

The Domestic Economic Outlook

Regional and Community Bankers
Conference
Federal Reserve Bank of Boston
June 3, 2002

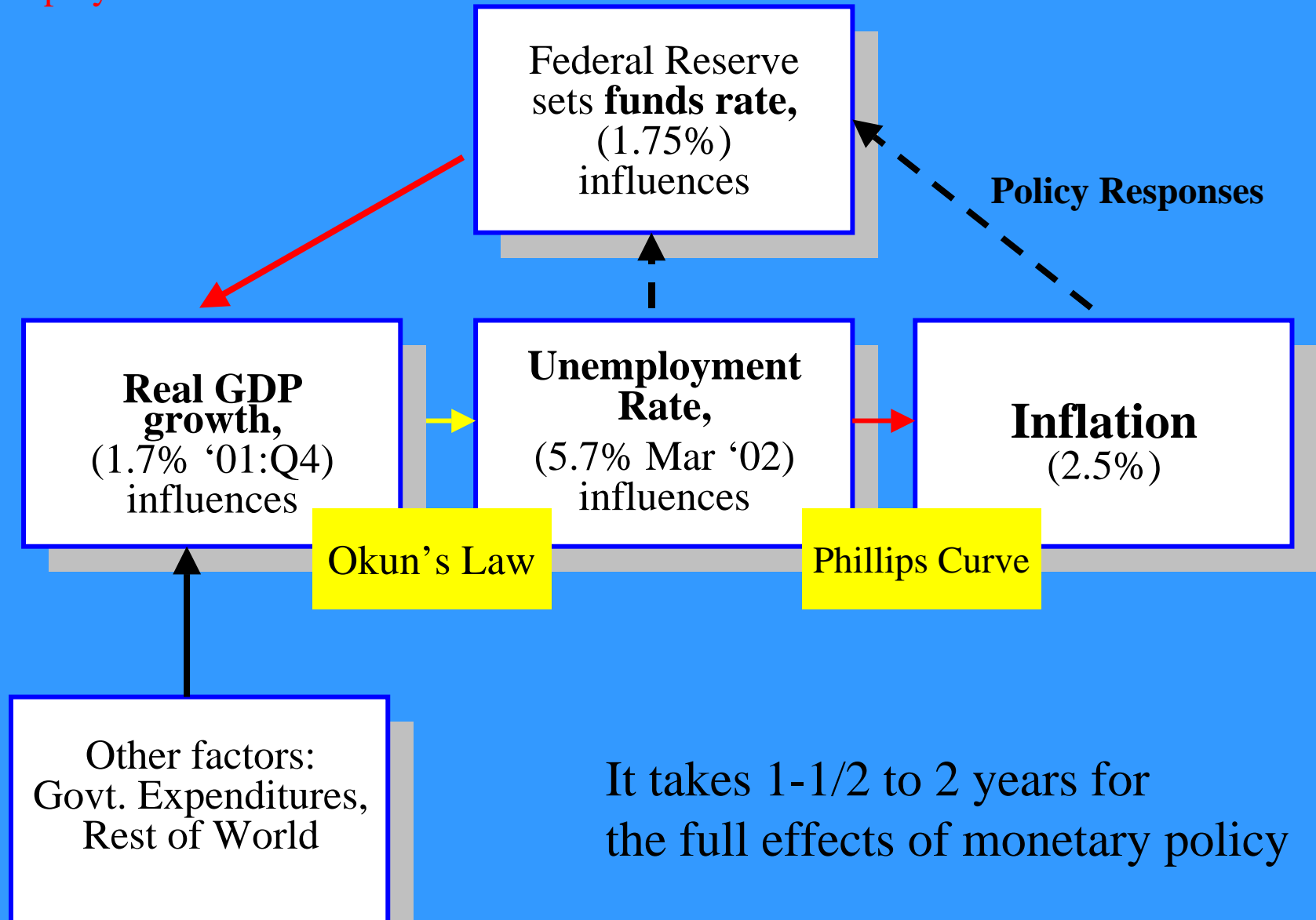
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SVP and Director of Research
Federal Reserve Bank of Boston

Overview

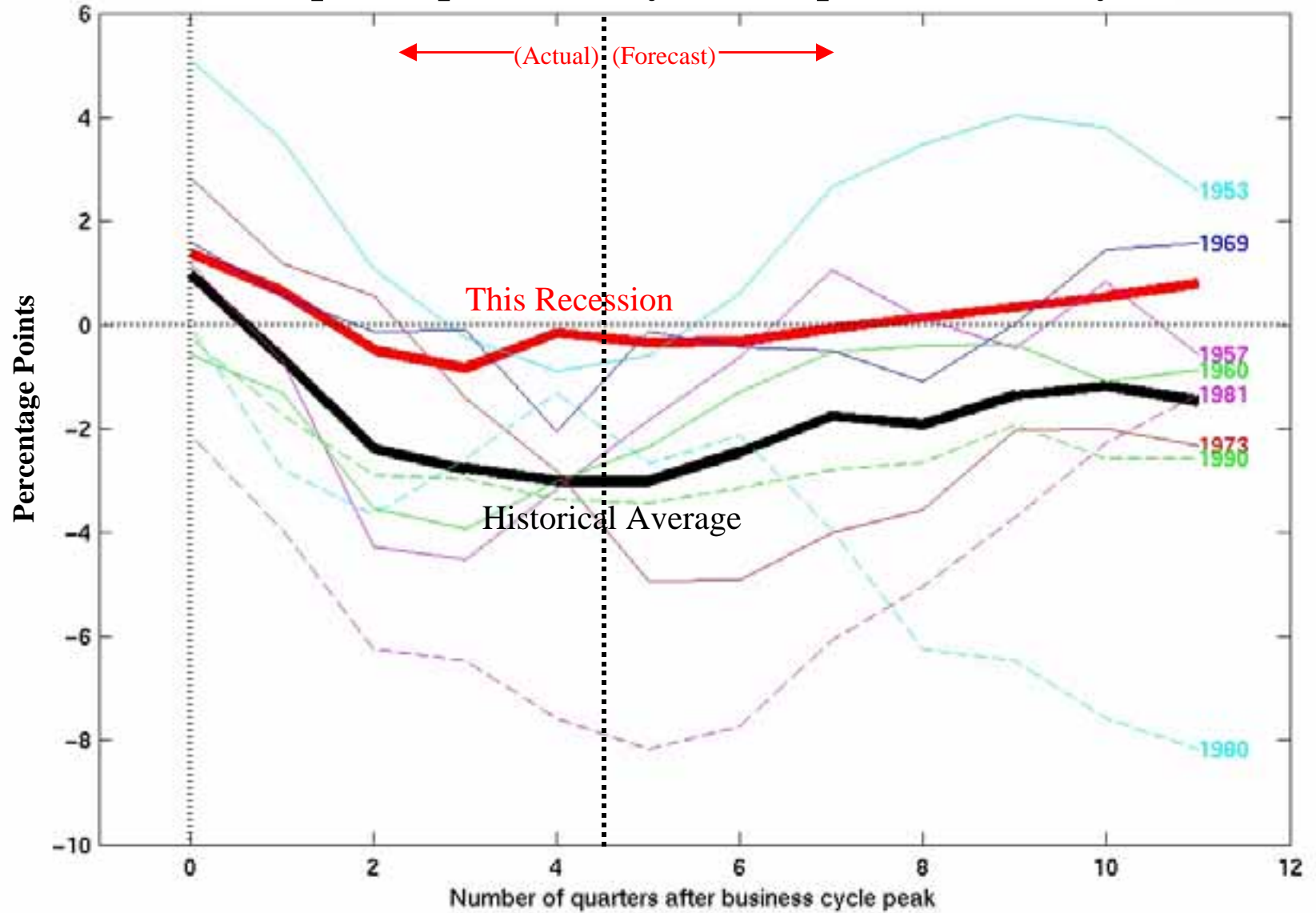
- A Simple Framework for Monetary Policy
- A Brief History of a Shallow Recession
 - How Mild Was It?
 - What Kept Us Humming During the Recession?
 - Who Gets the Credit for That?
- This Year--the Recovery?
 - How Far Have We Come?
 - Where are we going?
 - What are the Risks?
 - How About Those Productivity Numbers?
 - What do they mean?

- It takes 1 to 2 quarters for
- (1) Interest rates to affect spending
 - (2) Spending to affect employment
 - (3) Employment to affect inflation

