



~~"Lower Expectations"~~

~~"Even Lower Expectations"~~

*"No Expectations"*

**Presented to:  
Maricopa County  
Board of Supervisors**

**By:  
Elliott Pollack  
February 9<sup>th</sup>, 2009**



*Elliott D. Pollack & Company*



# What has been making the news?

- **Weakening confidence;**
- **Falling housing prices;**
- **Declining GDP;**
- **Falling stock prices;**
- **Falling commodity prices;**
- **Job situation worsening;**
- **Bail-out packages;**
- **Fed action;**
- **Global recession?**



# Bail Out?

- Short-term
- Targeted





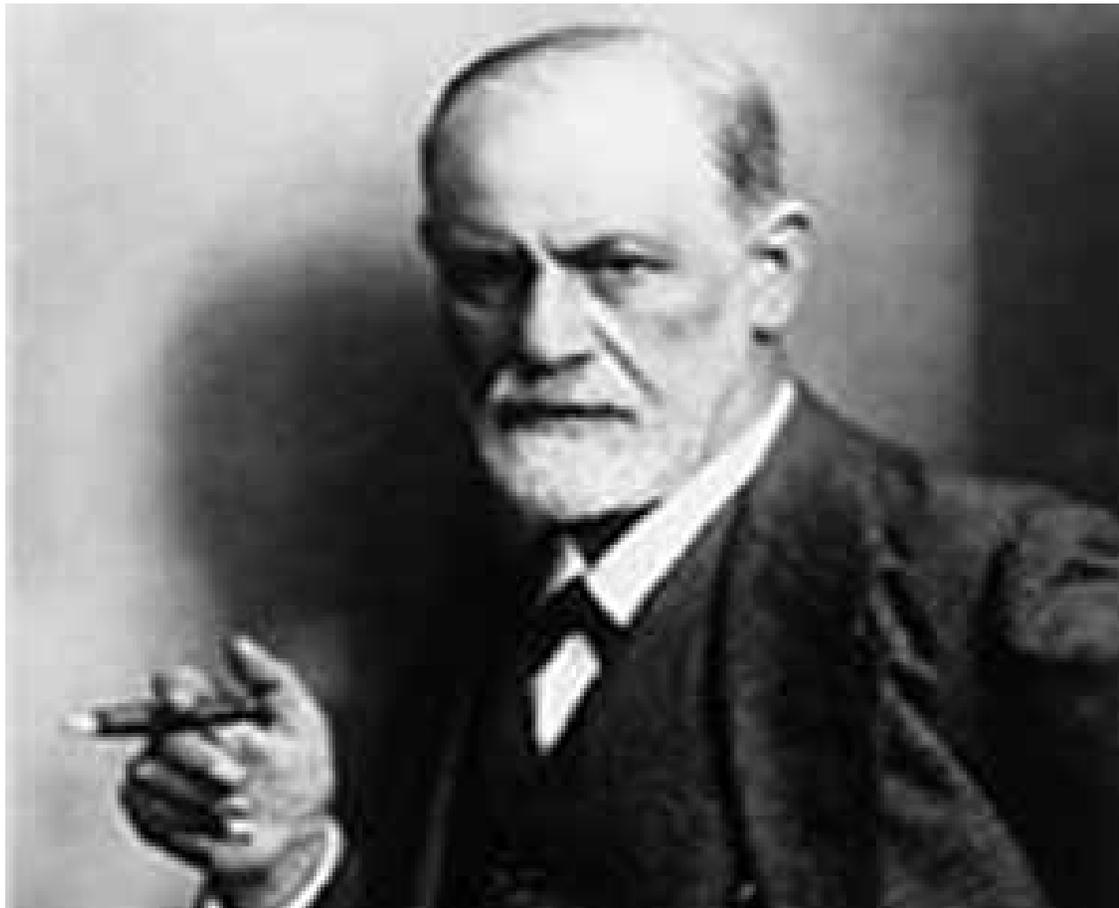
= a **BAD** year

or

= a **TERRIBLE** year



# Economics vs. Psychology



# Basic Story?



# Basic Story

## Consumer

- Too much debt
- Not enough traditional savings
- Poor stock market and housing price performance
- Jobs and hours worked declining



# The Result

## Consumer

- Consumer spending squeezed
- Big cuts in spending on durables
- Also cuts in non-durables and services





# Basic Story

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## Business

- Had been strong due to weak dollar / strong exports
- Weakness in domestic spending
- Weakness in rest of world will hurt exports





# The Result

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## Business

- Business spending on plant & equipment will be weak
- Trade deficit will improve, but more slowly





# Basic Story

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## Housing

- Supply / demand imbalance continues
- No quick fix for credit markets
- Foreclosures to continue at high rates





# The Result

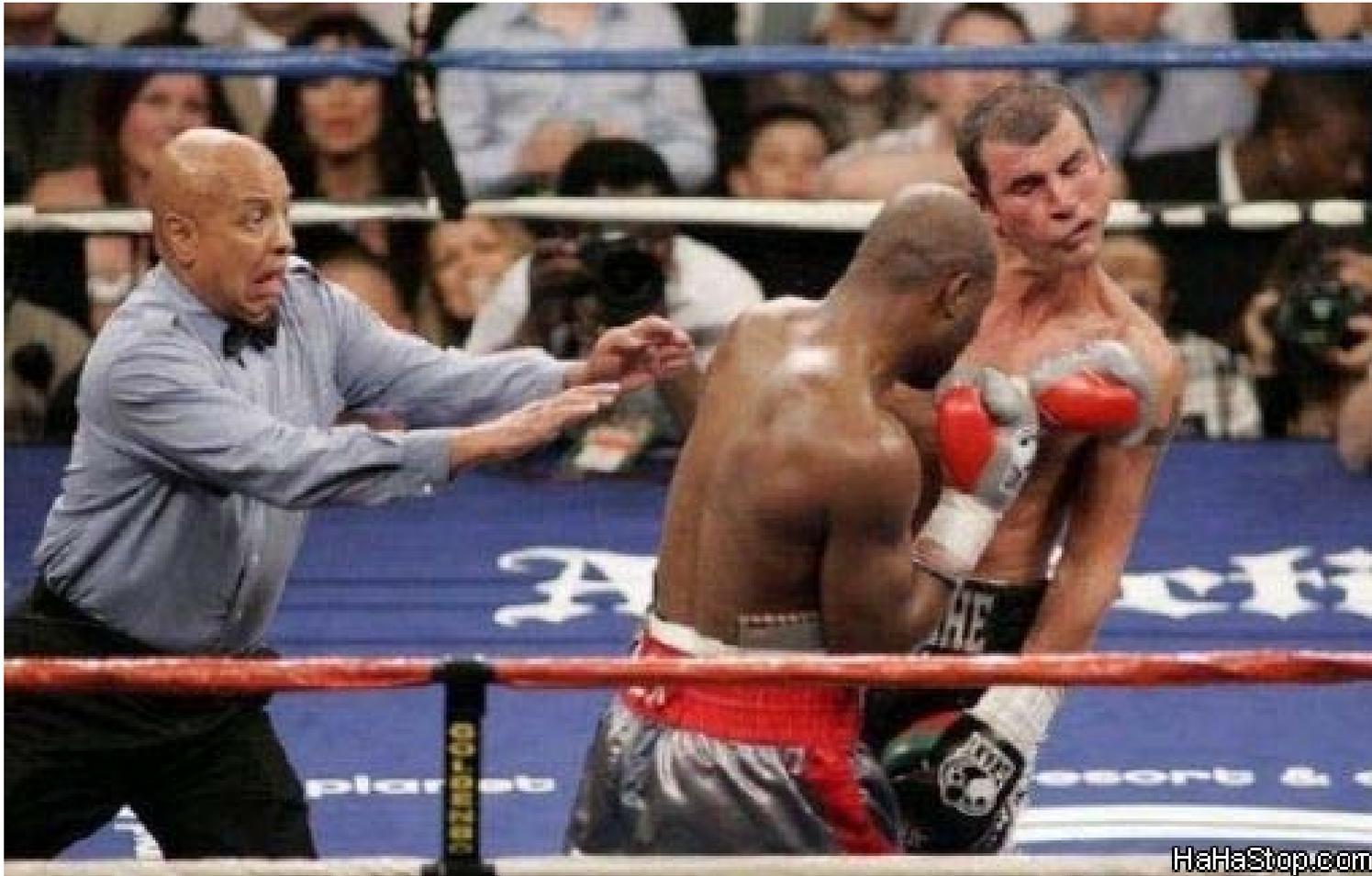
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## Housing

- Drag on economy from housing will end because comparisons so easy
- But drag on economy from commercial will get worse



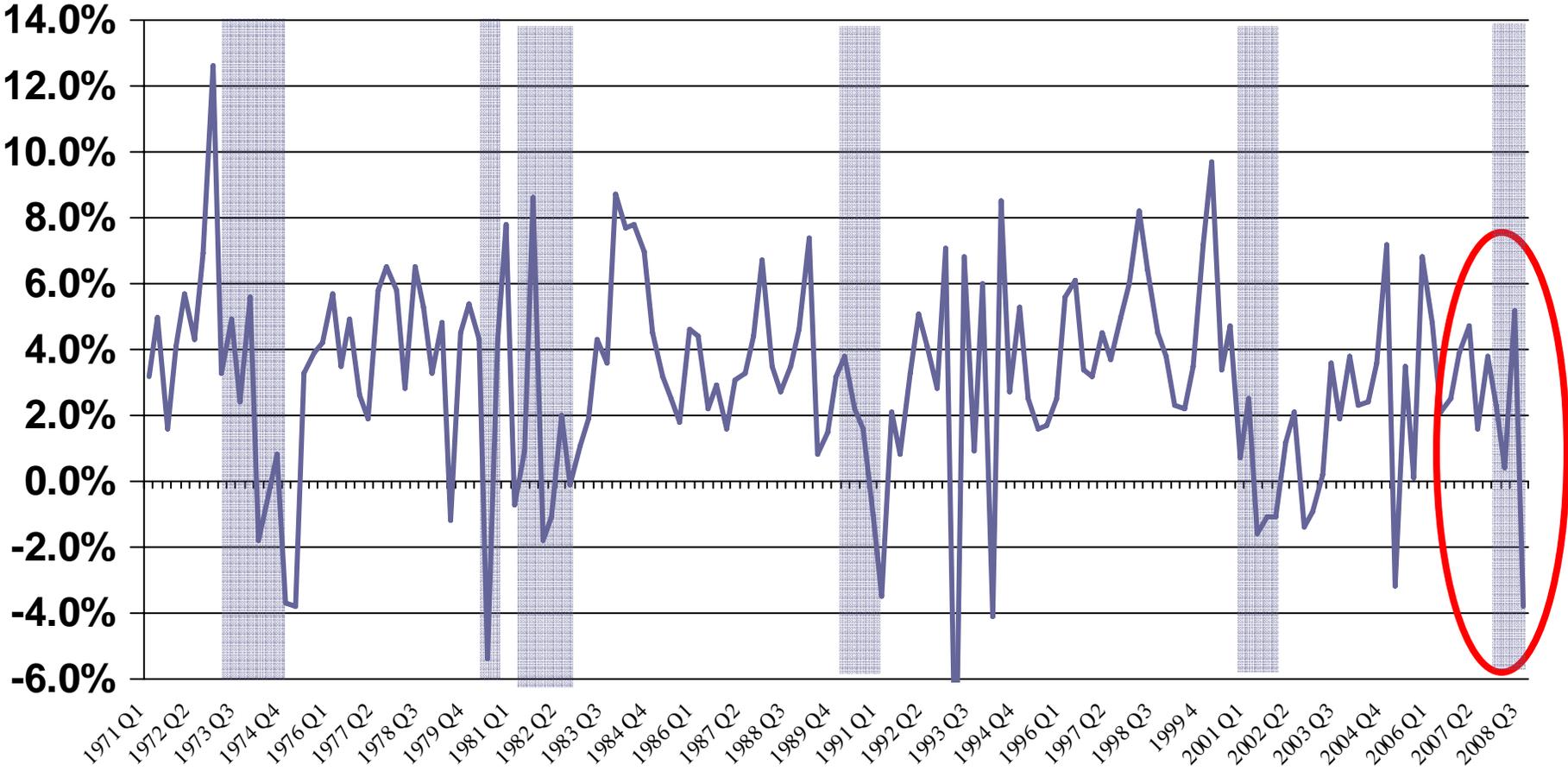
# The Consumer



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

Source: Bureau of Economic Analysis

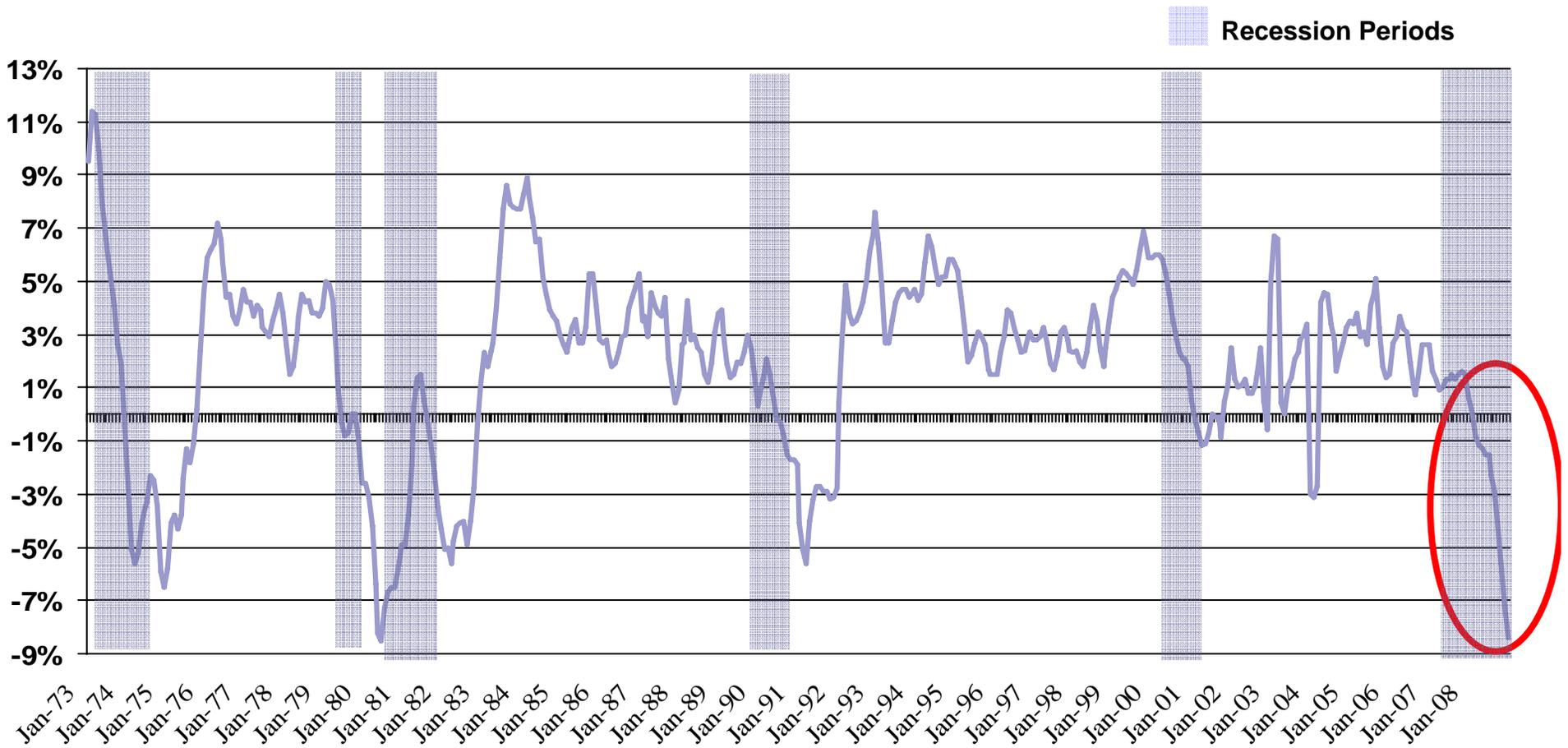
Recession Periods



\* Data through third quarter 2008

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

Source: Federal Reserve



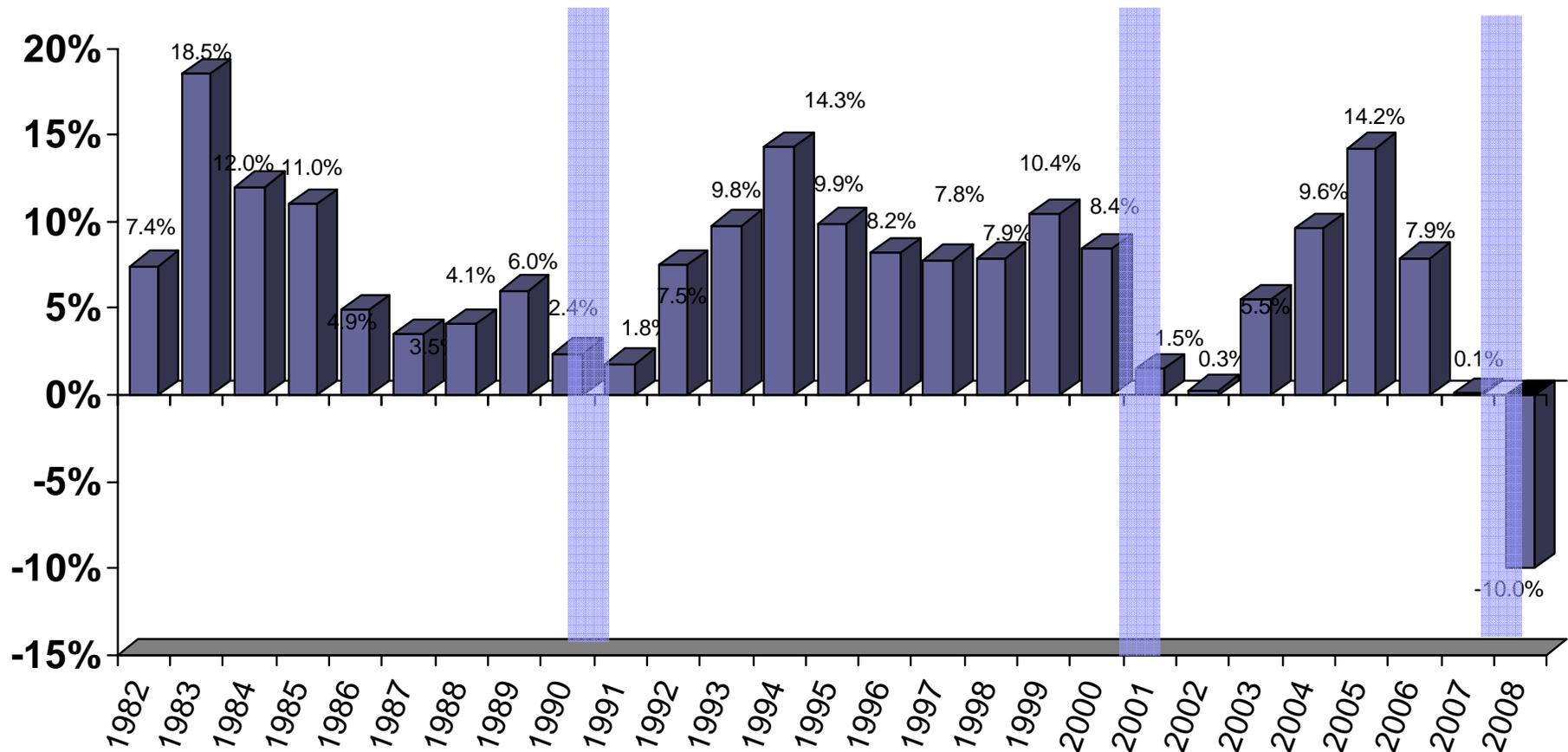
\*Data through December 2008

\*\*Three-month moving average



# Maricopa County Retail and R&B Sales Annual Growth 1982 – 2008\*

Source: ADOR



\* Year-to-date through November 2008

 Recession Periods

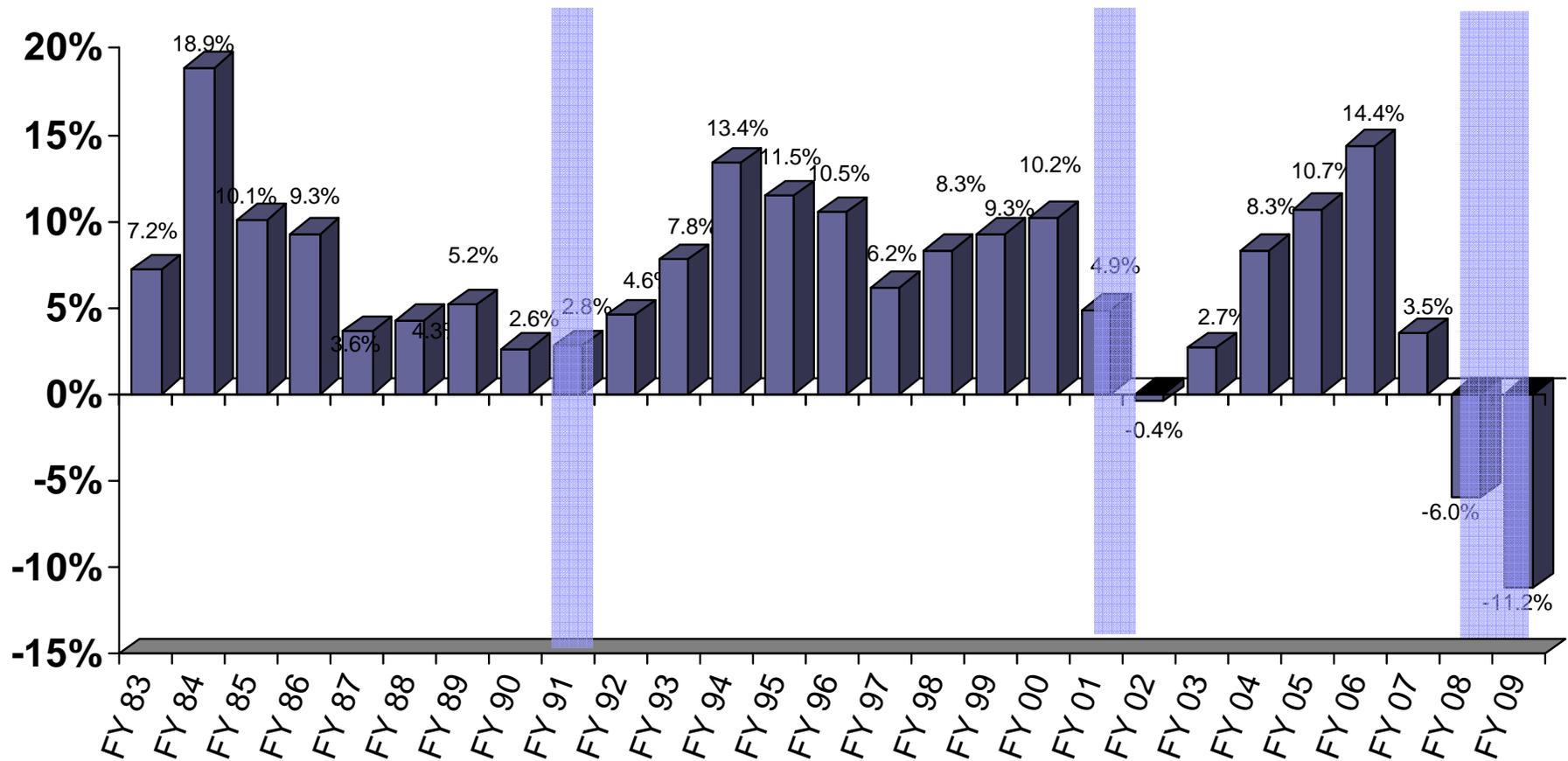


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# Maricopa County Retail and R&B Sales by Fiscal Year

## Annual Growth FY 83 – FY 09\*

Source: ADOR



\* Fiscal year-to-date through November 2008

 Recession Periods





**Short-term: deflation**

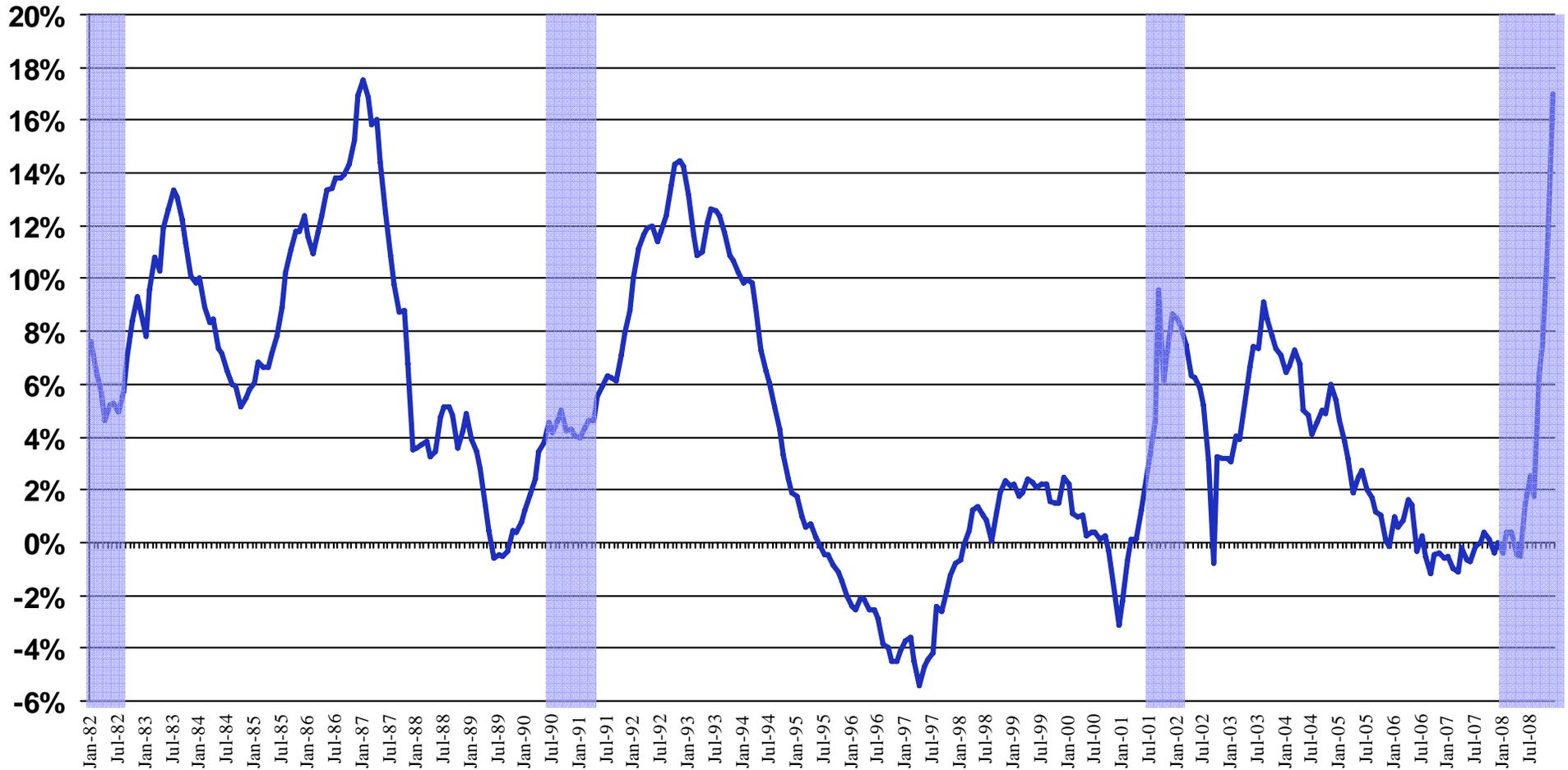
**Long-term: inflation**

**?**



# M1 Stock Percent Change Year Ago 1982 – 2008\*

Source: Federal Reserve Economic Database



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\*Data through December 2008.



