# Revenue Update
## Joint Caucus Meeting

**January 15, 2008**

**JLBC**

# Current Economic Conditions Have Had Widespread Impact on Revenue Collections

- Through December, collections are down (1.7)%.
- General Fund revenues are $(440) million below forecast.

| Category | Year-to-Date % Growth |
|---|---|
| Sales Tax | (0.3)% |
| Individual Income Tax | (0.8)% |
| Corporate Income Tax | (15.7)% |
| Total | (1.7)% |

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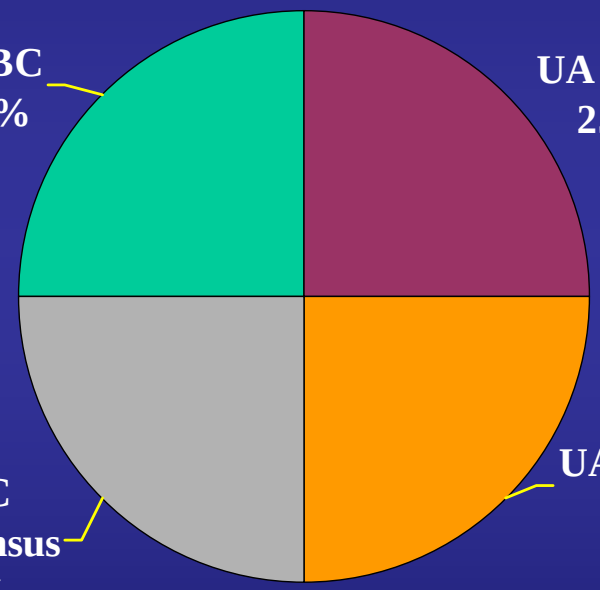
# Where Are We Headed Over the Next Few Years?

## - Four-Sector Consensus Forecast Incorporates Different Economic Views, Including the FAC

4-sector forecast equally weights:

- FAC average
- UofA model - base
- UofA model - low
- JLBC Staff forecast
- Remaining revenues (4% of total) are staff forecast




* Includes Big 3 categories of sales tax, individual income and corporate income taxes.

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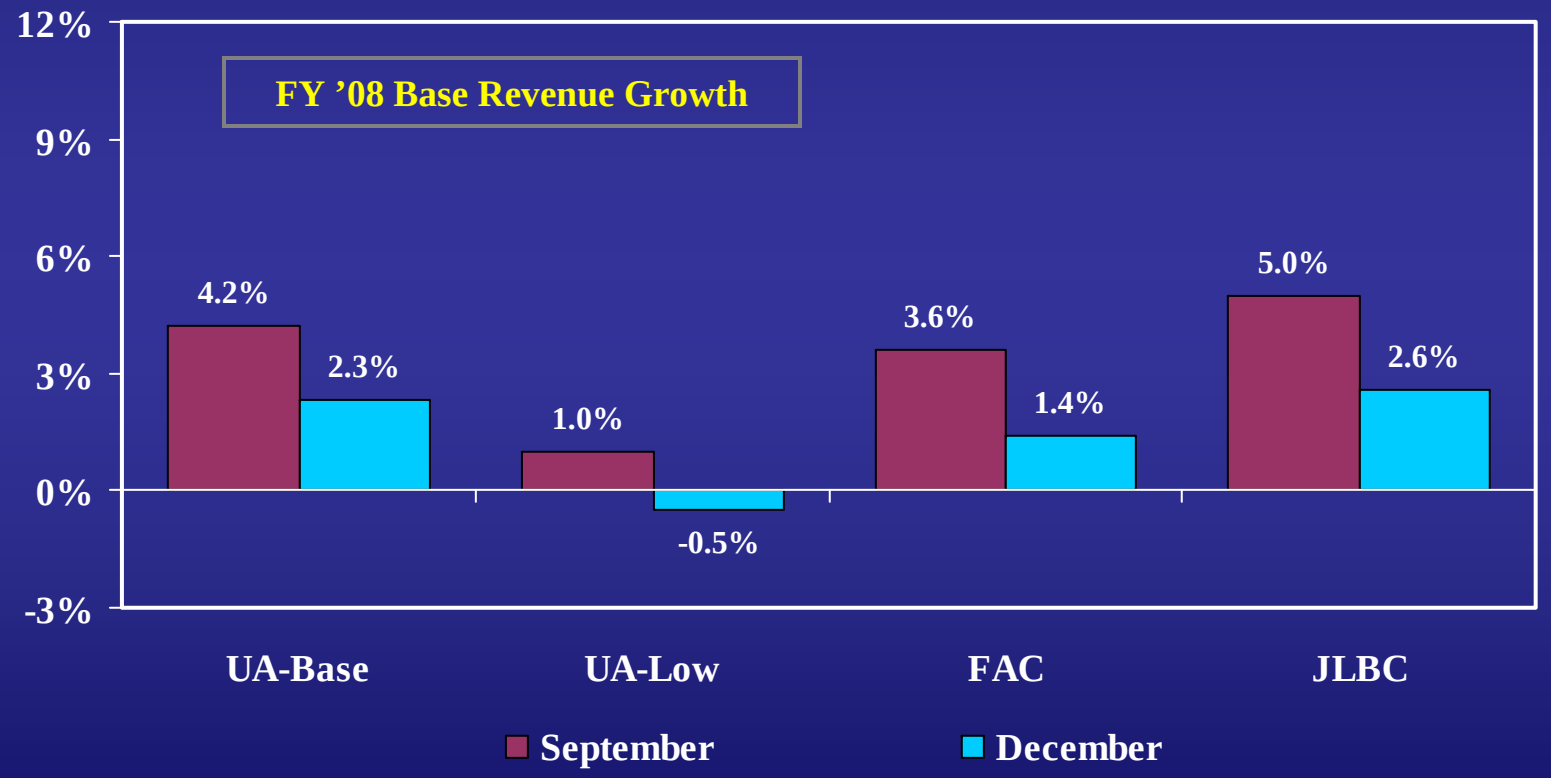
# The Impact of Employer Sanctions Legislation

- The forecasts do not attempt to predict the effect of the new employer sanctions legislation.
- A disruption in labor supply could impact the state's economy – the magnitude is difficult to determine in advance.
- A decline in illegal immigrant use of public services could reduce government spending – again by a magnitude that is difficult to forecast.

# New FY '08 4-Sector Growth Forecast is 1.5%

**- Compares to a Budgeted Rate of 8.4%**

**- After Adjusting for Tax Reductions, the 4-Sector Rate is (1.1)%**




**Weighted Big 3 Average**
**Prior to Tax Law Changes**

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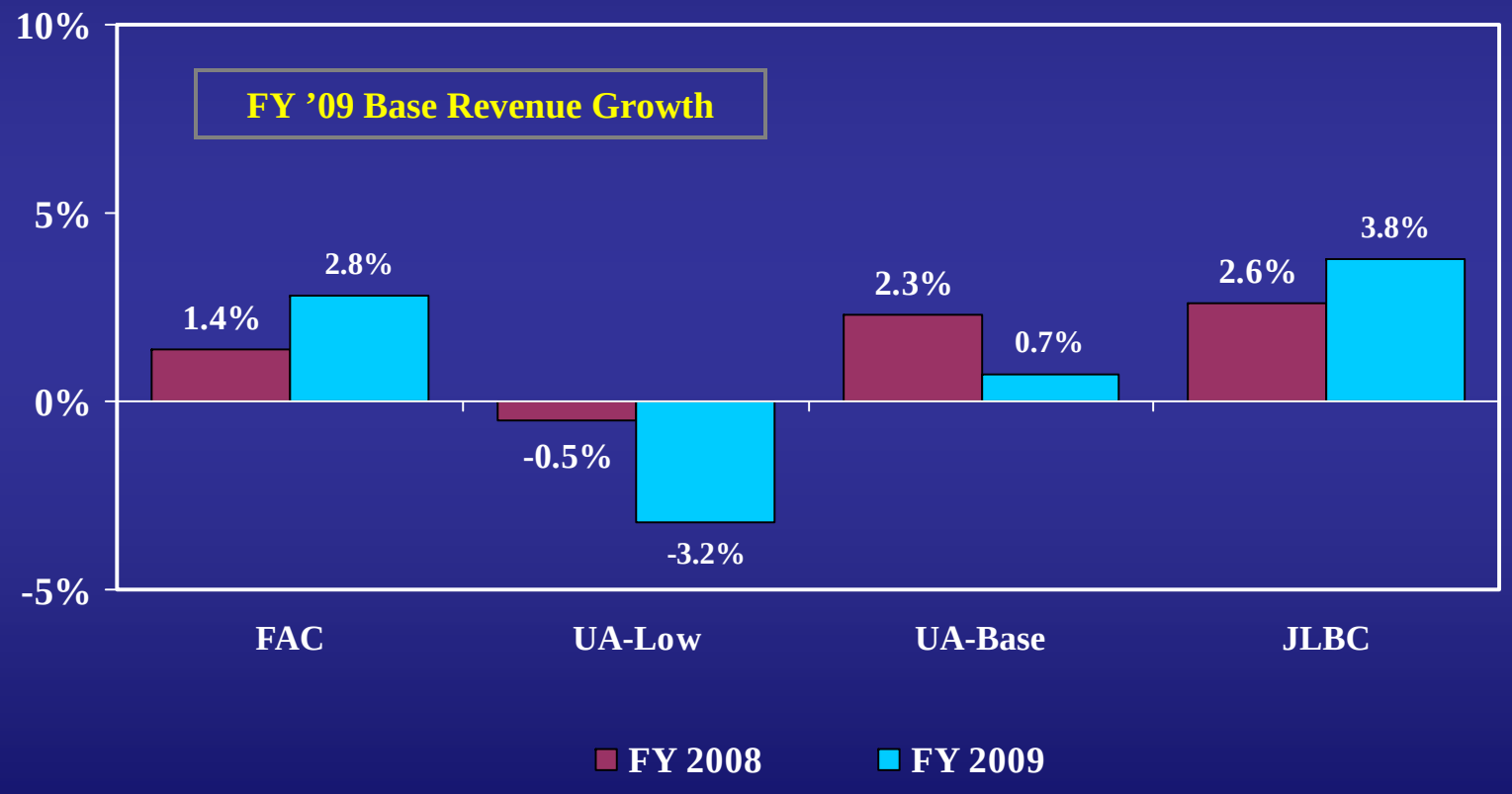
# New FY ’09 4-Sector Growth Drops from 1.5% in ’08 to 1.0% in ‘09




**Weighted Big 3 Average**
**Prior to Tax Law Changes**

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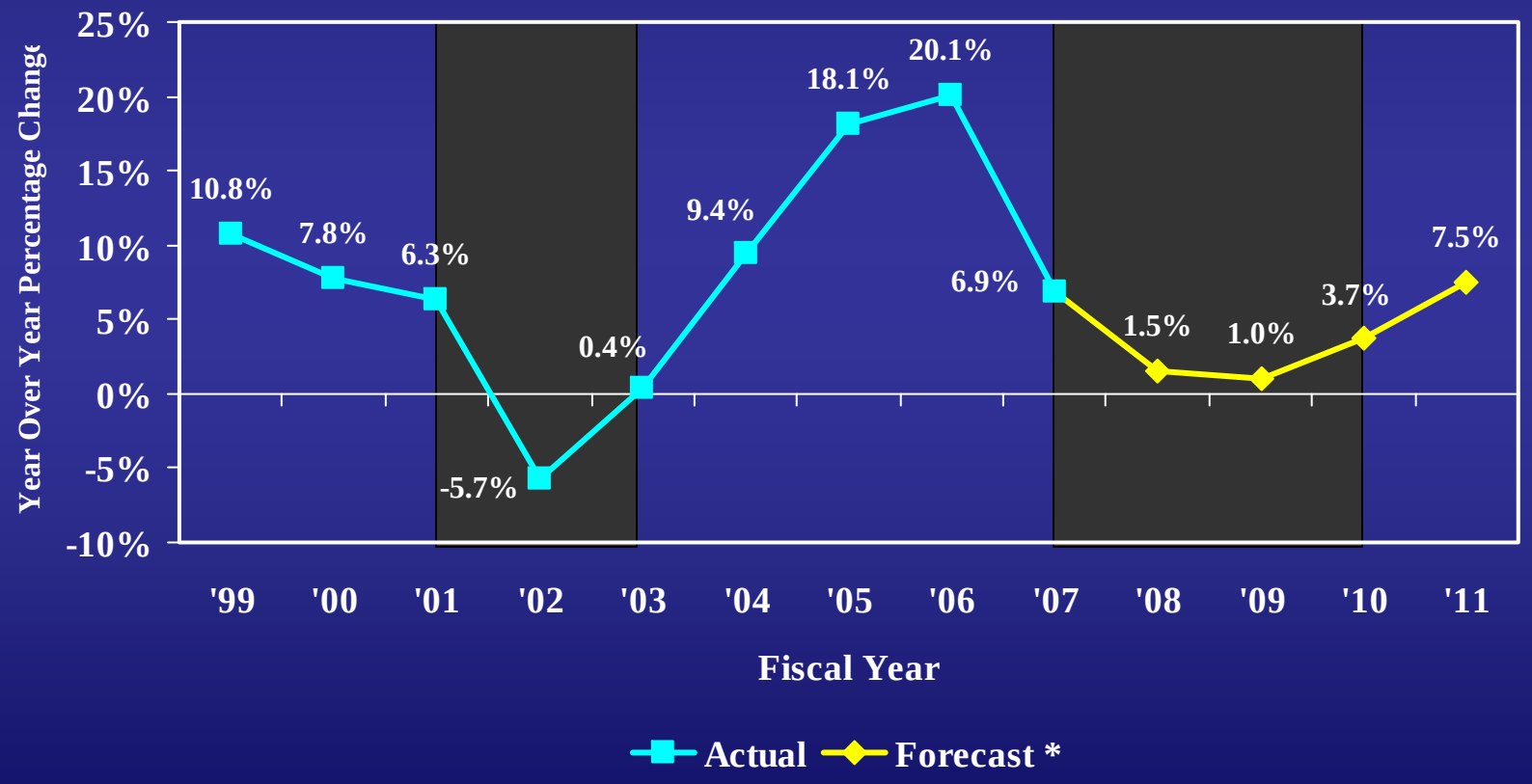
# Growth Remains Slow Until FY 2011

## - September Forecast Had Similar "U" Shaped Curve




* 4-sector forecast weighted average growth.

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# Impact of 4-Sector Projections On Budget Shortfall

- FY ’08 budget shortfall is projected to be $970 million.
- If none of FY ’08 solutions are on-going, FY ’09 budget shortfall is $1.7 billion.