A Schematic Framework for Monetary Policy Analysis



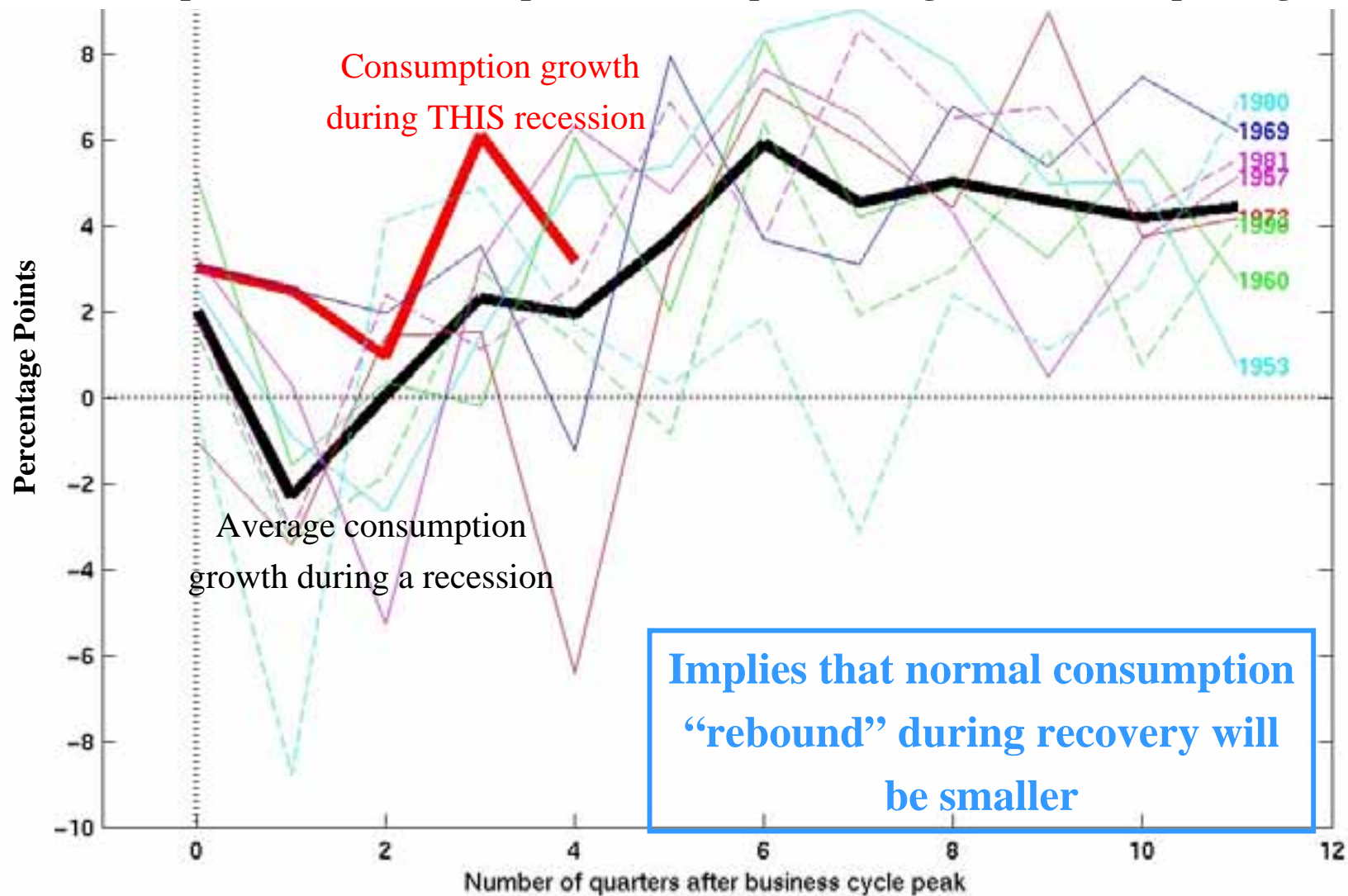
How Mild Was the Recession? “Output Gap” in this Cycle Compared to History



Heavy black line represents average of recessions
Heavy red line represents current experience

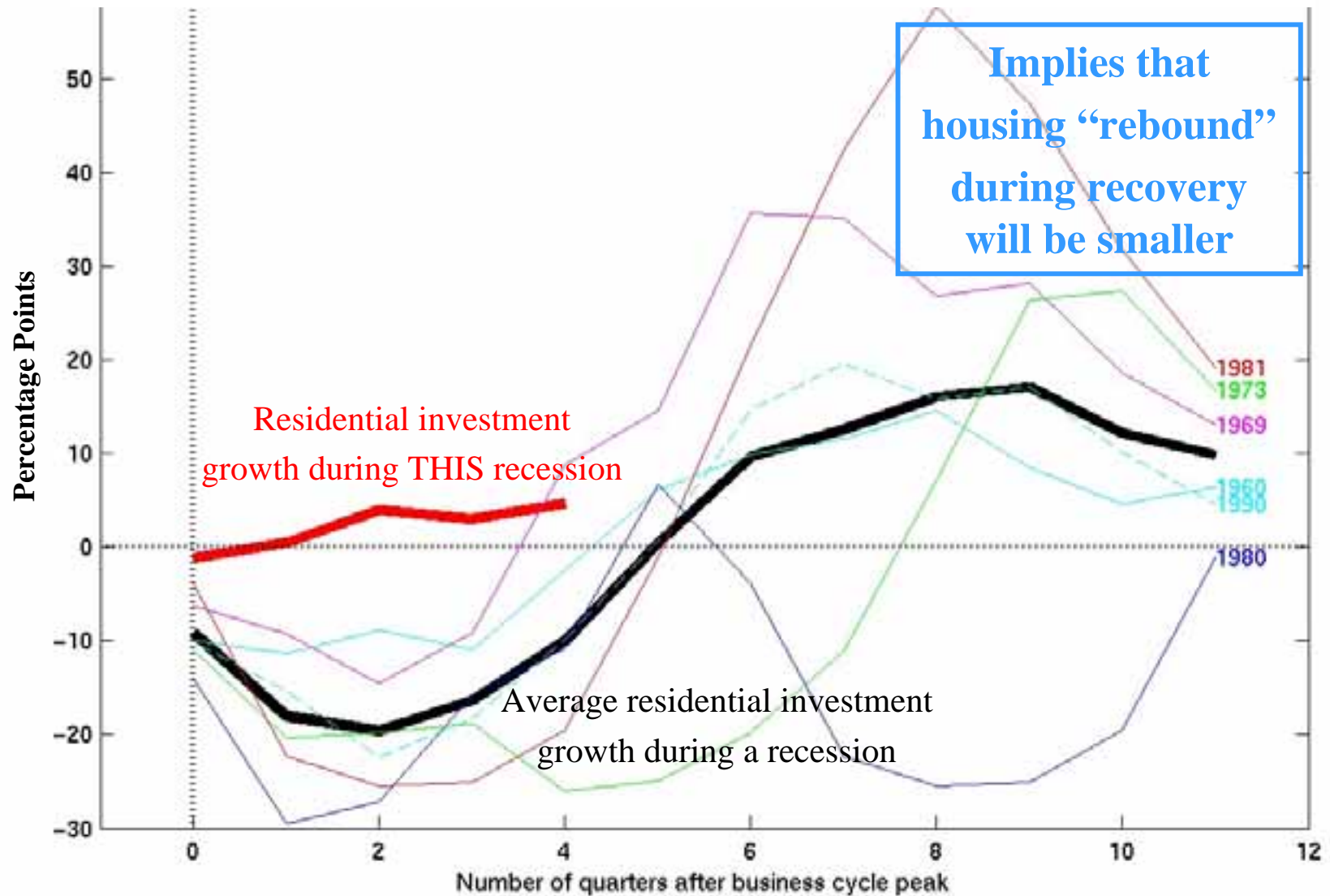
Why Was It So Mild? (1) Strong Consumer Spending

Comparison of recession experience for 1-qtr. % change in consumer spending



Why Was It So Mild? (2) Strong Housing

Comparison of recession experience for 4-qr. % change in residential investment

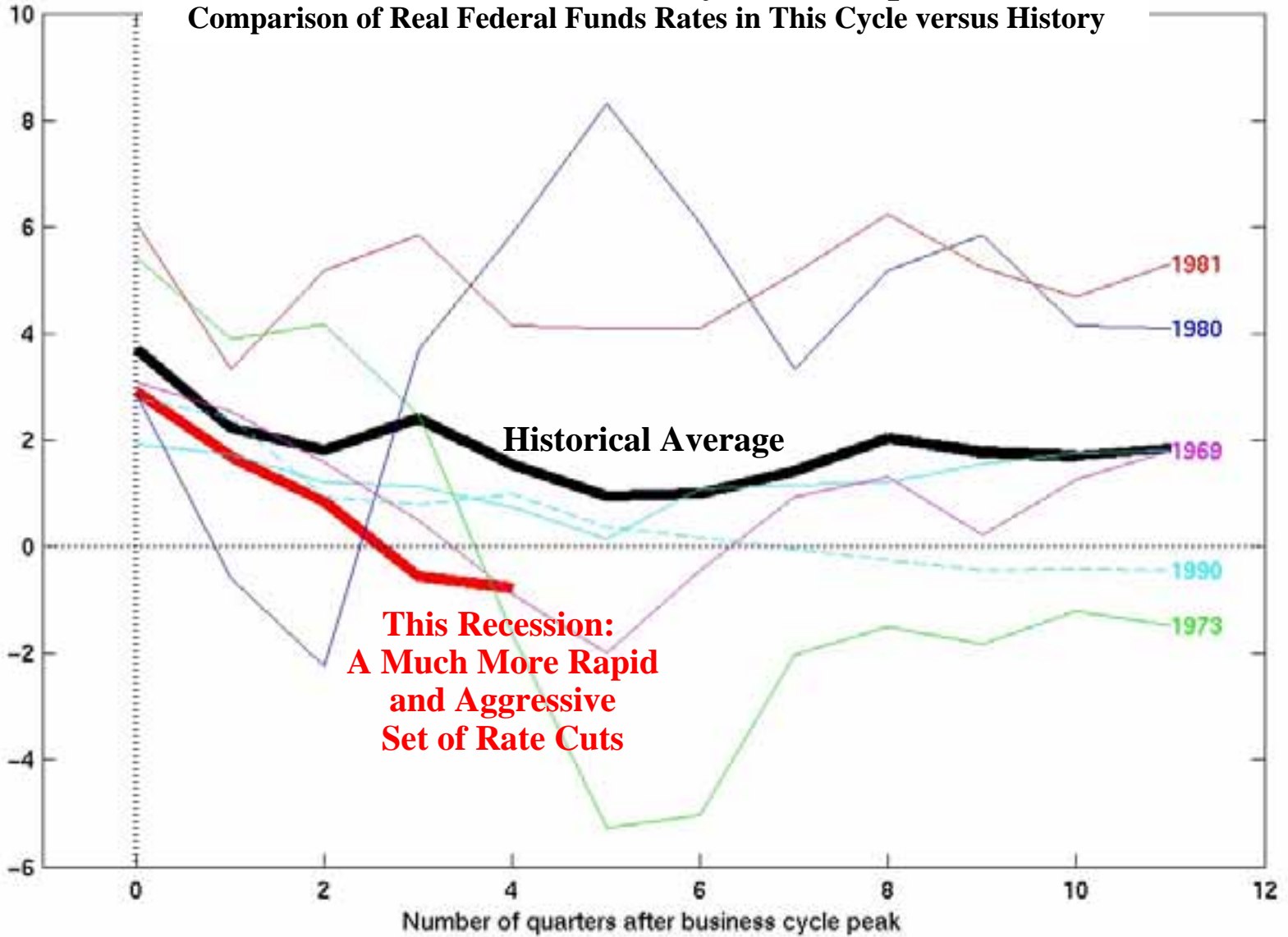


Heavy black line represents average of recessions
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What Spurred These Components (Part I)?