Recession Periods

# Wealth Effect





# What Will Happen to HH Net Worth?

## In the 90s

Housing prices increased moderately,  
but stock market boomed.

## First half of 2000's

Stock market was doing poorly,  
but housing prices boomed.

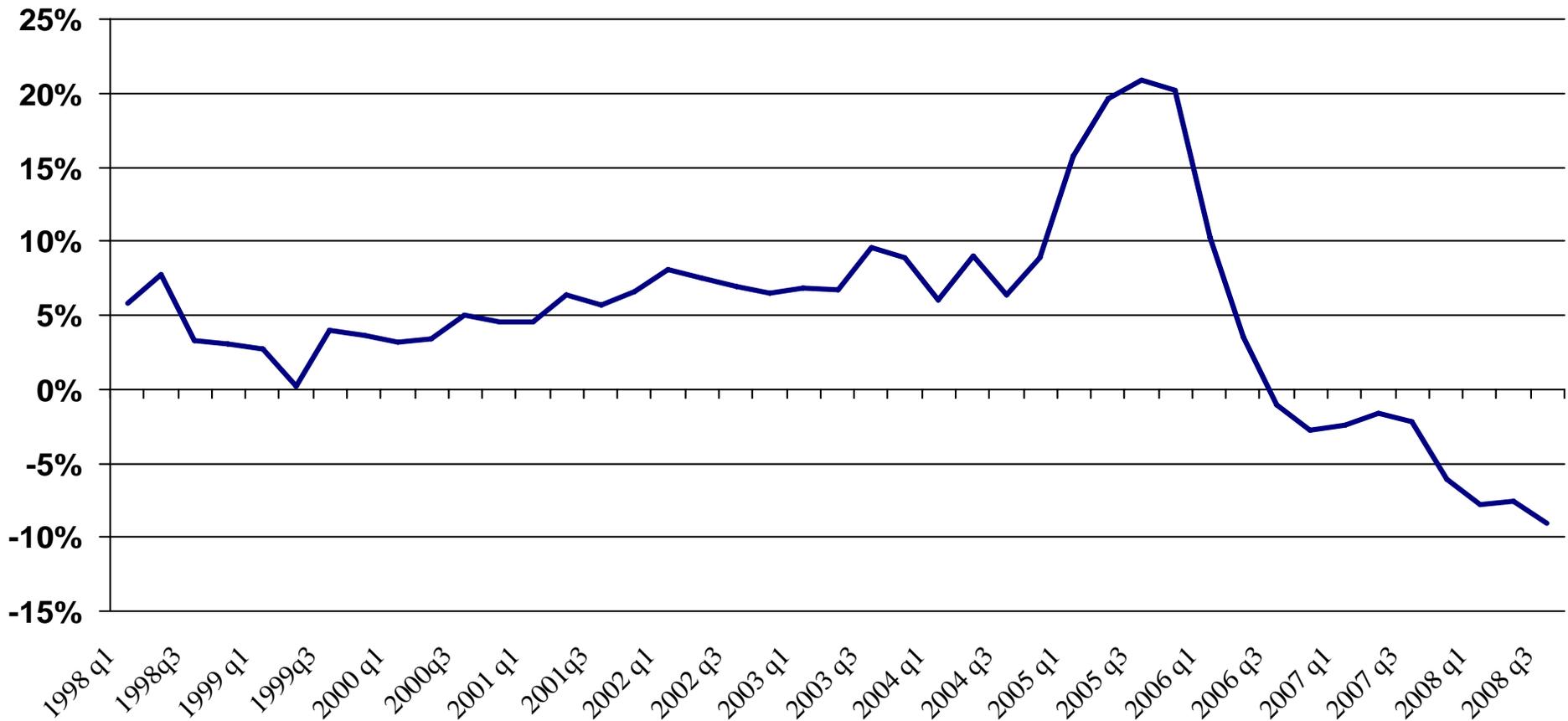
## Now

Declining housing prices AND  
poor results in the stock market.



# Median Price of Resale Homes – U.S. Percent Change Year Ago 2003 – 2008\*

Source: National Association of Realtors



\*Data through third quarter 2008

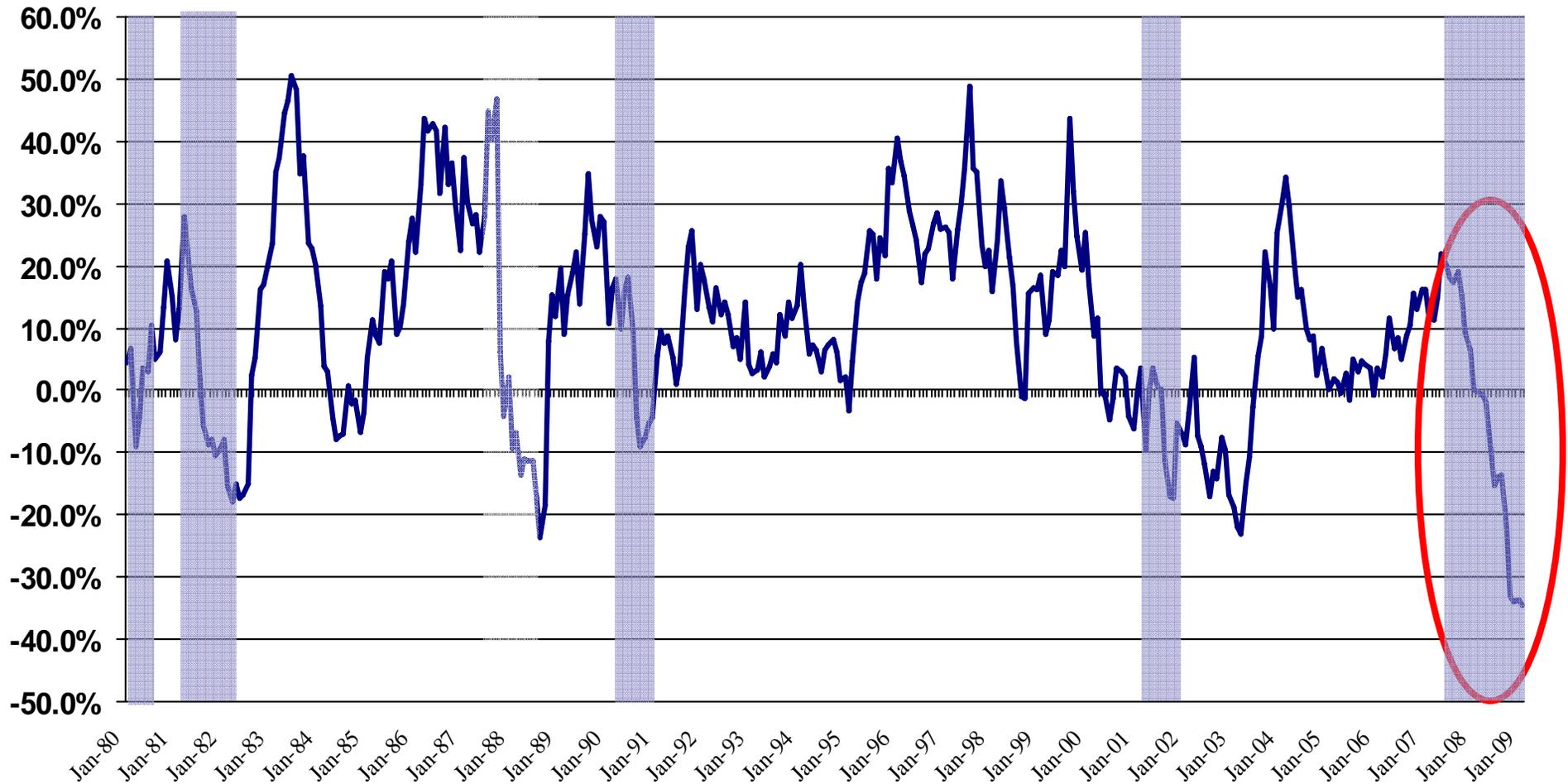


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# Dow Jones Stock Prices Percent Change Year Ago 1980 – 2009\*

Source: [www.economy.com](http://www.economy.com)