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# National Outlook: A "Sub-Prime" Year

**Presented by:**

**Elliott D. Pollack**

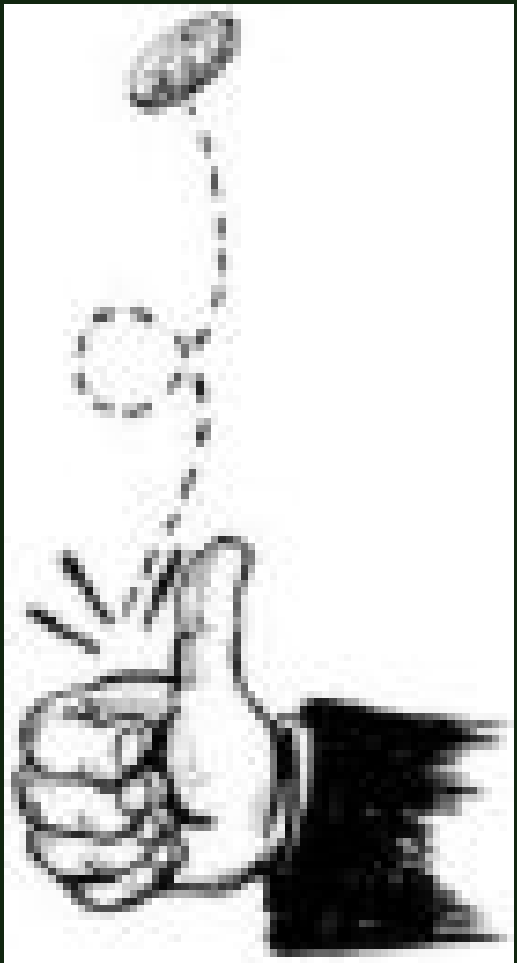
**Presented for:**

**State of Arizona Legislature**

**January 15th, 2008**

**40 / 60 chance of a recession**

**(almost a coin flip)**



# Will there be a recession in 2008?

☐ YES

☐ NO

# ☒ YES

- Housing market will worsen
- Credit crunch will spread to non-highly levered section
- Consumers will cut back
- Business expansion will stop

# ☒ NO

- Housing market will worsen
- Credit crunch will not spread to the business sector to the same extent it spread to the residential sector.
- Consumer spending weak, but not a disaster.
- Business continues to spend.

# Will there be a recession in 2008?

☐ **YES** ☐ **NO**

Either way, 2008 will not feel good!

# Economic Composition

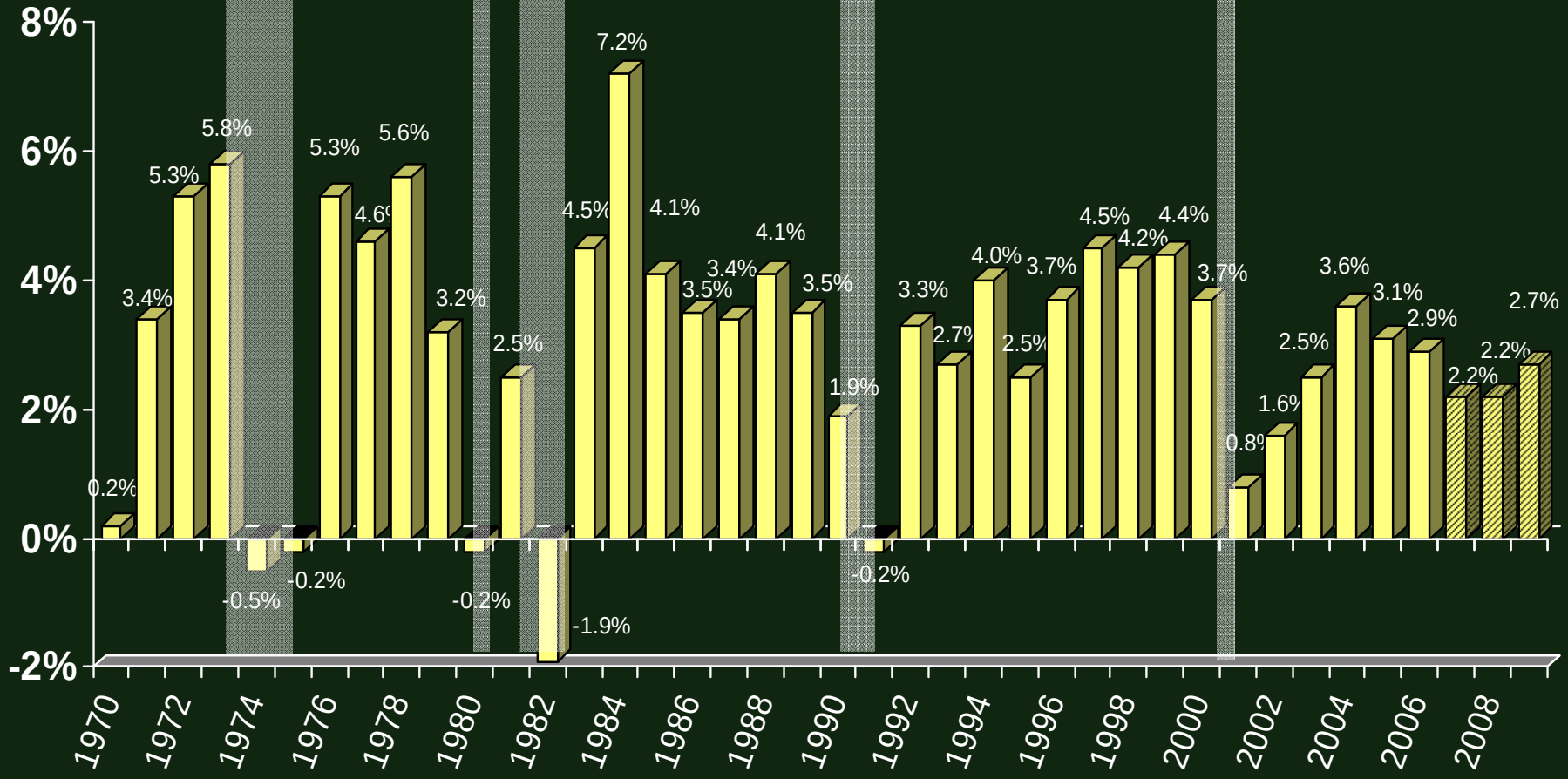
Source: BEA Real GDP 2006

| Category | % of Total |
|---|---|
| Consumer | 70.8% |
| Private Investment | |
| Non-residential | 11.5% |
| Plant | 2.4% |
| Equipment & software | 9.2% |
| Residential | 5.1% |
| Change in private inventories | 0.4% |
| Net Exports | -5.4% |
| Exports | 11.4% |
| Imports | -16.8% |
| Government expenditures | 17.5% |

# What causes economies to slow and where do we stand?

# 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.

** 2007 - 2009 are forecasts from the Blue Chip Economic Indicators, January 2008

**Recession Periods**

# ODDS OF A RECESSION

Source: National Blue Chip Panel

| | |
|---|---|
| January 08 consensus: | 38.1% |
| December 07 consensus: | 39.1% |
| November 07 consensus: | 33.6% |
| January 07 consensus: | 25.4% |

Odds of a recession survey question was not asked in October 2007
Survey questions are asked on the 5th and 6th of each month.

# Is a RECESSION Imminent?

**Economic expansions do not die of old age.**

**They die from:**

1. **Structural imbalances**
2. **Fiscal and monetary policy errors**

**…Combined with unusual shocks**

# TYPICAL IMBALANCES

- Consumers holding too much debt
- Real incomes decline
- Excess capacity
- Business has too much debt
- Too much inventory
- Employment markets too tight
- Inflation
- Bad tax policy
- Bad monetary policy

**Few of these imbalances presently exist to any significant degree.**

# PRESENTLY

- Employment still growing
- Real incomes growing
- Business awash in cash
- Capacity utilization at a level associated with increases in plant spending
- Employment markets do not appear to be tight
- Inflation still appears under control
- Exports booming
- Fed has reacted well

**The economy is no longer running on 8 cylinders; more like 3 or 4, but still driving forward….**

# ...Slowly.

# …hopefully.

# LAST YEAR WE SAID:

# Weakening economies are more sensitive to shocks.

# Examples of Direct Shocks:

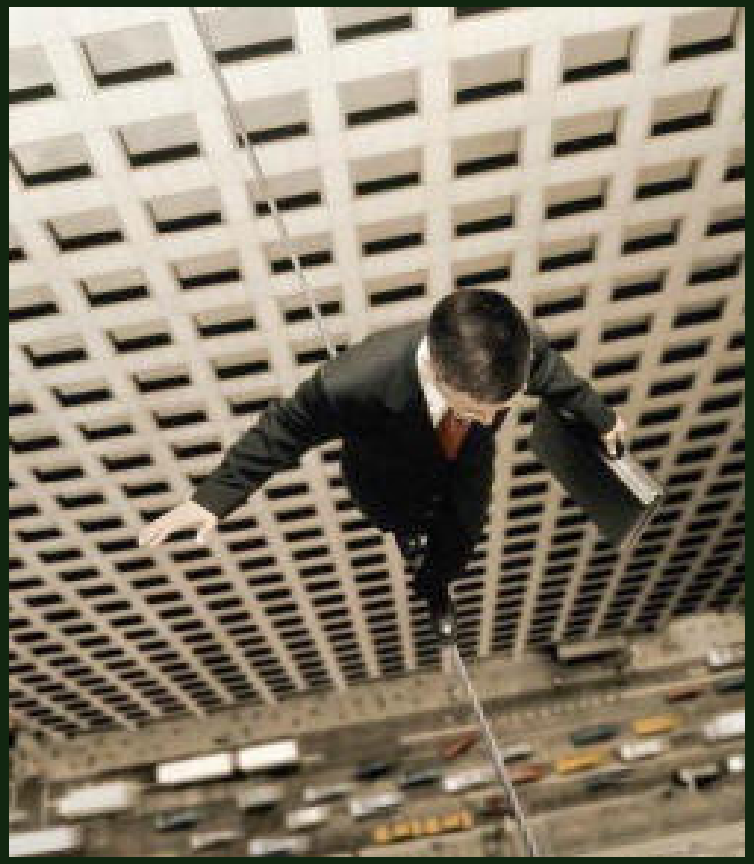
- Unexpected oil supply disruption.
- Unexpected oil price escalation.
- Terrorist event (especially to financial or commerce infrastructure).
- Decline in housing prices.

# THIS YEAR'S SHOCK:

- **Housing prices**
- **Mortgage backed securities**

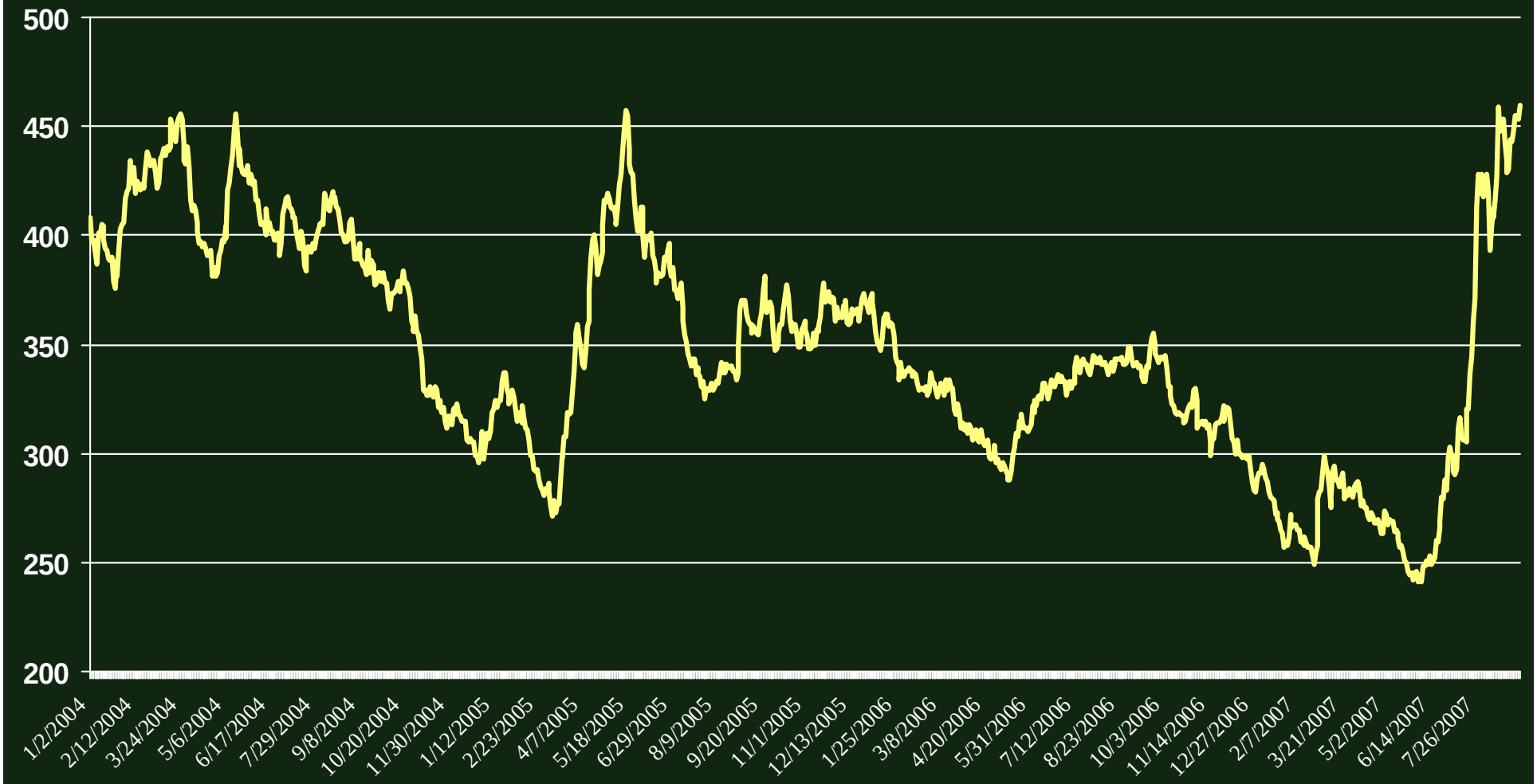
# Liquidity dried up…

# Market re-prices risk.



# High Yield Credit Spread
# 2004 – 2007

**Source: Bespoke Investment Group; Merrill Lynch**




*Data through August 2007.

** The spread between high yield corporate bonds (non investment grade/below bbb rated) and comparable Treasuries.

# High Yield Credit Spread
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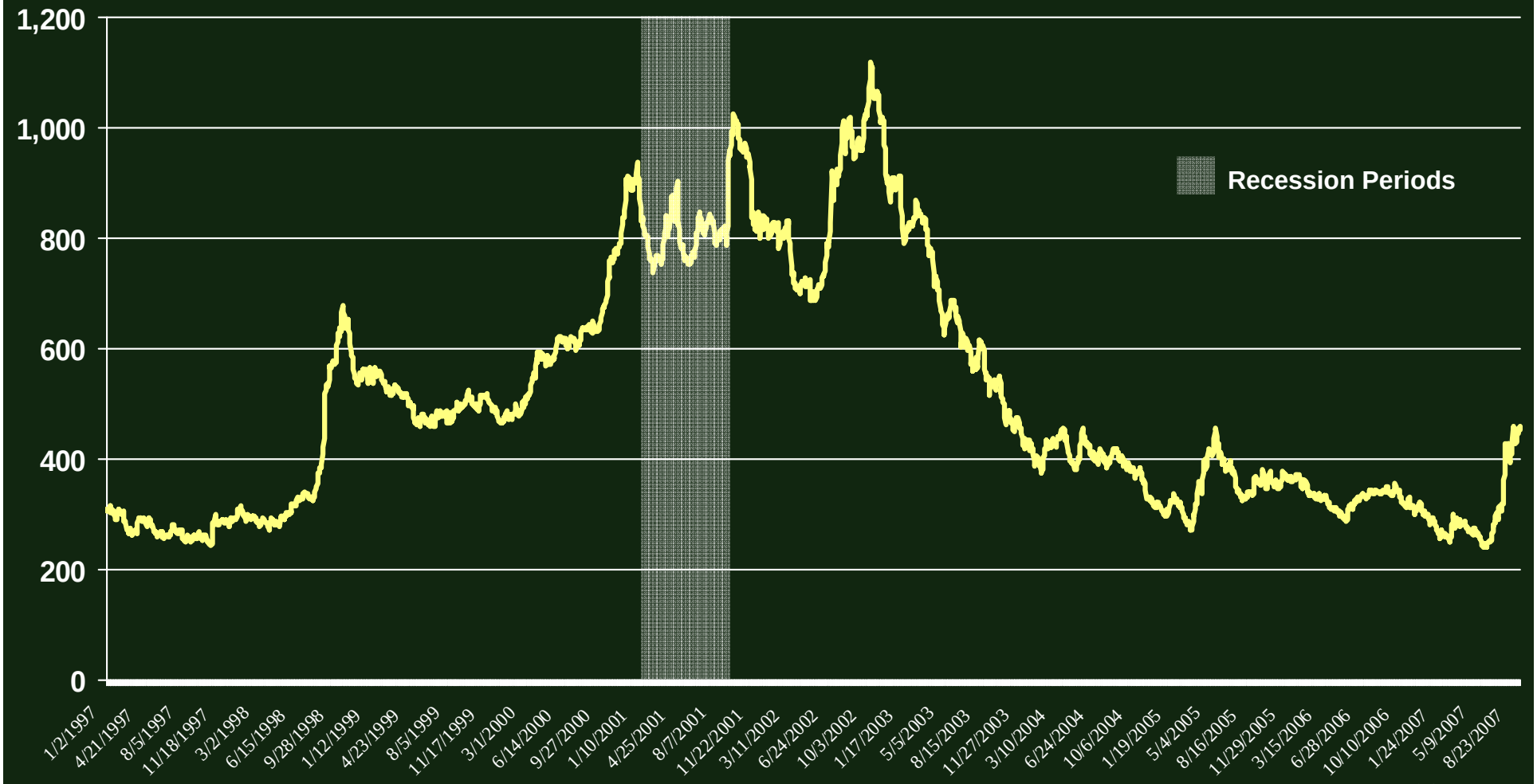
**Source: Bespoke Investment Group; Merrill Lynch**




*Data through August 2007.