The Fed's Actions May Have Helped:

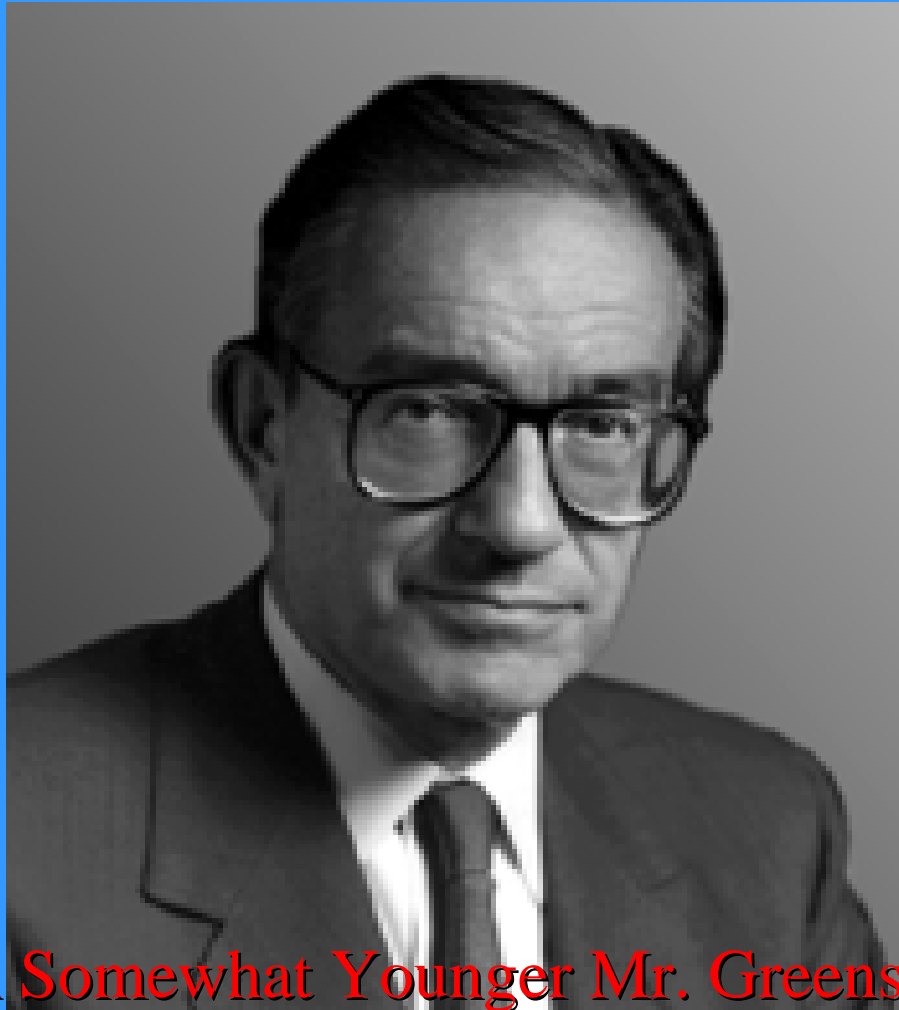
Comparison of Real Federal Funds Rates in This Cycle versus History



**This Recession:
A Much More Rapid
and Aggressive
Set of Rate Cuts**

Heavy black line represents average of recessions
Heavy red line represents current experience

And Now, Please Rise for Our National Anthem

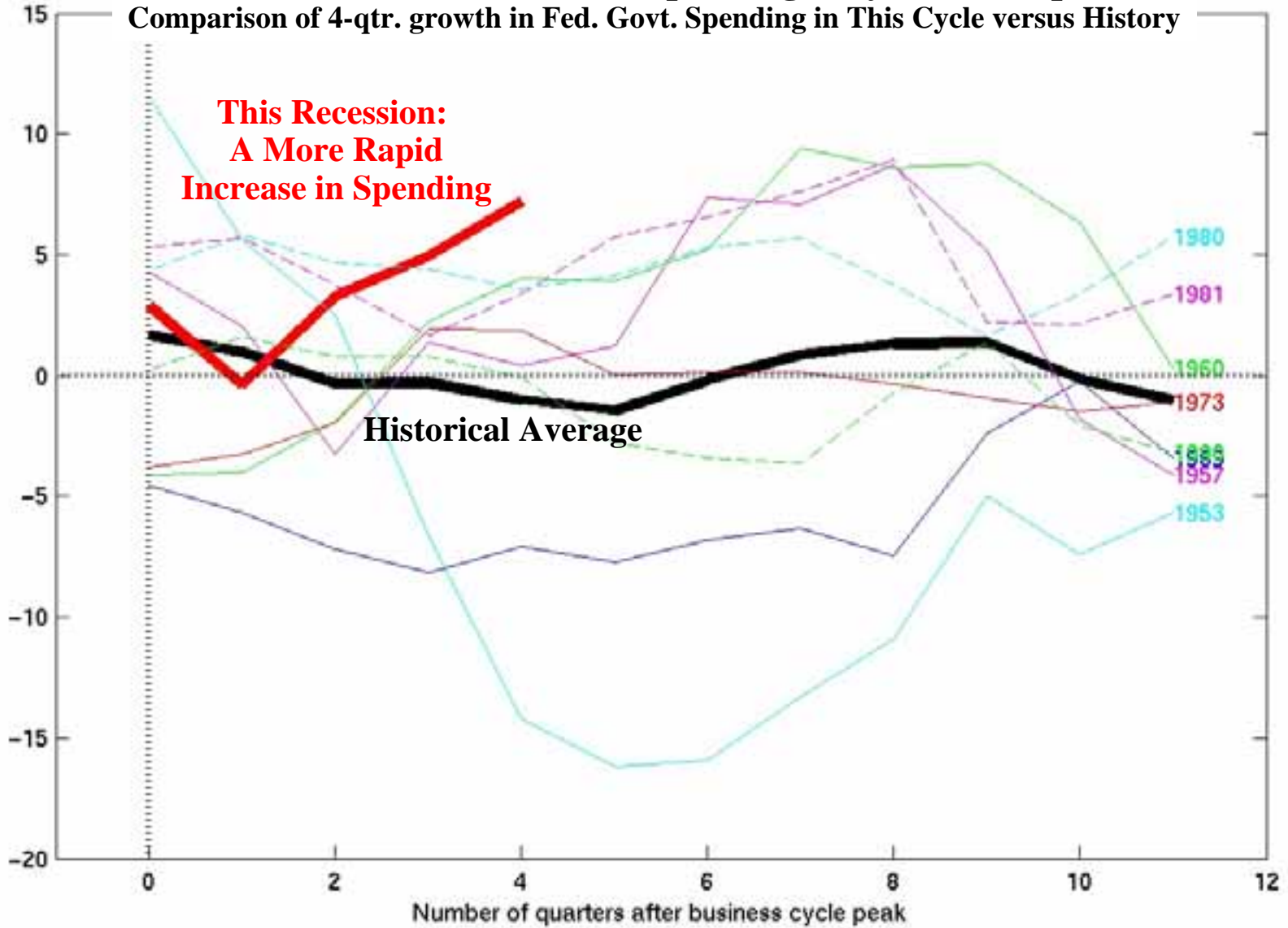


(A Somewhat Younger Mr. Greenspan)

What Spurred These Components (Part II)?

The Federal Government's Spending May Have Helped:

Comparison of 4-qr. growth in Fed. Govt. Spending in This Cycle versus History

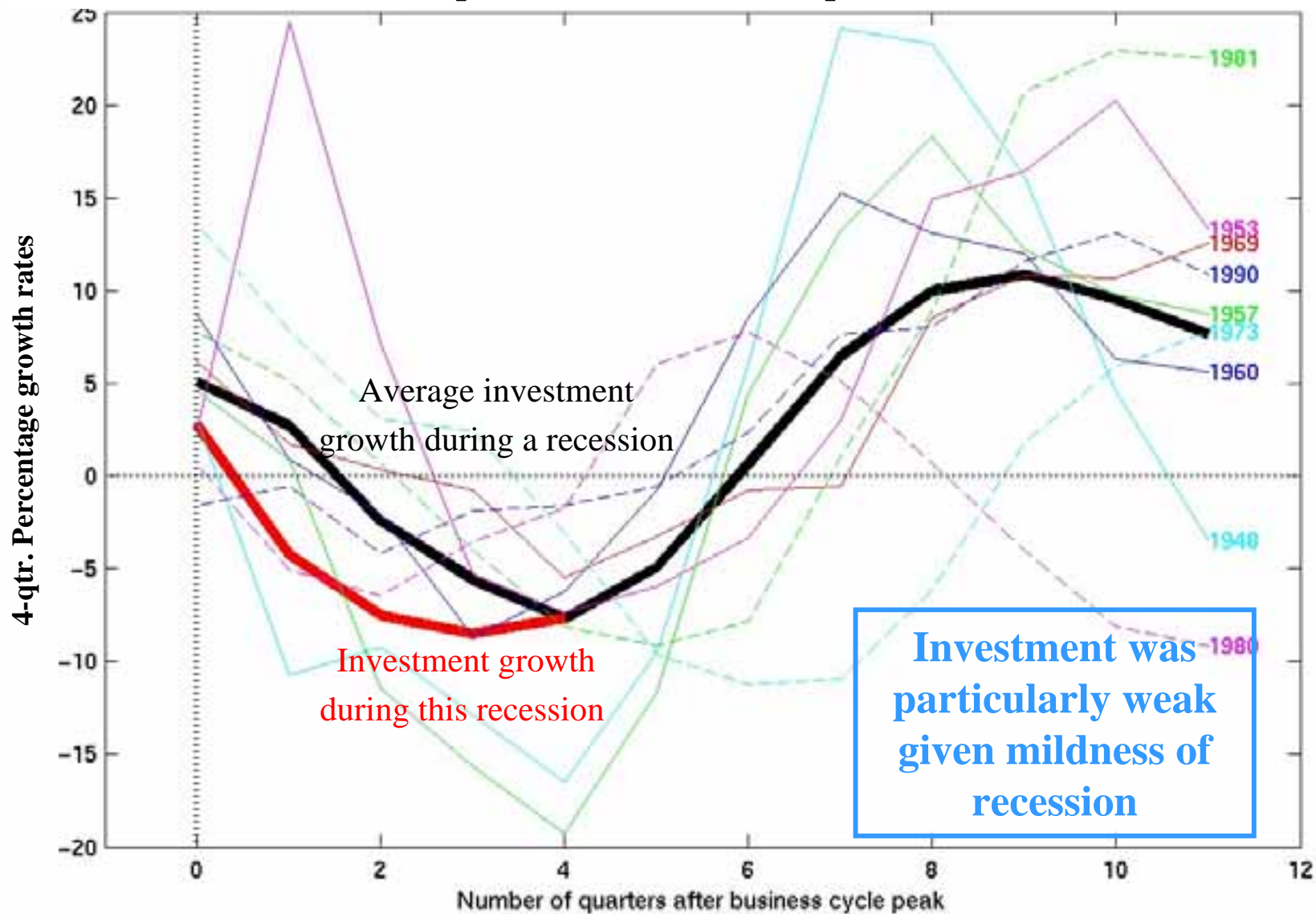


Heavy black line represents average of recessions

Heavy red line represents current experience

One Component That Wasn't So Mild: Capital Investment

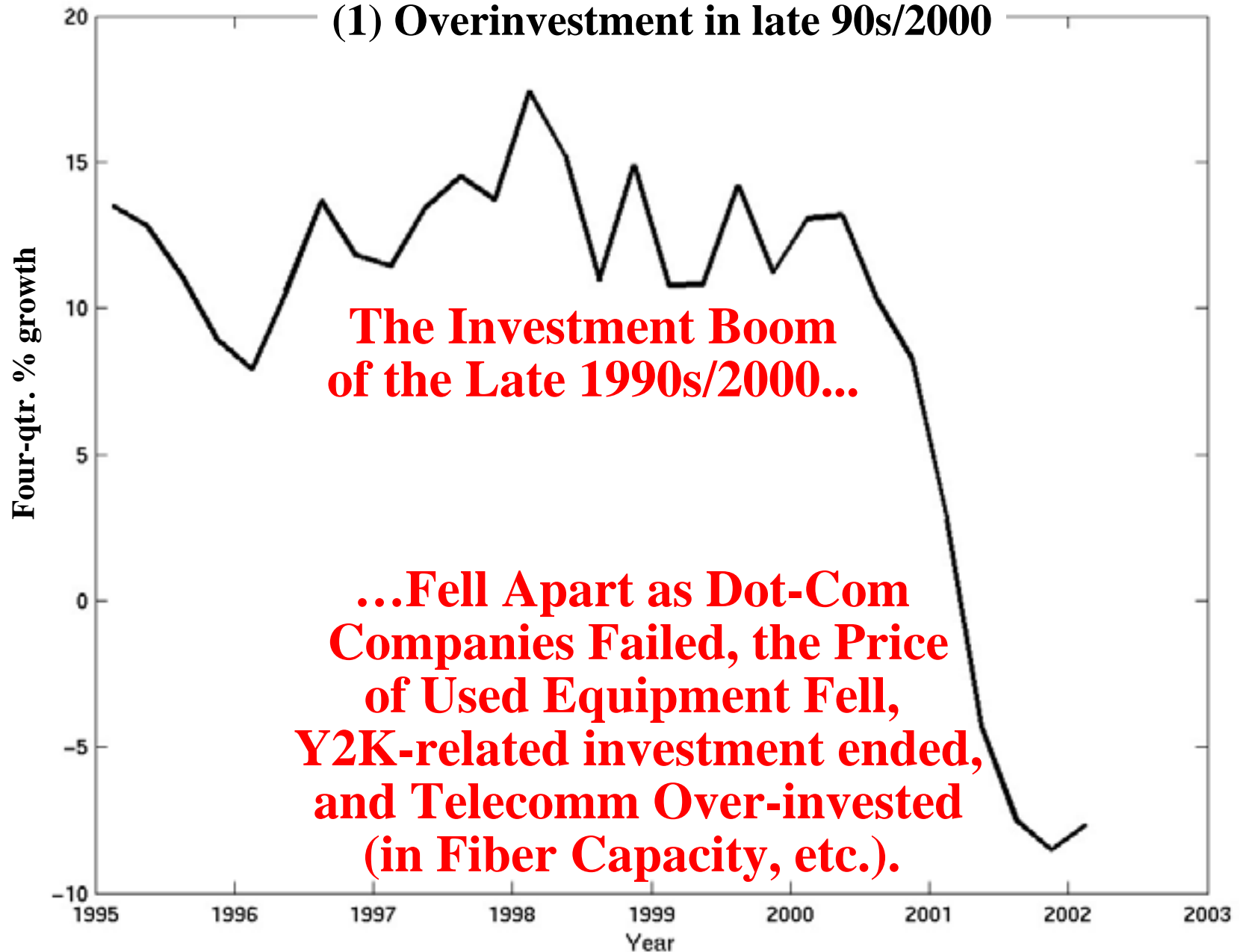
Comparison of Recession Experiences



Heavy black line represents average of recessions
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Why Was Investment Weak?

(1) Overinvestment in late 90s/2000

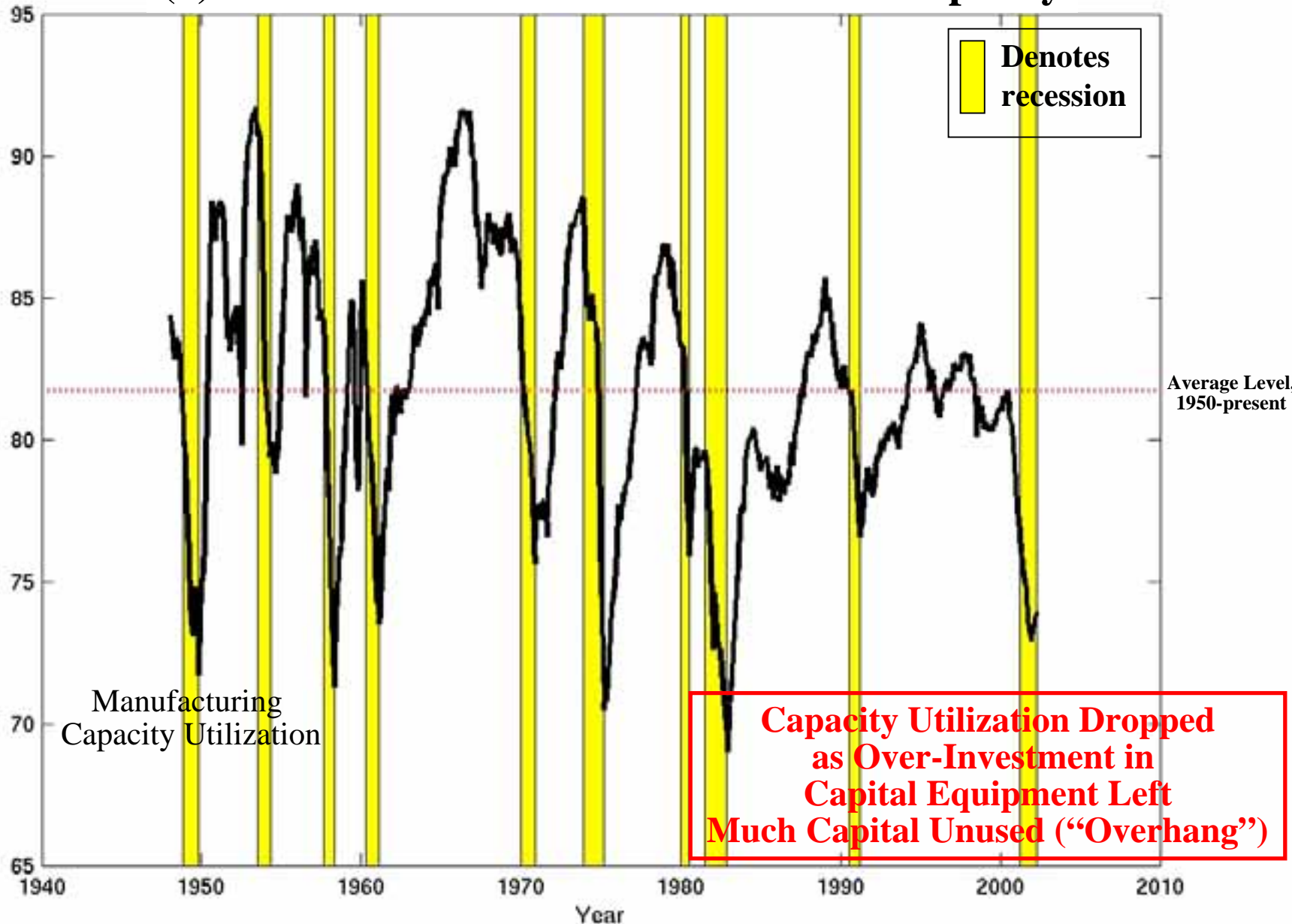


**The Investment Boom
of the Late 1990s/2000...**

**...Fell Apart as Dot-Com
Companies Failed, the Price
of Used Equipment Fell,
Y2K-related investment ended,
and Telecomm Over-invested
(in Fiber Capacity, etc.).**

Why Was Investment Weak?

