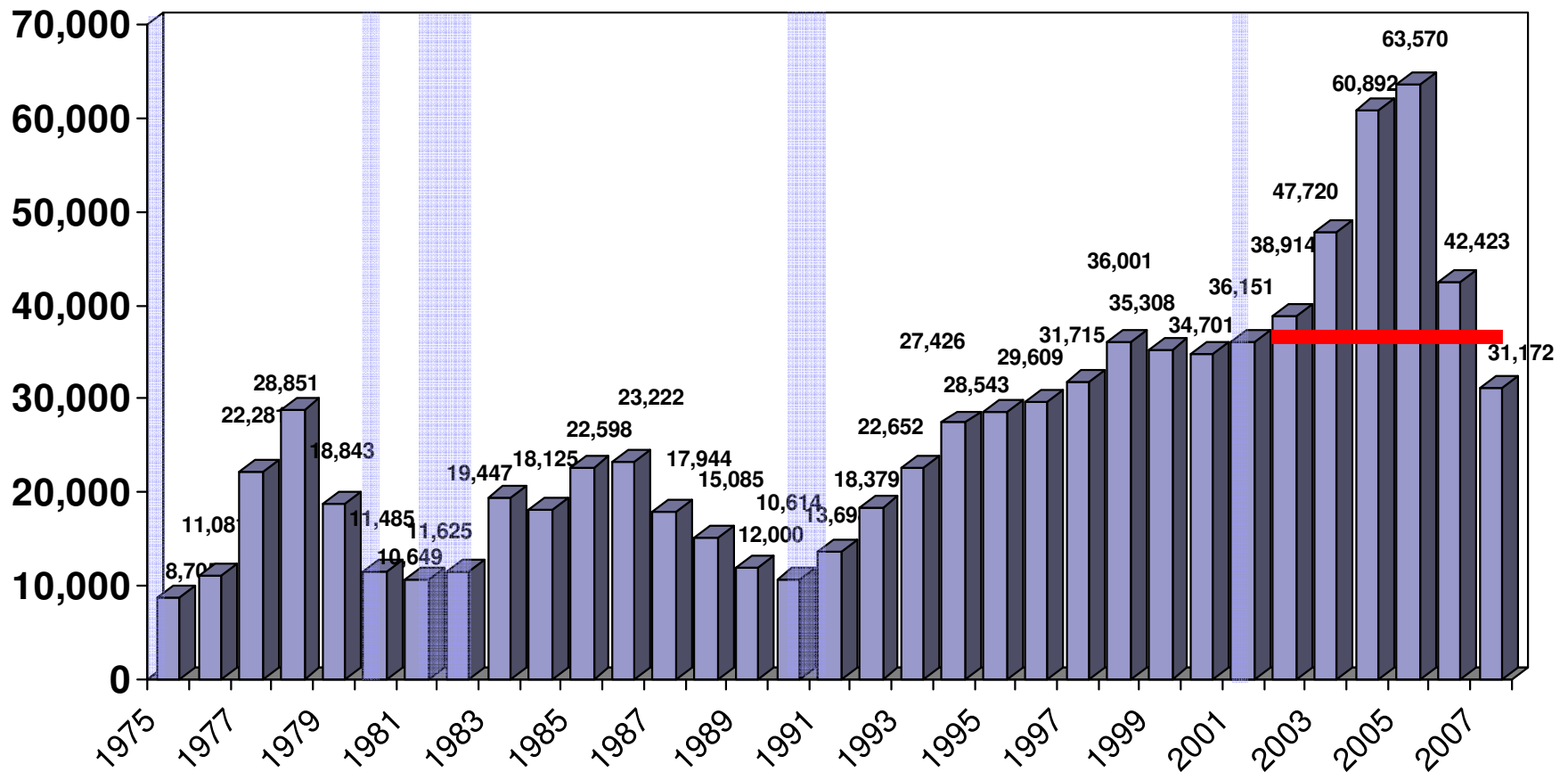
**(exact figures depend on the actual
population flows)**