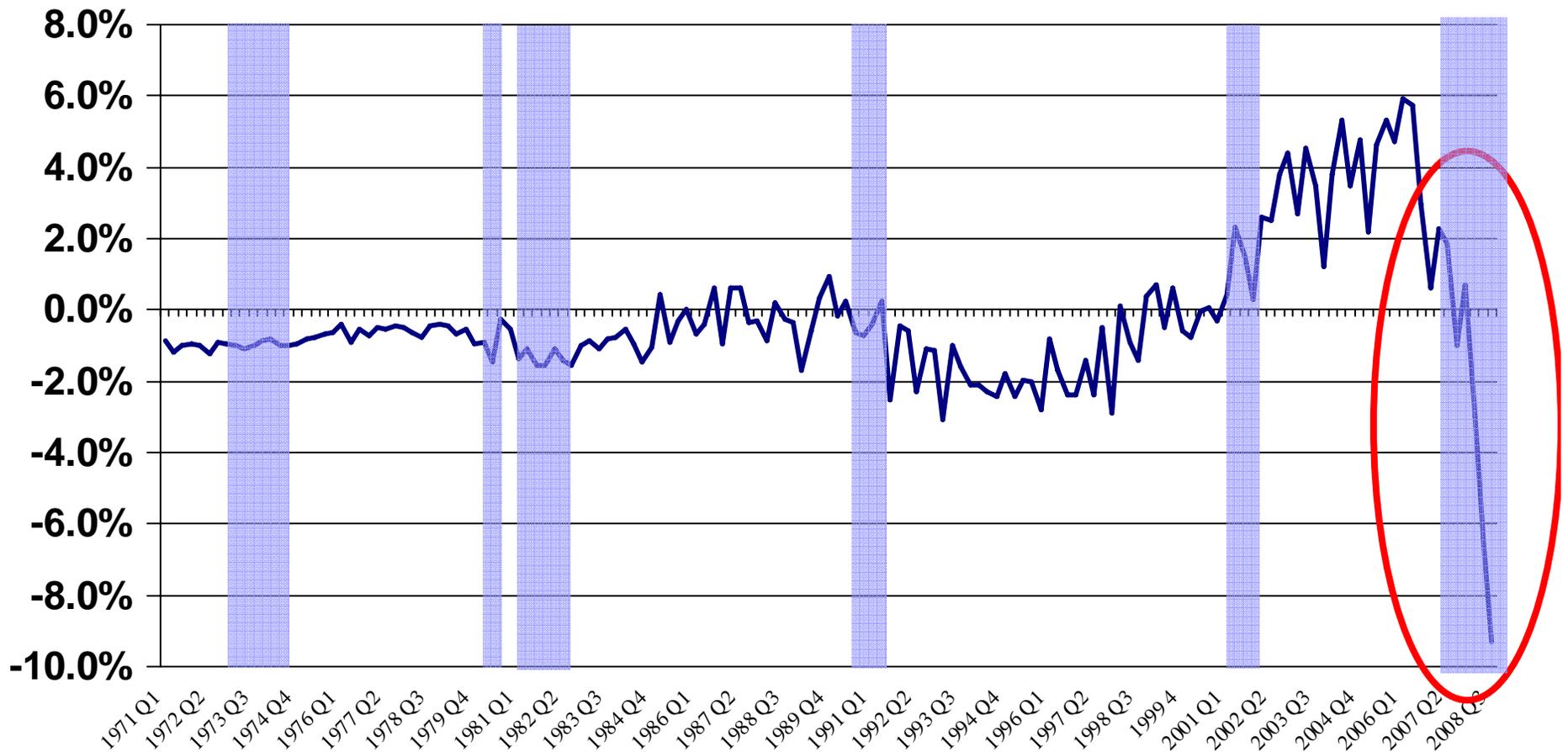
Recession Periods



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

Source: Bureau of Economic Analysis

Recession Periods



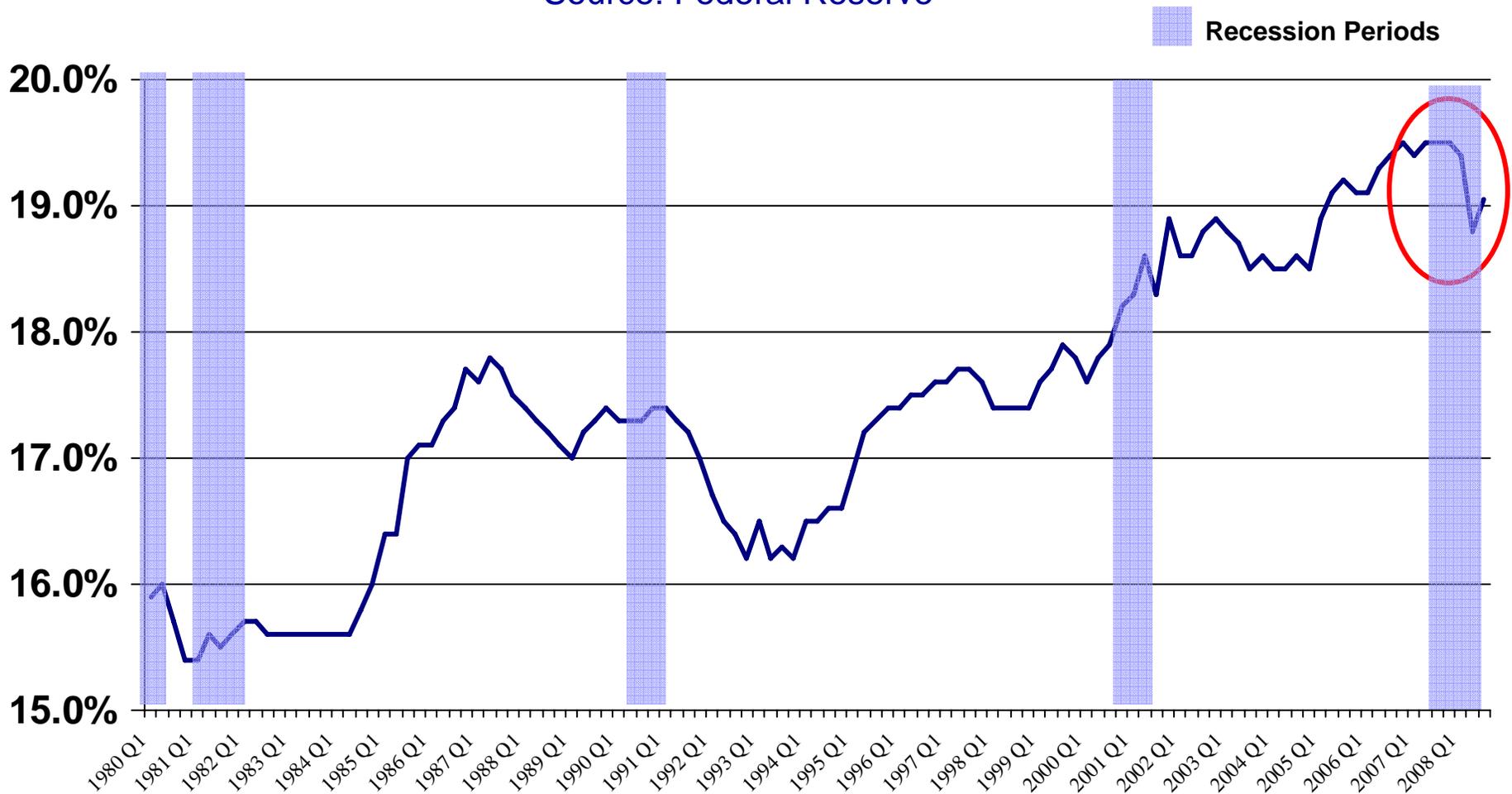
\* Data through third quarter 2008



# Financial Obligation Ratio\*\*

## 1980 – 2008\*

Source: Federal Reserve



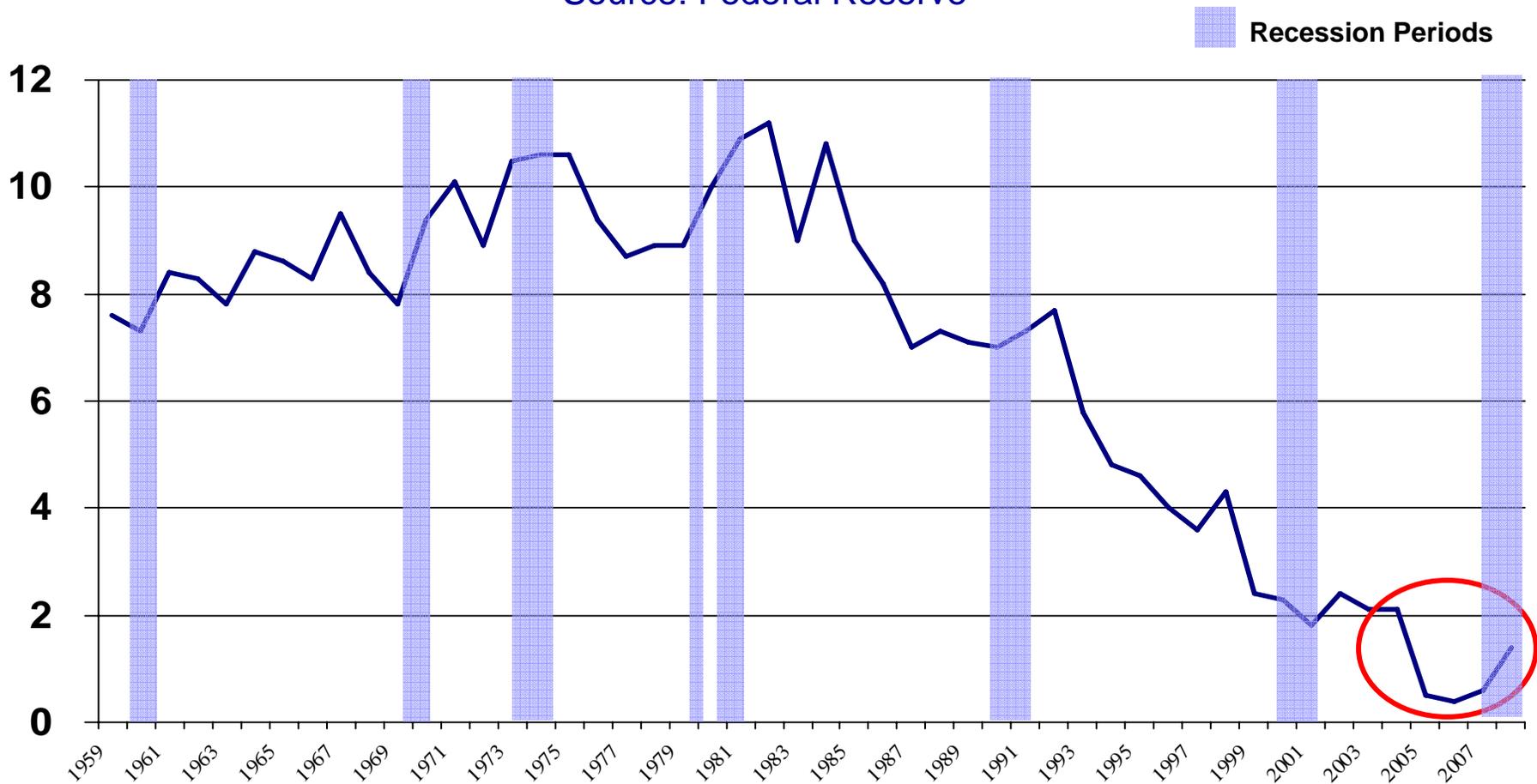
\*Data through third quarter 2008

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



# Savings Rate 1980 – 2008\*

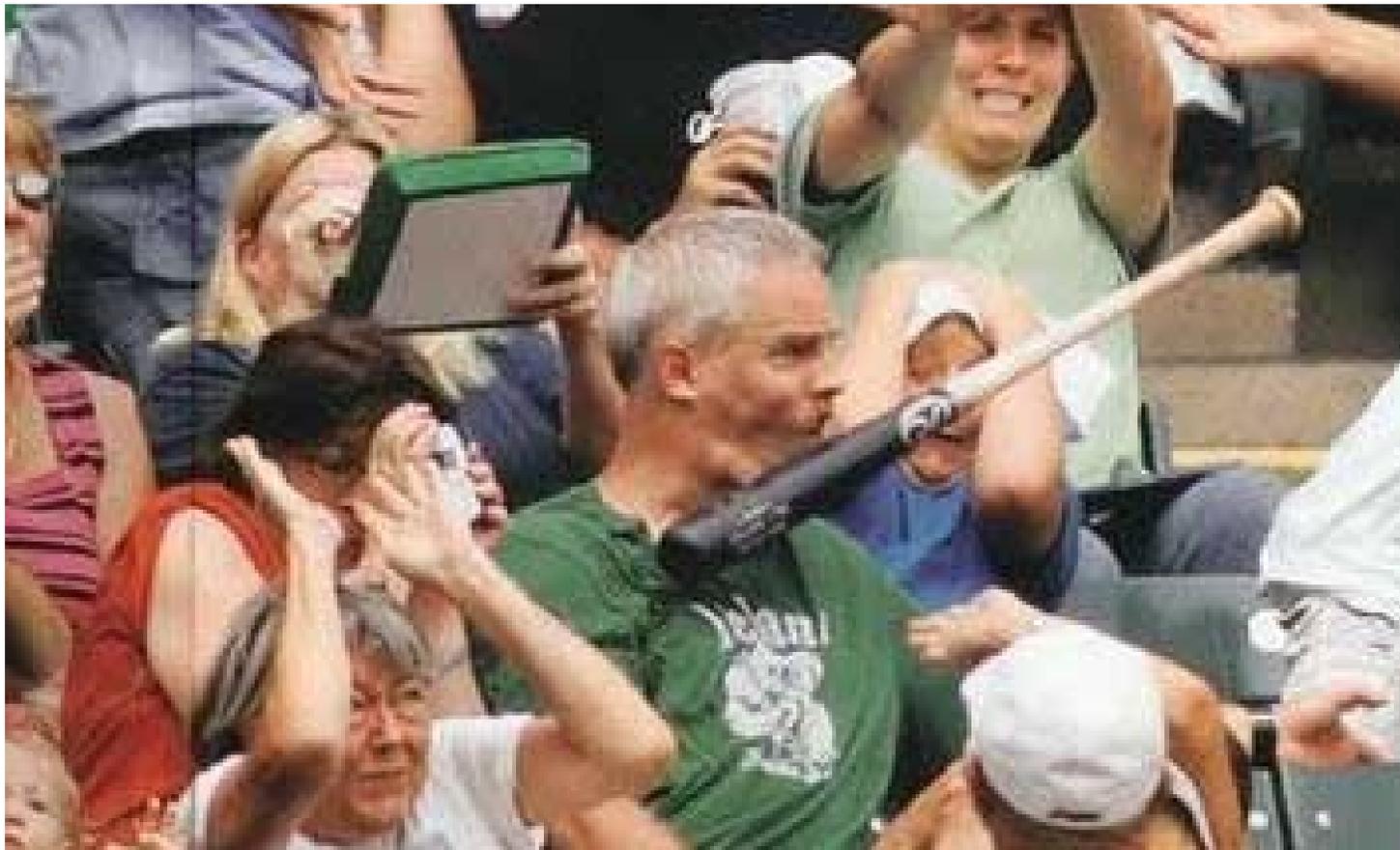
Source: Federal Reserve



\*Data through third quarter 2008



# Business: Finally taking it on the chin



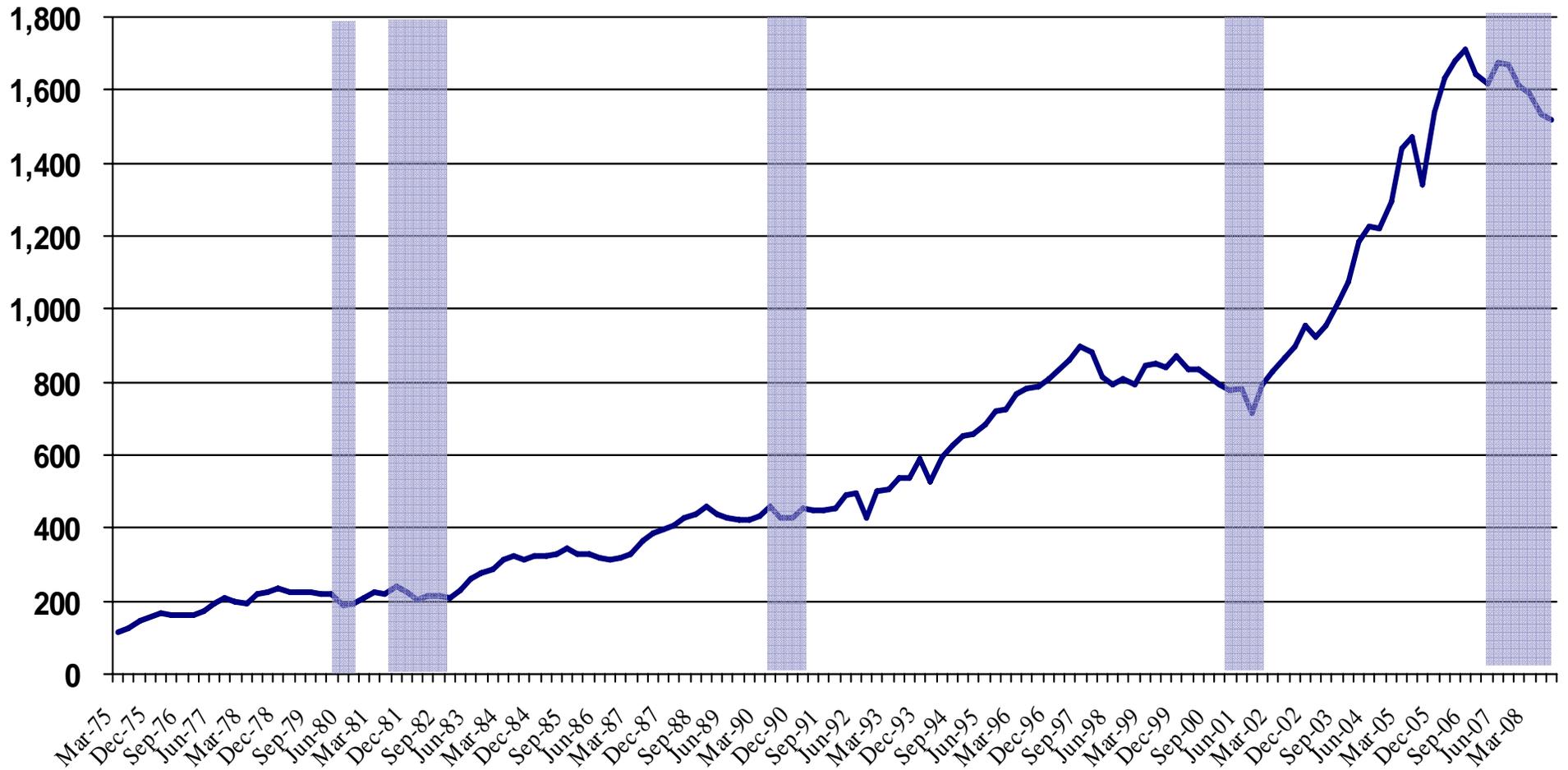
- 
- **Corporations were in good financial shape. Now can't get credit.**
  - **Exports were booming. Now declining.**



# Corporate Profit (Billions of Dollars, SA) 1975-2008\*

Source: Freelunch.com

 Recession Periods



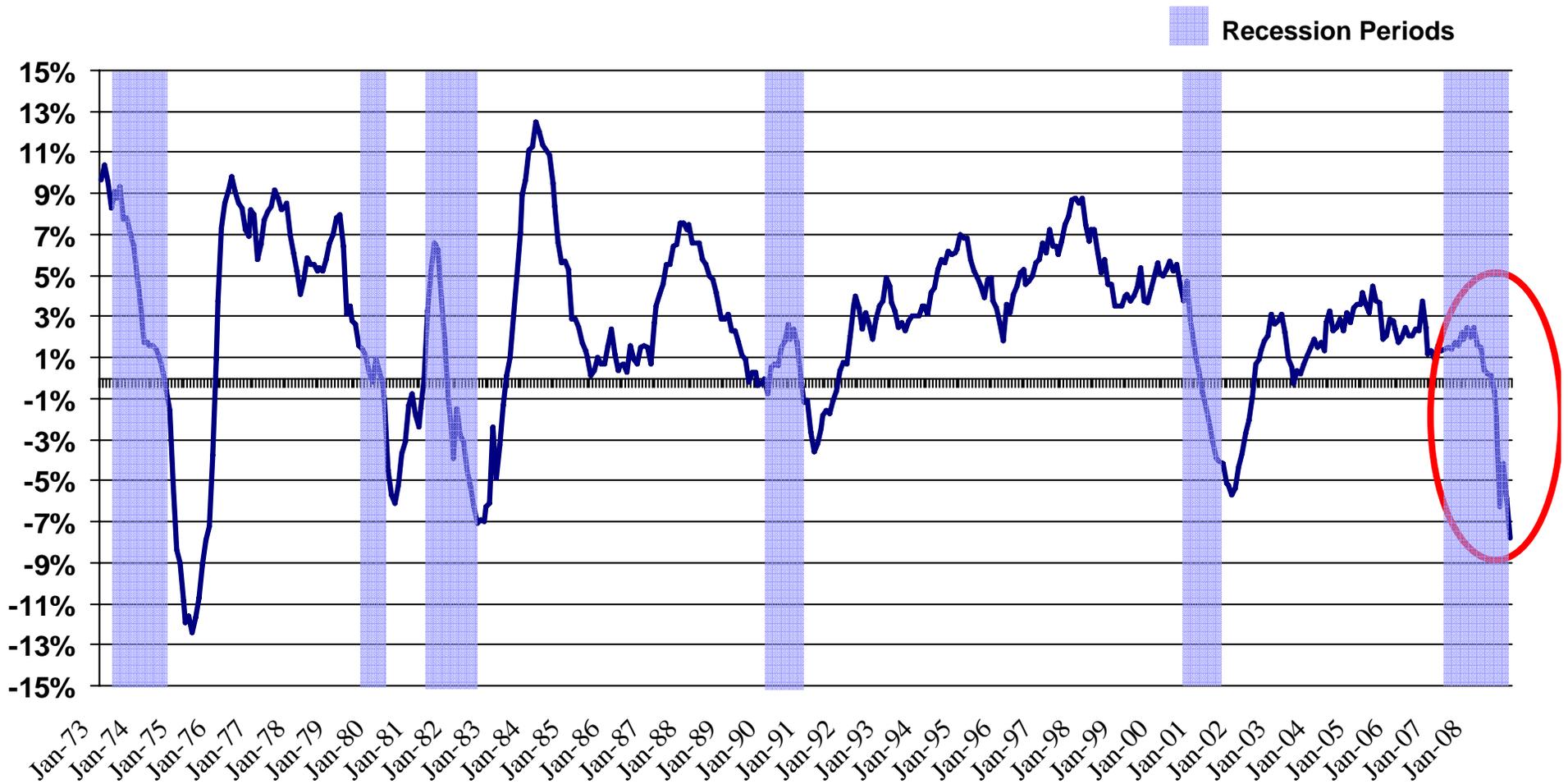
\*Data through third quarter 2008



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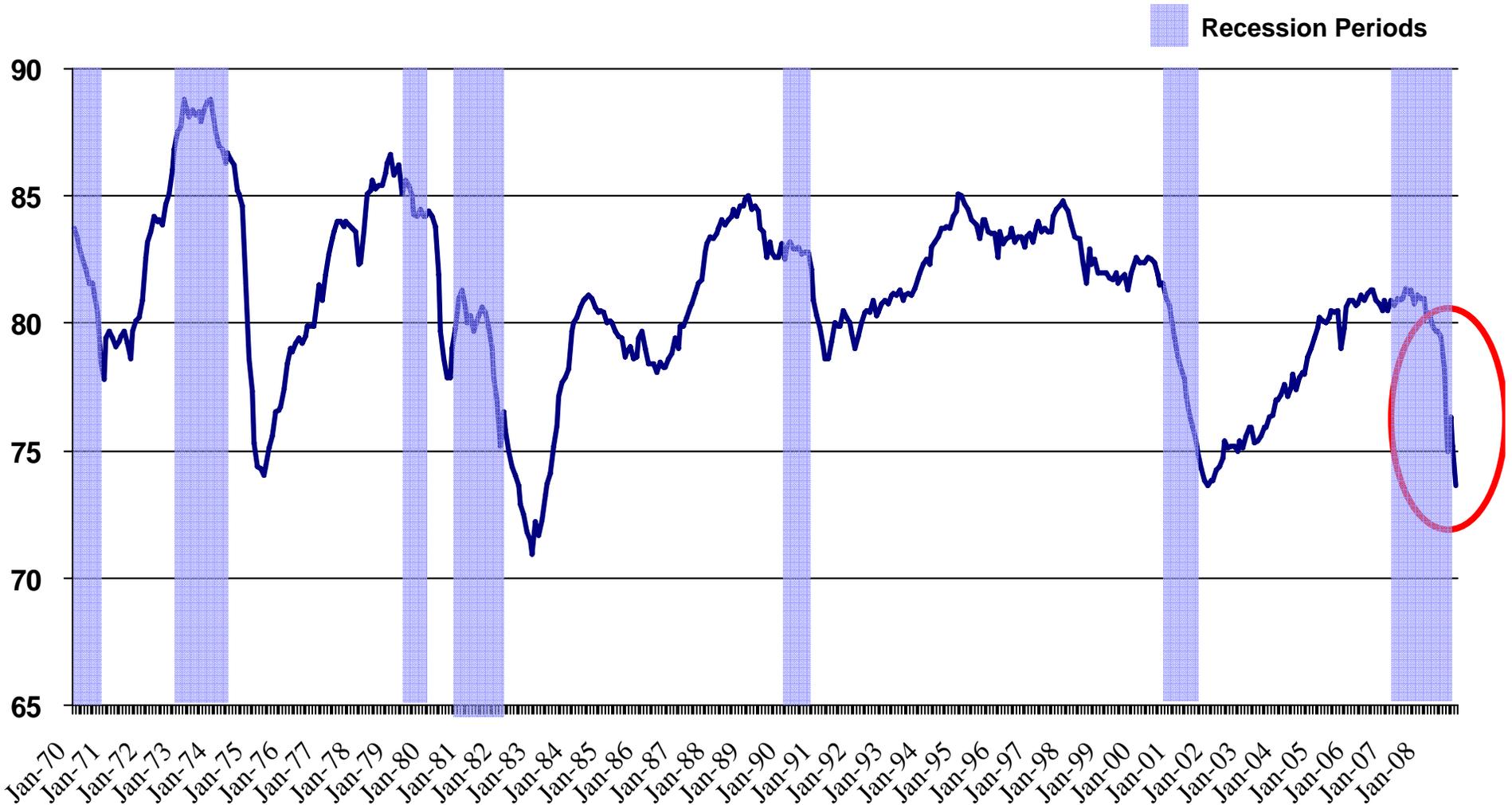
# Industrial Production Percent Change Year Ago 1973 – 2008\*

Source: The Conference Board



# Capacity Utilization Rate 1970 – 2008\*

Source: The Conference Board

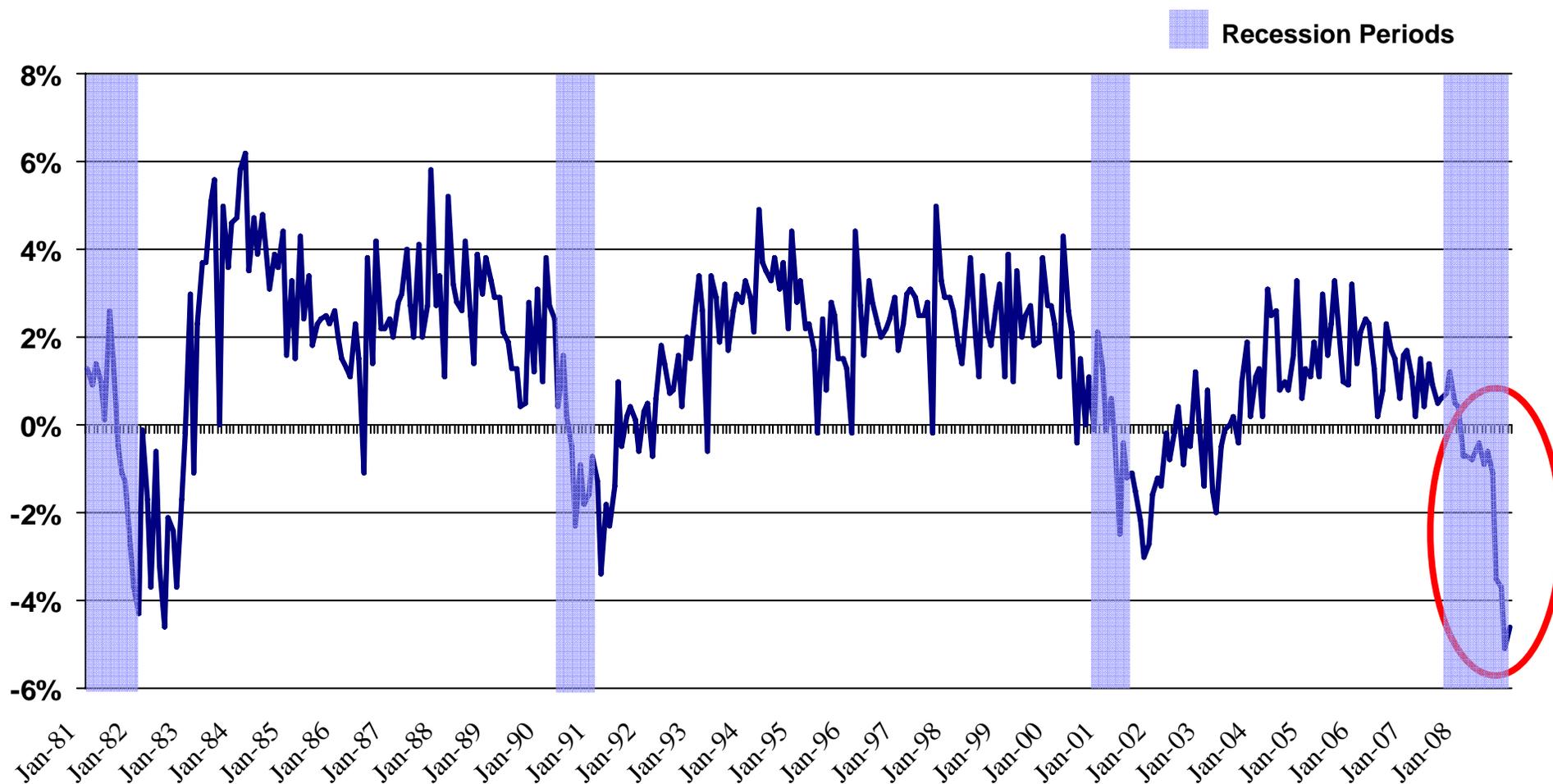


\*Data through December 2008



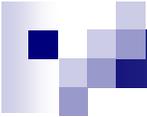
# National Employment Percent Change Month Ago, Annualized (S/A) 1981 – 2008\*

Source: U.S. Bureau of Labor Statistics



# Is credit now tight?





# **Tougher Mortgage Loan Standards**

Source: Federal Reserve Survey, October 2008

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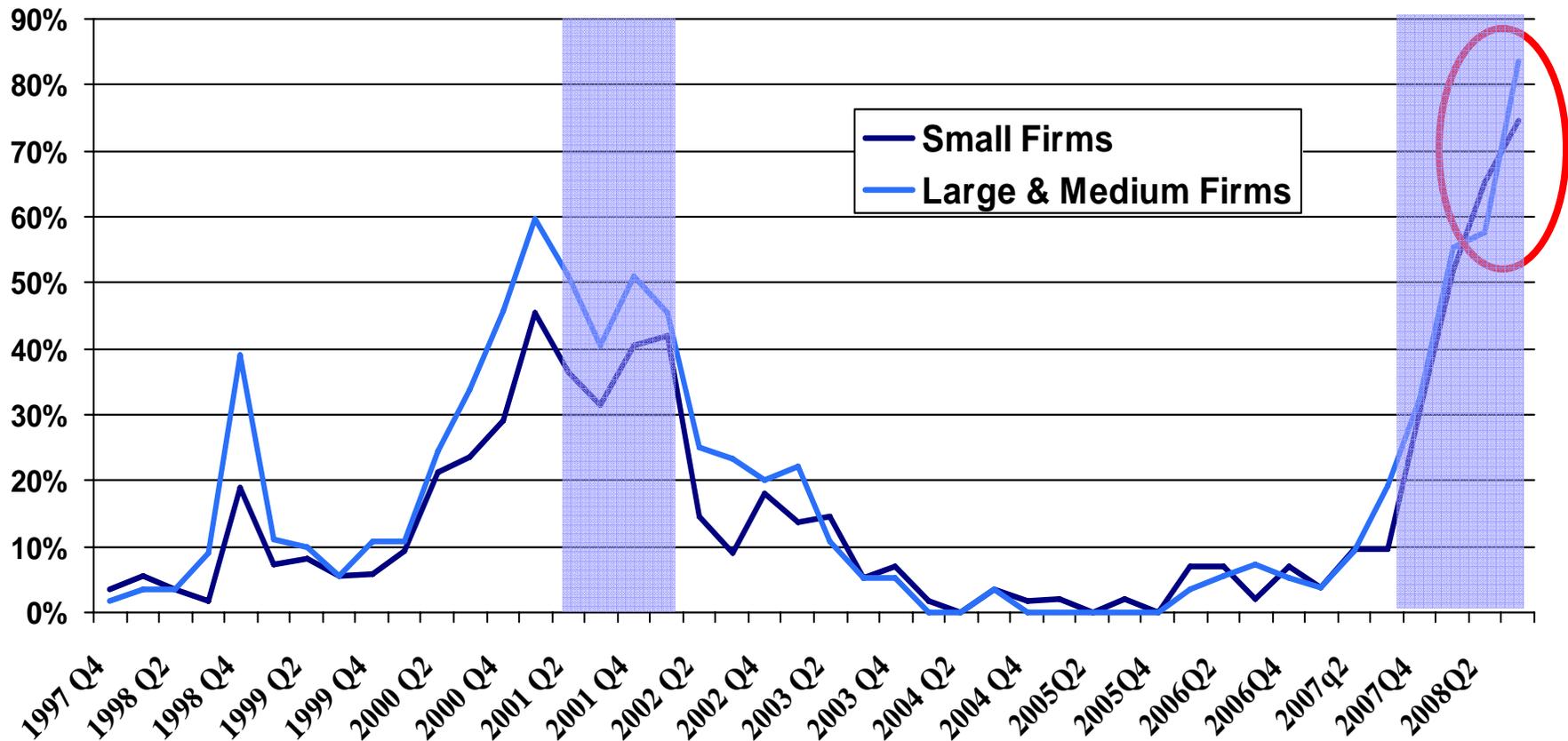
- **100% of banks tightened on sub-prime mortgages.**
- **89.6% of banks tightened on “non-traditional” mortgages**  
(ARMs, Interest-only, or Limited Income Verification loans).
- **71.0% of banks tightened on prime mortgage loans.**