** The spread between high yield corporate bonds (non investment grade/below bbb rated) and comparable Treasuries.

# Credit Crunch

**Banks and others significantly curtail their lending to all sectors.**

# Problem Areas Linked to Most Leveraged Sectors

- Mortgage Backed Bonds
- Leveraged Buyout Loans
- Junk Bonds

# To Get a *Full Blown* Credit Crunch you need:

1. **FEAR –**

   **Of big losses on current & future loans.**

2. **UNCERTAINTY –**

   ***How big* will the losses be?**

   ***When* will the market stabilize?**

   ***At what price* will it stabilize?**

# NOW – A *Limited* Credit Crunch

**The crunch has not yet spread to the general economy.**

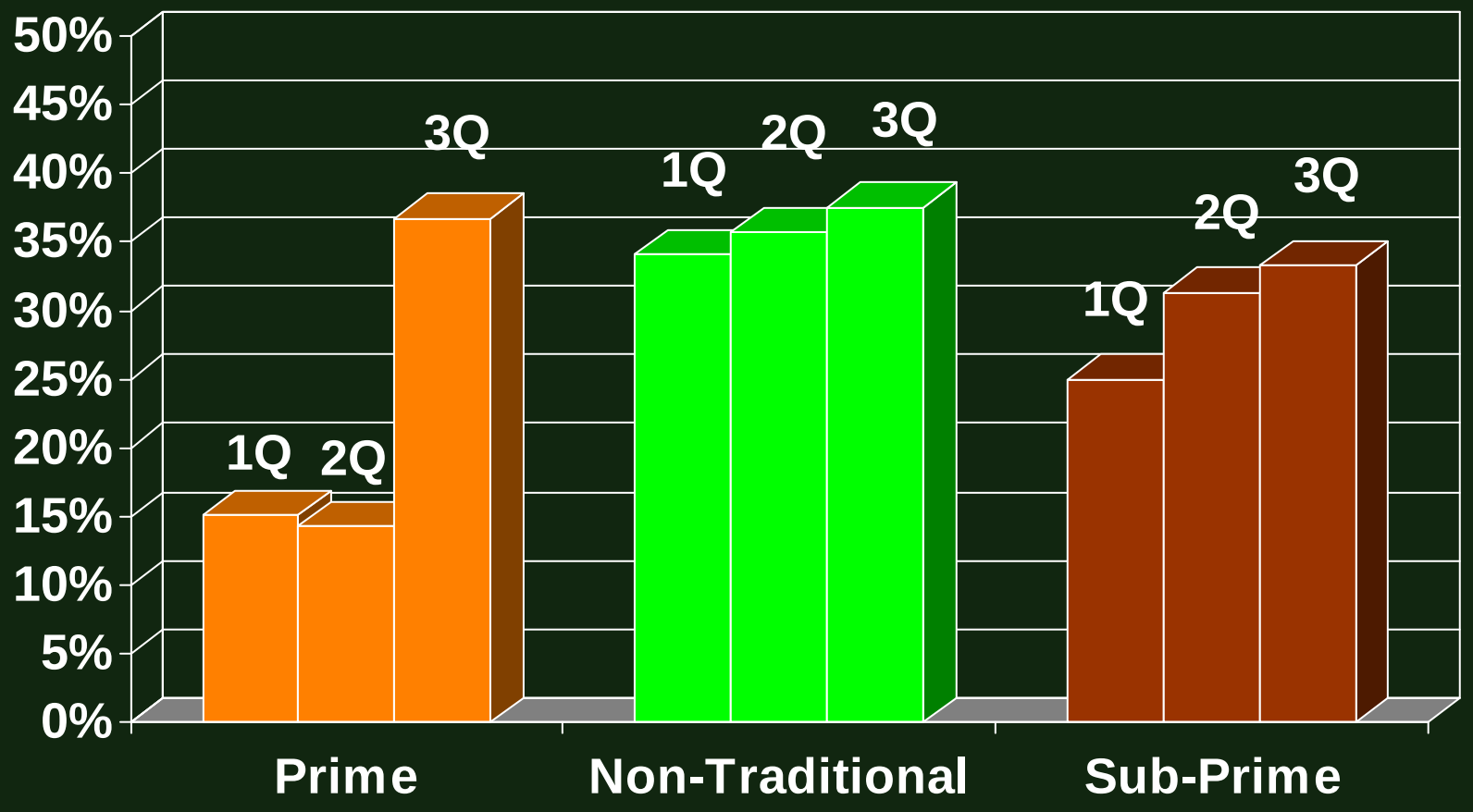
# Characteristics of a *Limited* Credit Crunch:

- **Banks are still lending to consumers & businesses.**
- **Credit card agencies are still issuing credit.**
- **Mortgage lenders are still lending to qualified borrowers.**

# Net Percentage of Large U.S. Banks Reporting Tougher Standards on Residential Loans

## 2007

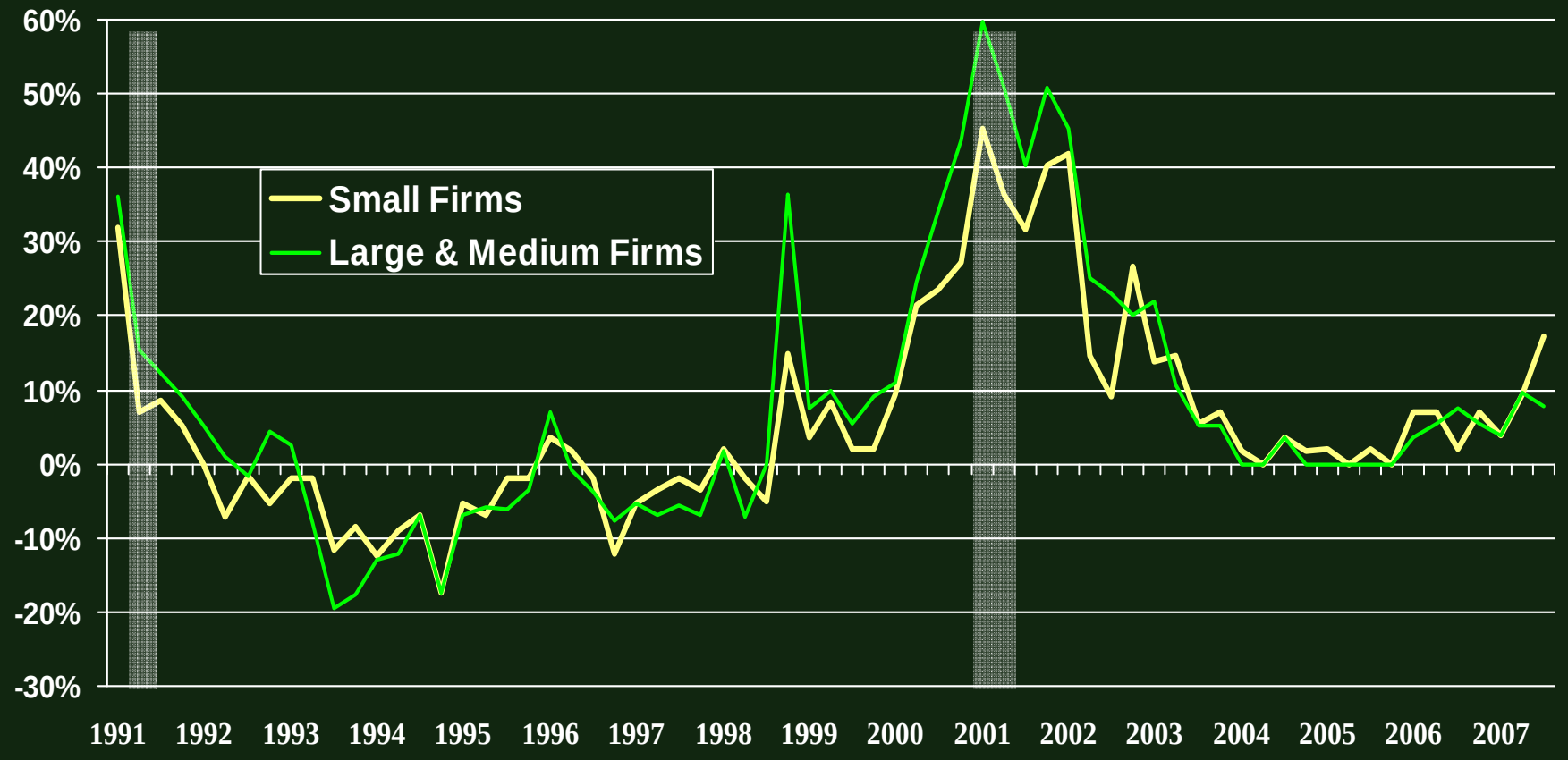
**Source: Federal Reserve, Board of Governors**



# Net Percentage of Large U.S. Banks Reporting Tougher Standards on Business Loans

## 1991 – 2007*

**Source: Federal Reserve, Board of Governors**





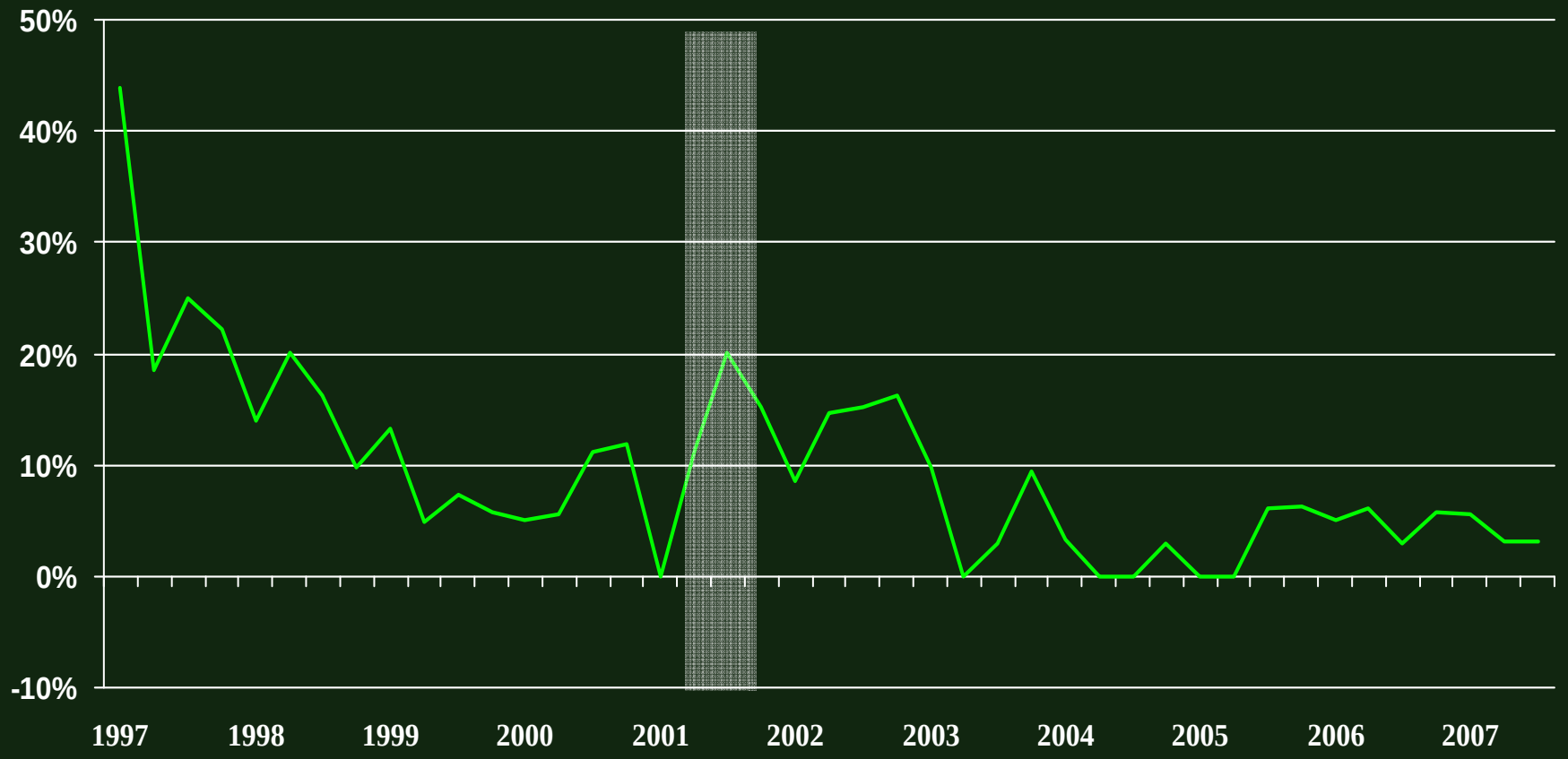

•Data as of October 2007 survey.

Recession Periods

# Net Percentage of Large U.S. Banks Reporting Tougher Standards on Consumer Loans

## 1997 – 2007*

**Source: Federal Reserve, Board of Governors**






•Data as of October 2007 survey.