Single-Family Permits Greater Phoenix 1975–2007

Permits

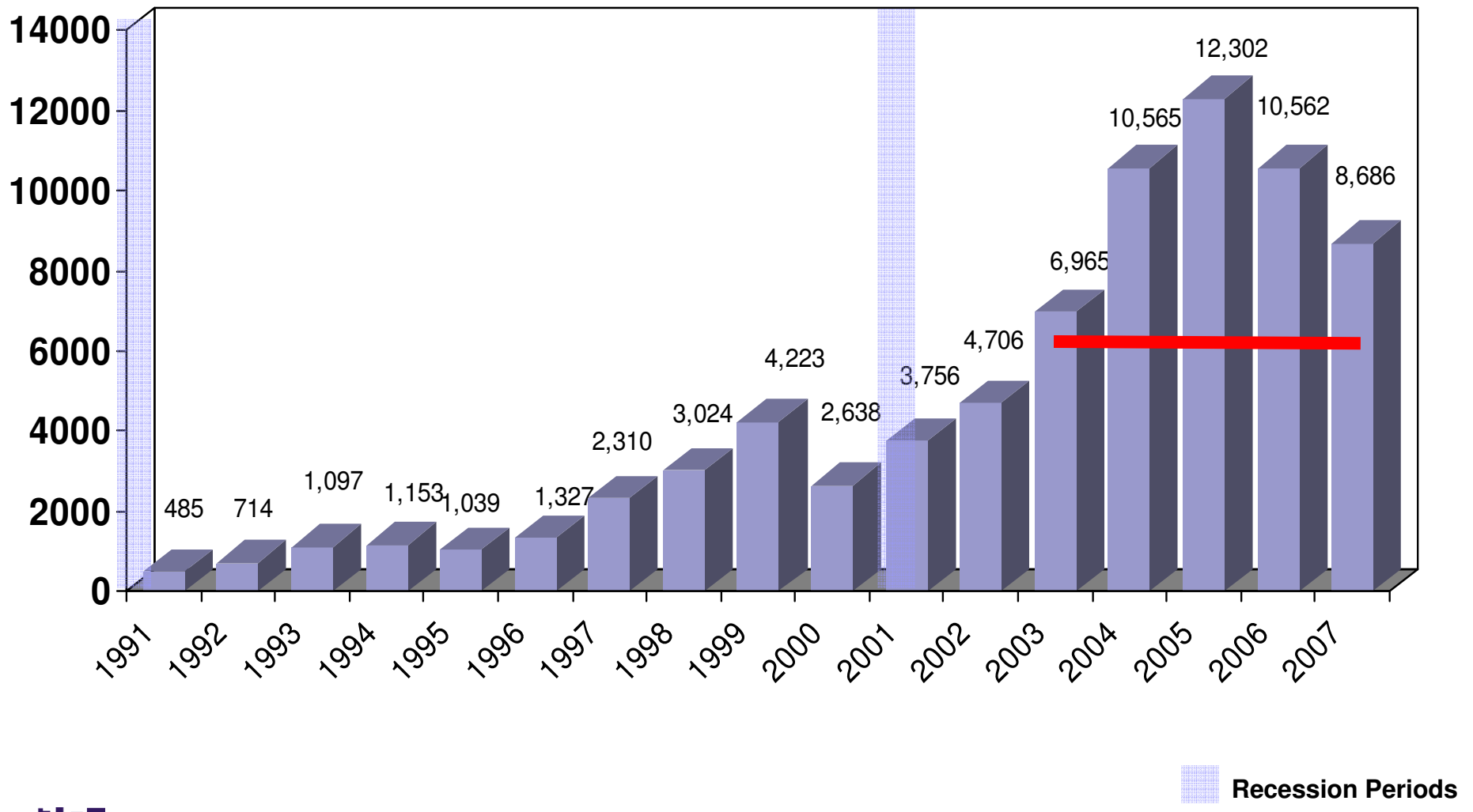
Source: PMHS / RL Brown



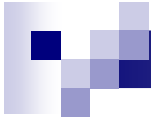
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Pinal County Housing Units Authorized 1991 –2007

Source: ASU Realty Studies

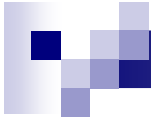


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**Not every region is as
overbuilt as Greater
Phoenix.**





Any positives?