(2) Overinvestment Resulted in Excess Capacity



And Now for the Recovery ...

- First-quarter growth in GDP: **5.6%**
- Of which **3.5%** was less rapid drop in inventories
- Which means only **2.1%** was Final Sales
- Blue-Chip^a GDP forecast for rest of year: **3.3%**
- Blue-Chip Unemployment forecast for end of years

Year

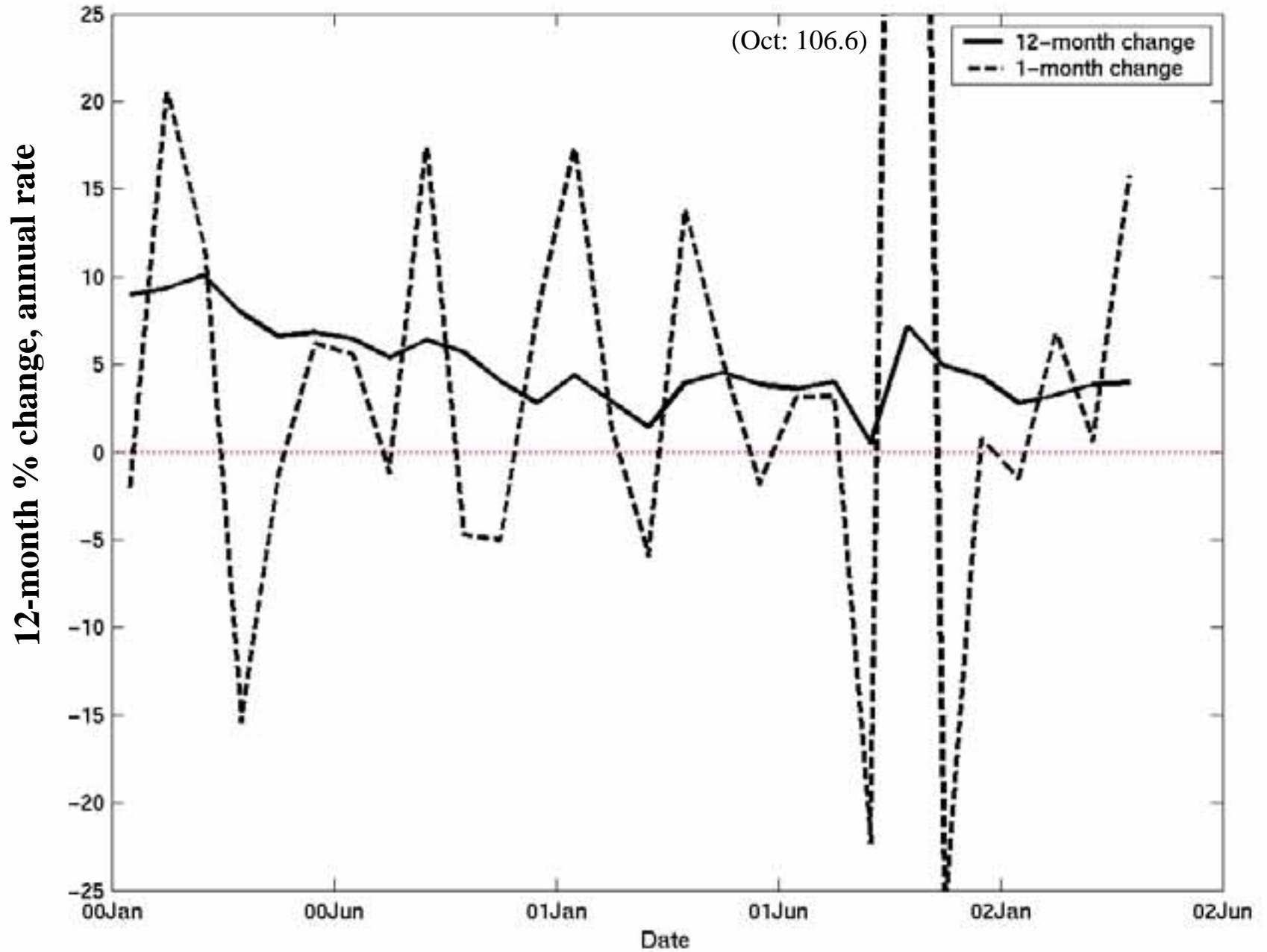
2002	2003
5.6%	5.2%

^a May 10 forecast

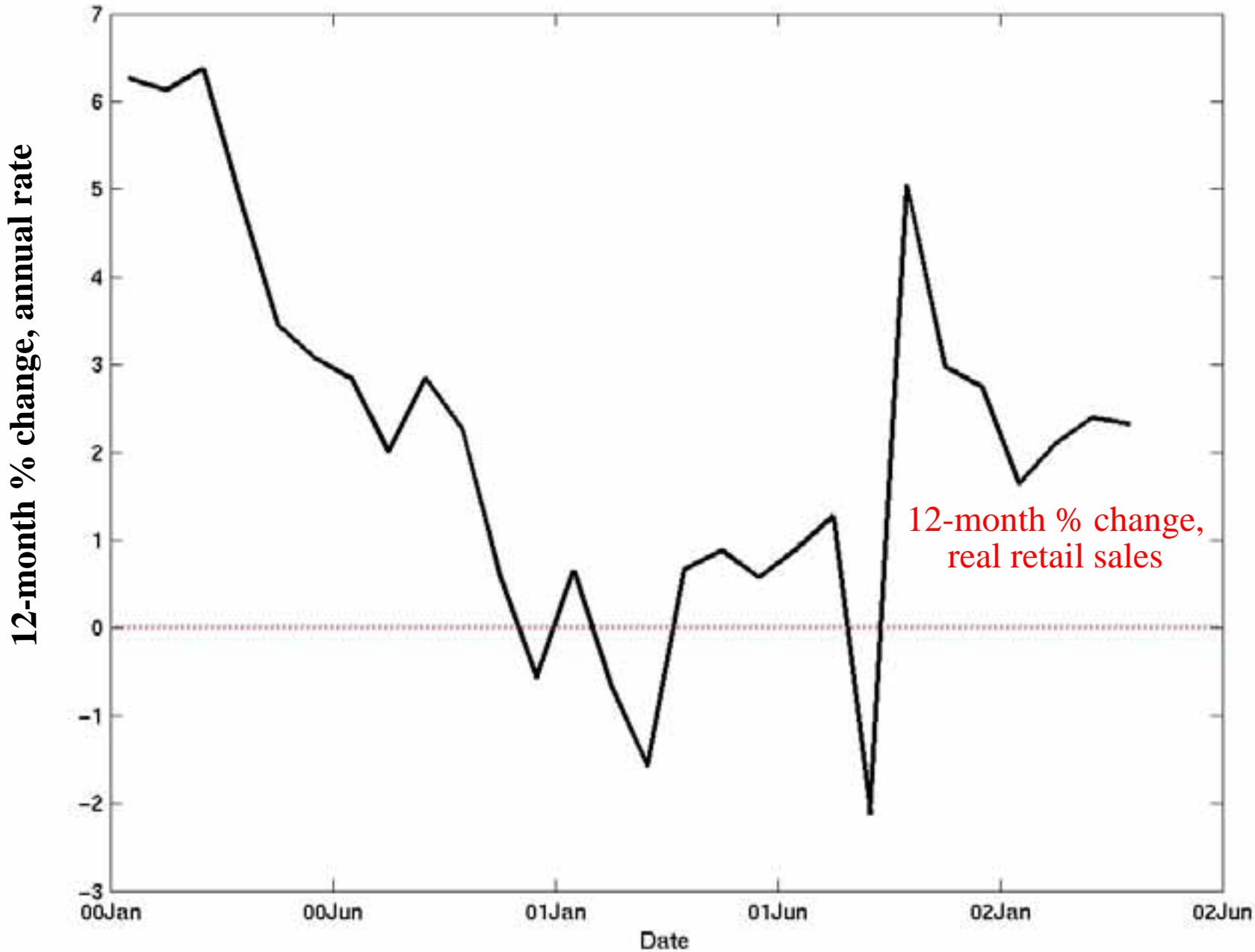
Where Does the Projected Recovery Come From?