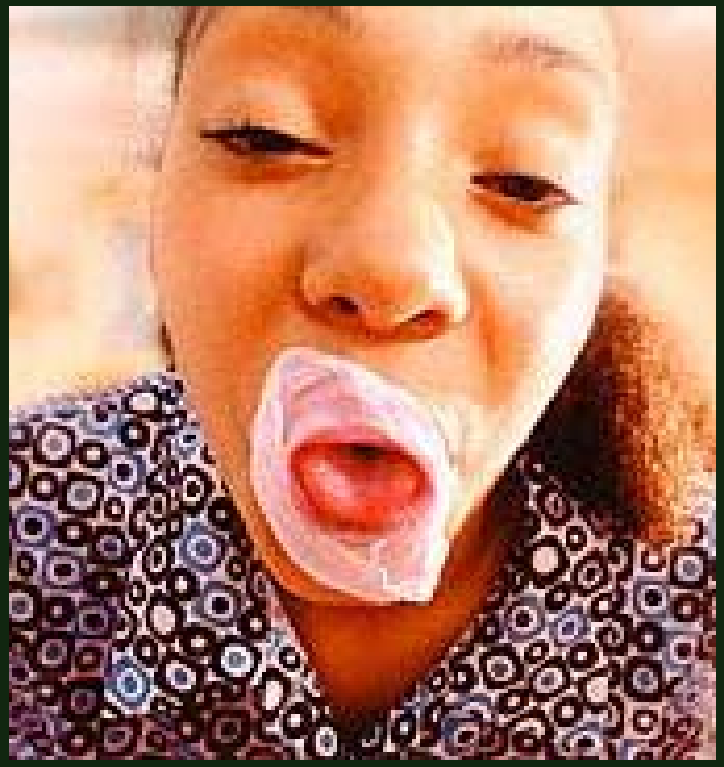
**Recession Periods**

# ACTIONS OF THE FED

# Common Themes of Manias

- Extreme speculative hype.
- Frenzy by all levels of investors.
- Severe departure from the investments "intrinsic value."
- Huge flows of new credit – usually new types of instruments.
- No formidable barriers to entry.

# The “Busting of the Bubble” shares similar features:



- Liquidity contracts
- Exogenous events my cause/exacerbate situation
- Prices decline, then plunge

# The Perfect Storm in the Housing Market?

# What Happened:

- Falling prices
  - Fear
    - Tightening of credit
      - Less money to loan

**Scheduled re-pricing of sub-prime loans pushes up delinquent and foreclosure rates, adding new supply that pushes down housing prices…**

**…which starts the process over again.**

# Danger Ahead – ARMS to Reset

**$515 billion (2007)**

**+**

**$680 billion (2008)**

Source: Bank of America

**The credit crunch ends when banks see stability.**

# Synopsis: Economy-Wide Negatives

- Credit crunch
- Housing market
- Consumer spending
- Inflation ??? (food & energy)

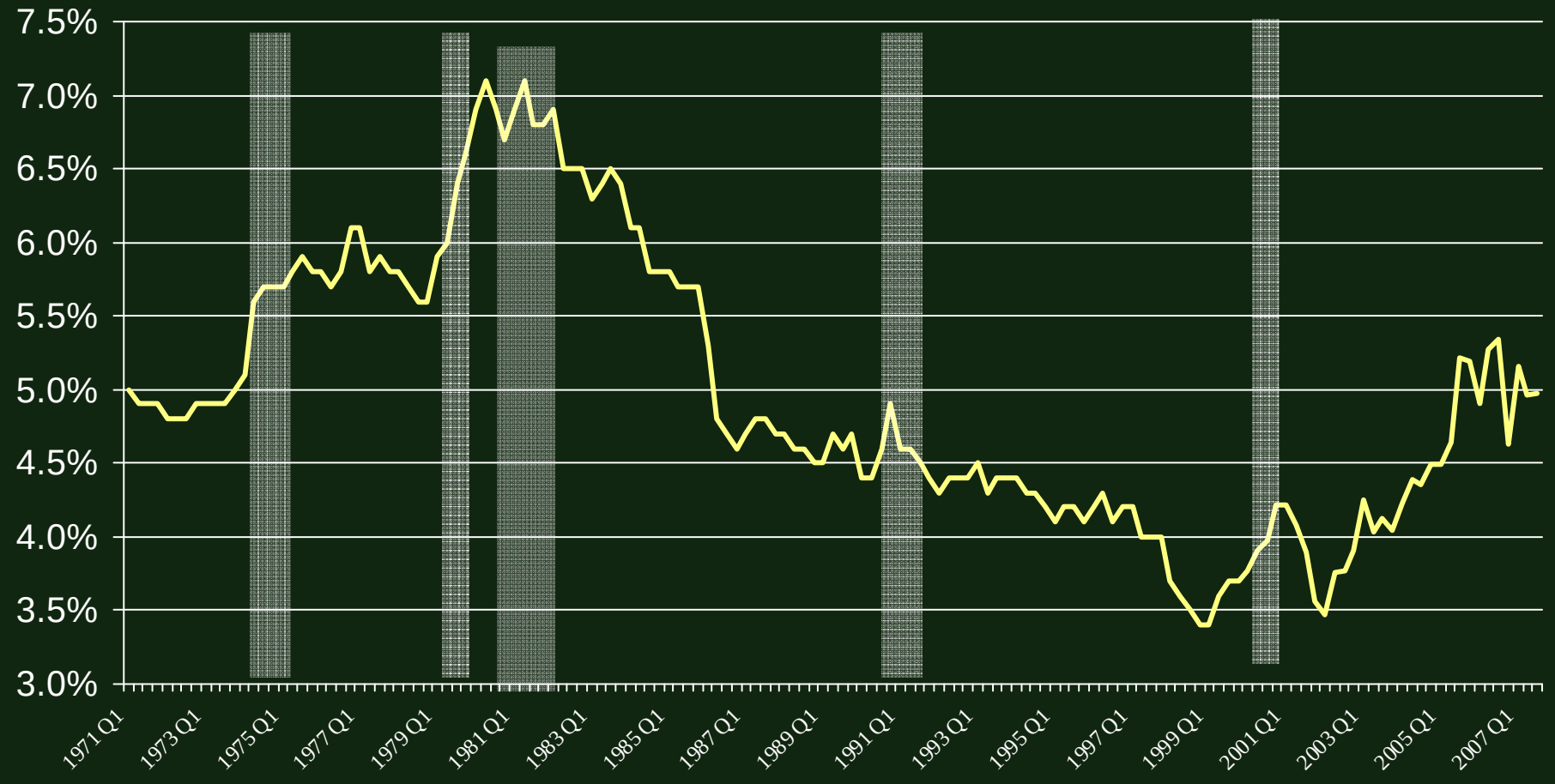
# Synopsis: Economy-Wide Positives

- Employment still positive.
- Businesses lean and mean.
- Recession would be pointless, so Fed will try to avoid one.

# Consumer Energy Goods & Services Spending as a Percent of Personal Income

## 1971 – 2007*

**Source: Bureau of Economic Analysis**






*Data through third quarter 2007

**Recession Periods**

# National Perspective

# Let’s look at some data.

# The Consumer:

## In for a painful year?

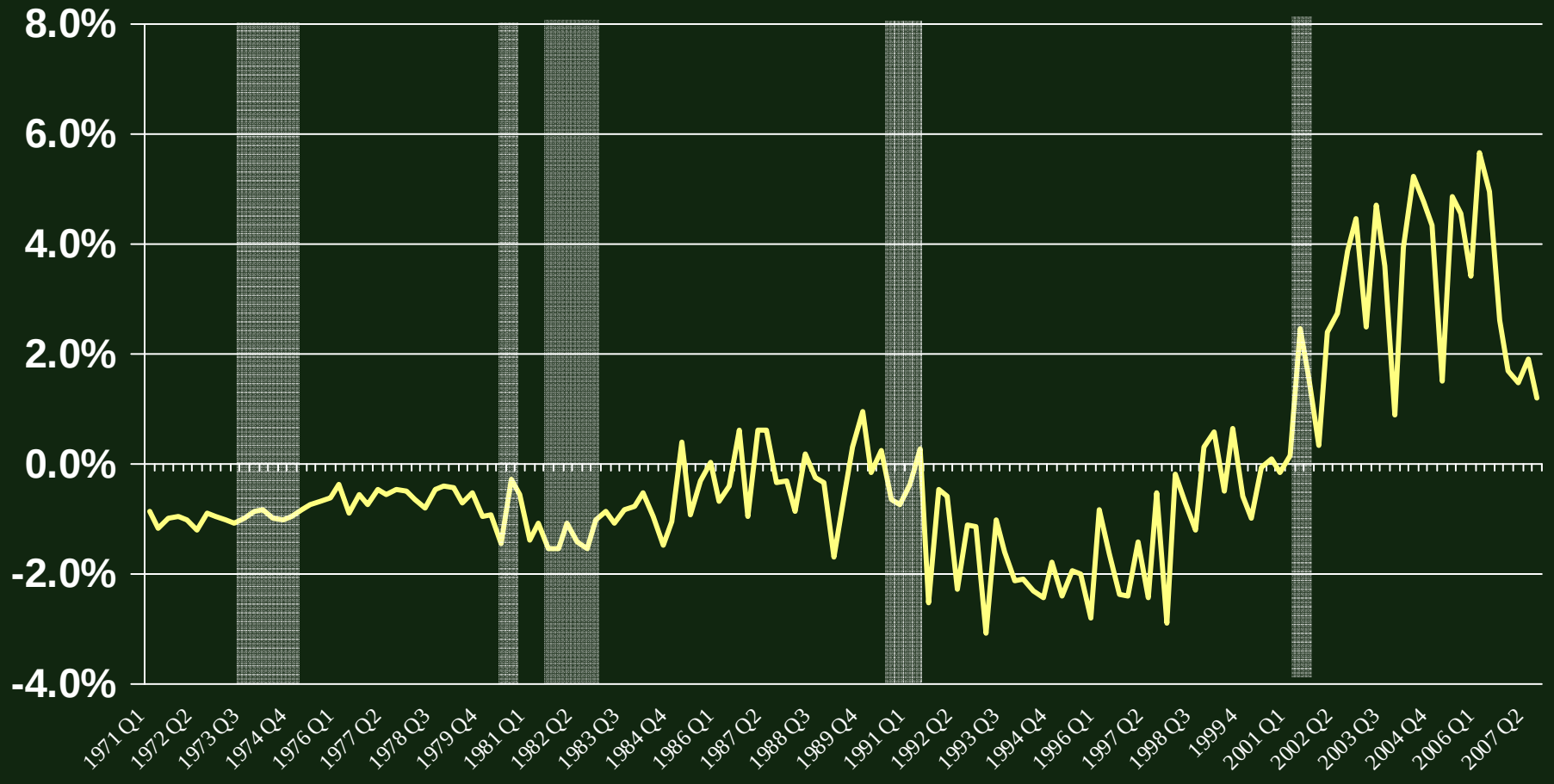
**(no, there really is no other picture to describe this)**

# CONSUMER SPENDING: Causes of Consumer Caution

- Reduced home-related spending on home improvement items such as furnishings, appliances, and building materials .
  (Look at completions not starts)
- Housing-related industries are now cutting jobs.
- Mortgage equity withdrawal slowing.