# 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.





# **U.S. Summary 2009:**

**The first half, continued  
ugly.**

**The second half, no better than  
homely.**





**Because....**

**In the first half, comparisons  
are **tough**.**

**In the second half, comparisons  
get easier.**

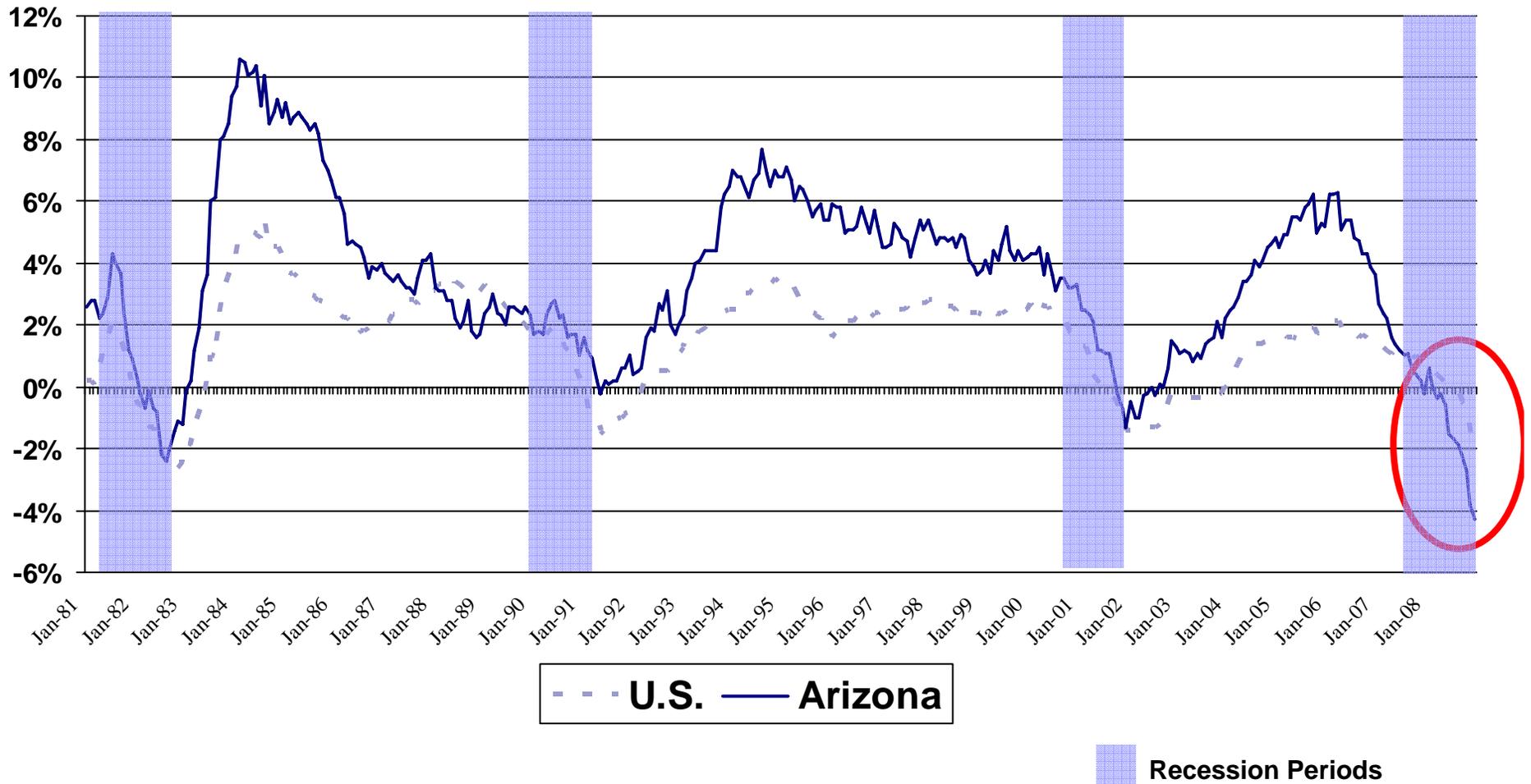


# What's Happening in Arizona?



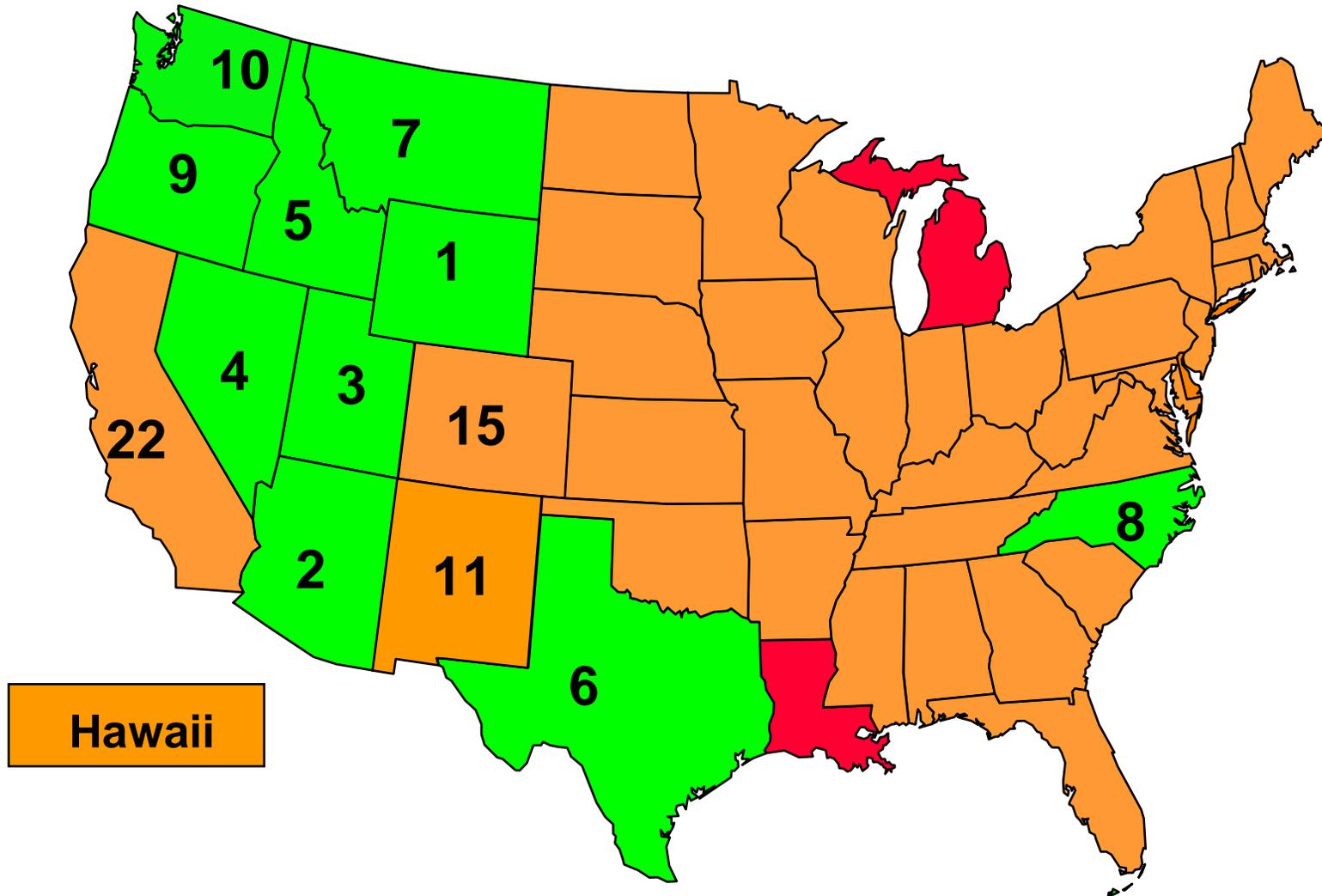
# Arizona & US Move Together

(Nonfarm Employment Percent Change 1980 - 2008)



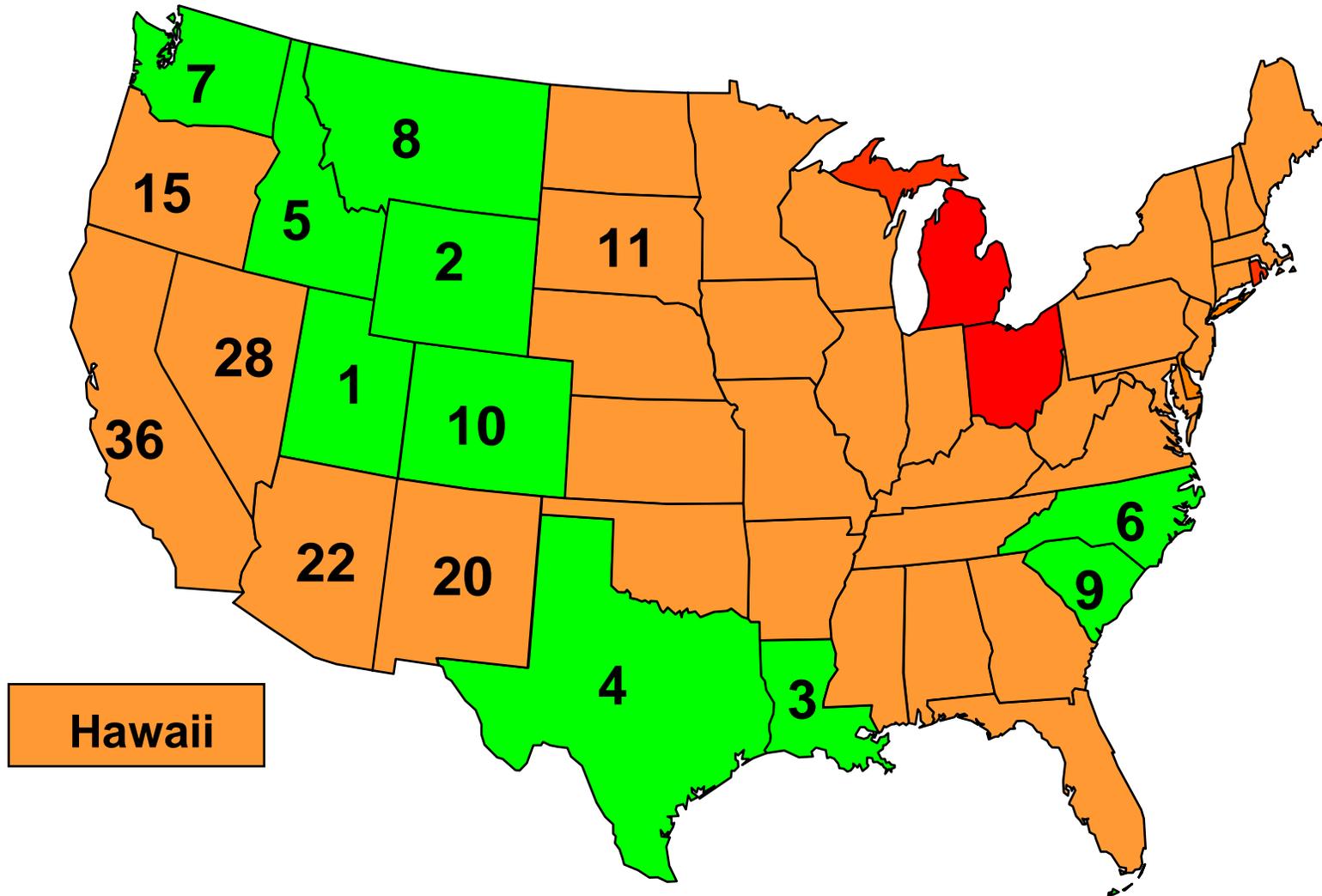
# Job Growth 2006

Source: US BLS



# Job Growth 2007

Source: US BLS

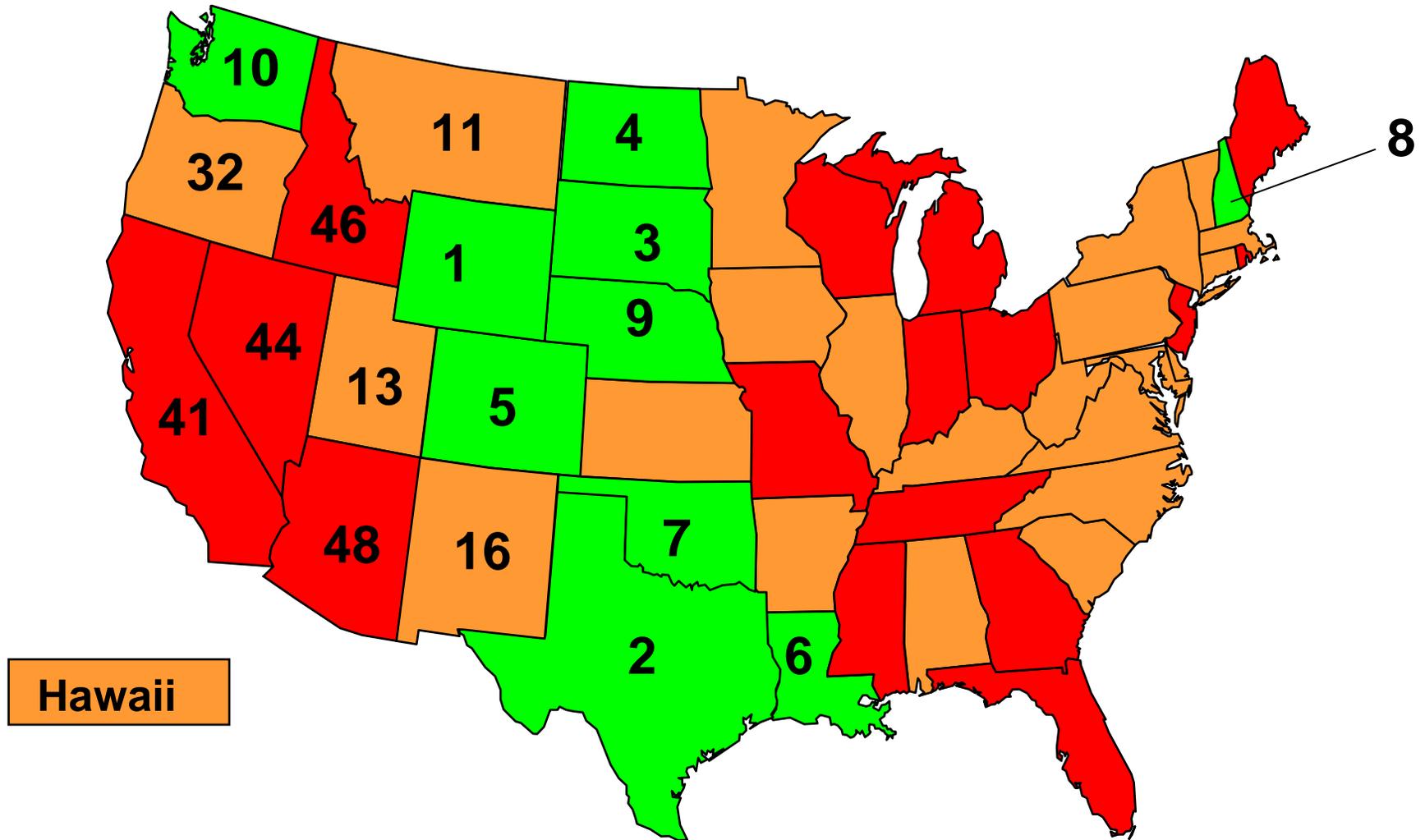


Hawaii



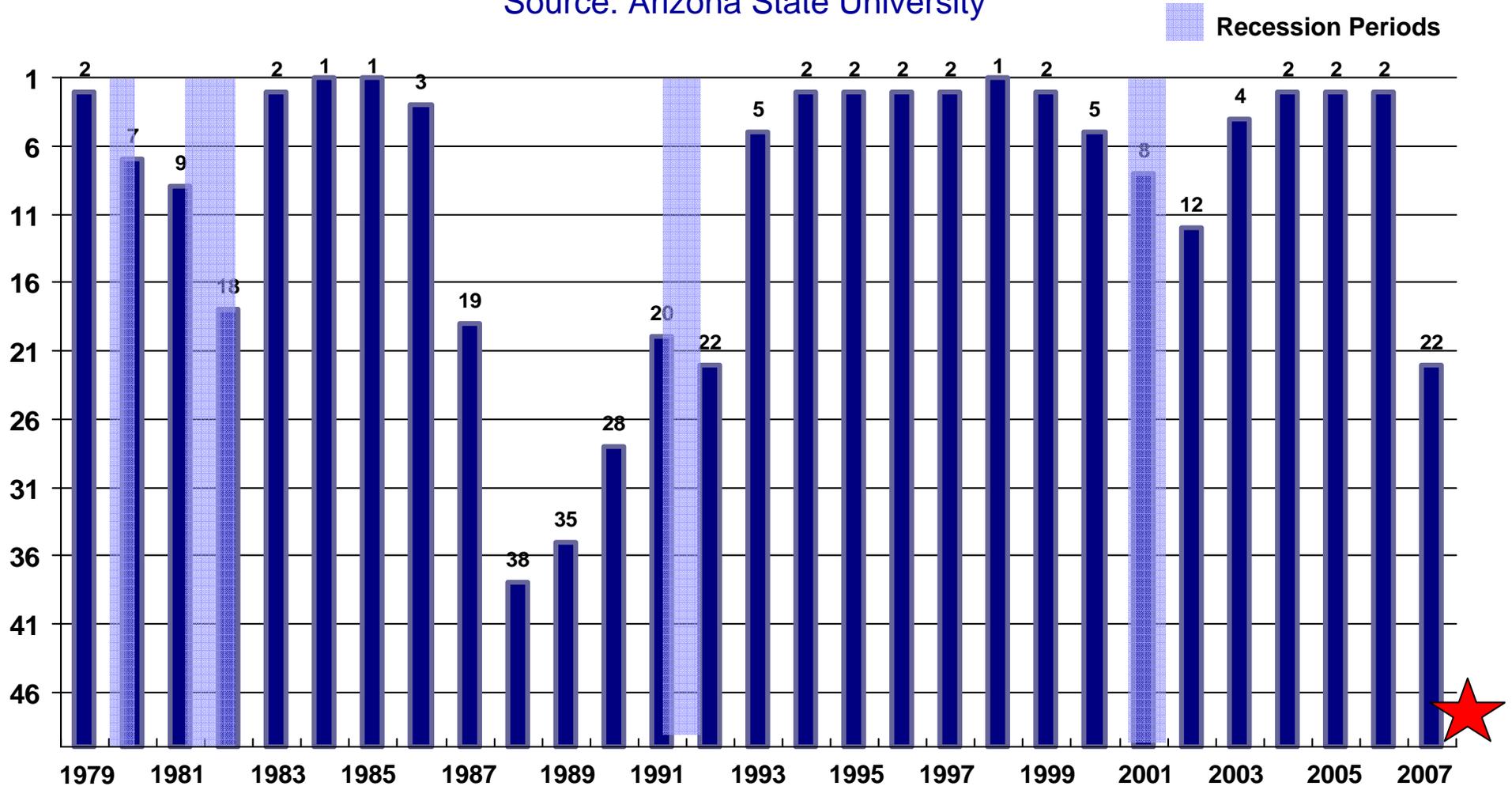
# Job Growth Update: Arizona Falls to 48<sup>th</sup>

YTD November 2008 vs YTD November 2007 - BLS



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

Source: Arizona State University



 = YTD Nov = 48





# Greater Phoenix



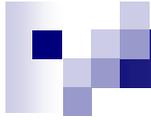
# Phoenix-Mesa Employment Growth

(Ranking among all metro areas greater than 1,000,000)

Source: Arizona State University, U.S. Bureau of Labor Statistics

<u>YEAR</u>	<u>RANK</u>	<u># of MSAs</u>
1991	4	20
1992	5	20
1993	2	20
1994	1	20
1995	1	21
1996	1	23
1997	2	23
1998	1	24
1999	3	26
2000	8	26
2001	6	28
2002	5	28
2003	3	29
2004	4	29
2005	1	30
2006	1	31
2007	10	32
2008 YTD November	28	32





# **Worst year (relatively) on record**



# Phoenix-Mesa Employment

Source: Arizona Department of Commerce, Research Administration

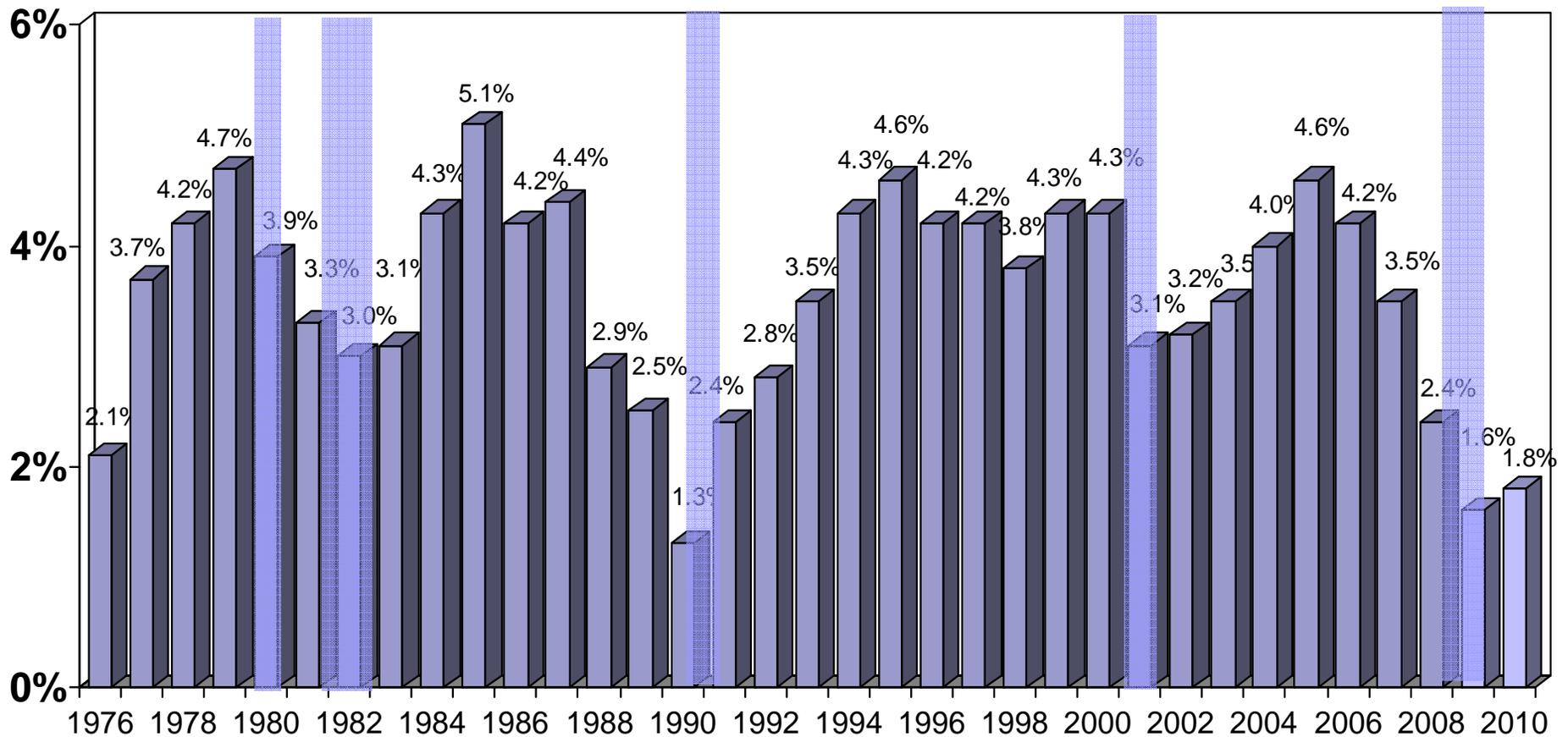
<u>Sectors (-)</u>	<u>Dec 08 / Dec 07</u> %	<u>% of Total</u>	<u>Sectors (+)</u>	<u>Dec 08 / Dec 07 %</u>	<u>% of Total</u>
Mining	-3.2%	0.2%	Other Services	0.9%	3.8%
Construction	-22.3%	6.7%	Edu & health Services	4.4%	11.9%
Manufacturing	-1.2%	7.3%			
Trade	-6.1%	16.9%			
Transp. & Utilities	-2.2%	3.6%			
Information	-7.3%	1.6%			
Financial Activities	-4.1%	7.9%			
Prof. and Bus. Services	-7.2%	16.4%			
Leisure & hosp svcs	-3.1%	10.0%			
Government	-0.1%	13.7%			
Percent of Total		84.2%			15.8%

Green = Phoenix growing faster than U.S.



# Greater Phoenix Population Annual Percent Change 1976–2010\*

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



2007 and 2008 are estimates put out by ADES and may be subject to substantial revision.