- Moderate Consumption Growth (<3%)
- Flat Residential Spending (high *level*, but no growth)
- Weak capital investment
- Weak state and local government spending
- Some federal spending
- And INVENTORIES!!
- Look at these components in more detail

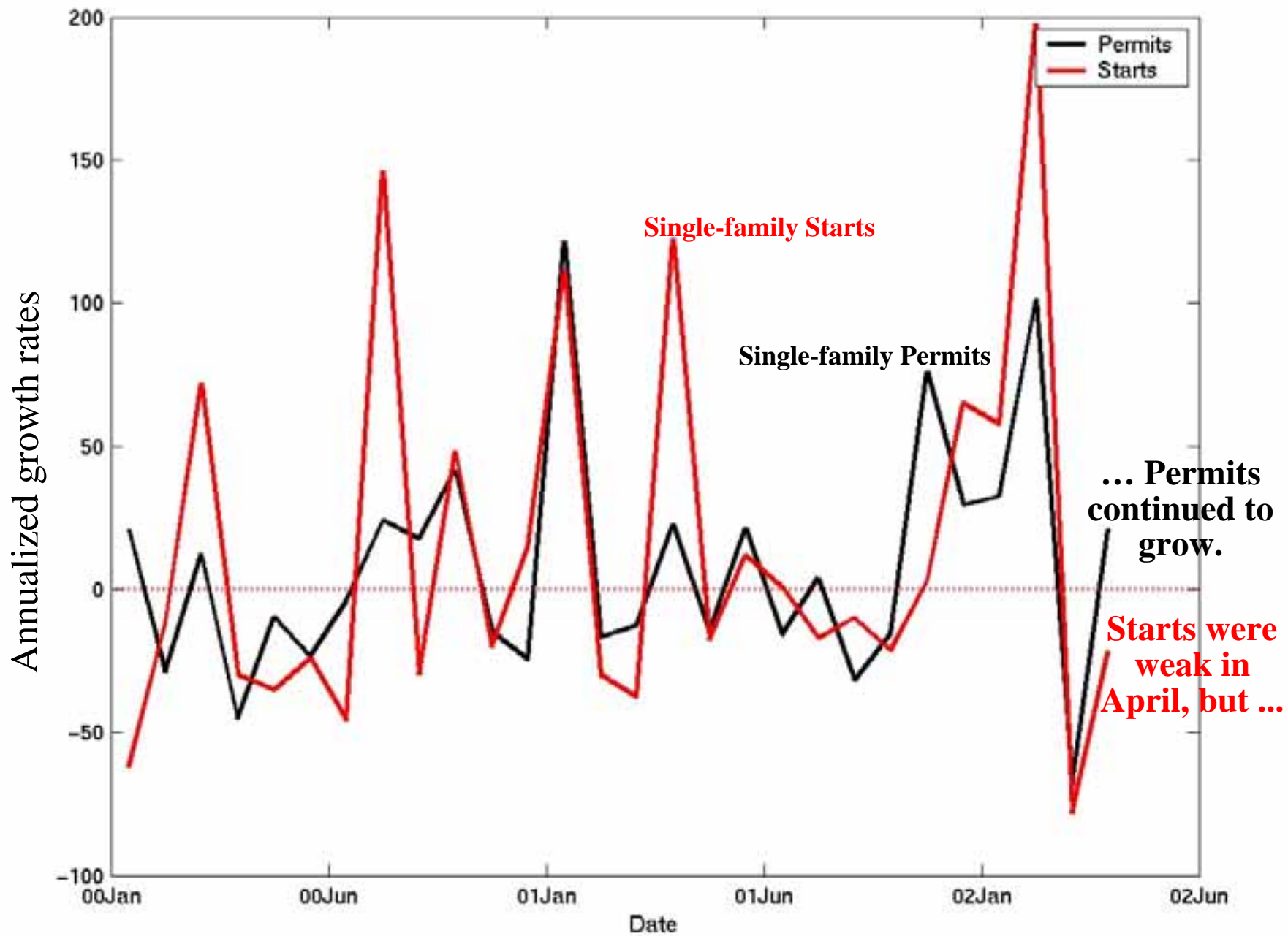
Consumption Indicator: Retail Sales Have Held Up Well So Far ...



In Real Terms, As Well.



Recent Forward-Looking Indicators of Housing Activity Have Held Up Well



Annualized growth rates

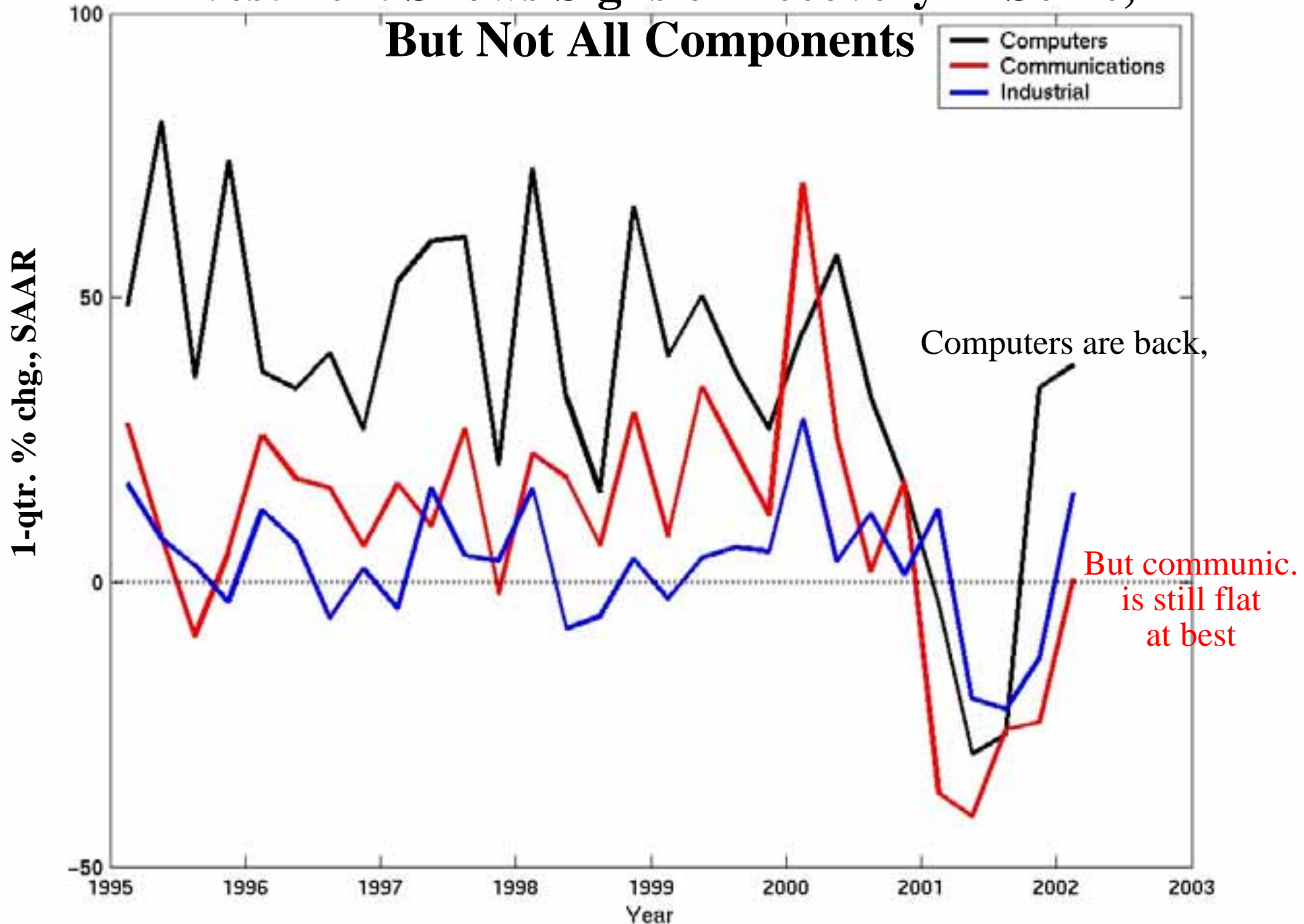
... Permits continued to grow.

Starts were weak in April, but ...

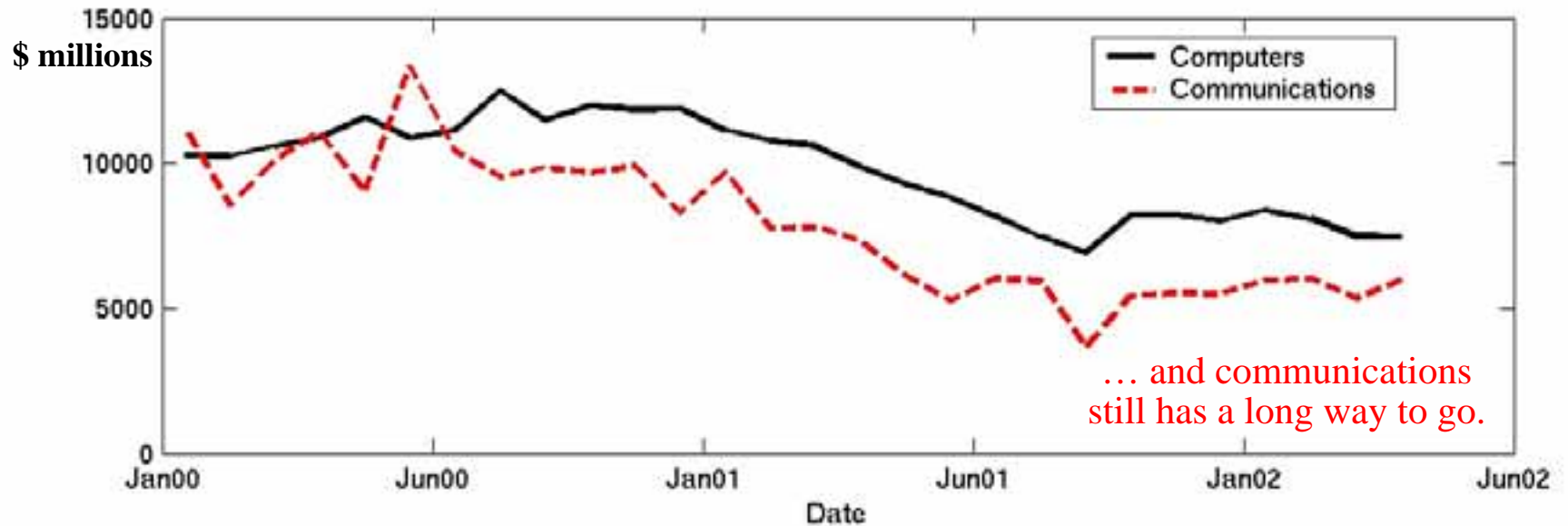
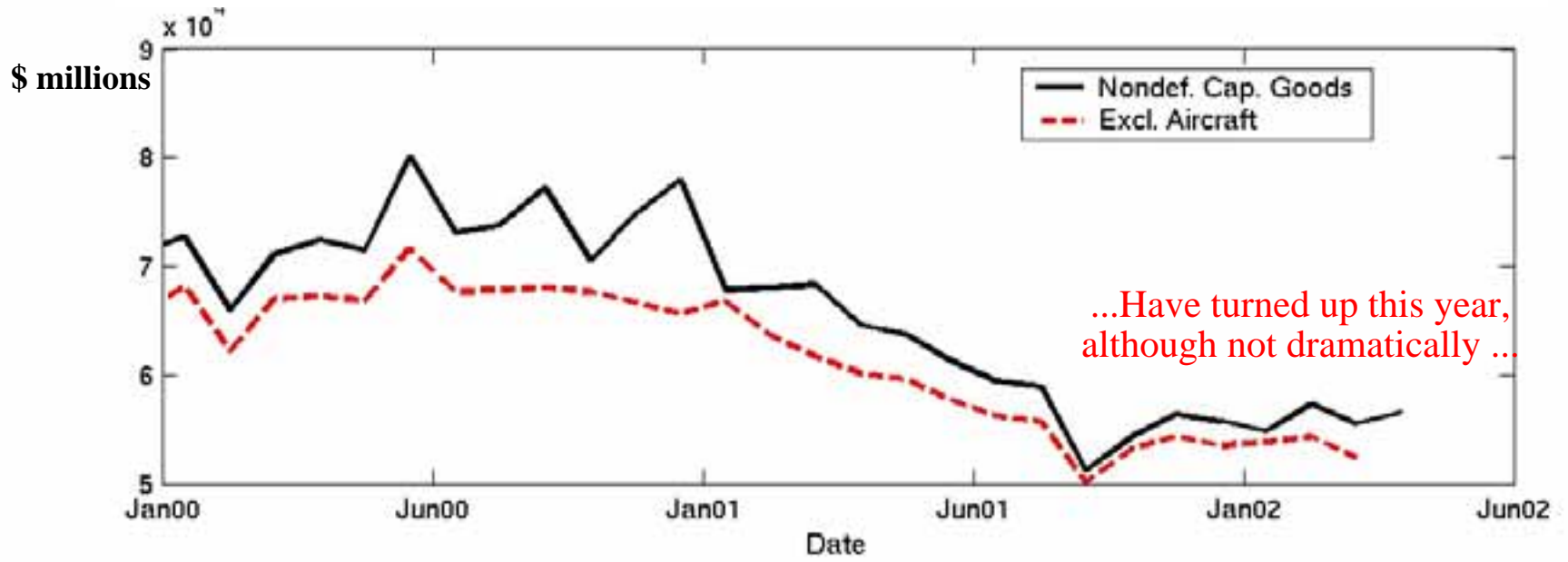
Single-family Starts