# Mortgage Equity Withdrawal as a share of Disposable Income U.S.: 1971 – 2007*

**Source: Bureau of Economic Analysis**






* Data through third quarter 2007

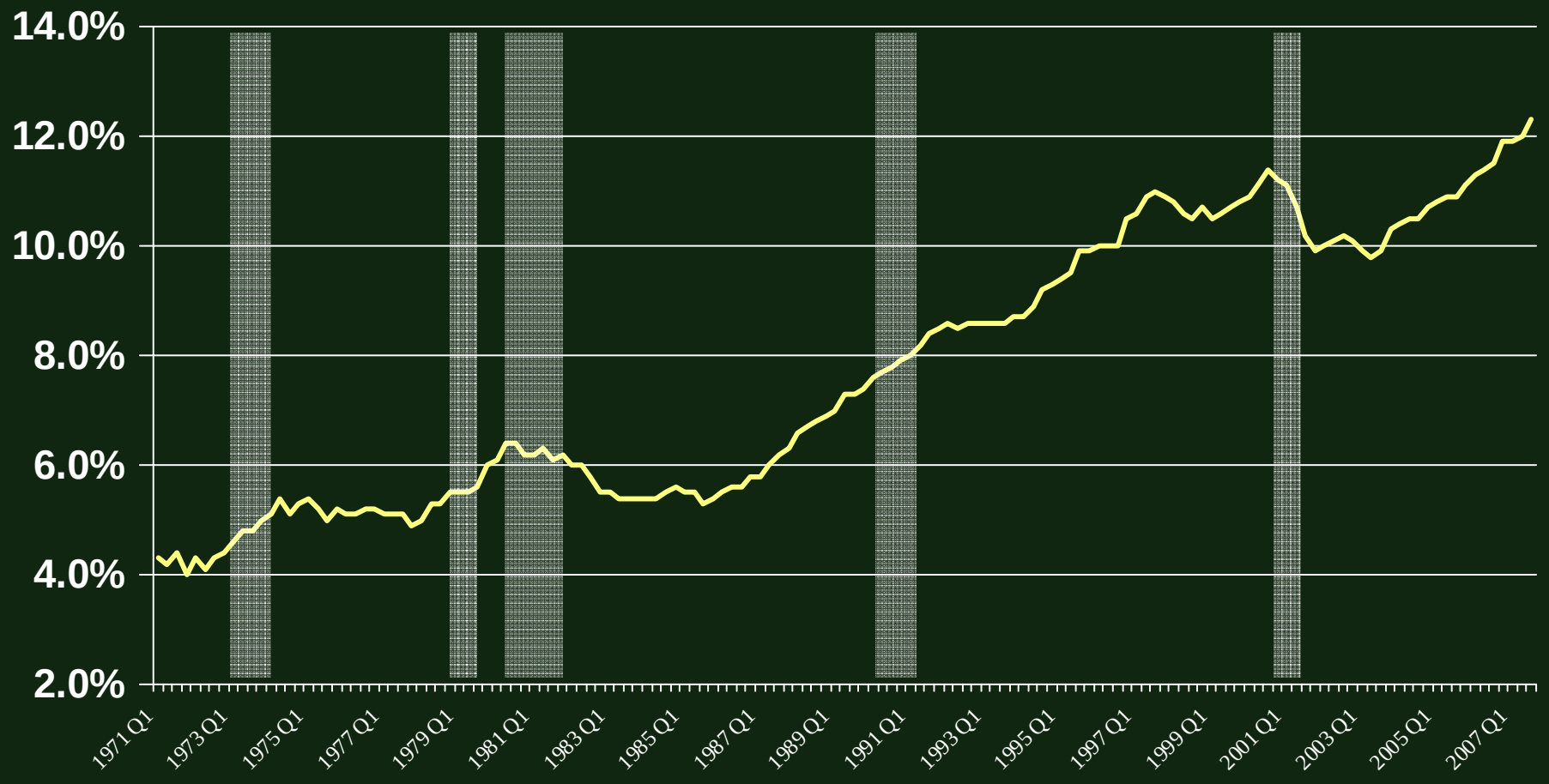
Recession Periods

# Business

# U.S. Real Exports as a Percent of Real GDP

## 1971 – 2007*

**Source: Bureau of Economic Analysis**



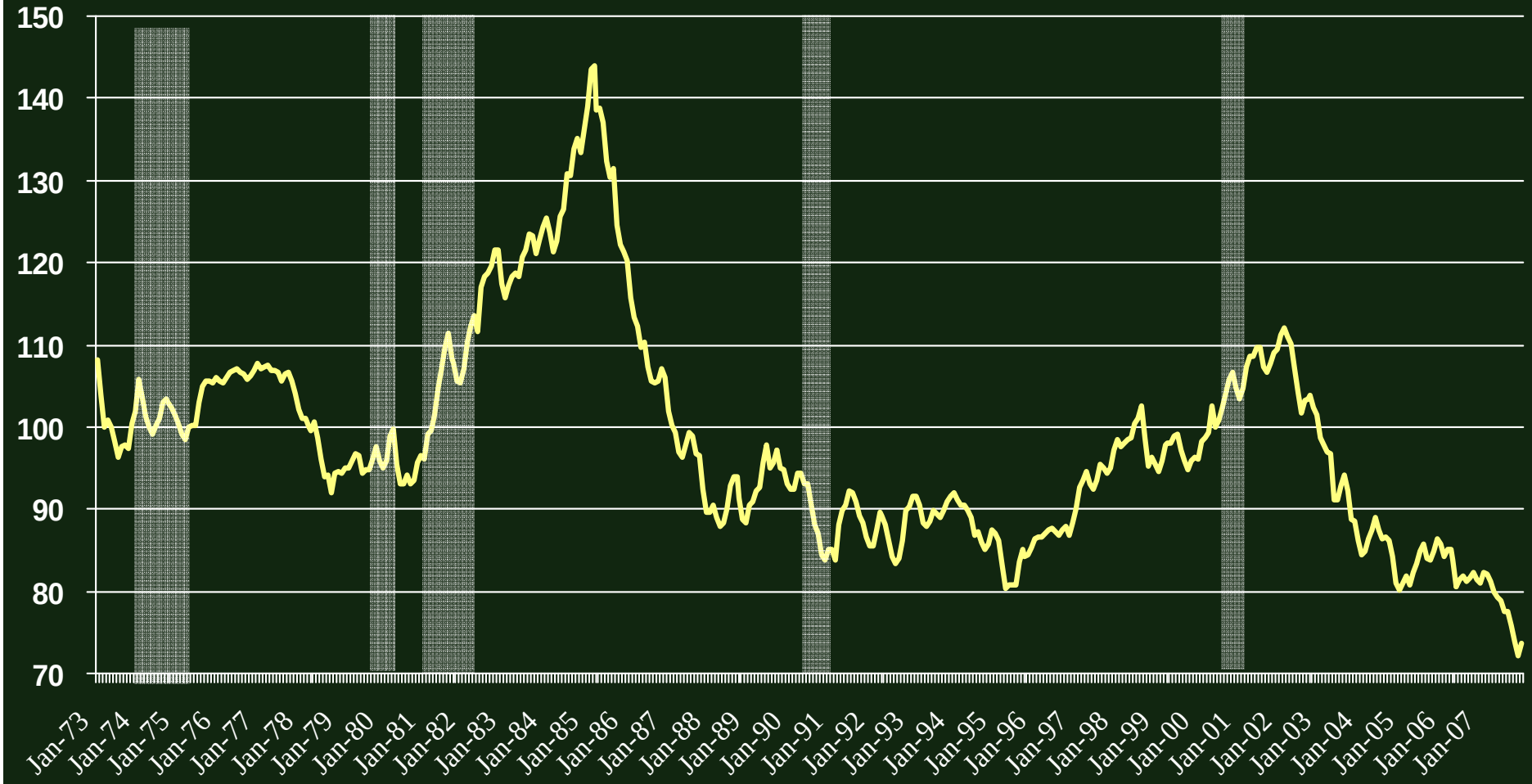



*Data through third quarter 2007

**Recession Periods**

# US Dollar Trade Weighted Exchange v. Major Currencies (1973 = 100) 1973 – 2007*

**Source: The Federal Reserve**



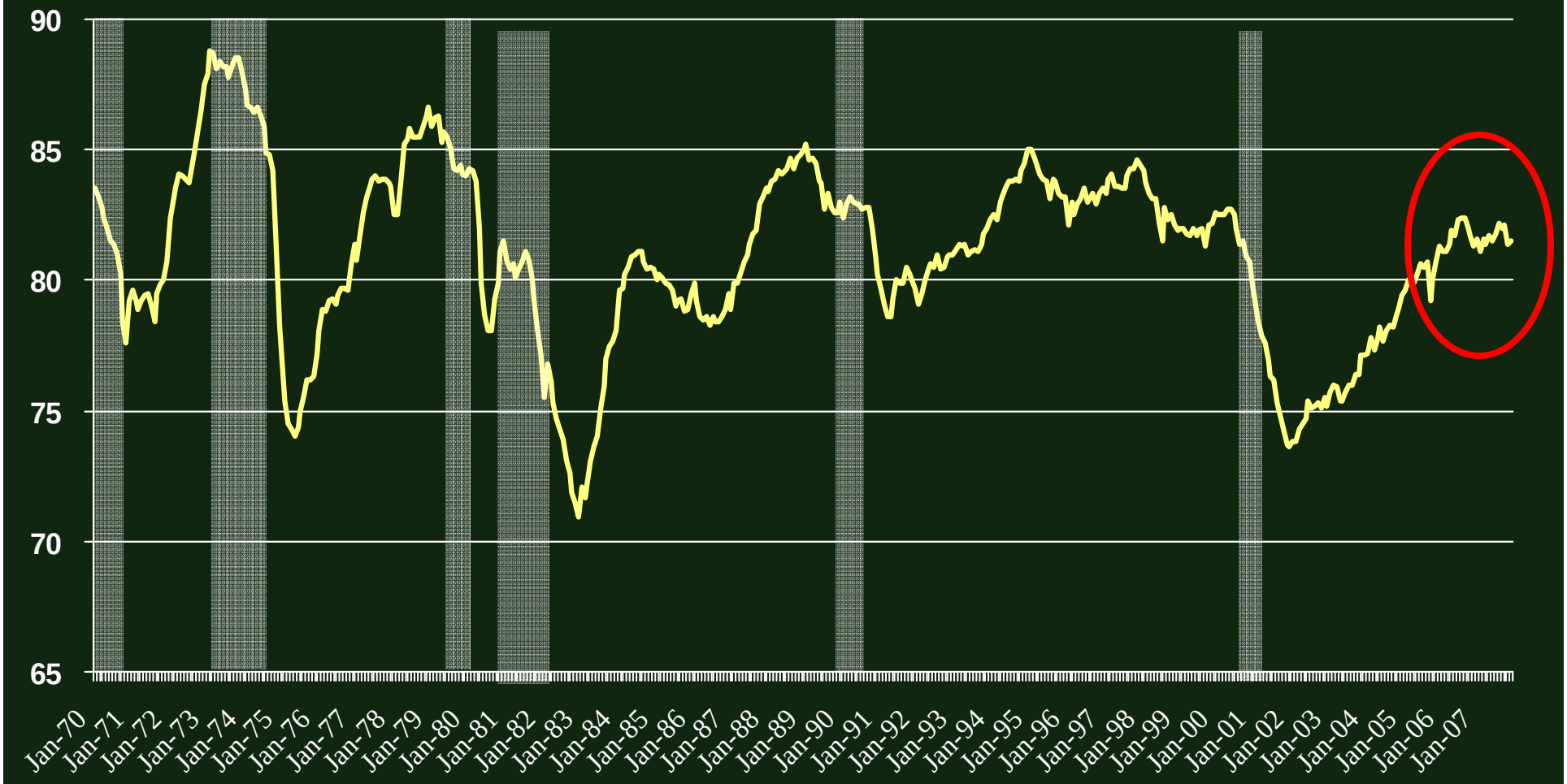



*Data through December 2007

**Recession Periods**

# Capacity Utilization Rate
# 1970 – 2007*

**Source: The Conference Board**



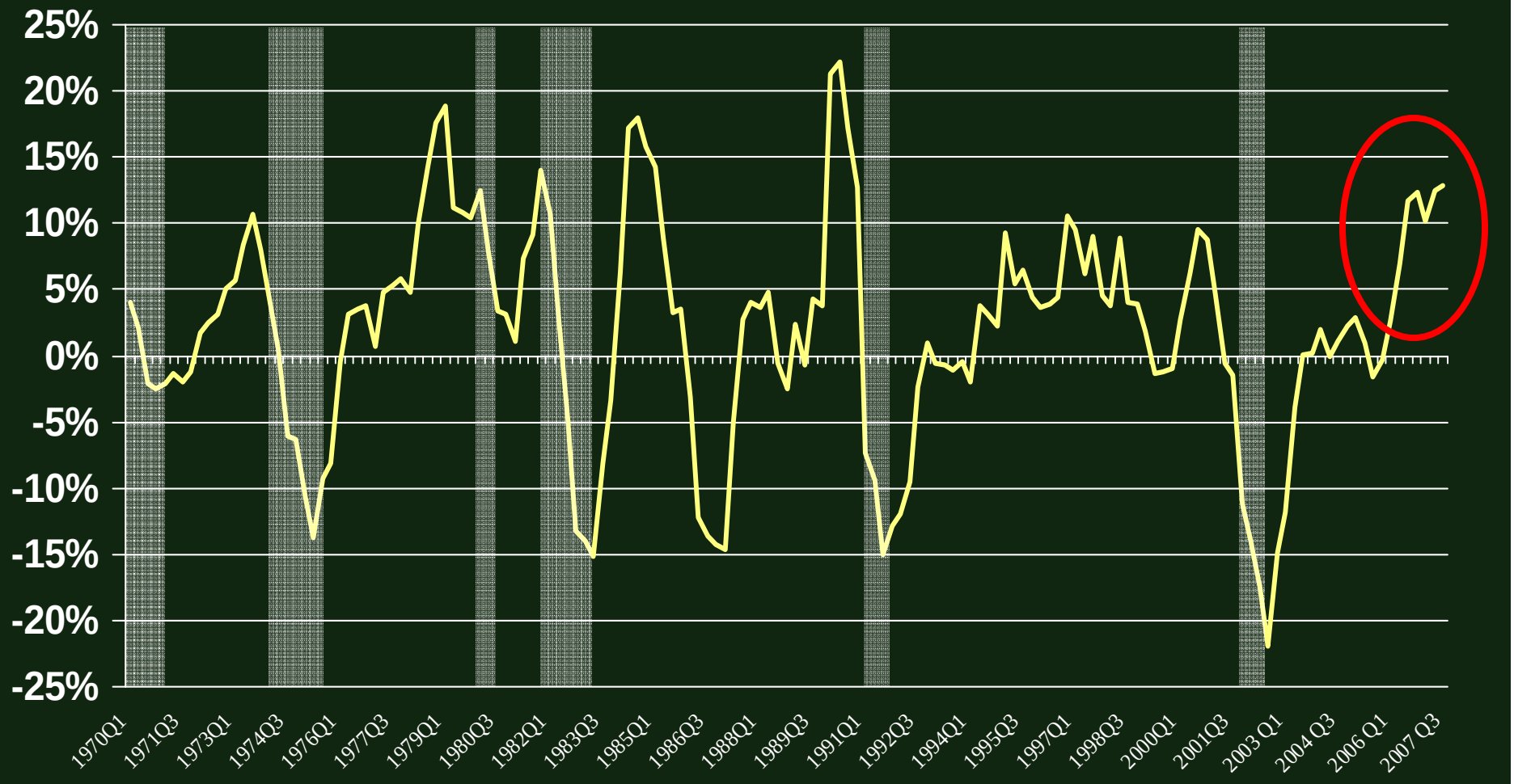



*Data through November 2007

**Recession Periods**

# Total Plant Spending
# Percent Change Year Ago
# (Real Dollars)
# 1970 – 2007*

**Source: Bureau of Economic Analysis**

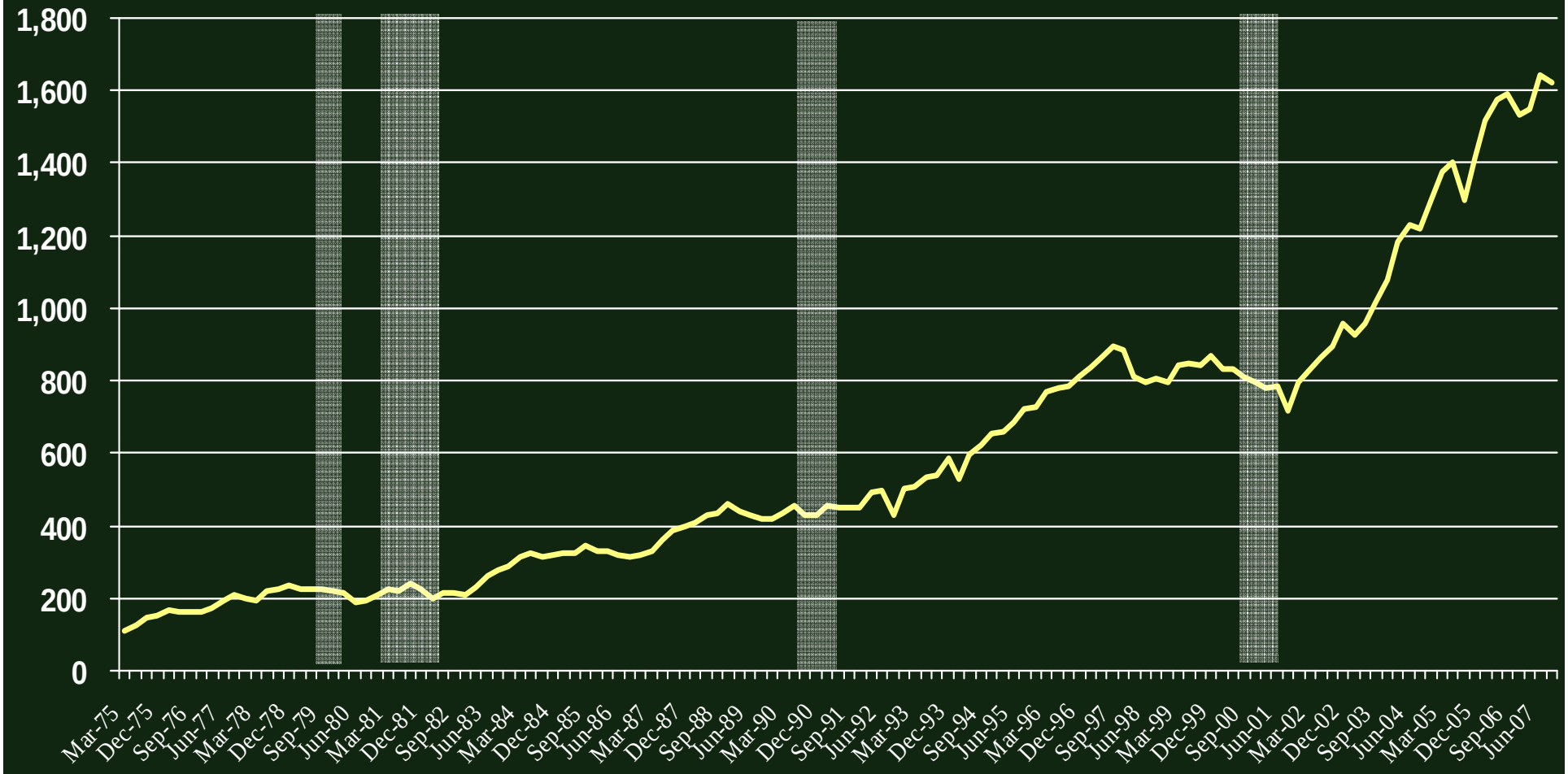



•Data through third quarter 2007.
•NOTE: Series was revised in March 2004. Data prior to 1990 was not provided.