\* 2009 & 2010 forecast is from *Elliott D. Pollack & Co.*

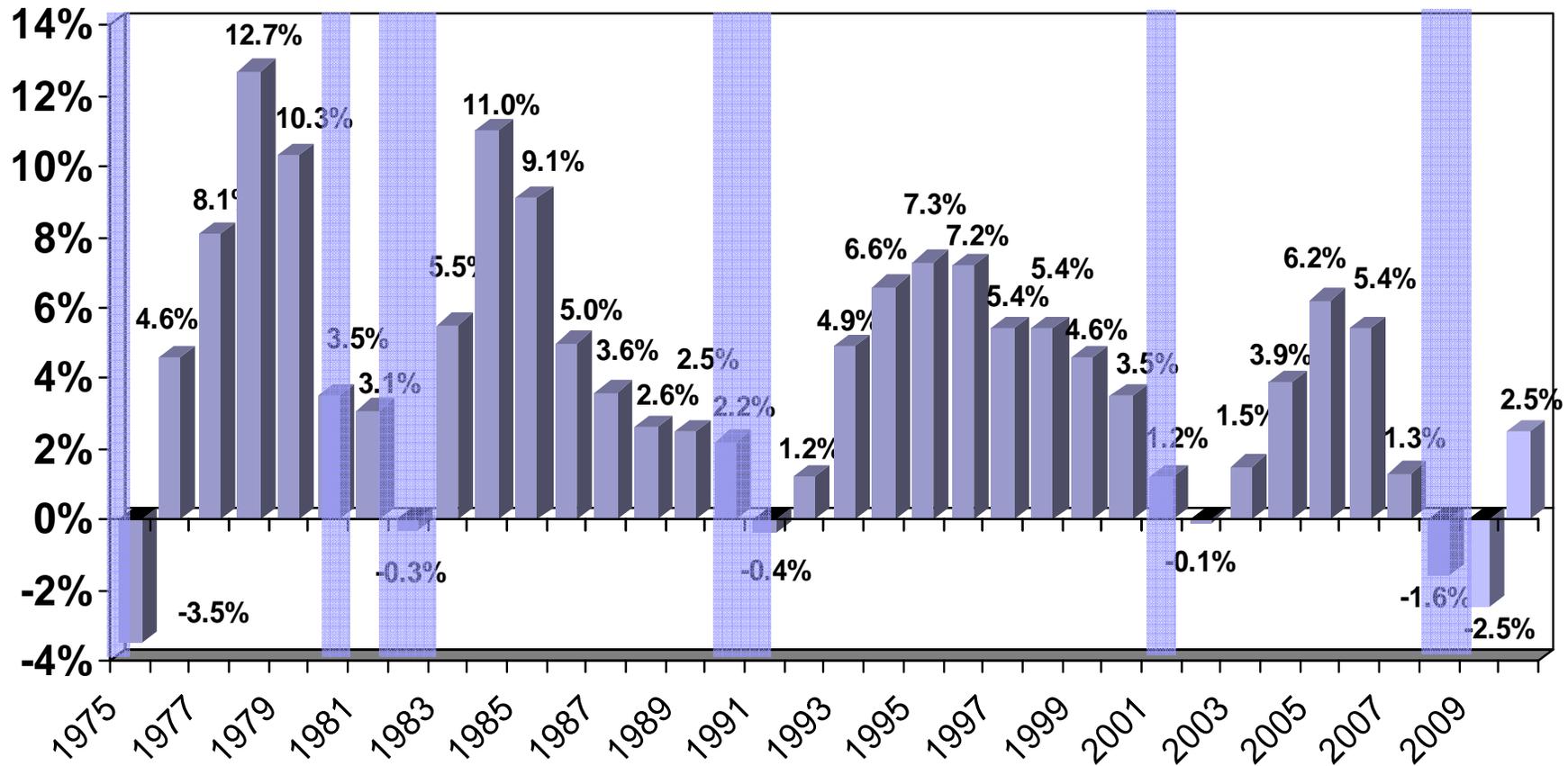
 **Recession Periods**



*Elliott D. Pollack & Company*

# Phoenix-Mesa MSA Employment\* Annual Percent Change 1975–2010\*\*

Source: Department of Commerce, Research Administration



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

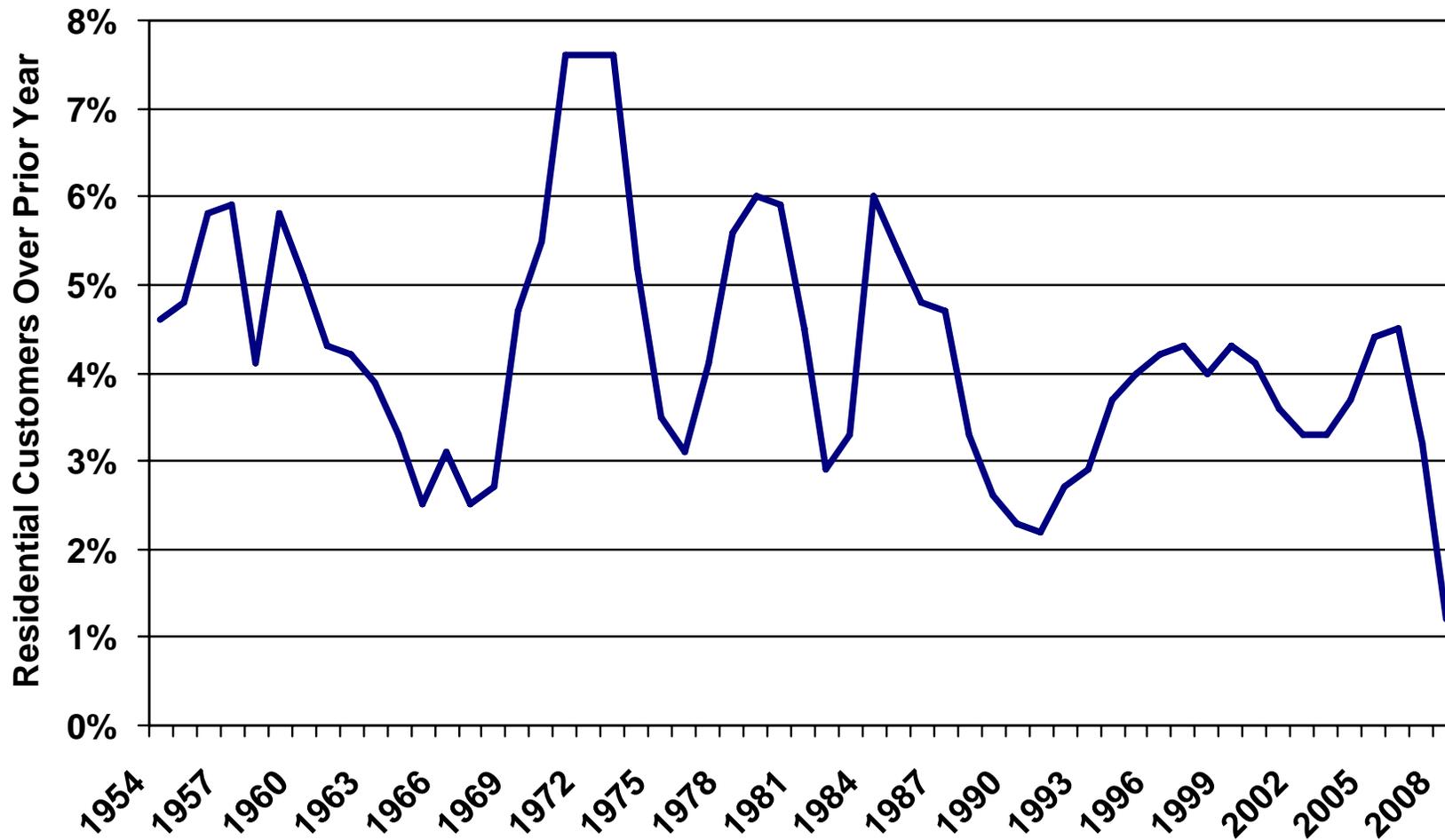
\*\* 2009 & 2010 forecast is from *Elliott D. Pollack & Co.*

 Recession Periods



*Elliott D. Pollack & Company*

## APS: Slowest Growth in over 50 years

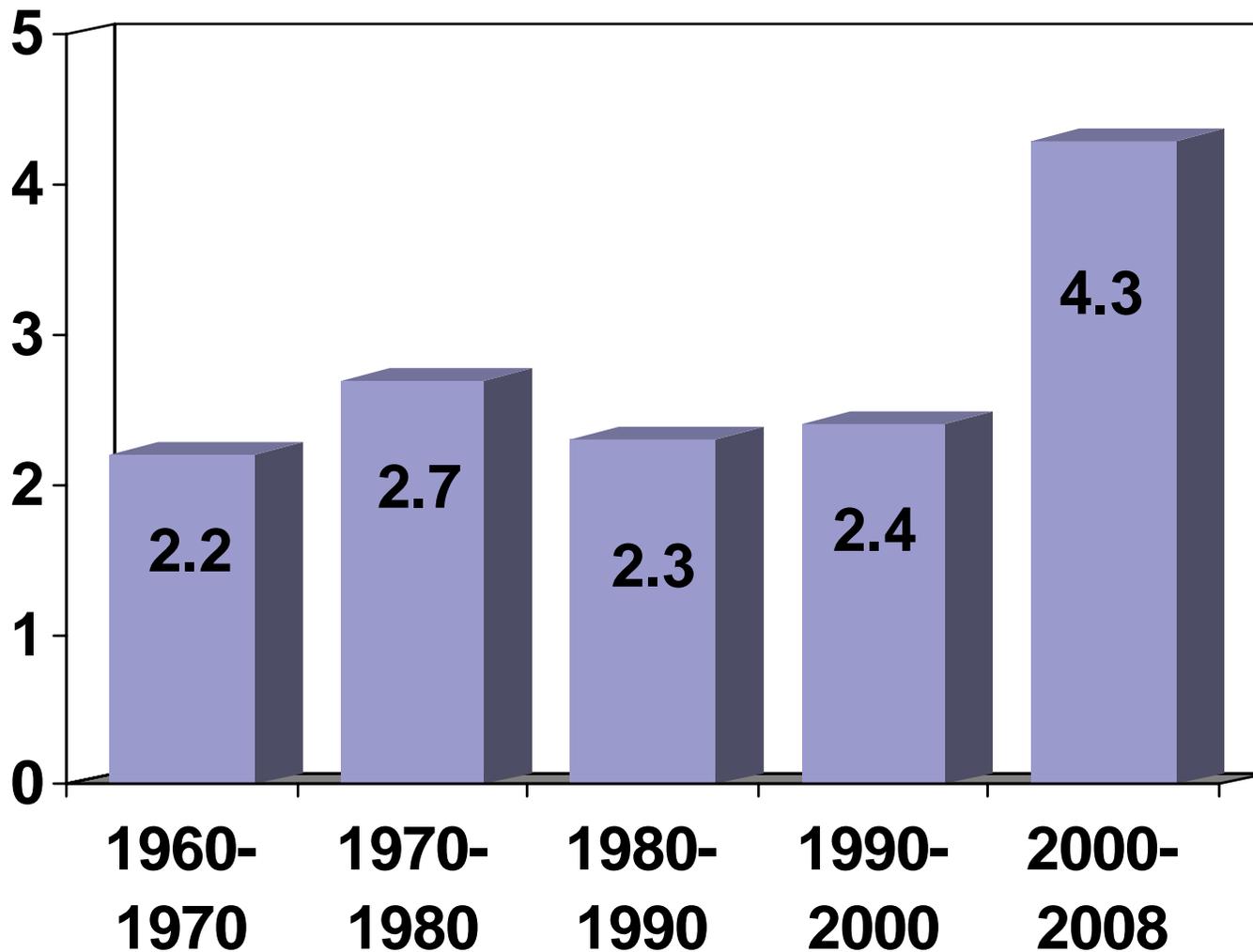


# Housing Market



# Greater Phoenix v. U.S. Ratio of Employment Growth Rates

Source: Bureau of Labor Statistics





**This cycle, Greater  
Phoenix built ten years  
of homes in five years  
(from 2001-2006)**





**Now we are paying the  
piper for that  
overbuilding**





**Simply an inventory  
correction in housing that  
affects construction and  
related industries and has  
a ripple effect throughout  
the economy**

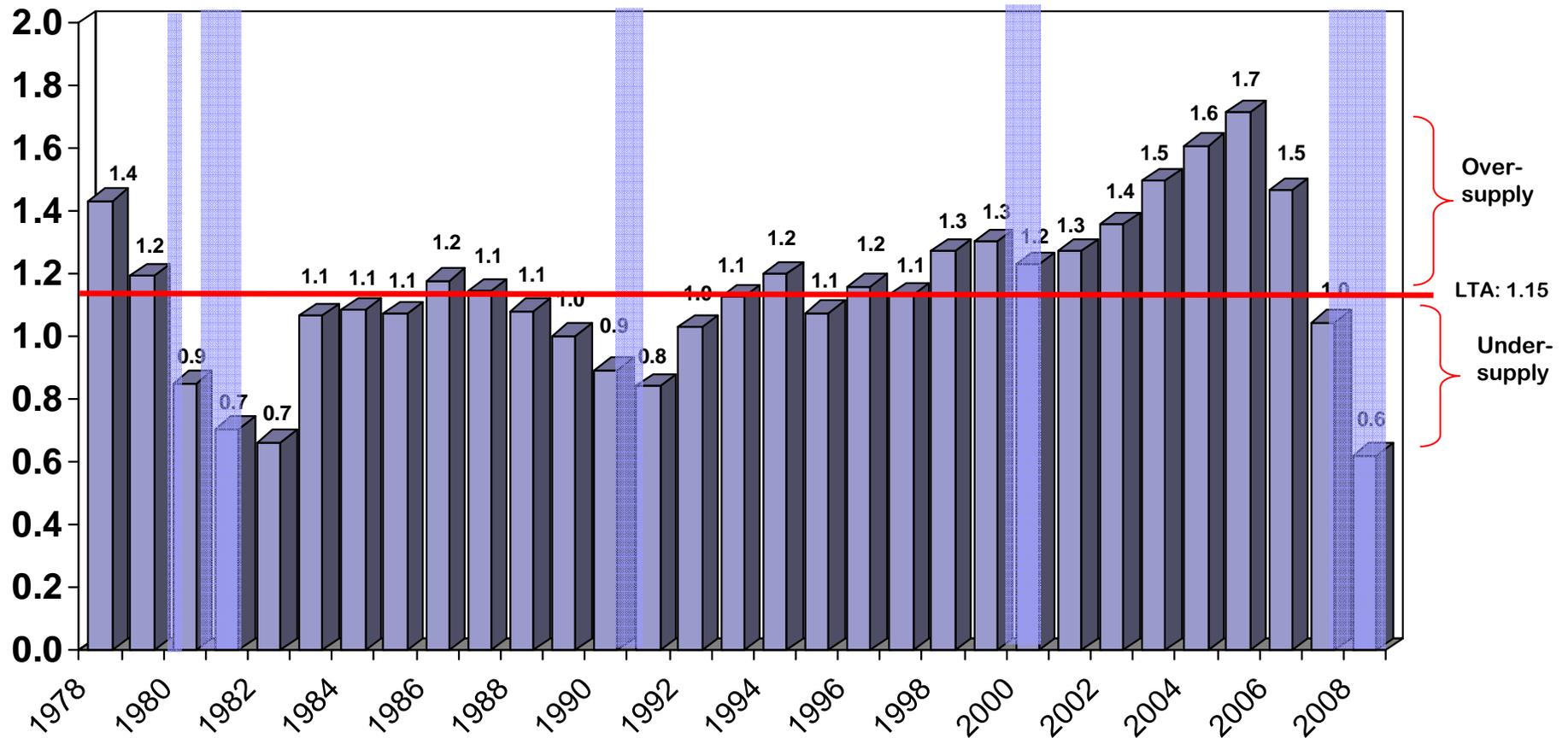


# U.S. Single-Family Starts 1978–2008<sup>1/</sup>

(Millions)

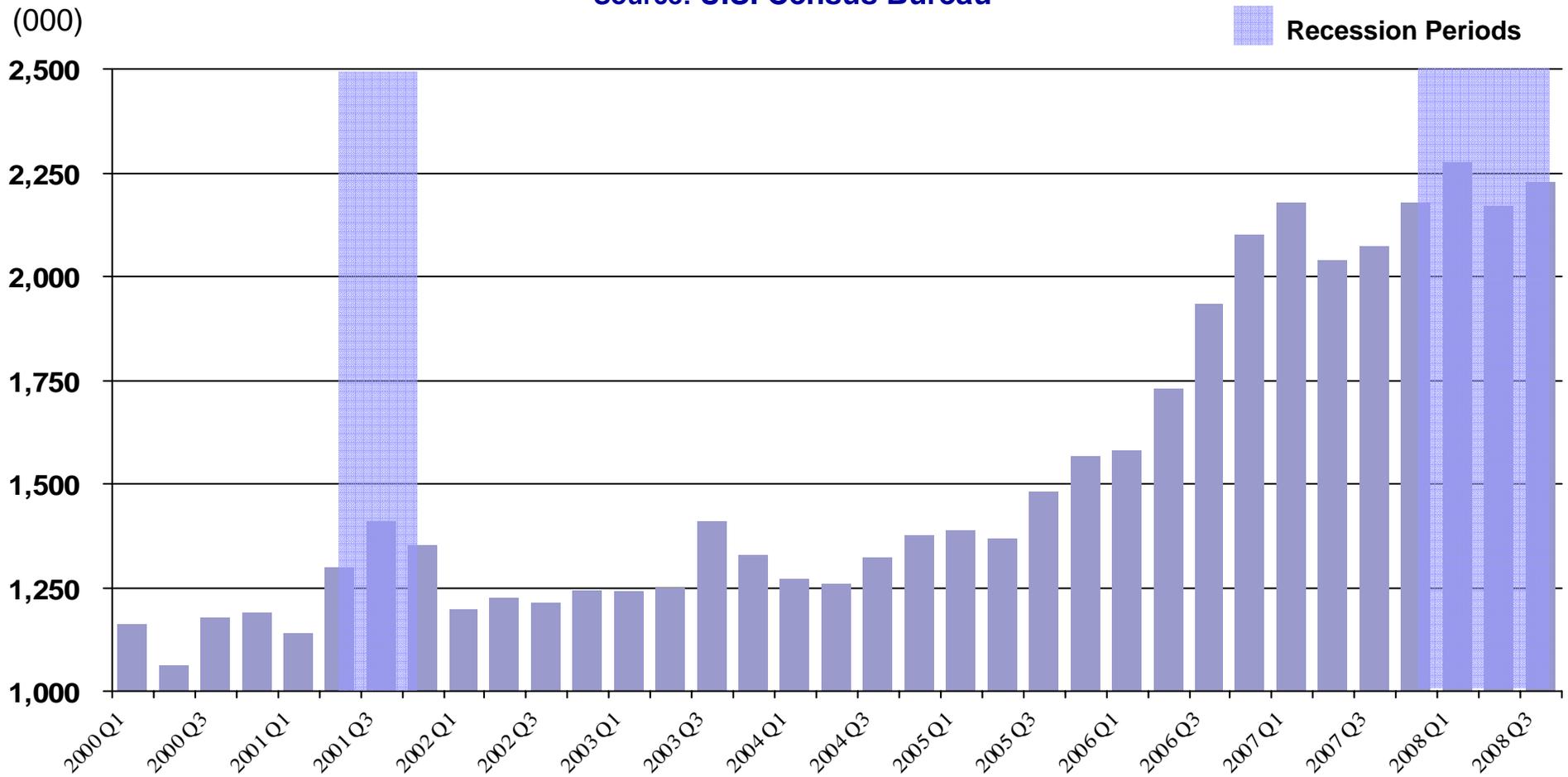
Source: Census Bureau

Recession Periods



# U.S. Number of Vacant Homes for Sale 2000 – 2008\*

Source: U.S. Census Bureau



• Data through 3rd Quarter 2008.

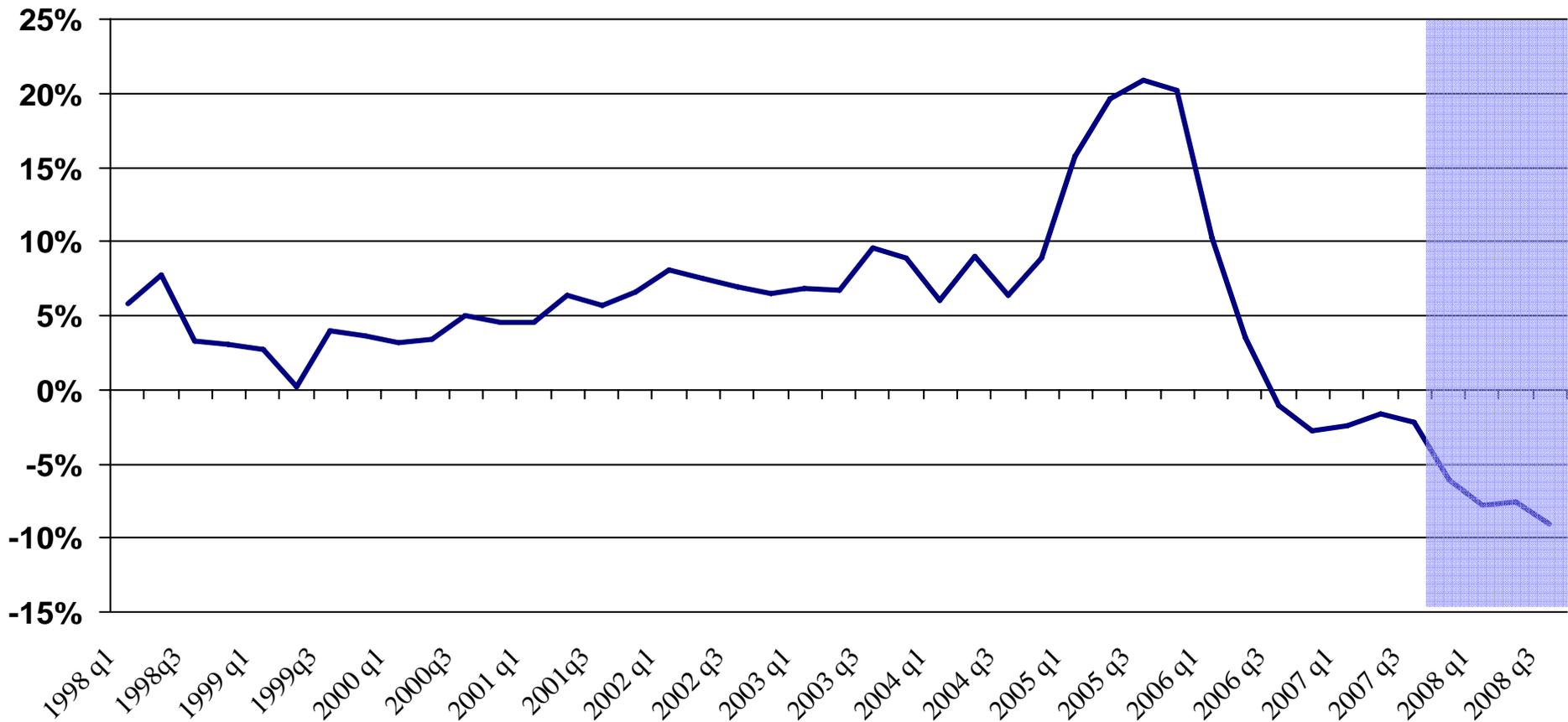


Elliott D. Pollack & Company

# Median Price of Resale Homes – U.S. Percent Change Year Ago 2003 – 2008\*

Source: National Association of Realtors

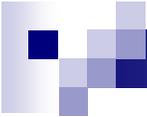
 Recession Periods



\*Data through third quarter 2008



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# It's Not Just Subprime

## 2008 Q1- Arizona

Source: Mortgage Bankers Association

Loan Type	AZ Share of Loans	AZ Share of Foreclosures
Prime Fixed	57.2%	14.2%
Prime ARM	19.8%	23.7%
Sub Fixed	4.9%	6.4%
Sub ARM	9.8%	52.6%
FHA	4.9%	2.2%
VA	2.3%	0.7%
Other	1.1%	0.3%
Total	100%	100%