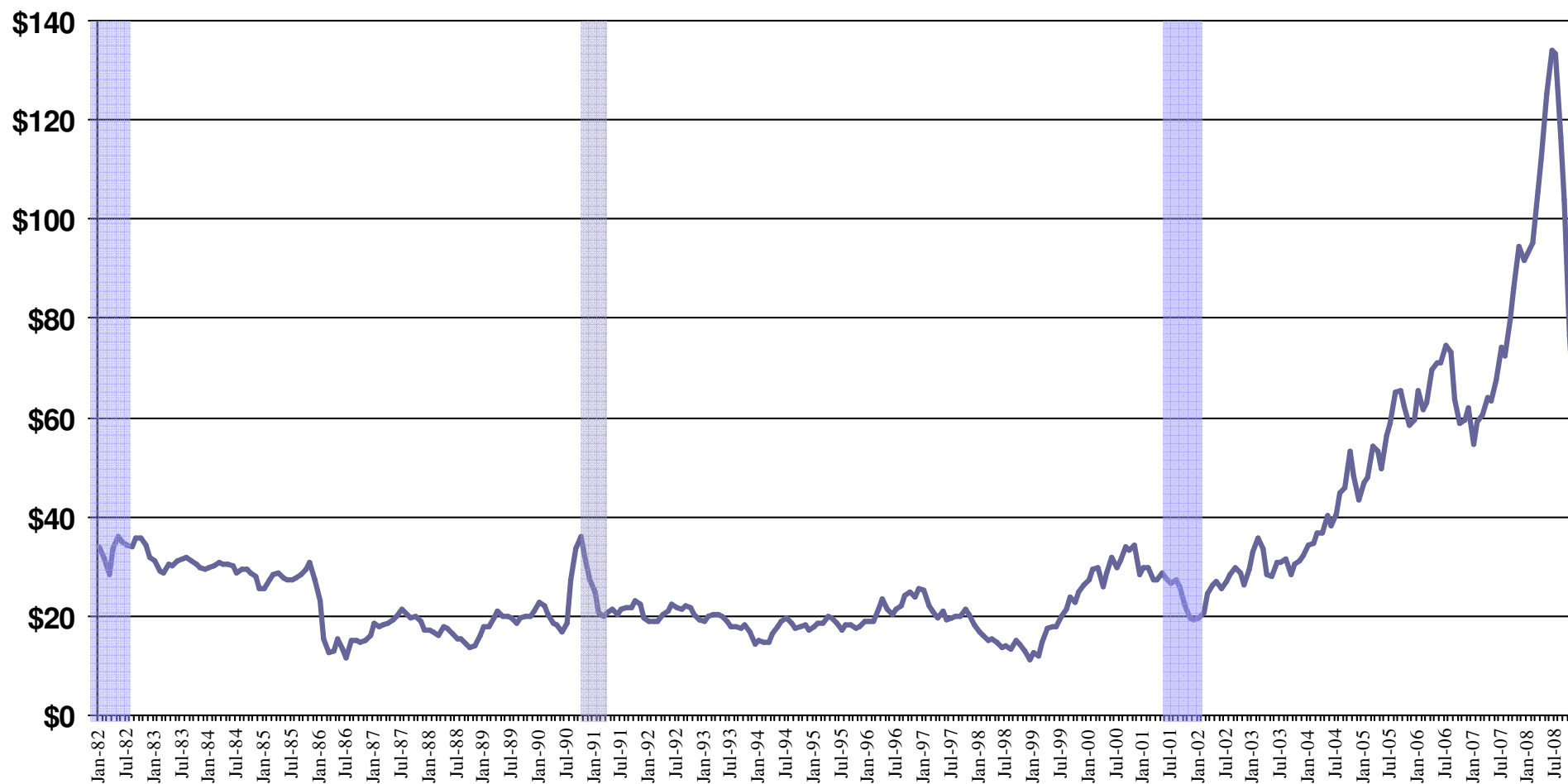




Oil Prices - \$/Barrel

1982 – 2008*

Source: Freelunch.com



•Data through Nov. 11th 2008.