**Recession Periods**

# Corporate Profit
# (Billions of Dollars, SA)
# 1975-2007*

**Source: Freelunch.com**






*Data through third quarter 2007

**Recession Periods**

# U.S. OUTLOOK - 2008

- Housing (-)
- Inflation (-)
- Productivity growth slowing (-)
- Consumer spending (-)
- Fiscal stimulus (+)
- Low interest rates (+)
- Business spending (+)
- Monetary stimulus (+)
- Real incomes (+)
- Businesses mean and lean (+)
- Job growth (+)
- Exports (+)

# ELLIOTT D. POLLACK
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# Economic Update and Outlook: Arizona

**Marshall J. Vest**
**Eller College of Management**
**The University of Arizona**

Arizona Legislature, January 15, 2008

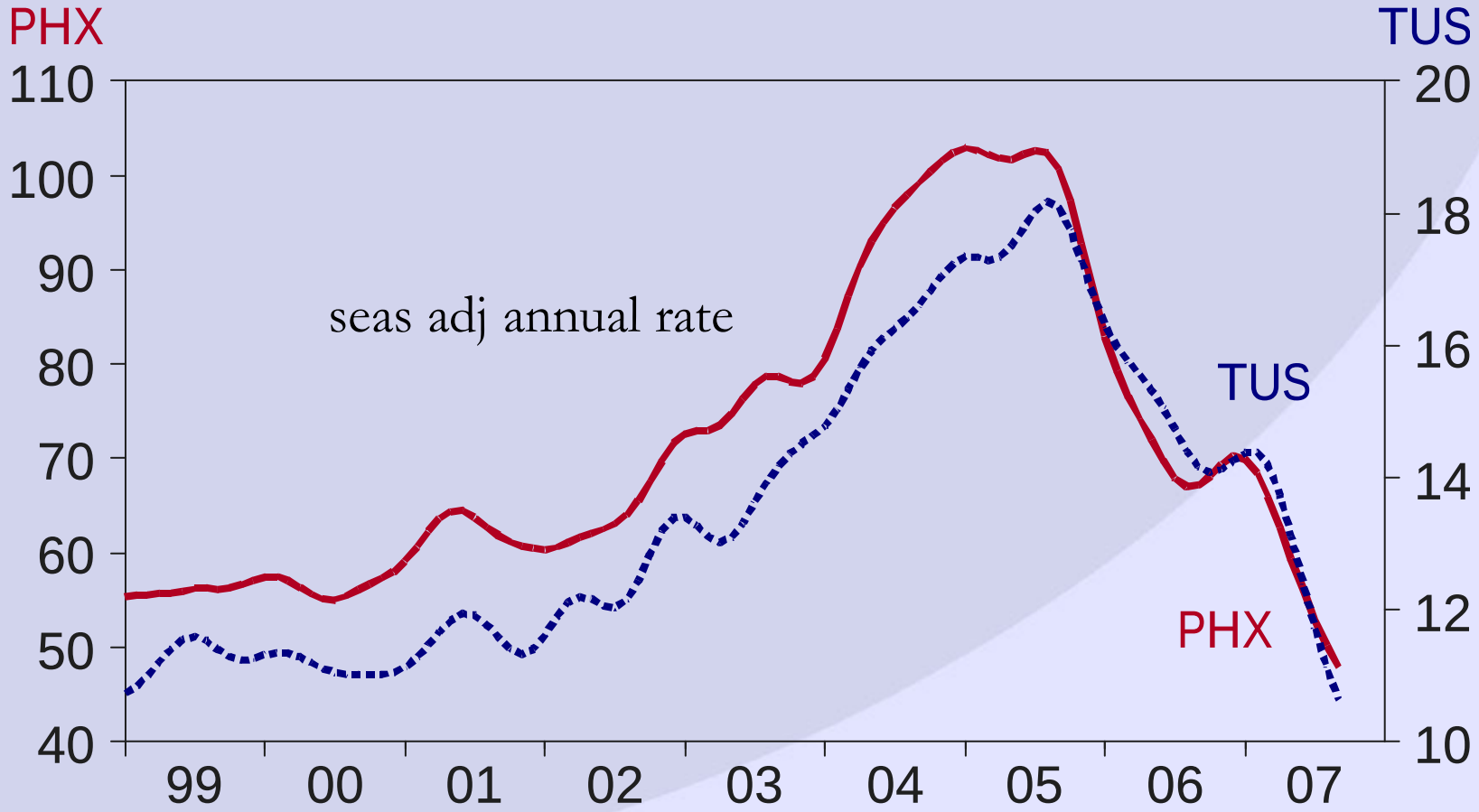
Eller College of Management
The University of Arizona

# Housing Recession Deepens

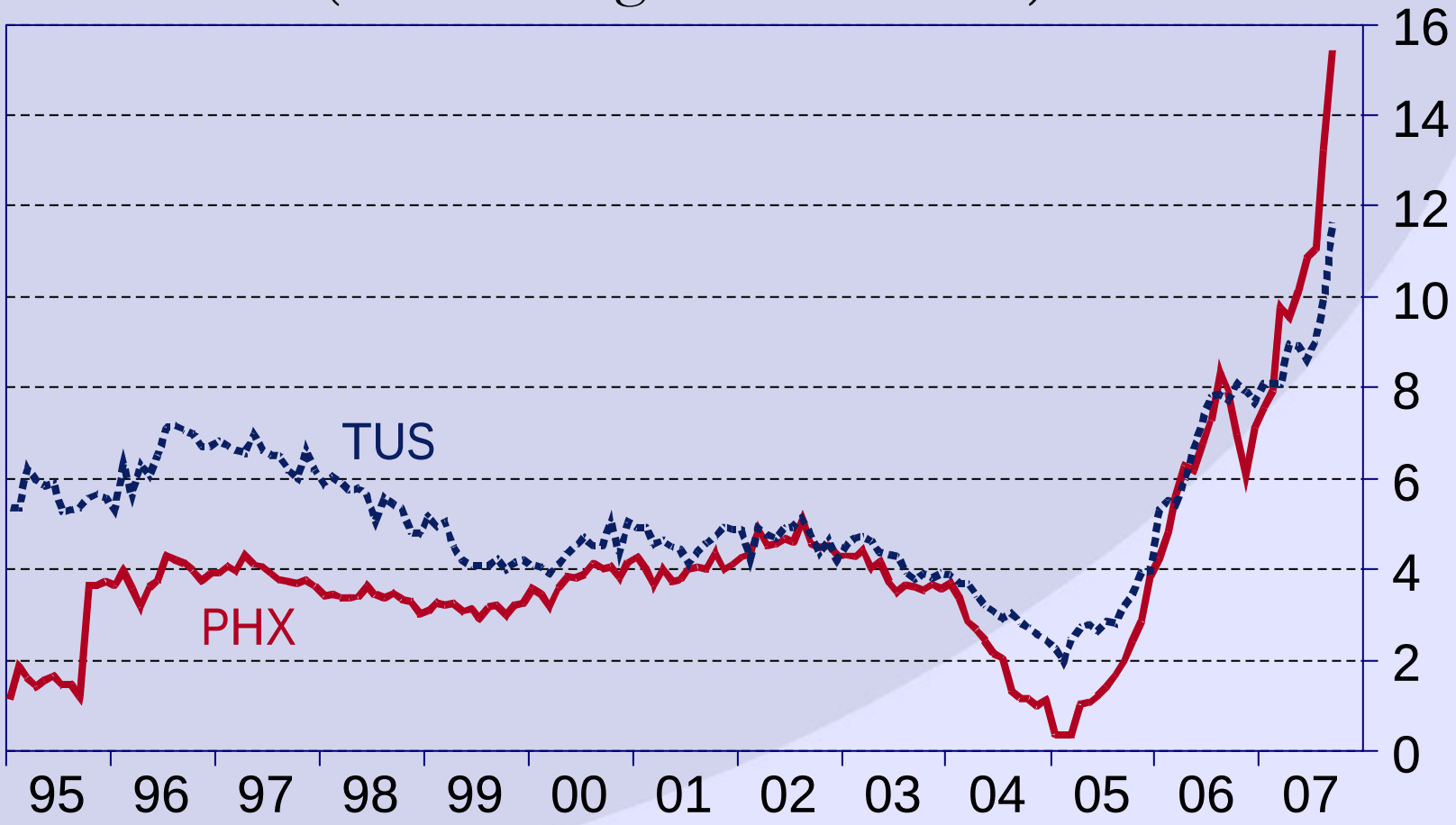
- Building permits and existing home sales still declining
- Inventories moving higher
  - Delinquencies and foreclosures are soaring
- Prices are falling

# Existing Home Sales, MLS

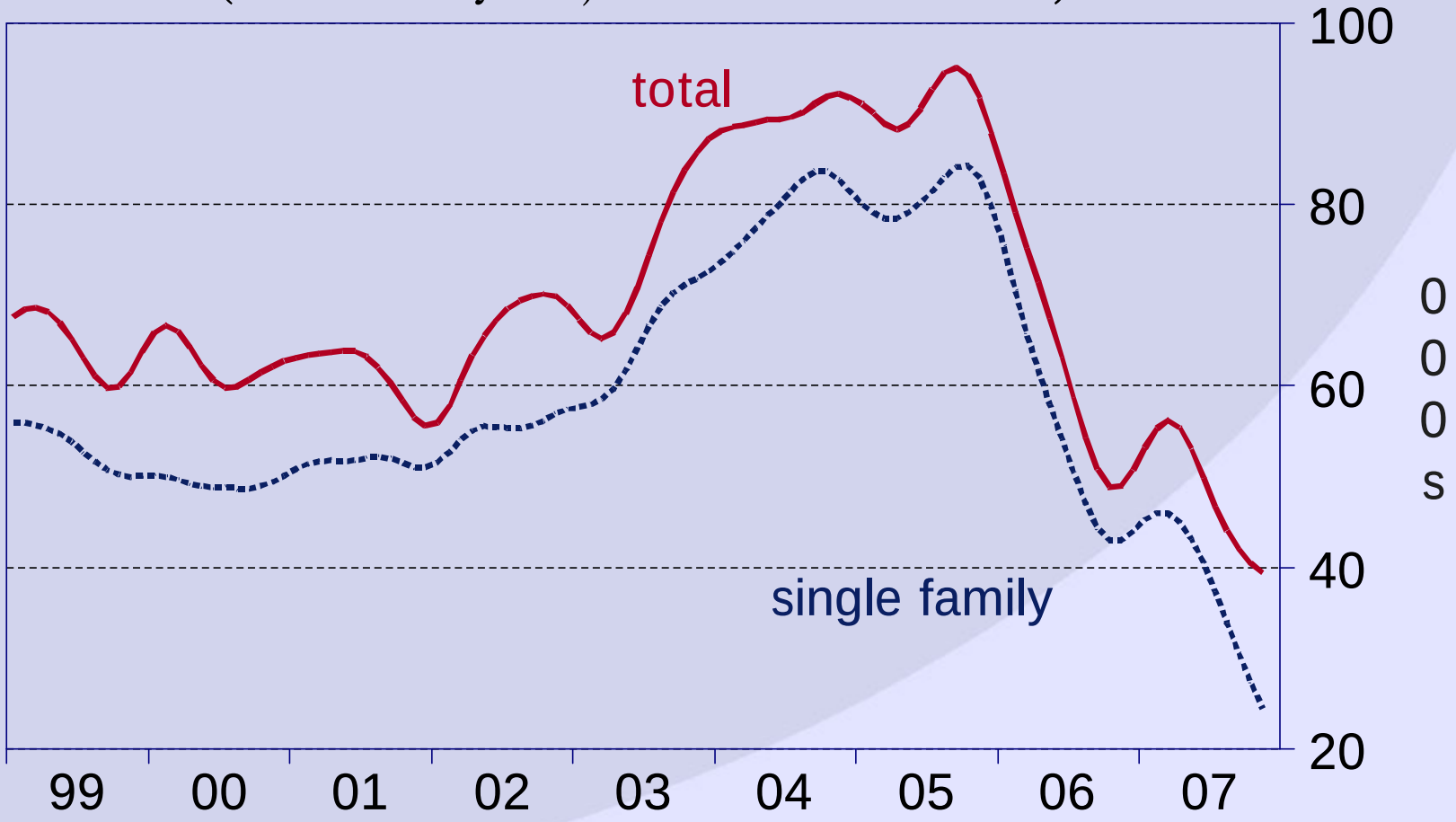
000s units



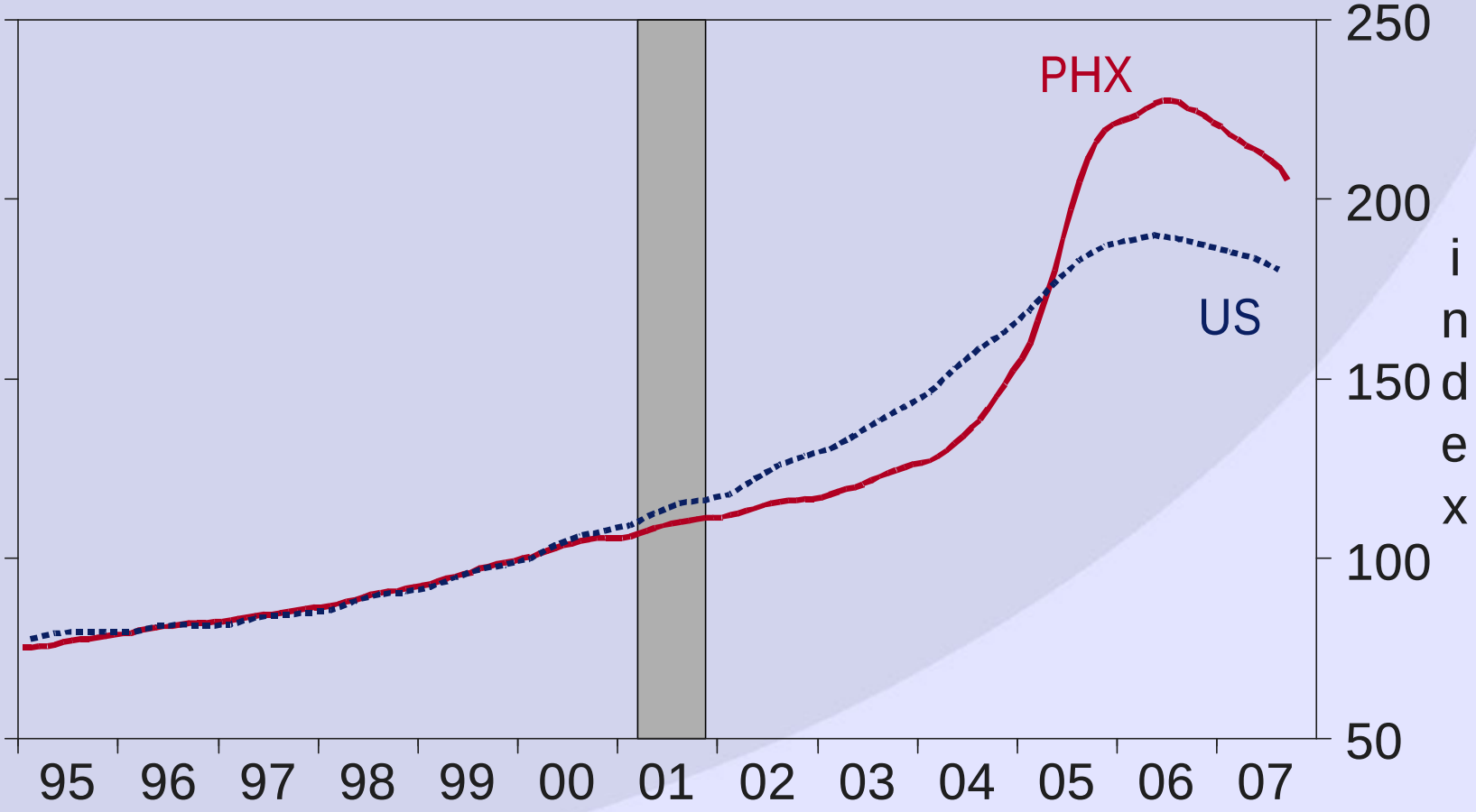
# Months Supply of Housing
(MLS listings to sales ratio)