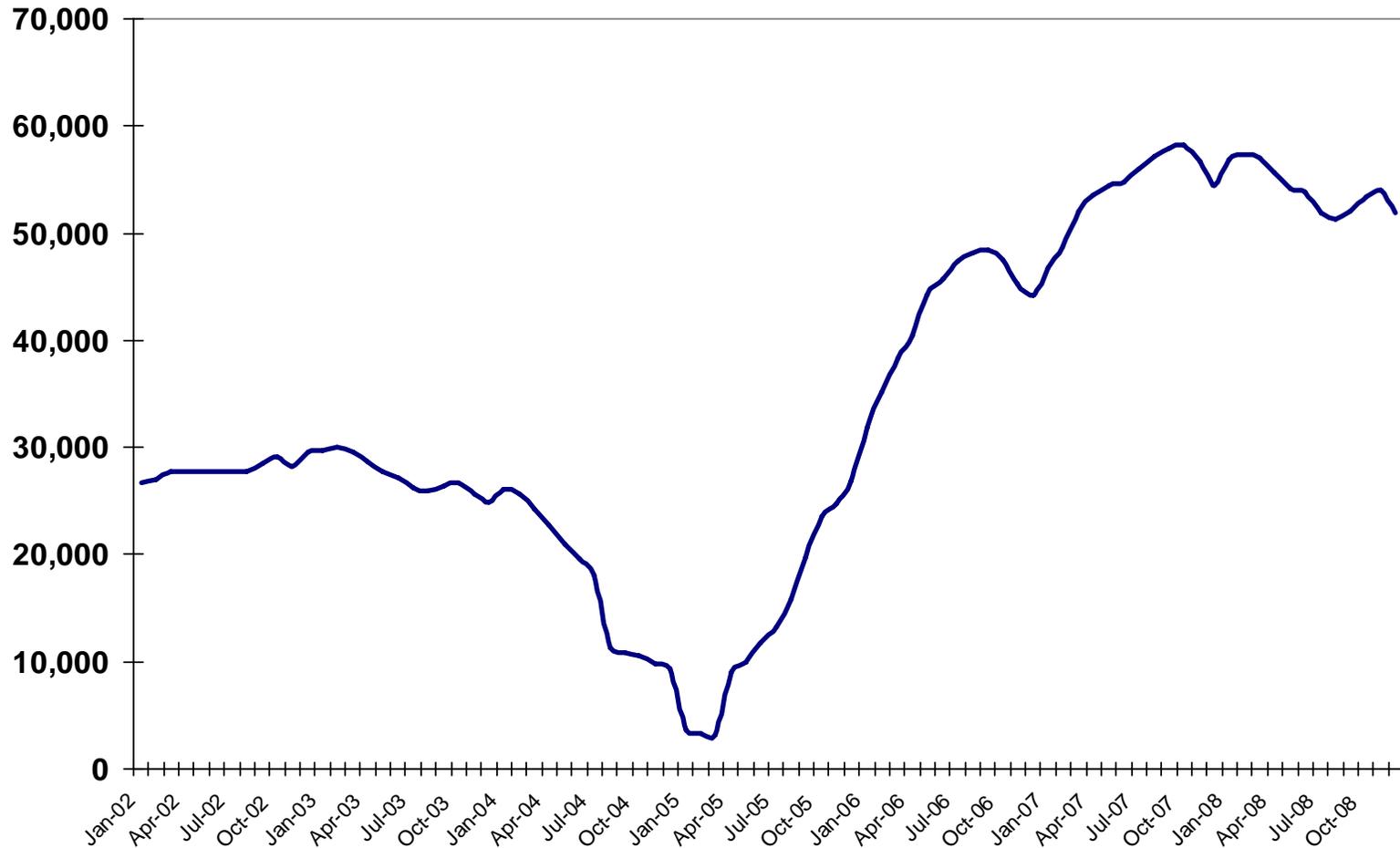


# SUPPLY V. DEMAND



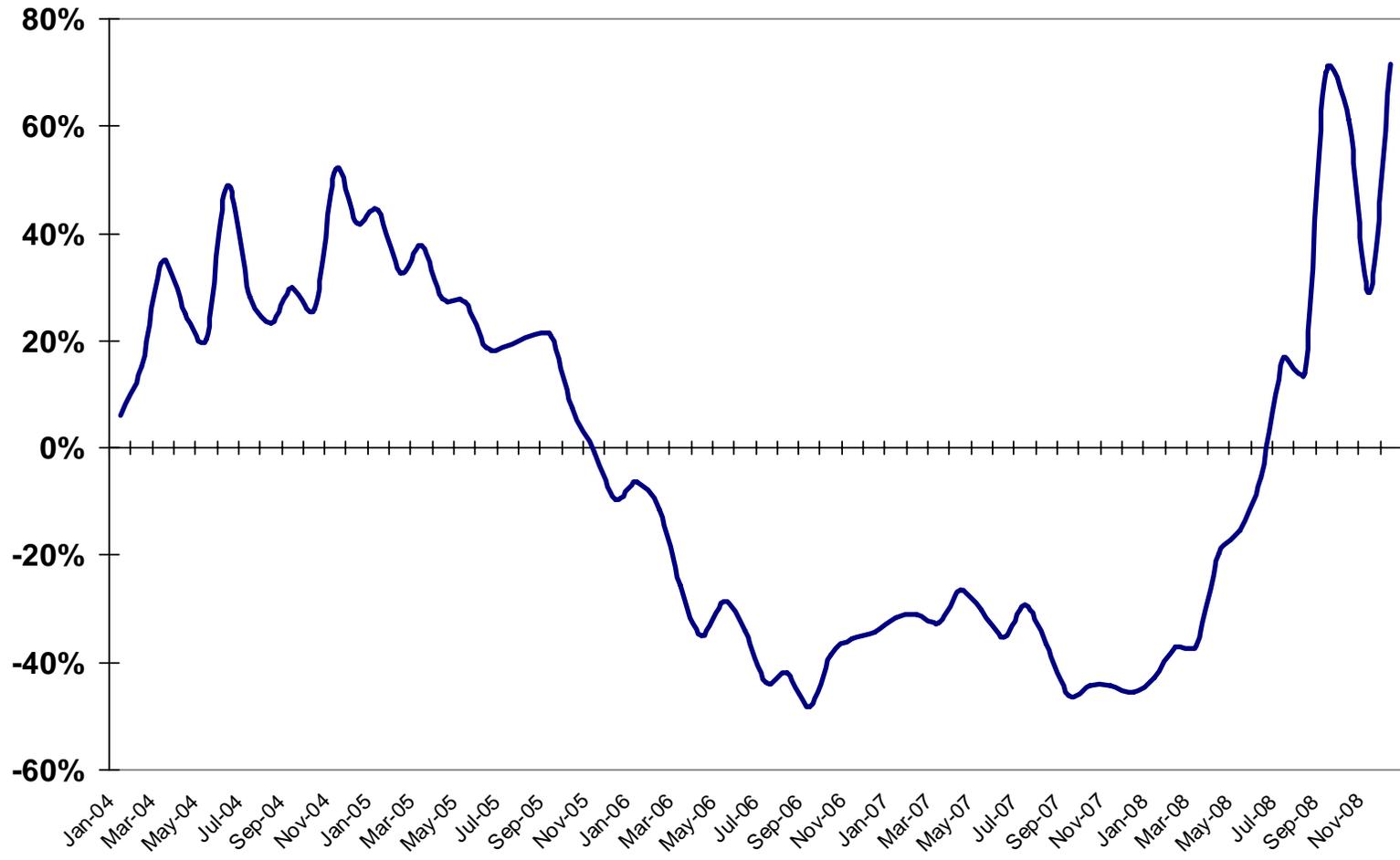
# Greater Phoenix Listings

January 2002 - December 2008  
Source: AMLS



# Greater Phoenix Resales Percent Change Year Ago January 2004 – December 2008

Source: R.L. Brown



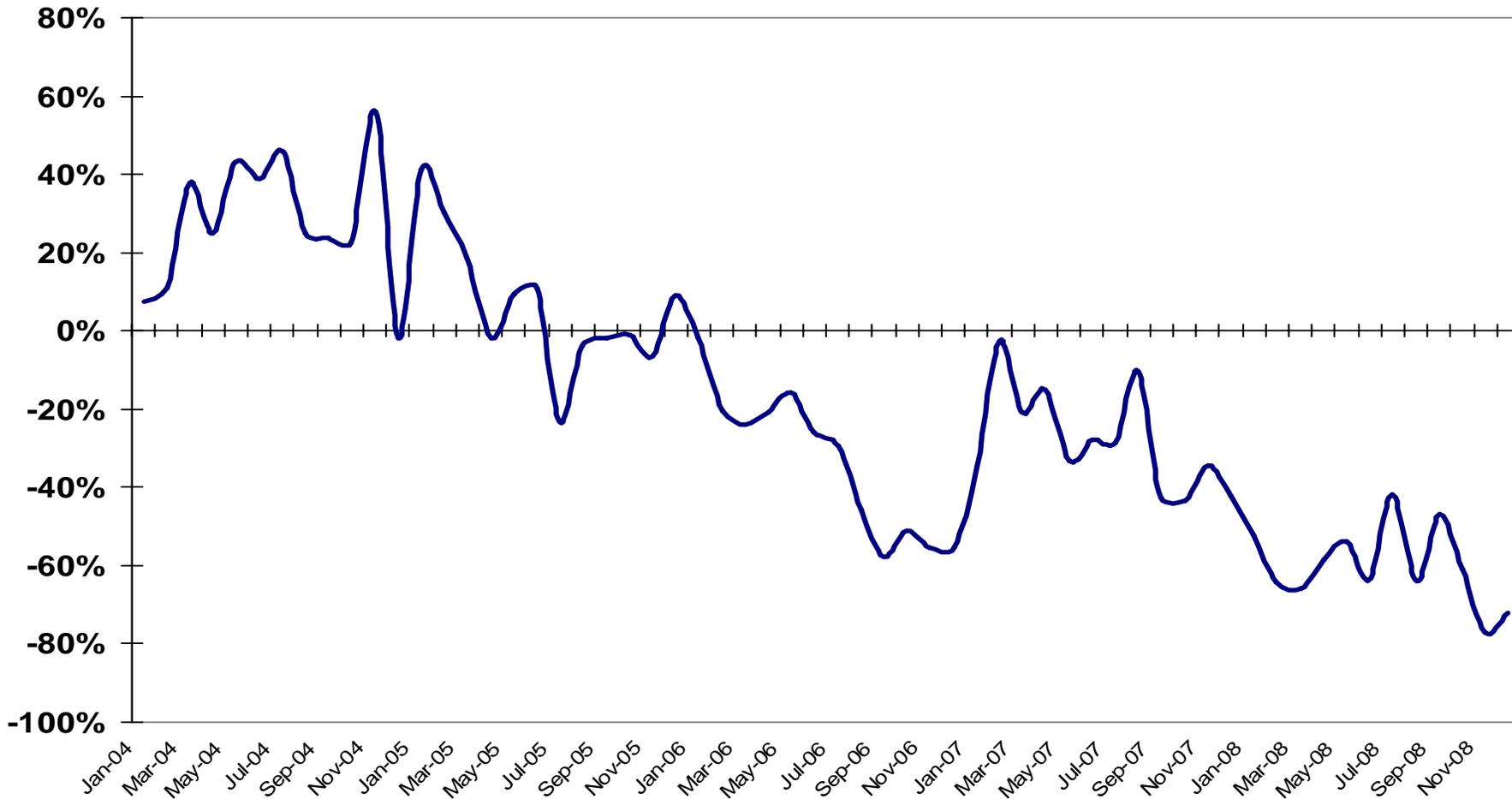
**During the September of 2008 in  
Greater Phoenix:  
- 49.7% of all resales  
were foreclosures.**

**Source: RL Brown**



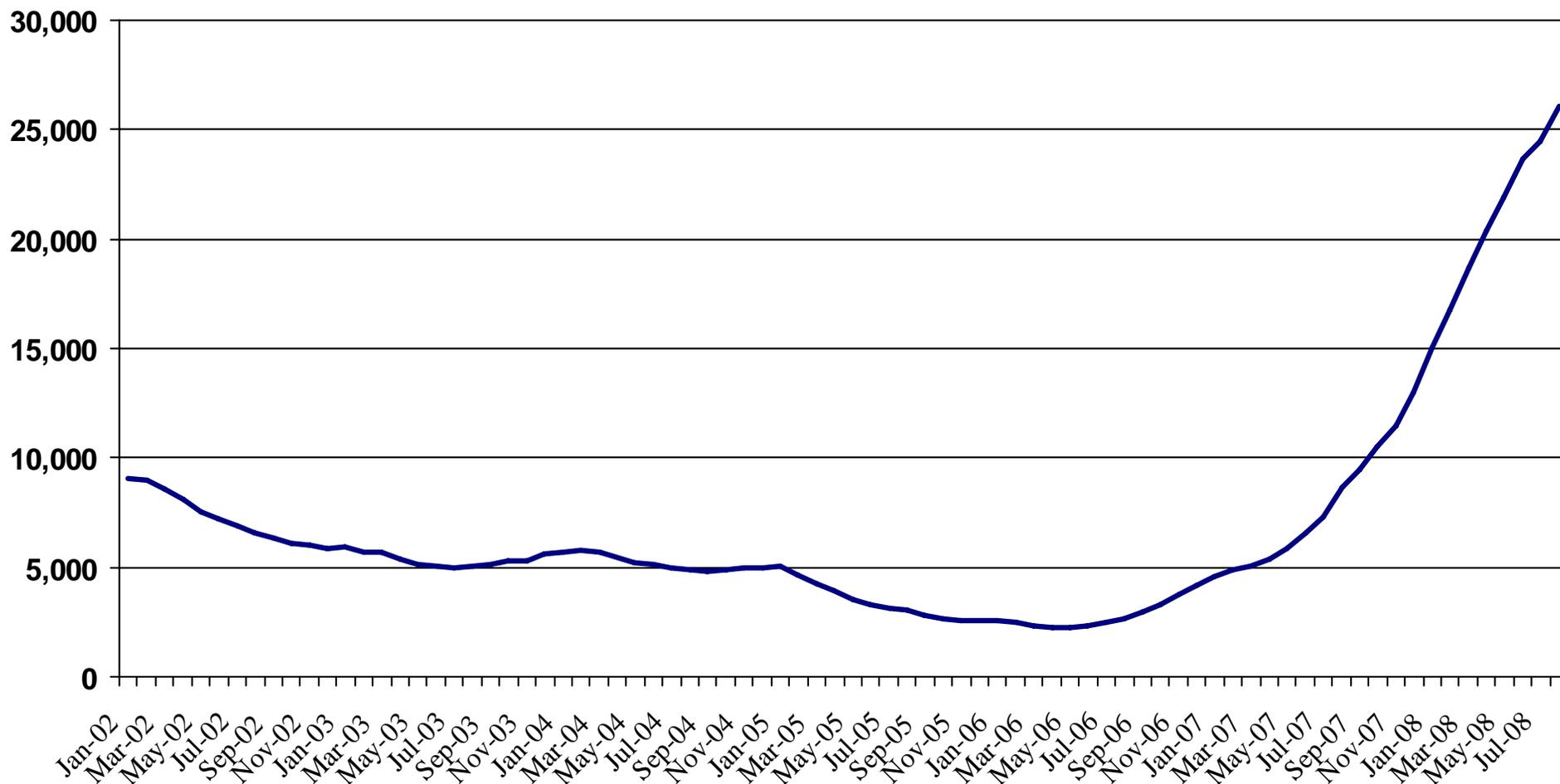
# Greater Phoenix Permits Percent Change Year Ago January 2004 - December 2008

Source: R.L. Brown



# Properties in the Foreclosure Process Maricopa County 2002 – 2008

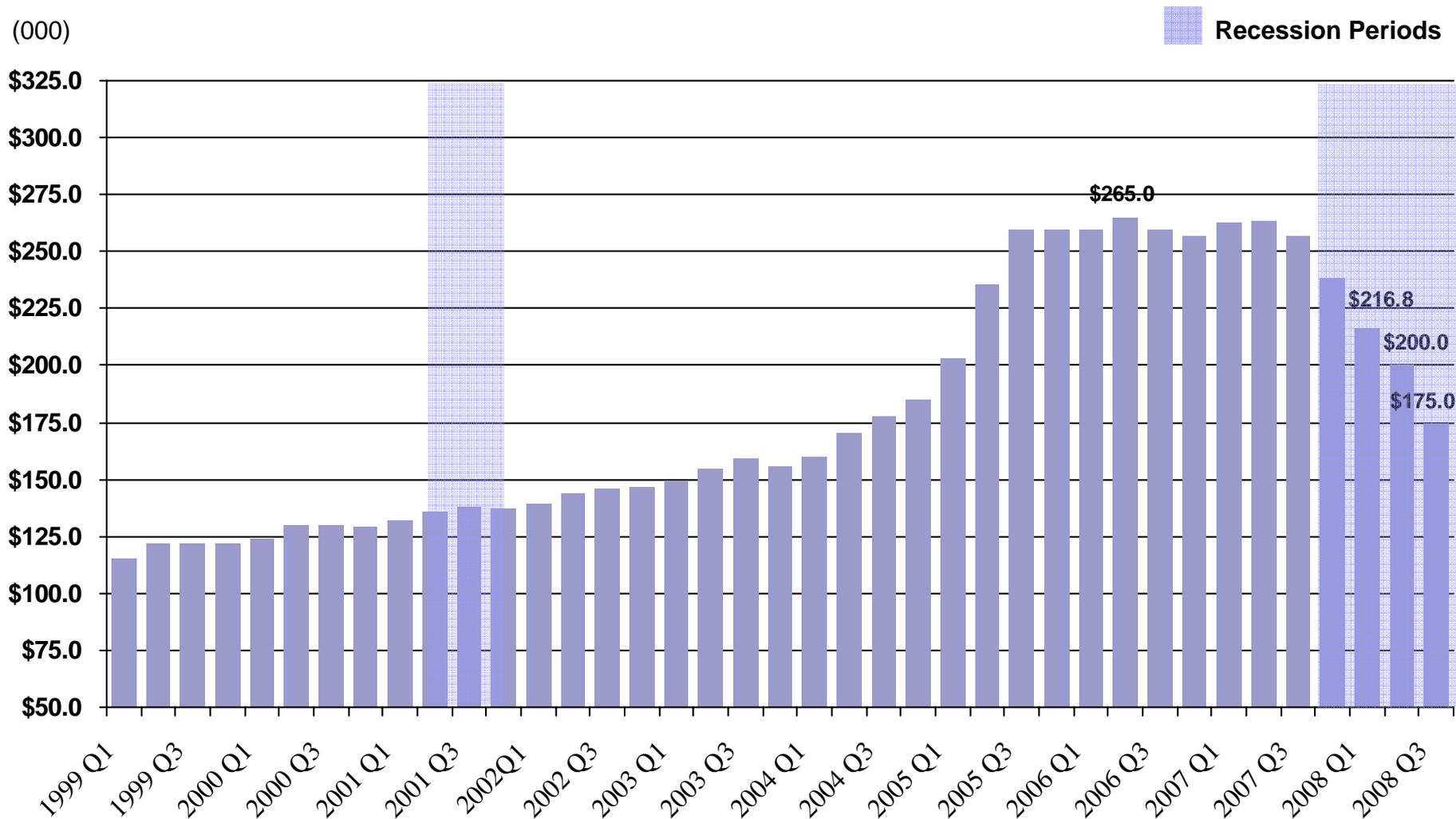
Source: The Information Market



# Greater Phoenix Median Price of Single Family Homes - Resale

## 1982 – 2008\*

Source: Realty Studies



\*Data through third quarter 2008



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

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





# Greater Phoenix Housing Demand

## Old Analysis

125,000 new residents each year

80% single family

2.5 persons / housing unit

= 40,000 single family units

## New Analysis

60,000 new residents each year

75% single family

2.7 persons / housing unit

= **16,600** single family units





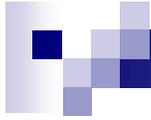
## Greater Phoenix Housing Demand

**16,600** single family units demanded

12,500 new housing units per year

= 4,100 eating into excess each year



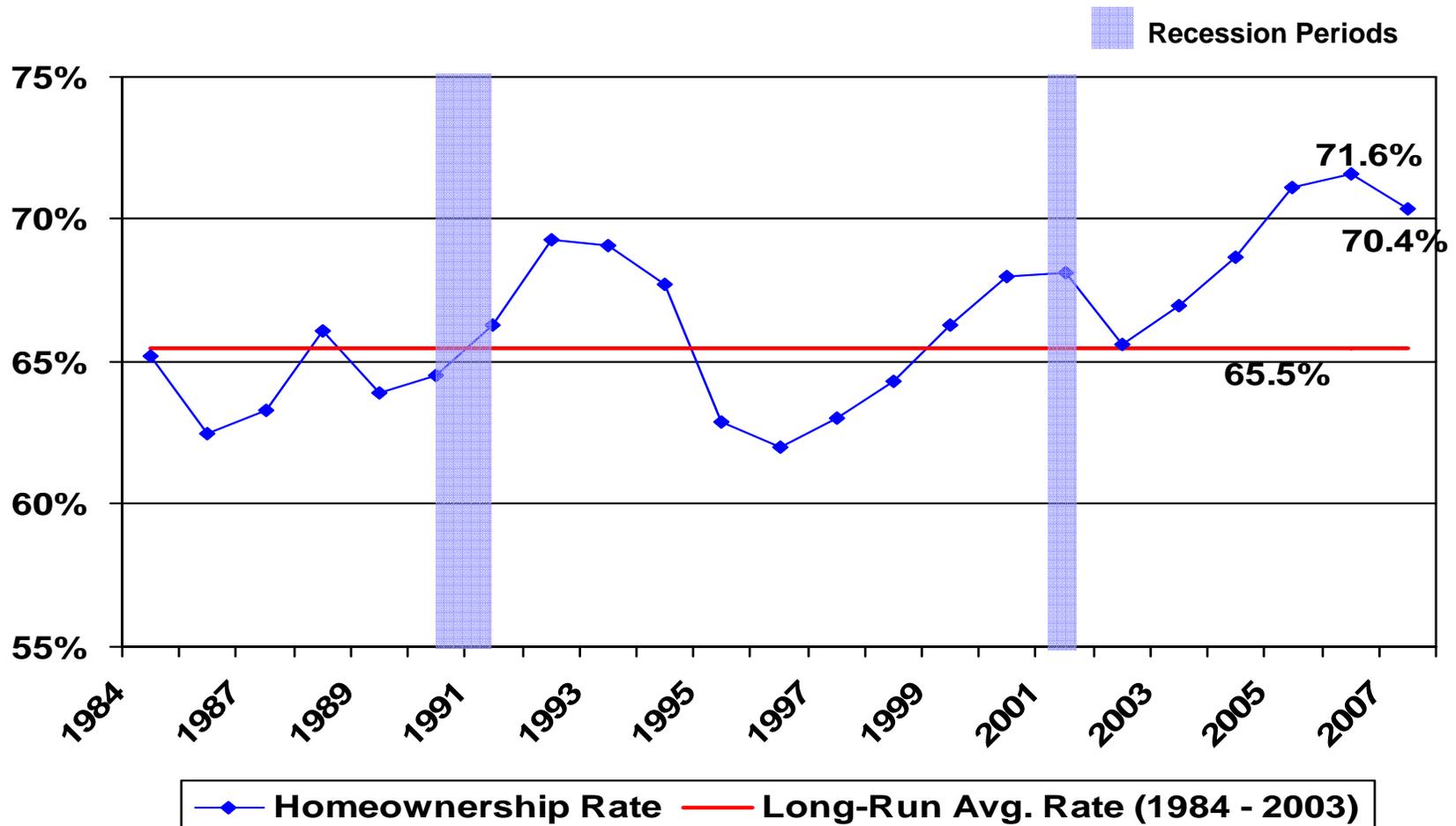


Homeownership rate  
went up during the  
housing bubble



# Arizona Homeownership Rates 1984 - 2007

Source: U.S. Census



# Greater Phoenix Housing Units

Source: ASU Realty Studies

<u>Year</u>	<u>Housing Units<sup>1/</sup></u>
-------------	-----------------------------------

<b>2007</b>	<b>1,517,500</b>
-------------	------------------

<b>1% =</b>	<b>15,175</b>
-------------	---------------

<b>2% =</b>	<b>30,350</b>
-------------	---------------

<b>3% =</b>	<b>45,525</b>
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<b>4% =</b>	<b>60,700</b>
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<b>5% =</b>	<b>75,875</b>
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**This suggests more foreclosures  
and more years of a weak market.**

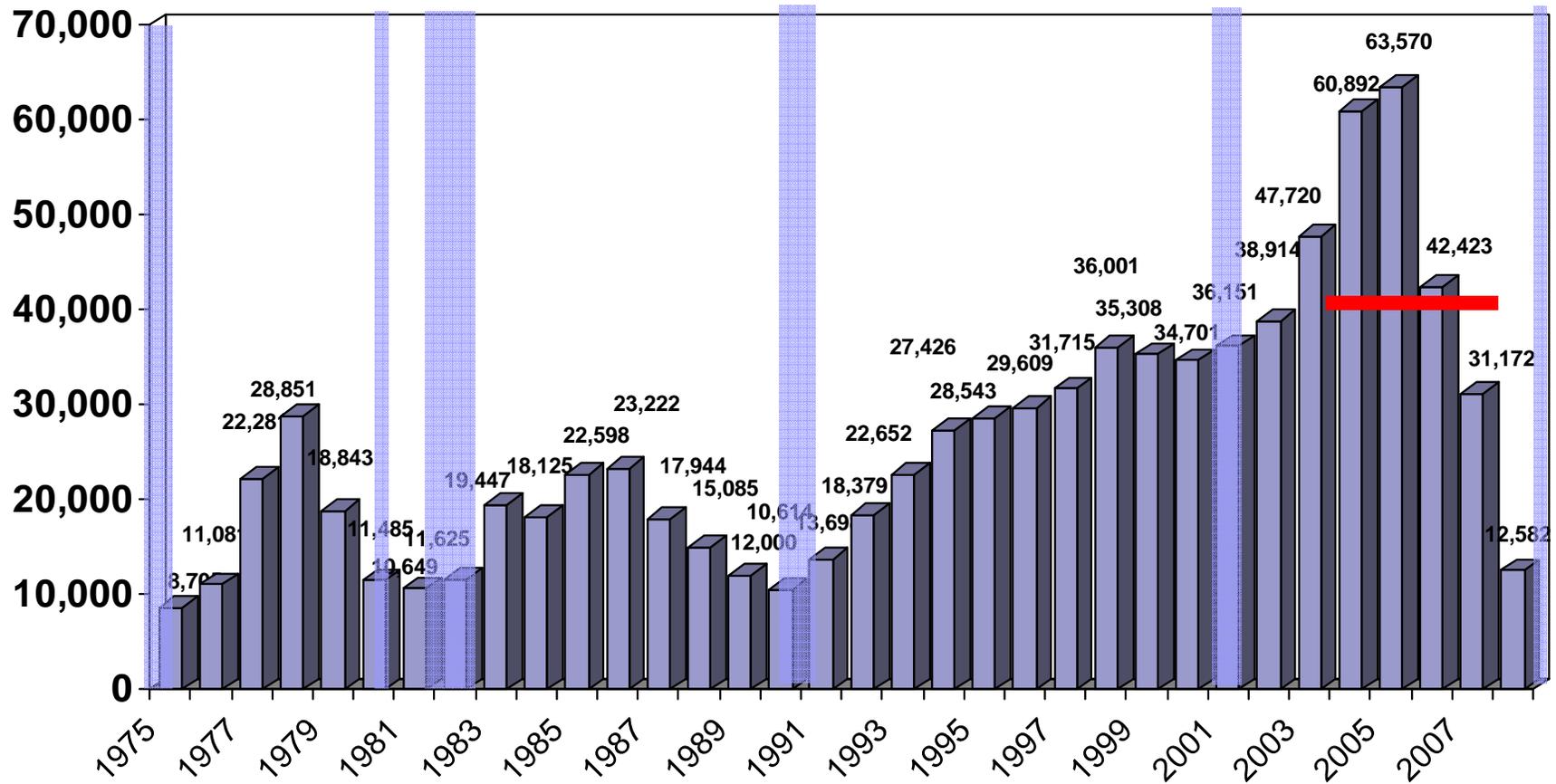


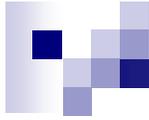
# Single-Family Permits Greater Phoenix 1975–2008

# Permits

Source: PMHS / RL Brown

Recession Periods





**—— Red line ——**  
**between 2003 and 2006 implies:**

- If “normal” demand is 40,000 units per year, then Greater Phoenix overbuilt **55,000** units.