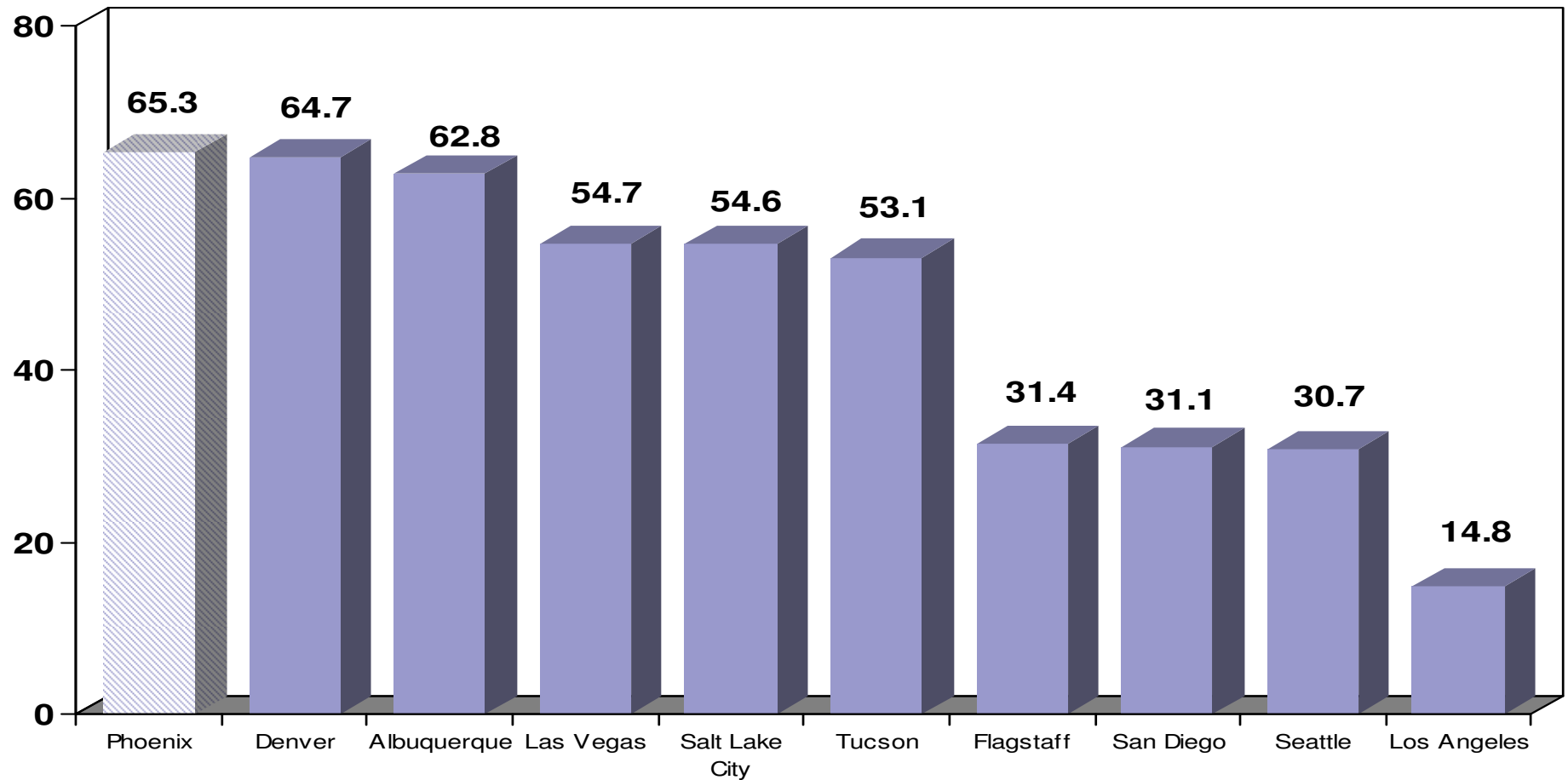


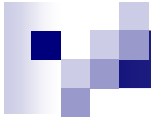
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Housing Affordability Index

2008 q2

Source: NAHB





Arizona

ECONOMIC OUTLOOK

2008 - 2009





Arizona Forecast 2008 – 2009

<u>Indicator</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Population	4.2%	3.5%	2.0%	2.0%
Employment	5.4%	1.3%	-2.0%	-1.0%
Personal Income	8.4%	4.5%	3.0%	2.5%
Retail Sales	7.9%	0.1%	-5.0%	0.0%

Source: *Elliott D. Pollack & Company*, AZ Blue Chip, Department of Commerce, Research Administration




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Best Guesses:

- Bottom for Dow?
- Equilibrium for oil/gas prices?
- Recession dates?
- Return to normal growth (U.S./State)?
- When will government intervention improve confidence?





**How can the State's
current problems be
avoided in the future?**





Long Term Solutions?

- **Quit spending like drunken sailors.** A 67% increase in the budget over 3 years is unacceptable.
- If, as a matter of public policy, there is a desire to significantly increase government spending, **it must be done over time and not all at once.**





Long Term Solutions?

- **Increase the BSF** limit to the original 15% of the budget (or more).
- **Pay more attention** to economists when they tell you that 15% revenue growth is not sustainable.
- Moving forward, improve the State's **economic development toolbox.**





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