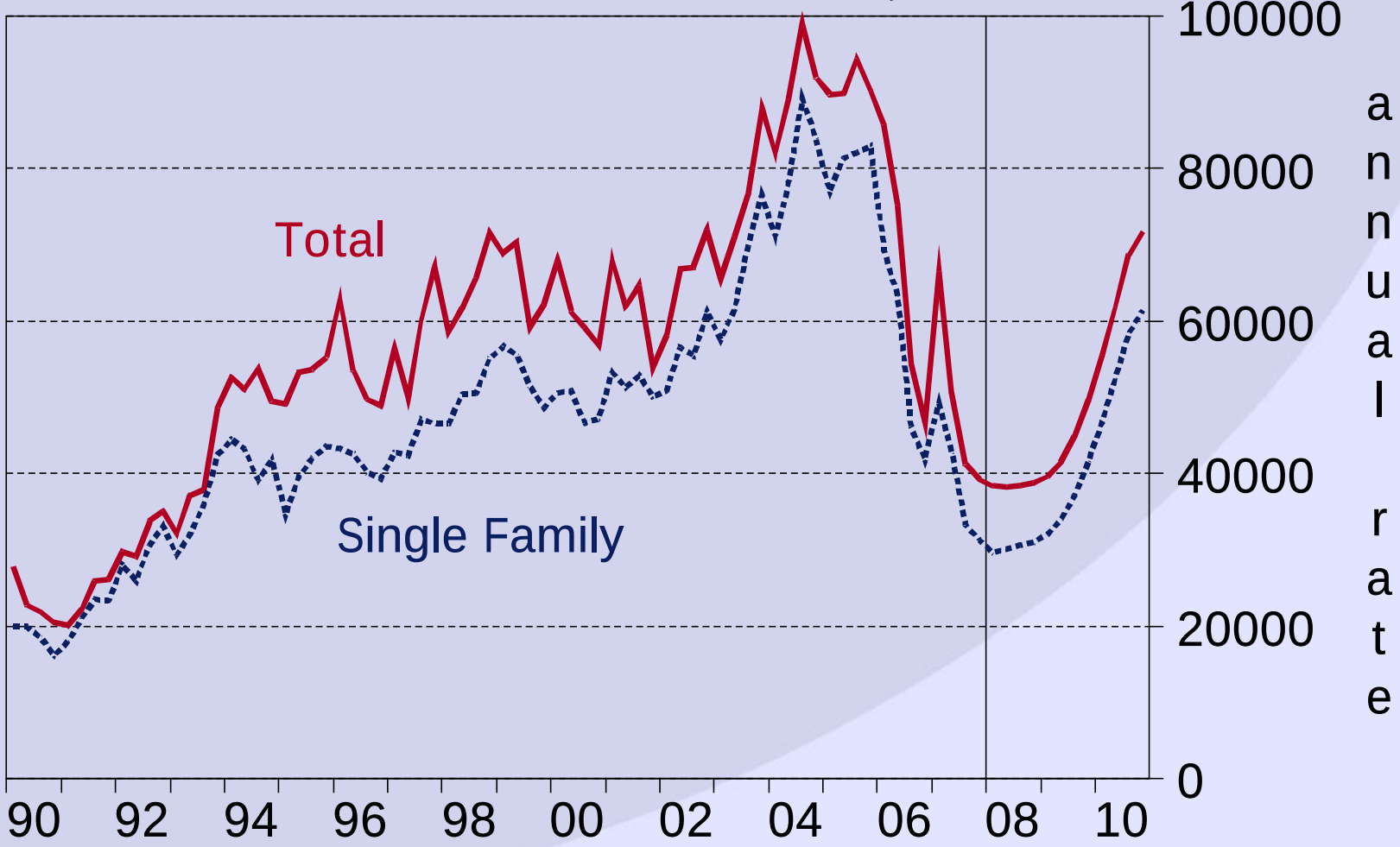
# Building Permits, AZ
(seasonally adjusted annual rate)



# Home Price Index
## S&P/Case-Shiller



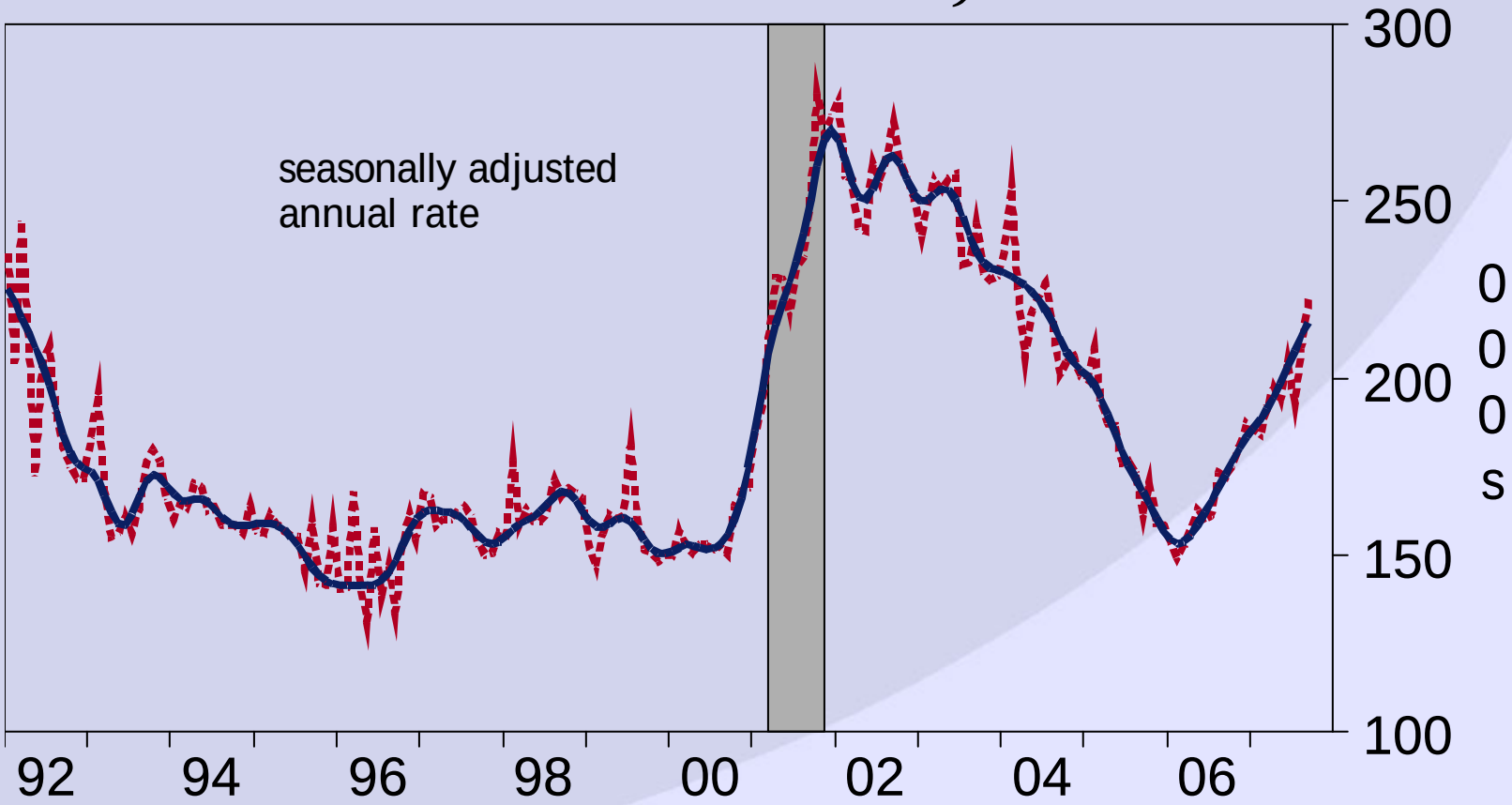
# Residential Permits, AZ



# Labor Market is Deteriorating

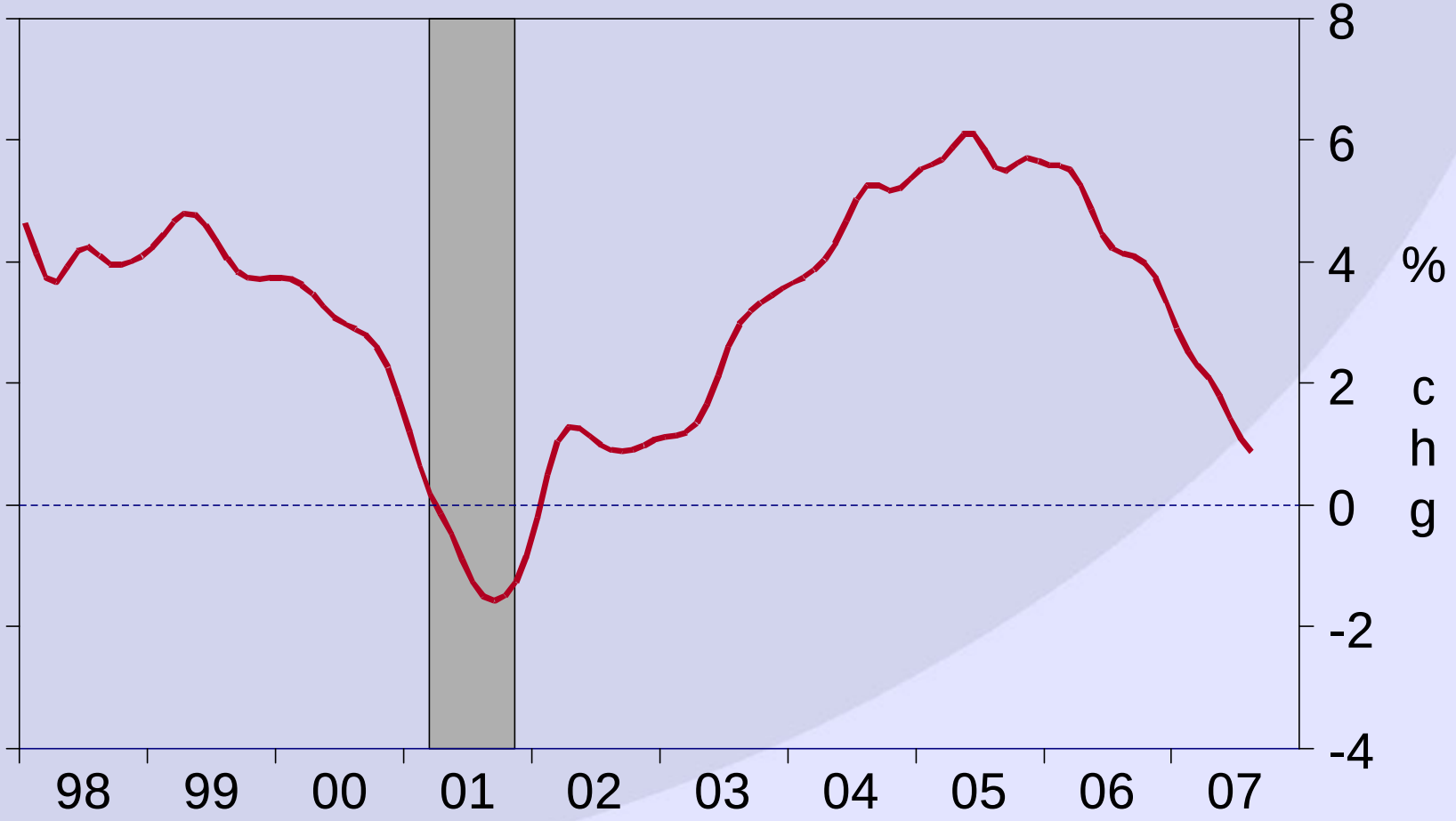
- Initial unemployment insurance claims are rising
- Job growth is falling toward zero
- Slowdown is spreading across sectors