Single-family Permits

Investment Shows Signs of Recovery in Some, But Not All Components

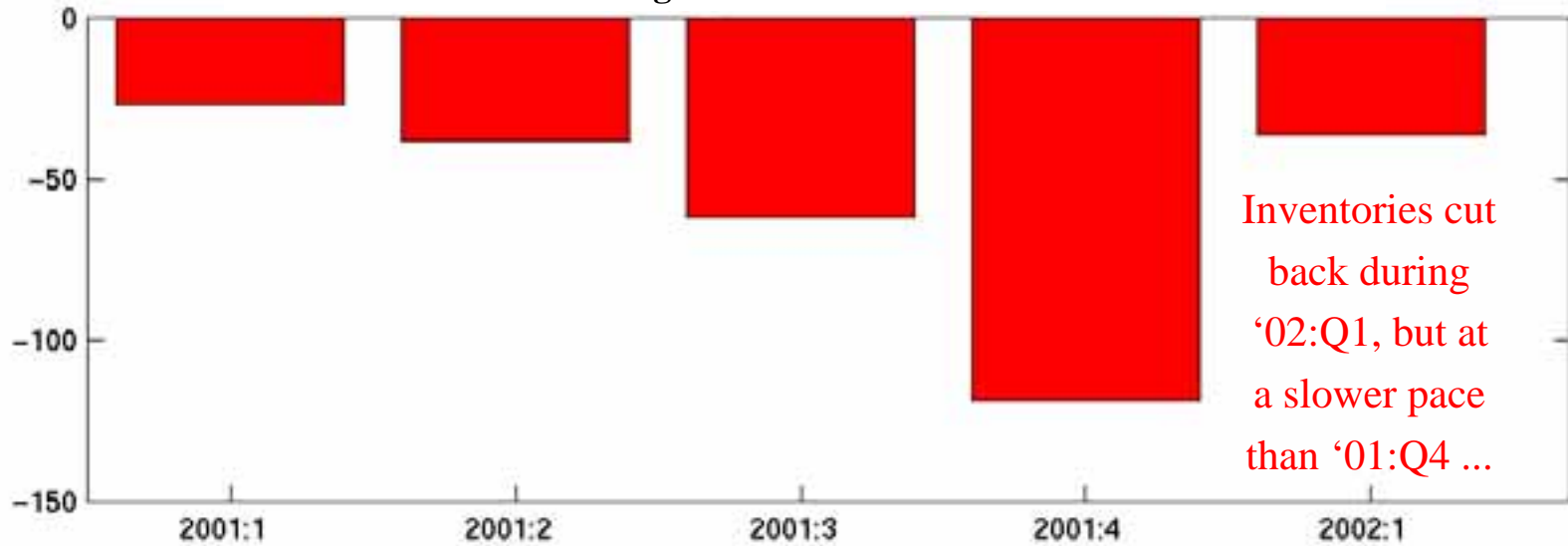


Looking Forward: Orders for Capital Equipment ...

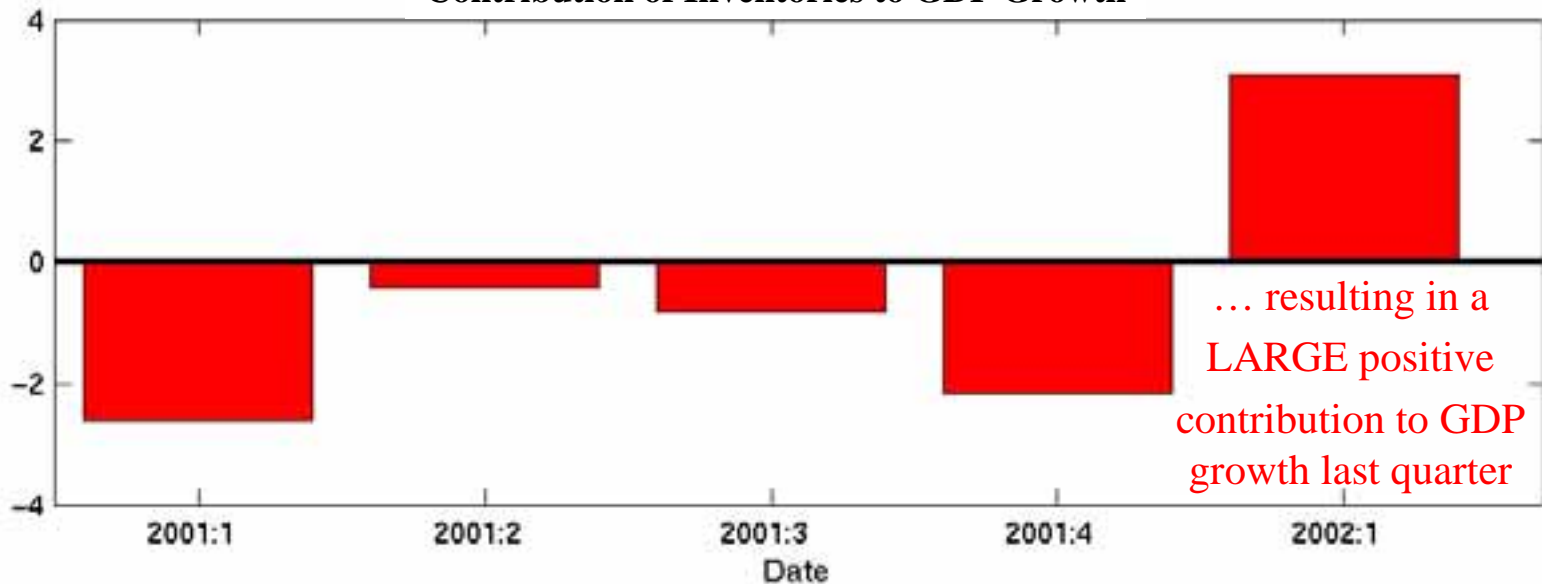


The Inventory Dynamic Over the Recession

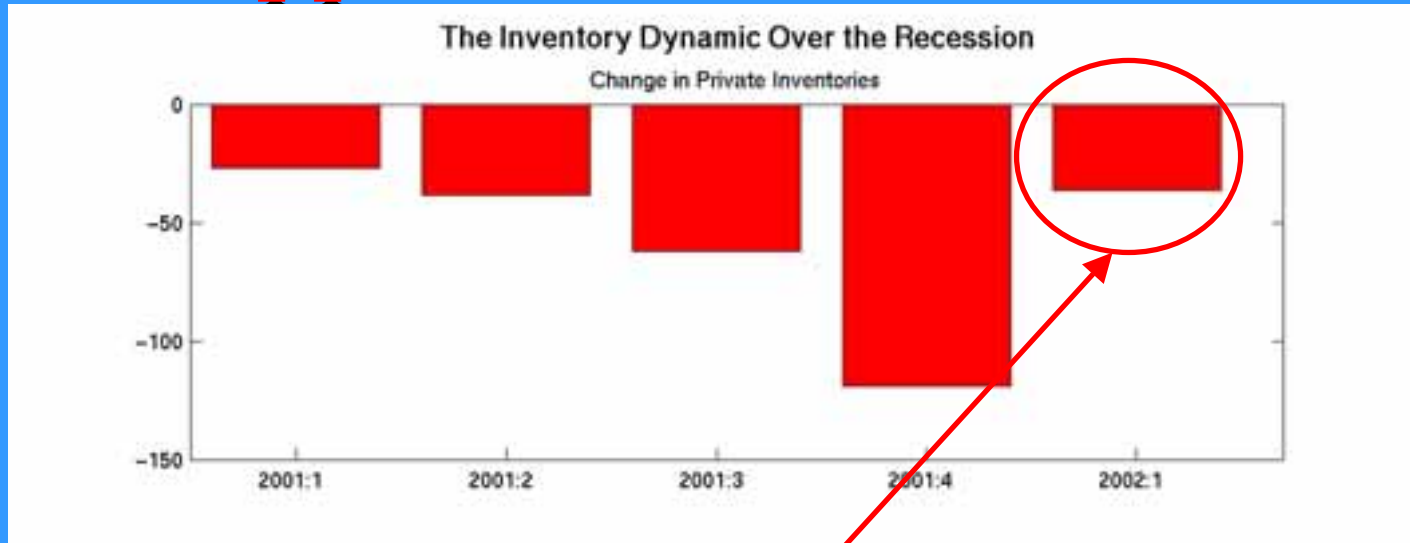
Change in Private Inventories



Contribution of Inventories to GDP Growth



If sales persist, then what happens to inventories?