If there are **45,000** to **55,000** excess units above “normal” and only eating into 4,500 units per year in 2008 and 2009...

... Then there will *still* be **35,000 – 45,000** excess units to absorb.

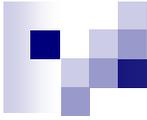


# 2012? Assuming another shoe doesn't drop!



(We will grow from 8,000 permits back to a normal 35,000 permits)





**How  
will it  
turn out?**



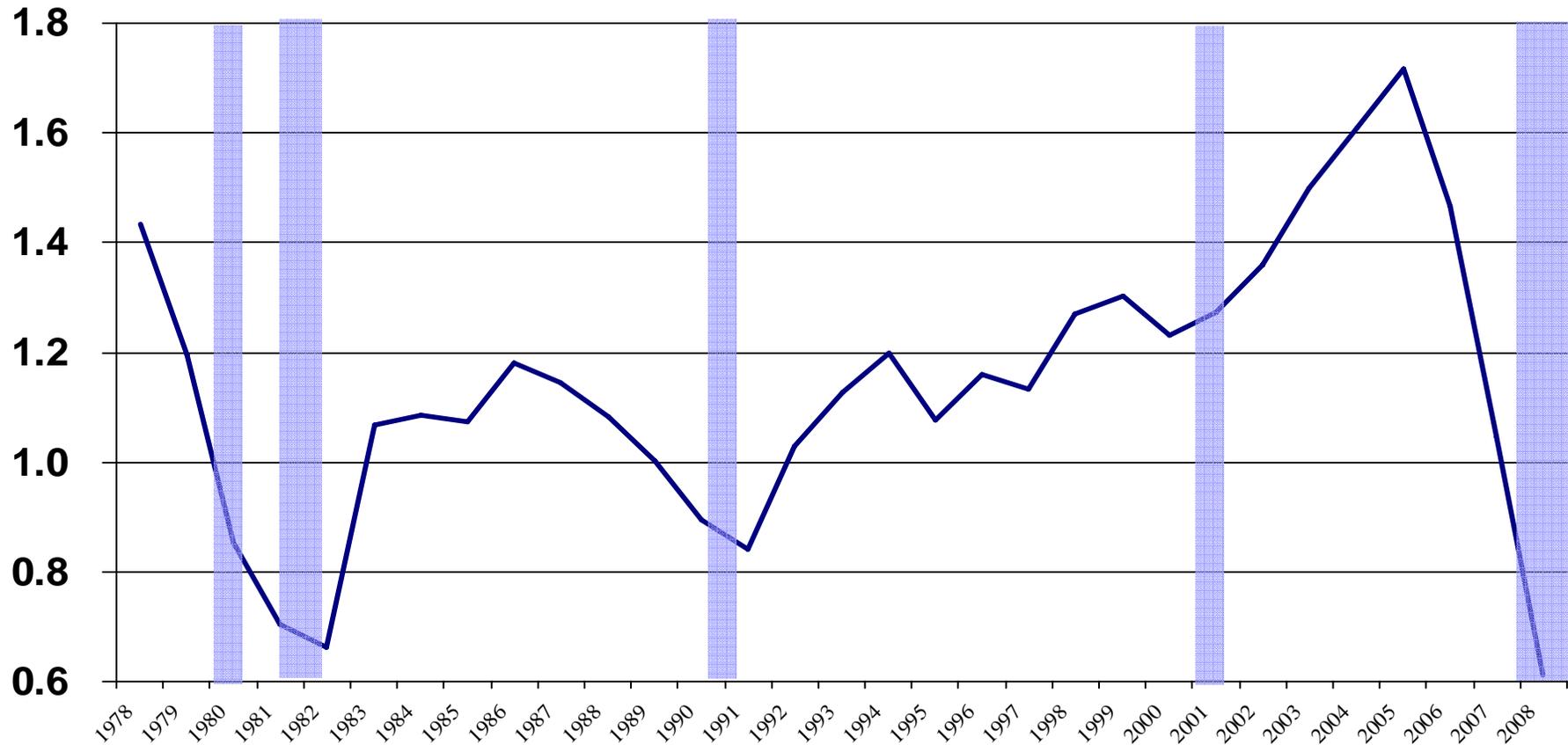
# U.S. Single Family Housing Rebound: Can It Start After 2009?

## Total Housing Starts

Source: US Census Bureau

(millions)