# Initial Unemployment Insurance Claims, AZ

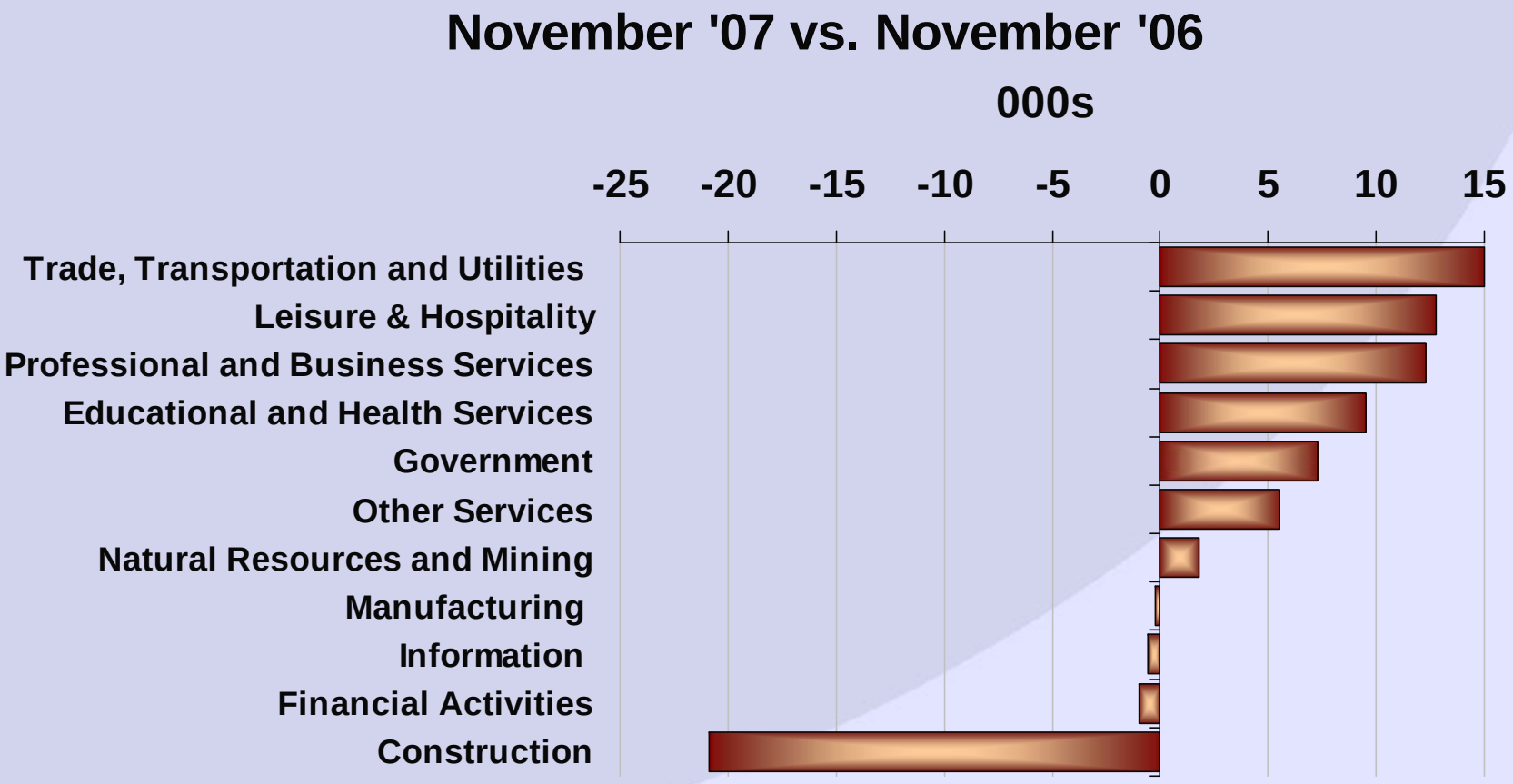


# Nonfarm Job Growth, AZ

seasonally adjusted annual rate (m/m), smoothed

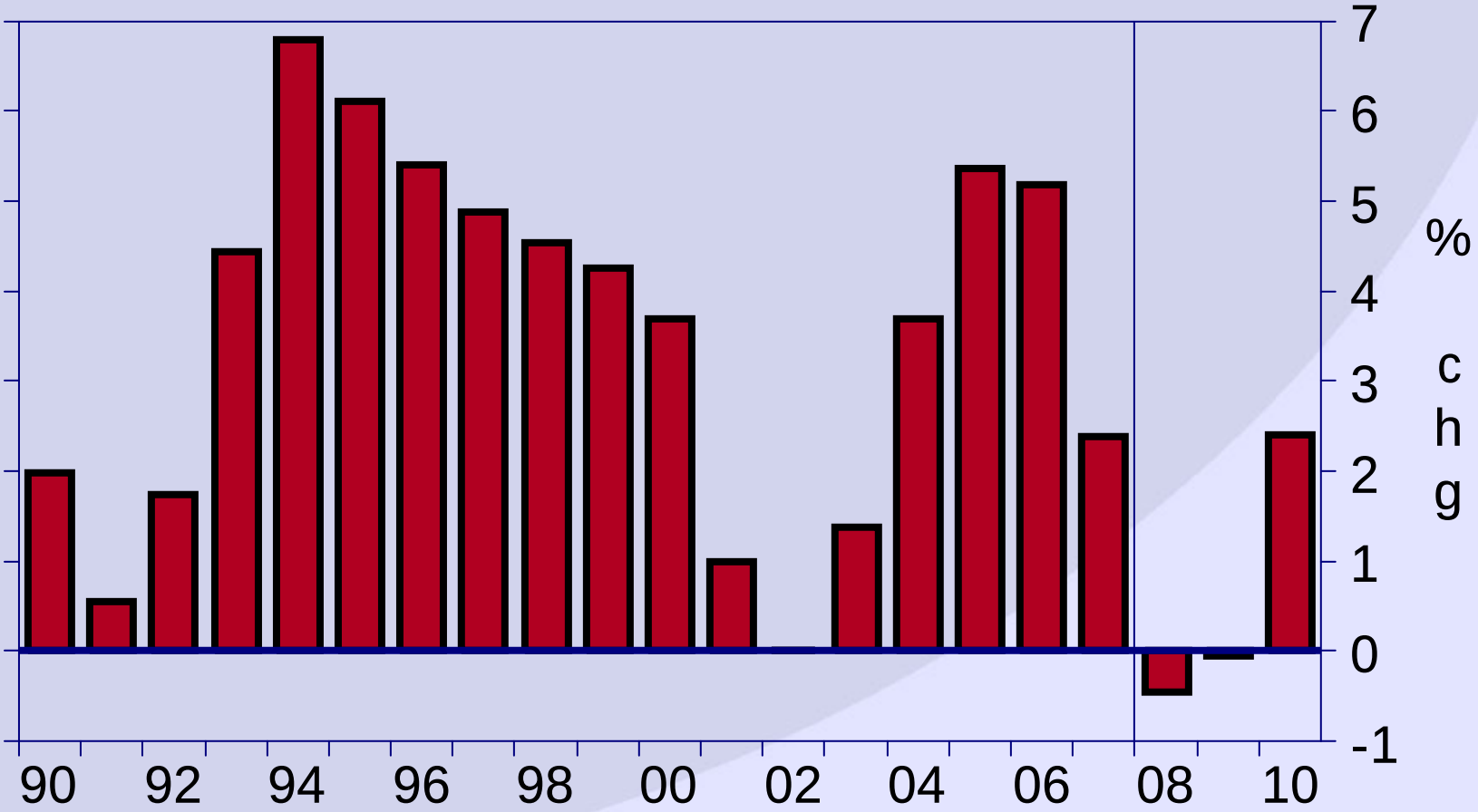


# Changes in Employment, AZ



# Nonfarm Job Growth

## Arizona

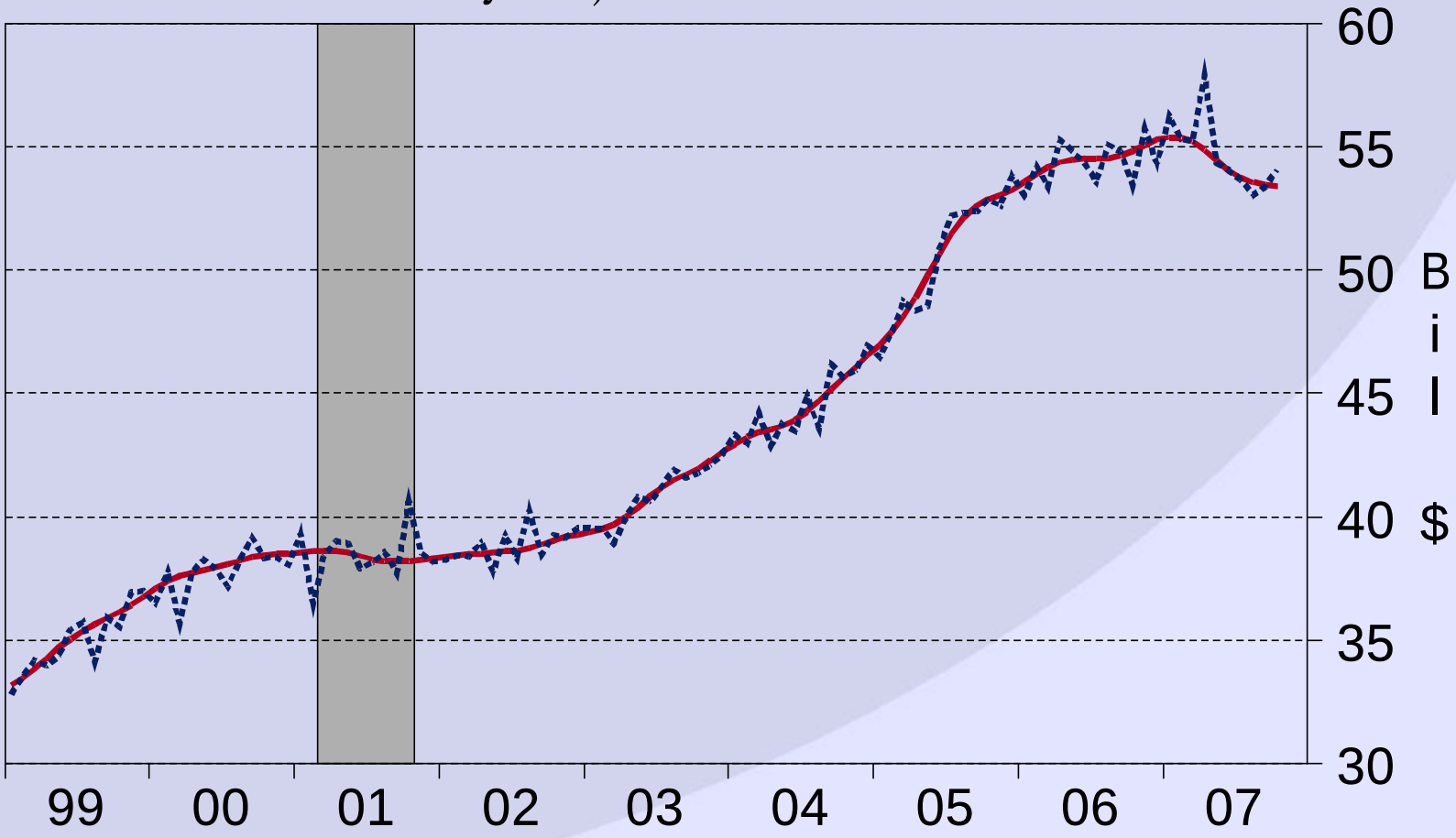


# Consumer Retrenchment Underway

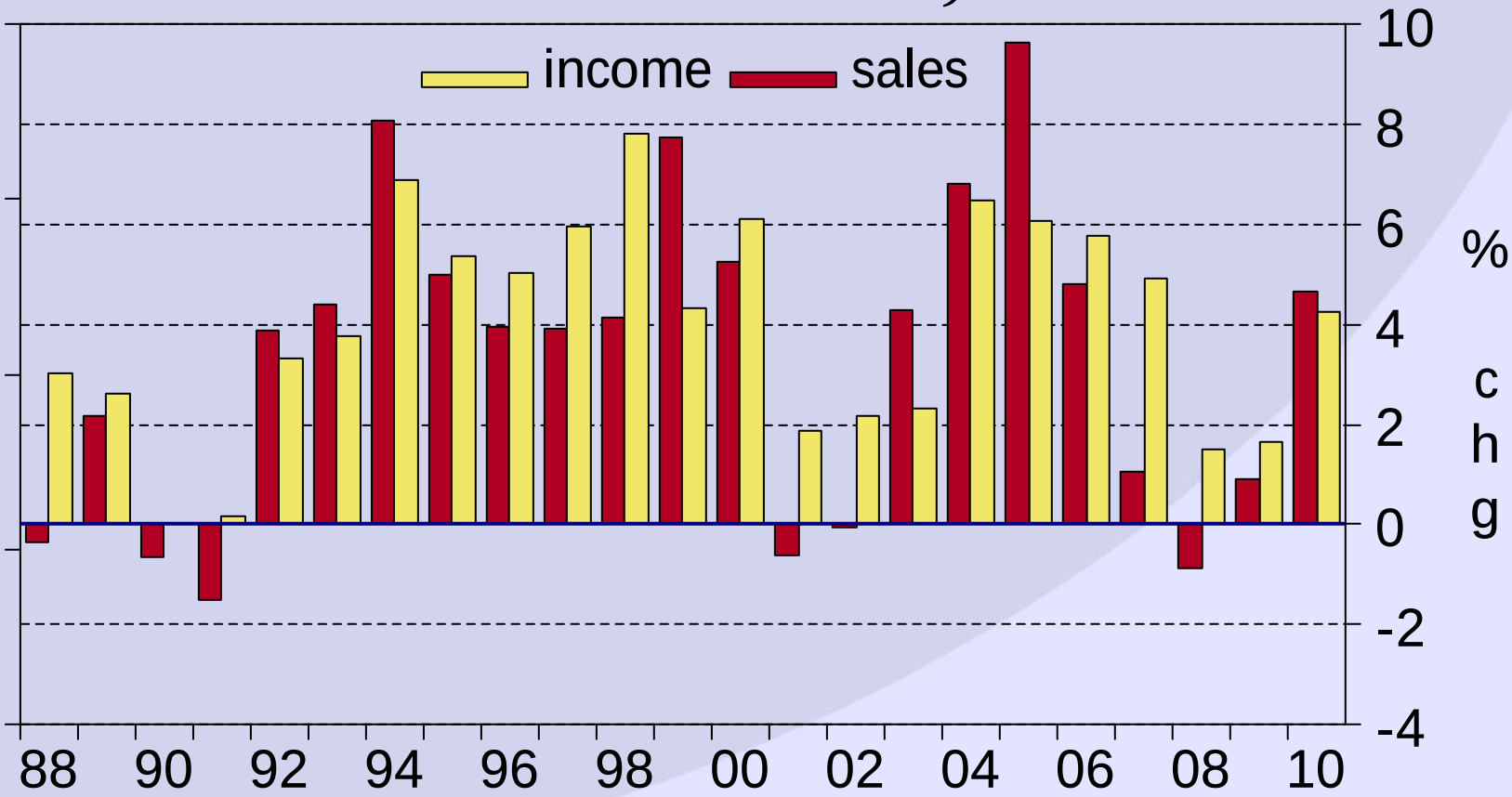
- Consumer confidence is falling to levels last seen in early 1990's
  - Job market, home prices, gasoline prices
  - ARM rate resets
- Spending will grow more slowly than income in 2008-09

# Retail Sales, AZ

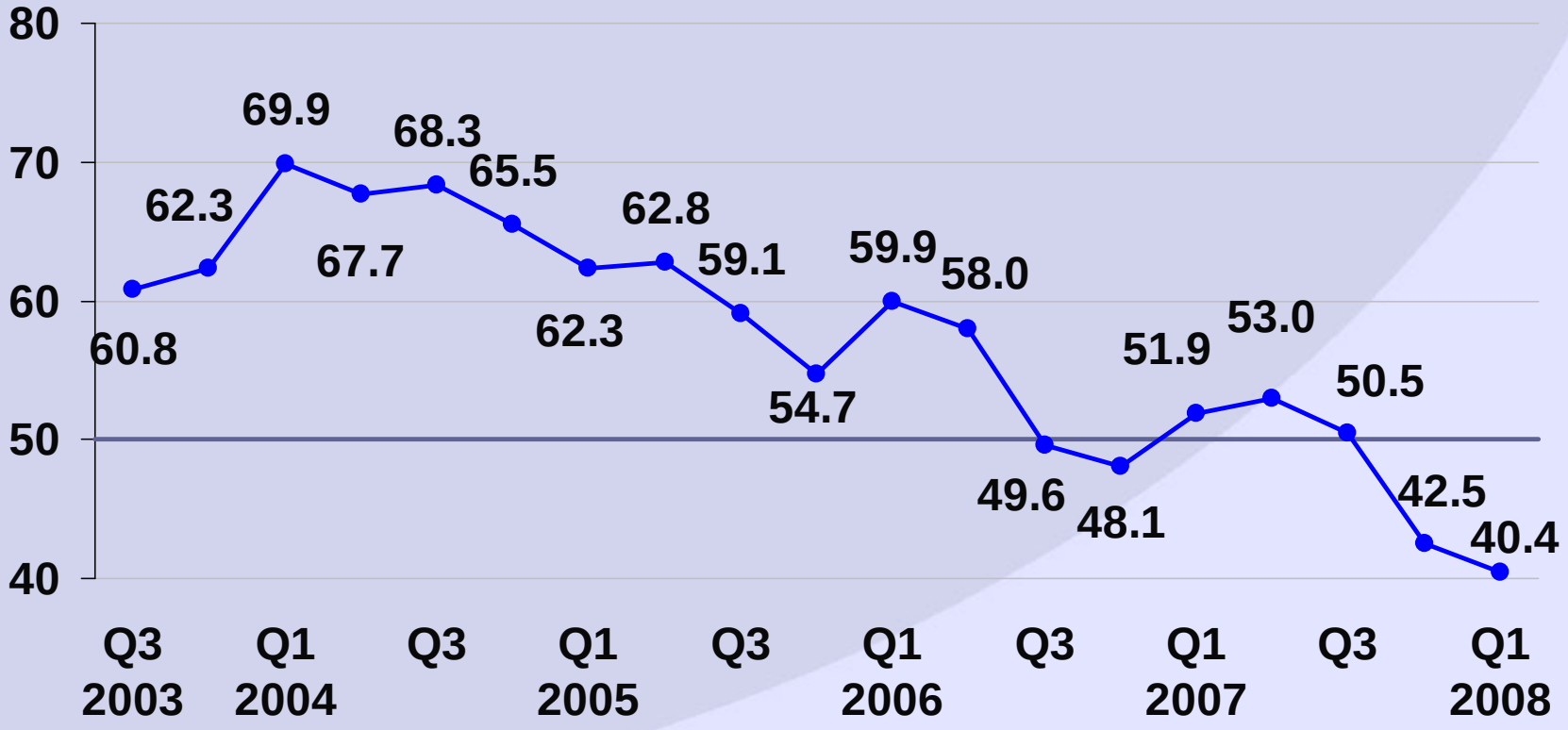
seasonally adjusted annual rate



# Real Consumer Spending and Income Growth, AZ



# Business Leader Confidence Index Arizona



# Recession Ahead?

- Arizona (likely) already in recession
- Joined by Michigan, California, Florida, Nevada
  - Concentration of jobs related to growth
  - Exposure to speculation & subprime lending

# How Long? How Bad?

- The best bet is a short and mild recession
- Foreclosures and bankruptcies will soar
- Consumers spending will stall as will job and income growth
- Population growth will slow
- Public sector will struggle to balance budgets

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