Recession Periods



\*Data through October 2008



Elliott D. Pollack & Company



**Look for a:**

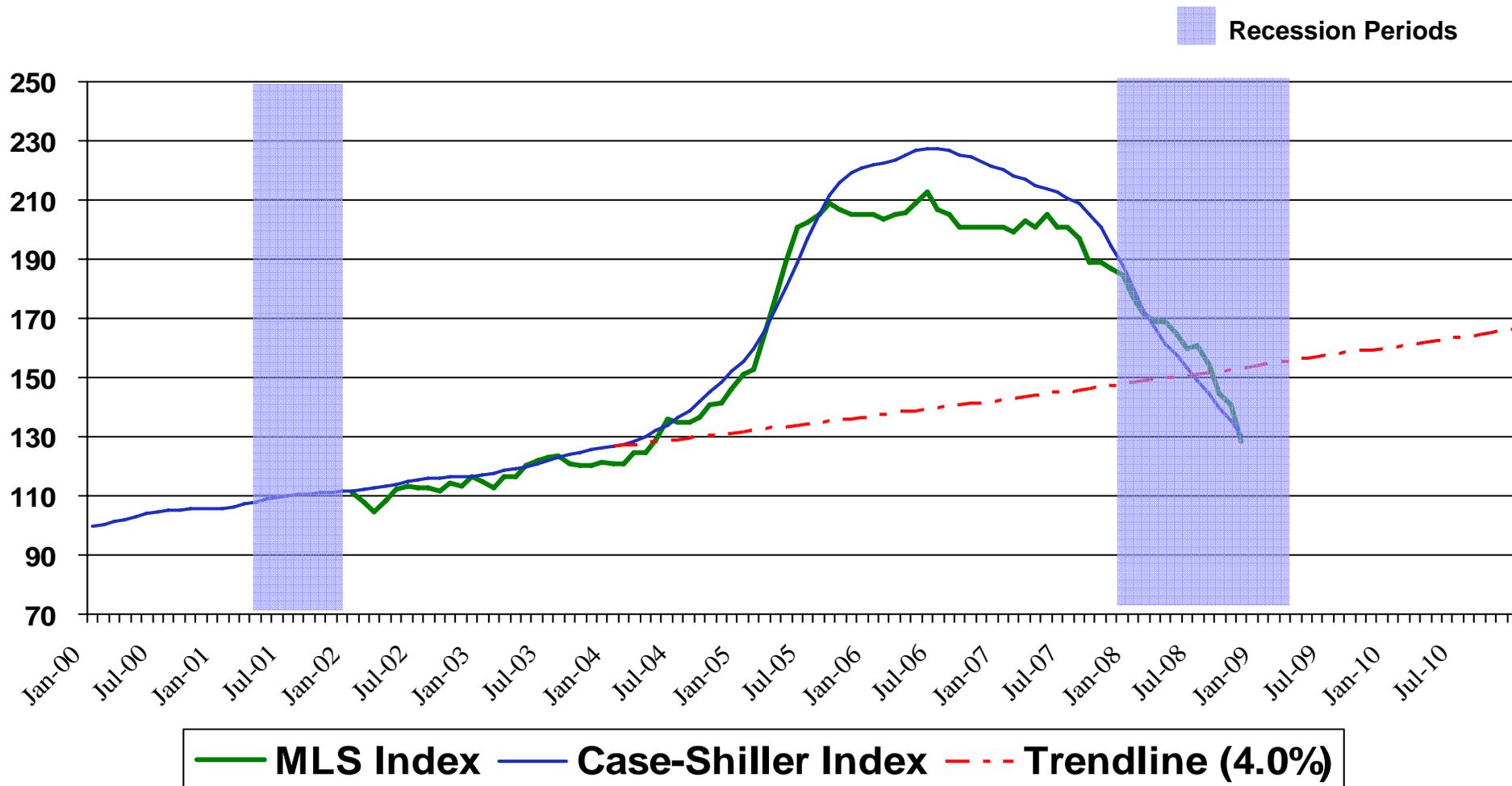


**Not a:**



# Home Prices Indices 2000 – 2010

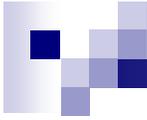
Source: Macro Markets, LLC; AMLS





**The bottom of the housing market  
may occur in 2009,  
but a full recovery  
will probably take **multiple** years.**





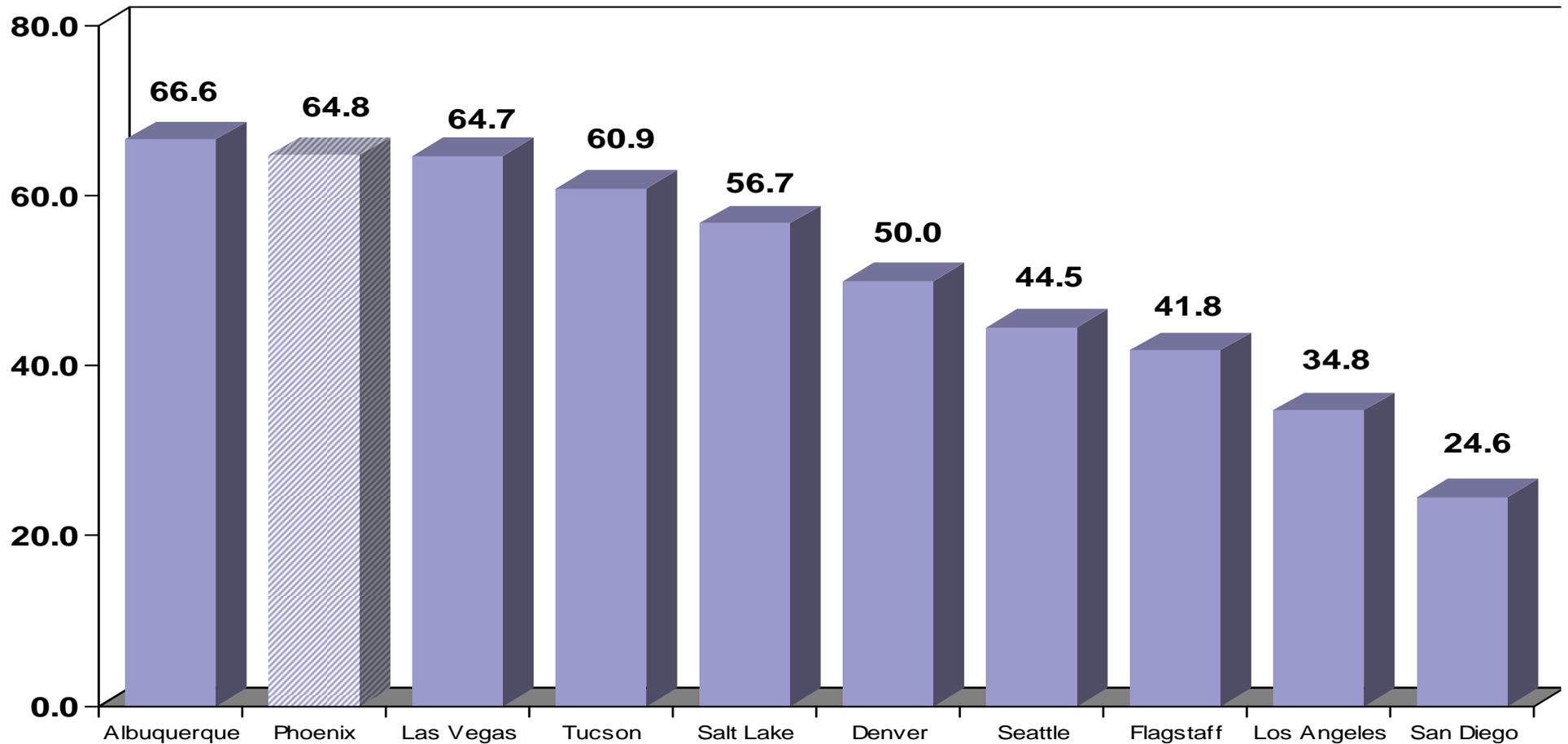
**Any positives?**



# Housing Affordability Index

## 2000 q3

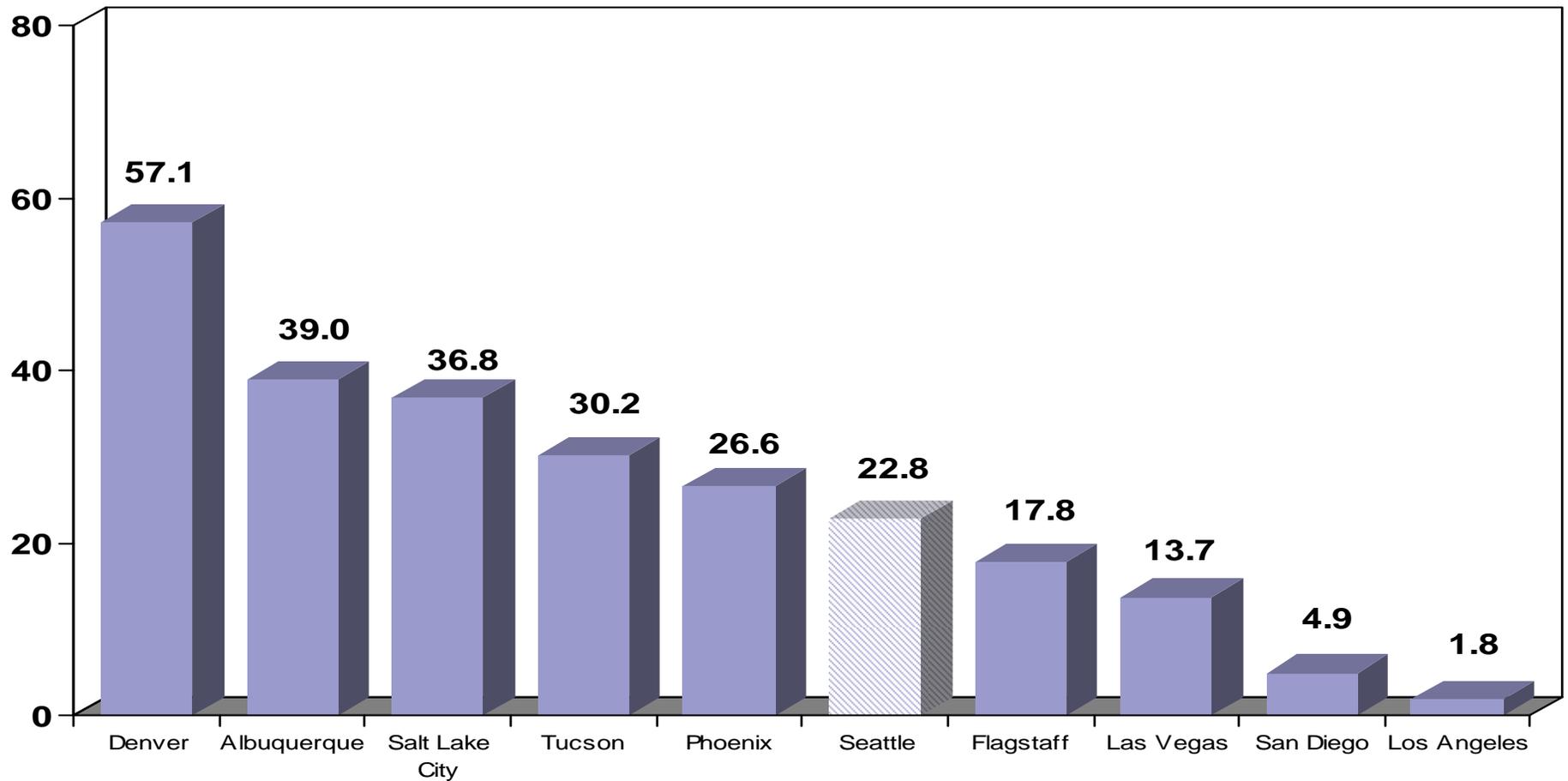
Source: NAHB



# Housing Affordability Index

## 2006 q3

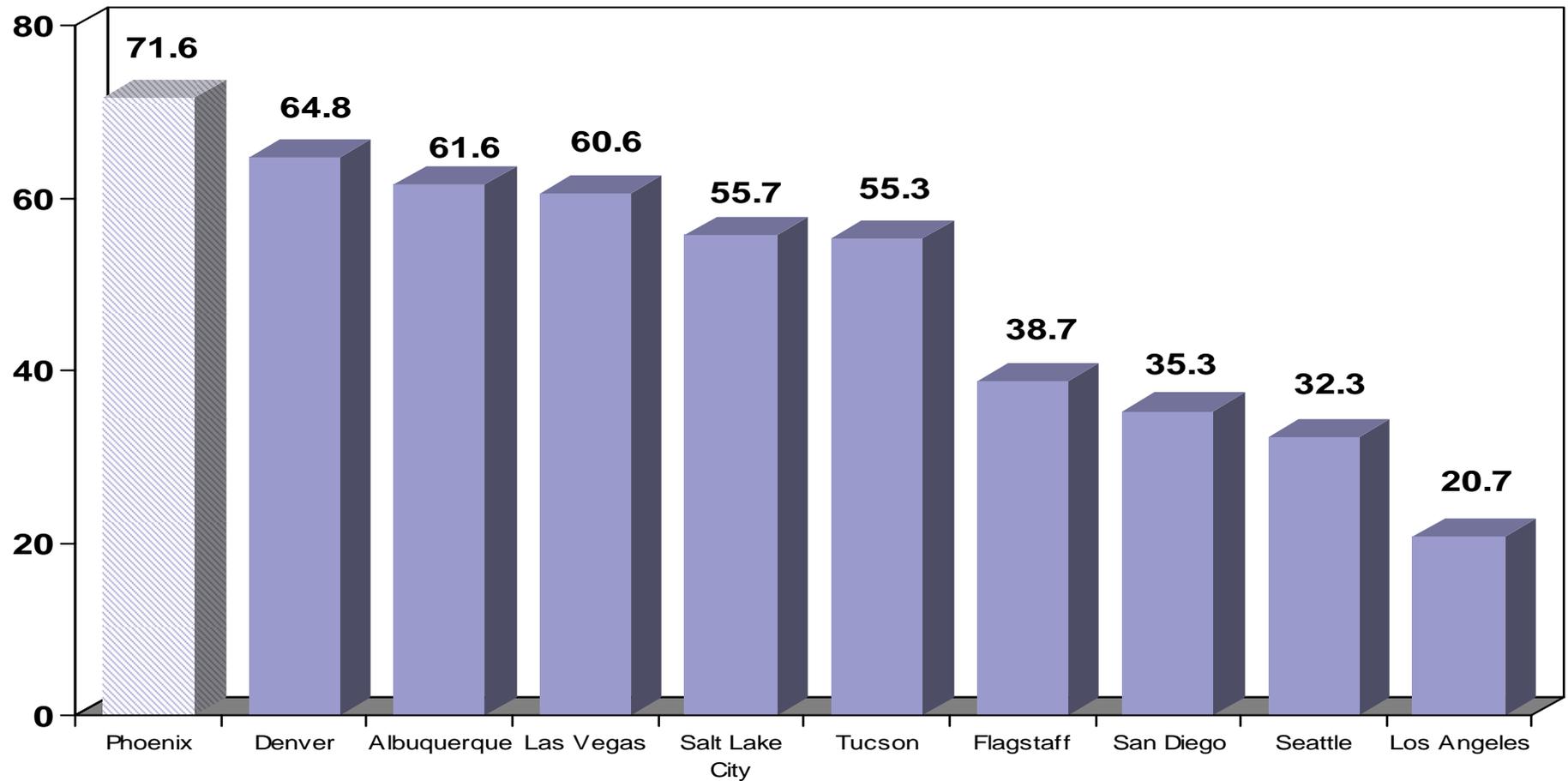
Source: NAHB



# Housing Affordability Index

## 2008 q3

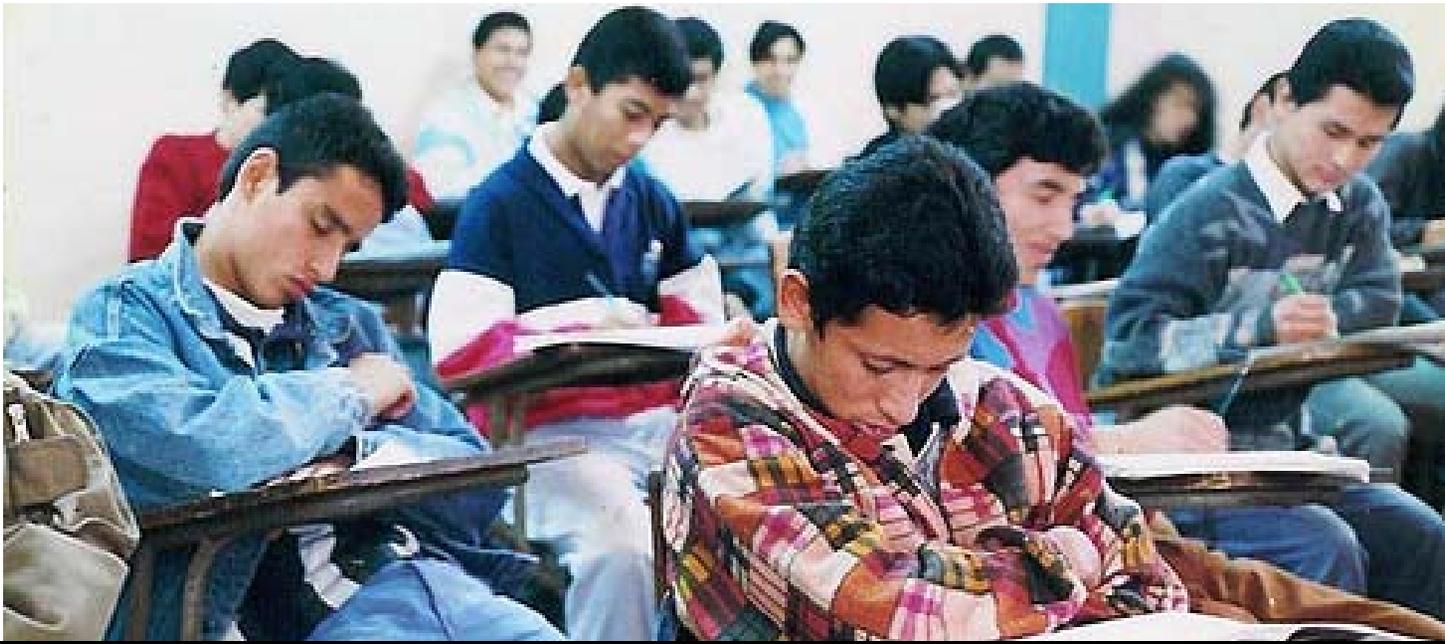
Source: NAHB



# Commercial Real Estate



**People are still not paying attention.**



**Commercial Real Estate Mortgage Seminar - 2007**

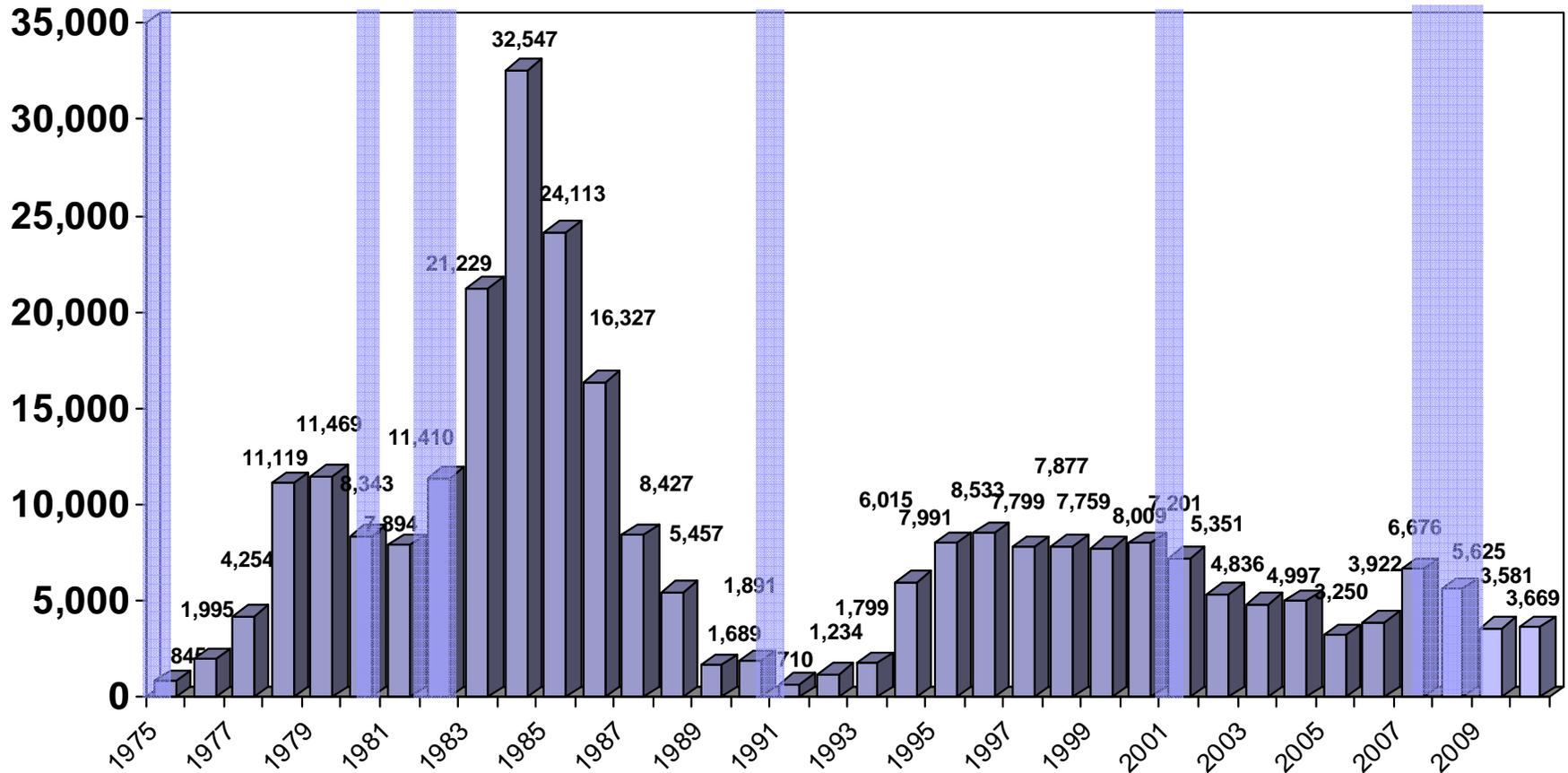


# Multi-Family Permits Greater Phoenix 1975–2010\*

# Permits

Source: ASU Realty Studies

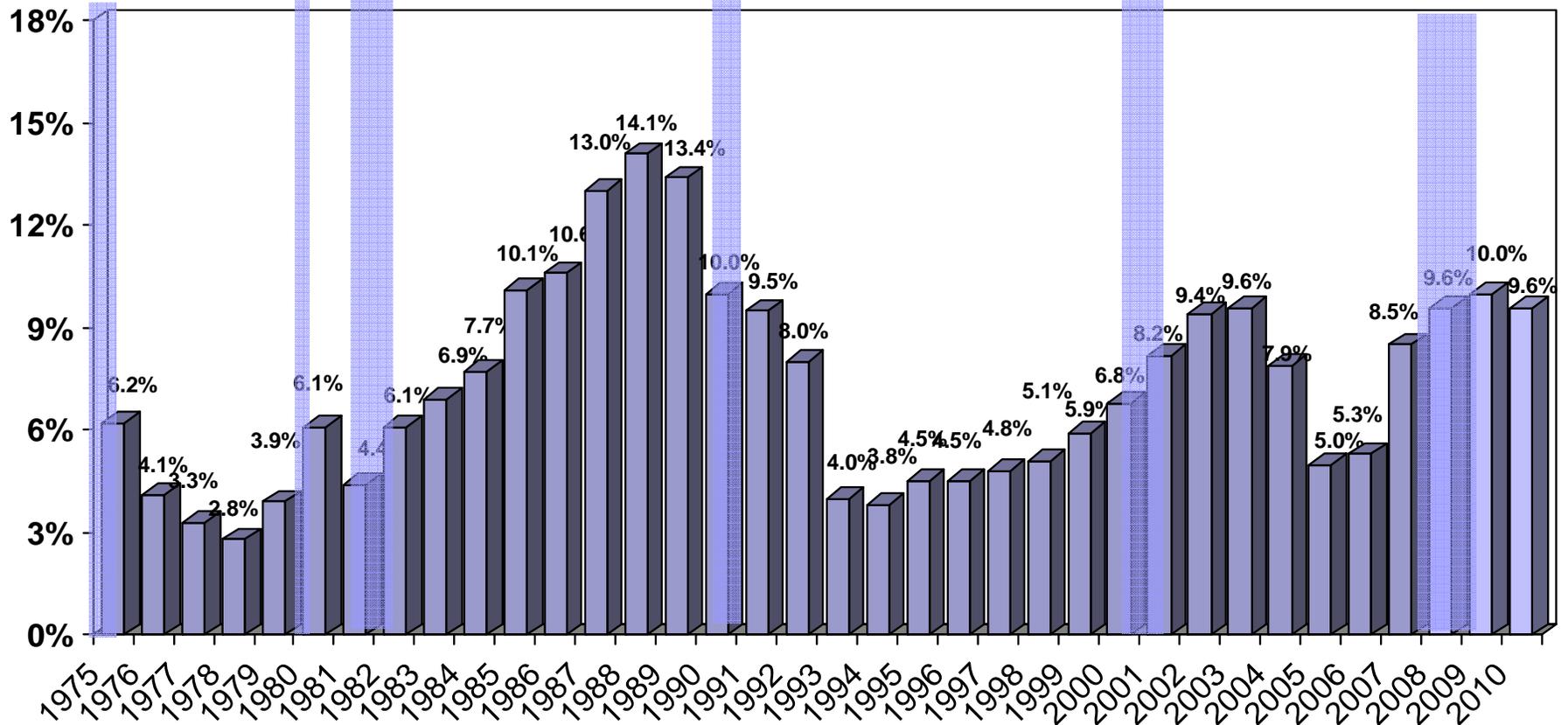
Recession Periods



# Multi-Family Year-End Vacancy Rates Maricopa County 1986–2009\*

Source: ASU Realty Studies

Recession Periods



\*2008 -2009 are forecasts from CB Richard Ellis





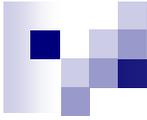
# Multi-Family Construction Activity

Source: PMHS

	<u>Absorption</u>	<u>Chg in Inventory*</u>
<b>2003</b>	<b>3,702</b>	<b>4,852</b>
<b>2004</b>	<b>9,230</b>	<b>3,980</b>
<b>2005</b>	<b>4,756</b>	<b>(5,169)</b>
<b>2006</b>	<b>(4,653)</b>	<b>(3,828)</b>
<b>2007</b>	<b>(5,846)</b>	<b>4,979</b>
<b>2008q3</b>	<b>4,115</b>	<b>2,490</b>

\*There were 19,949 condo conversion in the Greater Phoenix area from q1 2005 through q3 2008.





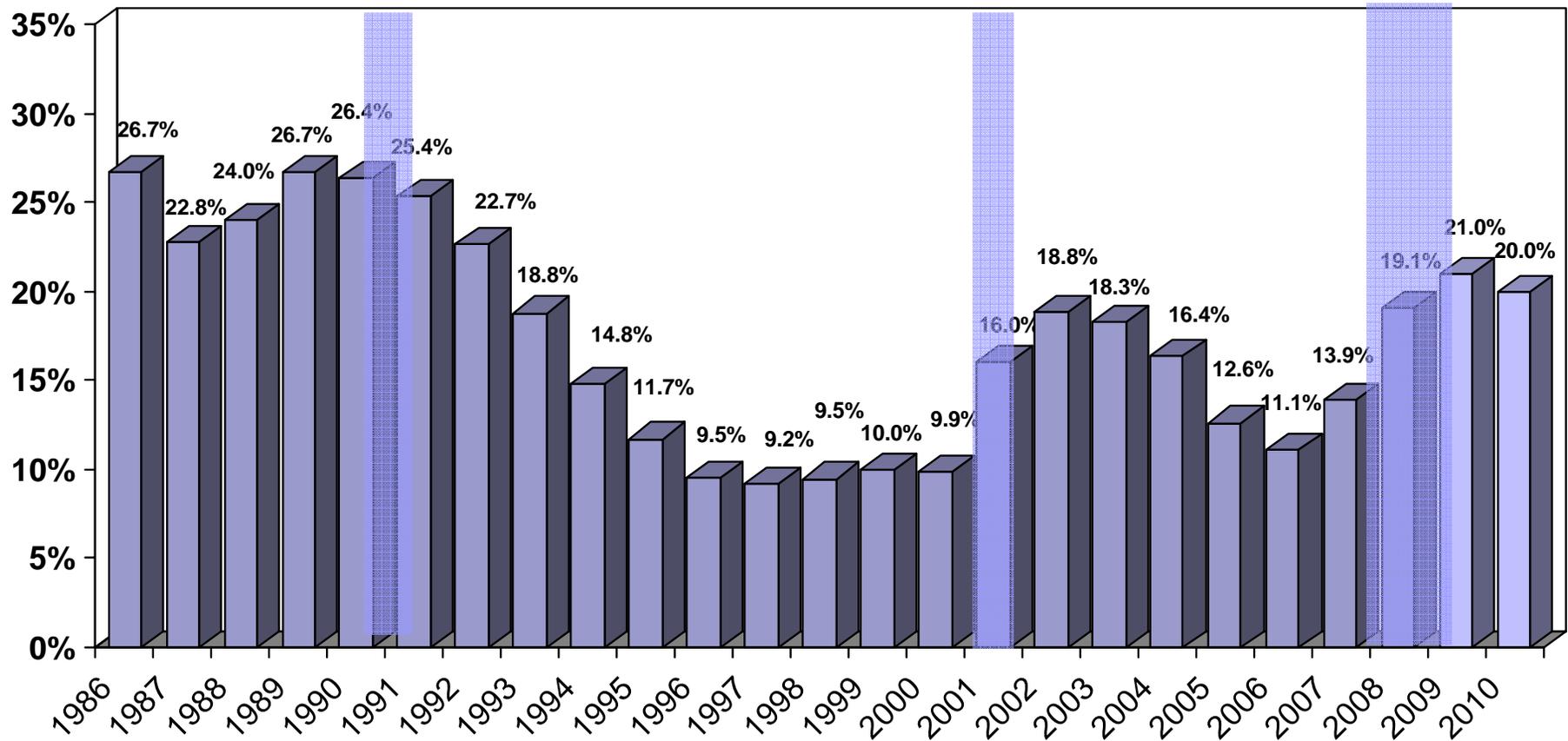
**There are currently  
9,802 multi-family units under  
construction (q3 08).**

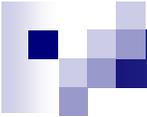


# Office Space Year-End Vacancy Rates Maricopa County 1986–2010\*

Source: CB Richard Ellis

 Recession Periods





## Greater Phoenix Office Market Construction Activity\*

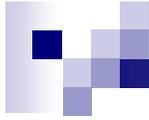
Source: CB Richard Ellis

	<u>Absorption</u>	<u>Chg in Inventory</u>
<b>2002</b>	<b>707,037 sf</b>	<b>2,305,591 sf</b>
<b>2003</b>	<b>1,245,156 sf</b>	<b>326,117 sf</b>
<b>2004</b>	<b>2,222,880 sf</b>	<b>1,620,860 sf</b>
<b>2005</b>	<b>3,119,293 sf</b>	<b>7,987 sf**</b>
<b>2006</b>	<b>3,245,888 sf</b>	<b>2,320,302 sf</b>
<b>2007</b>	<b>1,500,704 sf</b>	<b>4,905,374 sf</b>
<b>2008</b>	<b>(603,112) sf</b>	<b>3,402,646 sf</b>

\*Only includes multi-tenant space greater than 10,000 SF

\*\* A number of buildings in downtown and mid-town are being converted to office condos.



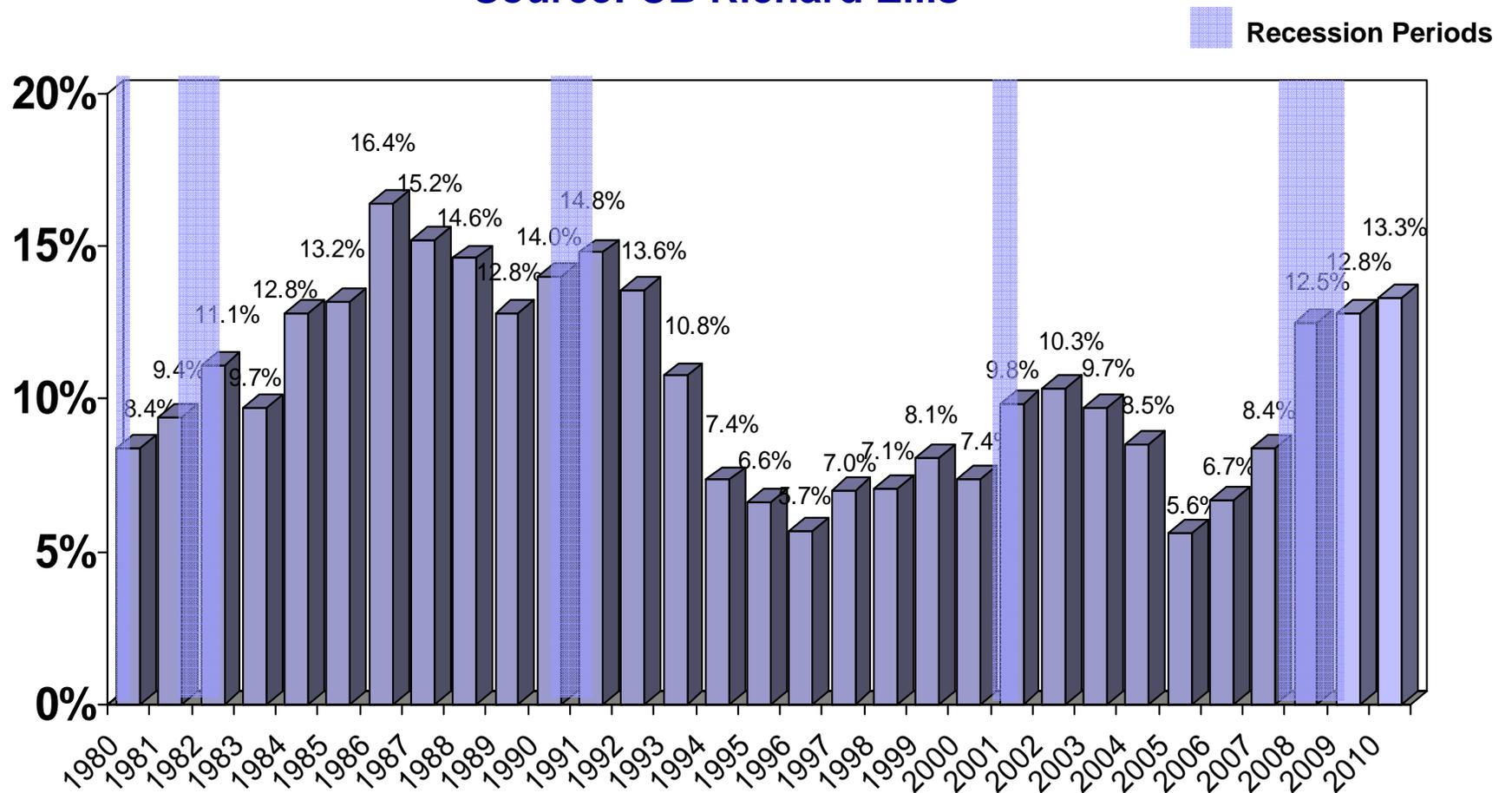


**There are currently  
3.1 million square feet of office  
space under construction (q4 08).**



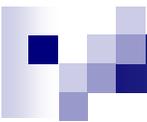
# Industrial Space Vacancy Rates Maricopa County 1980 – 2010\*

Source: CB Richard Ellis



\* 2009 - 2010 are forecasts from CBRE





# Greater Phoenix Industrial Market Construction Activity

Source: CB Richard Ellis

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	<u>Absorption</u>	<u>Chg in Inventory</u>
2002	3,364,998 sf	5,650,277 sf
2003	4,406,646 sf	4,801,910 sf
2004	6,273,847 sf	7,402,396 sf
2005	12,339,591 sf	7,071,477 sf
2006	6,032,175 sf	7,829,959 sf
2007	8,359,835 sf	13,914,612 sf
2008	2,297,084 sf	13,467,215 sf





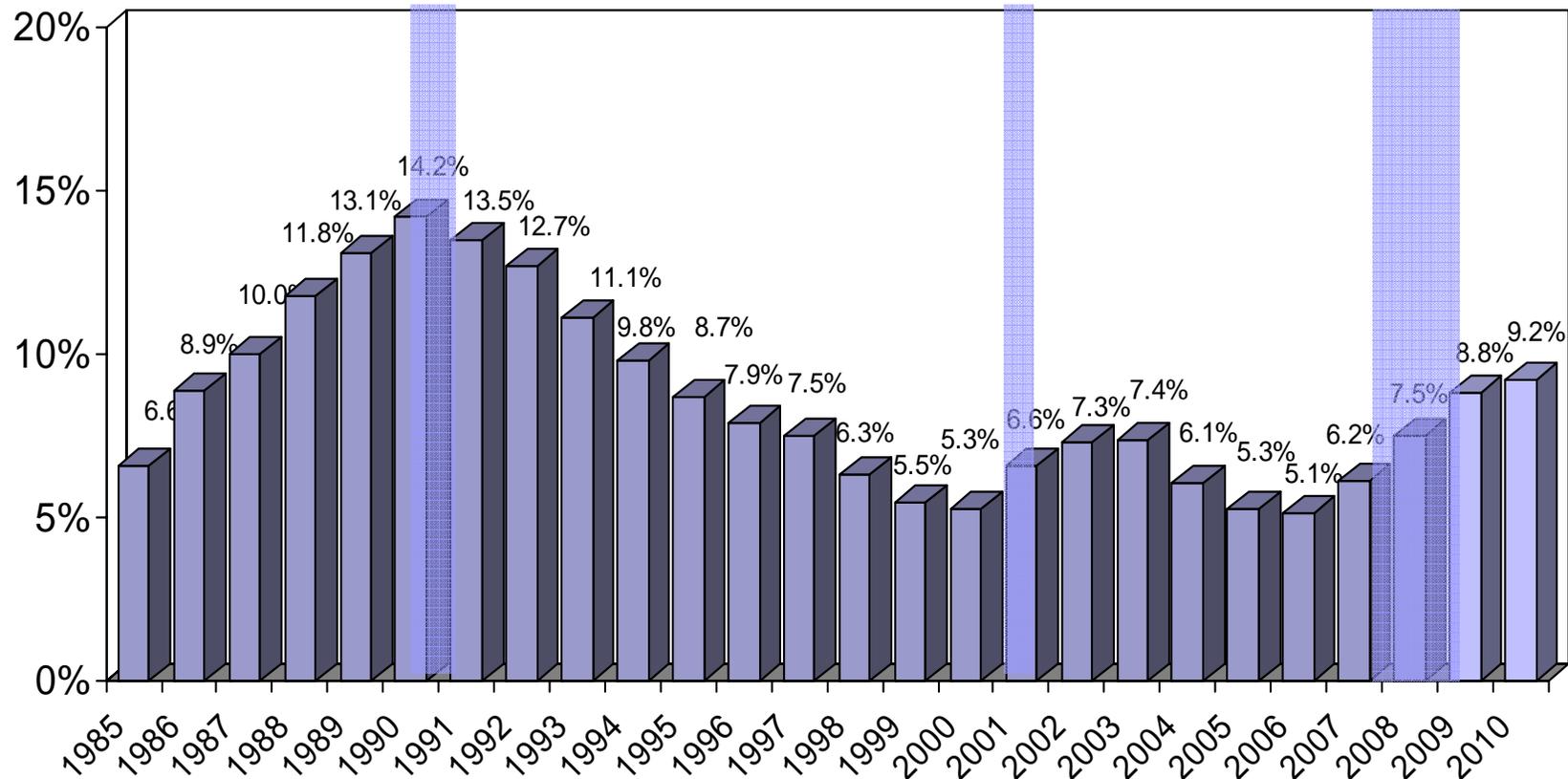
**There are currently  
3.8 million square feet of  
industrial space  
under construction (q4 08).**



# Retail Space\* Vacancy Rates Maricopa County 1985–2010\*

Source: CB Richard Ellis\*\*

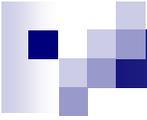
 Recession Periods



\* 2009 -2010 are forecasts from CB Richard Ellis

\*\* Data prior to 1992 is from Grubb & Ellis





# Greater Phoenix Retail Market Construction Activity

Source: CB Richard Ellis

	<u>Absorption</u>	<u>Chg in Inventory</u>
2002	3,041,142 sf	3,887,567 sf
2003	4,118,612 sf	5,013,109 sf
2004	6,664,812 sf	5,501,706 sf
2005	6,708,155 sf	6,248,789 sf
2006	5,244,600 sf	4,582,618 sf
2007	9,424,362 sf	11,104,865 sf
2008	3,395,986 sf	6,229,205 sf





**There are currently  
6.0 million square feet of  
retail space  
under construction (q4 08).**



# Maricopa County Outlook 2009 - 2010

I HAVE SEEN THE END...



NO ONE WAS SPARED!!!



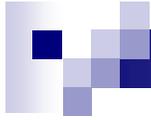
# Maricopa County Forecast FY 2009 – FY 2010

<u>Indicator</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
Population	3.0%	2.5%	1.8%	2.0%
Employment	3.1%	-0.3%	-2.8%	1.5%
Retail Sales	3.5%	-6.0%	-10.0%	-4.0%
Building Permits	-24.5%	-33.5%	-20.0%	0.0%

Source: *Elliott D. Pollack & Company*, Pessimistic Scenario



*Elliott D. Pollack & Company*



**There is no**  
**QUICK**  
**fix!**





**Things are bad now, and it will  
be **bad** for  
several more quarters.**

**But...**

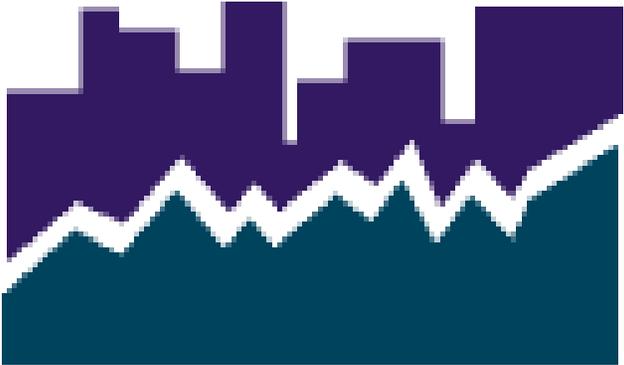




**Greater Phoenix  
economic fundamentals  
have not really changed  
(even housing is returning to  
more affordable levels).**

**The long term economic outlook  
remains favorable.**





**ELLIOTT D. POLLACK**  
**& Company**

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*Elliott D. Pollack & Company*