- This change in inventories, while less than the 4th quarter, is still **NEGATIVE**.
- At some point, if sales are growing, businesses will **ADD** to inventories.
- This will add to **GDP** growth for the balance of **2002**

That Point Should Come Fairly Soon, As Inventory Stocks are LEAN

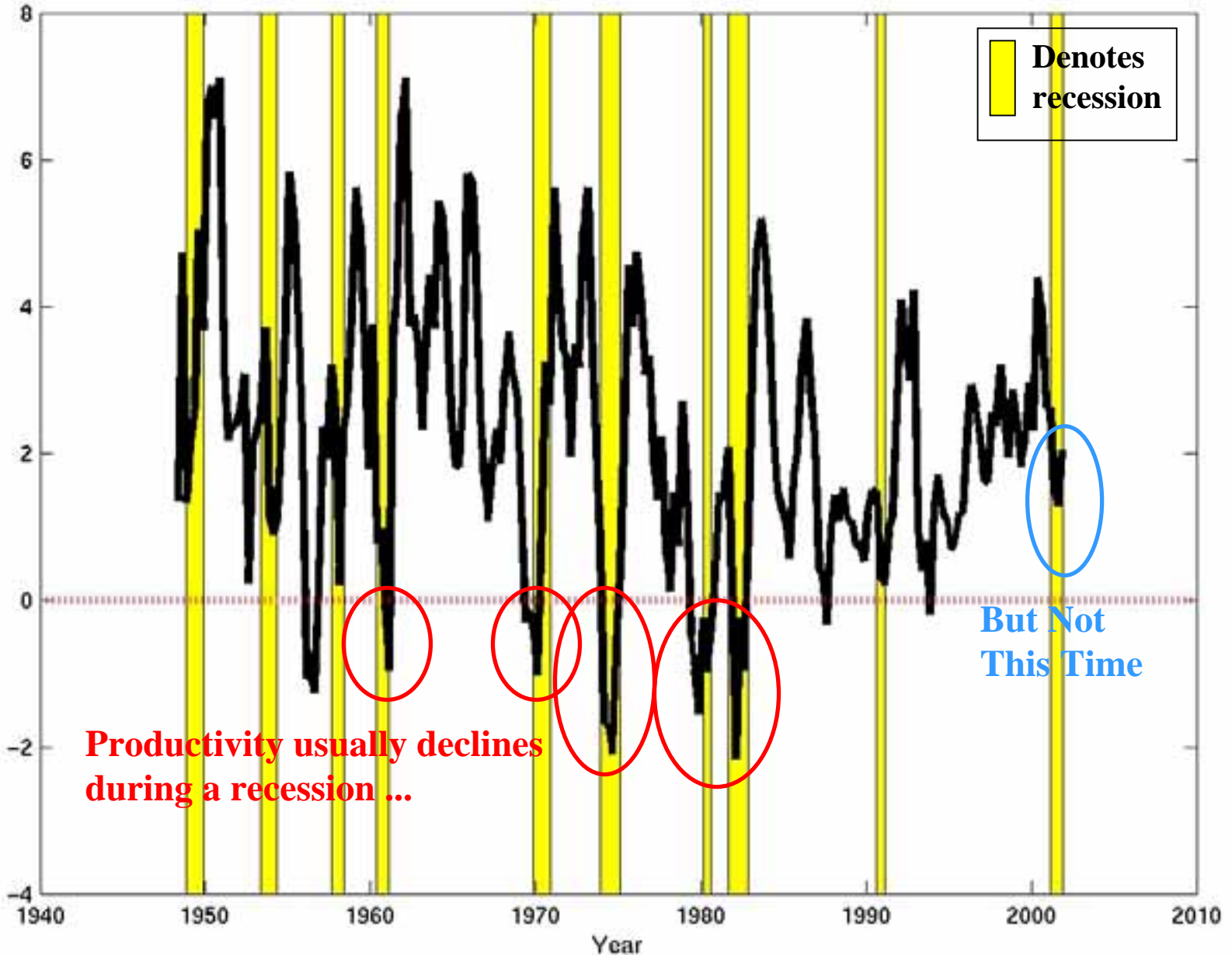


Risks to the Recovery

- Capital Spending: Who's Doing It?
- State and Local Spending: Are the states in any shape to spend?
- Federal spending: Deficits re-emerge
- Consumer spending and housing: Never contracted during recession→no boost in recovery (although April's retail sales data suggest consumption is OK)?
- Consumer spending: As unemployment remains high, stock prices fall, ...

The Big Surprise this Time: Productivity

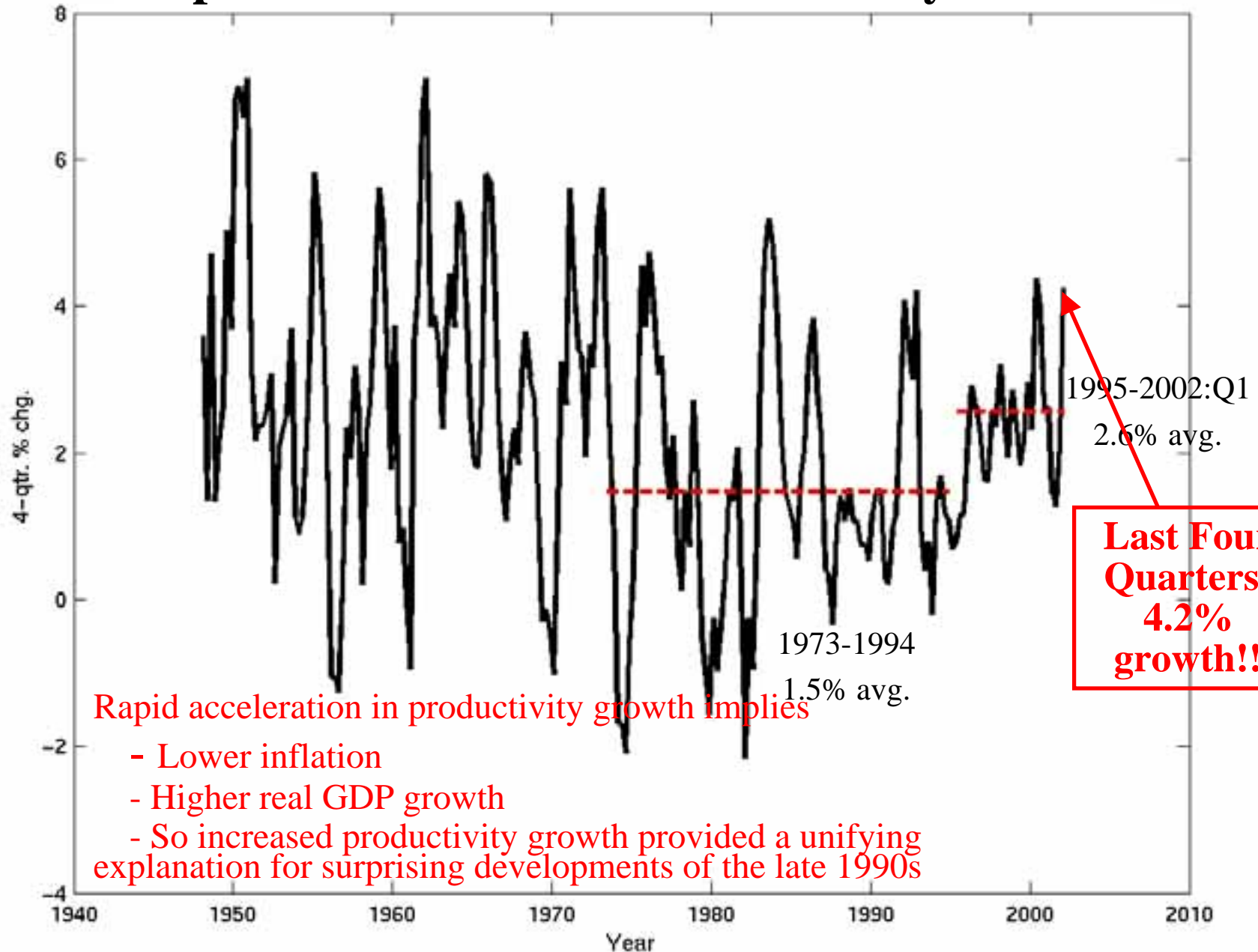
Productivity Growth During Recessions



Why Has Productivity Remained So Strong?

- We Don't Know
- Some Possible Explanations:
 - Structural productivity growth is even stronger than we thought at the end of the 90s
 - UNCERTAINTY
 - Firms are not convinced of the strength of the recovery
 - Sales in the first quarter were pretty strong
 - So they met the sales out of inventory stocks, and
 - They didn't hire or increase hours → productivity grew

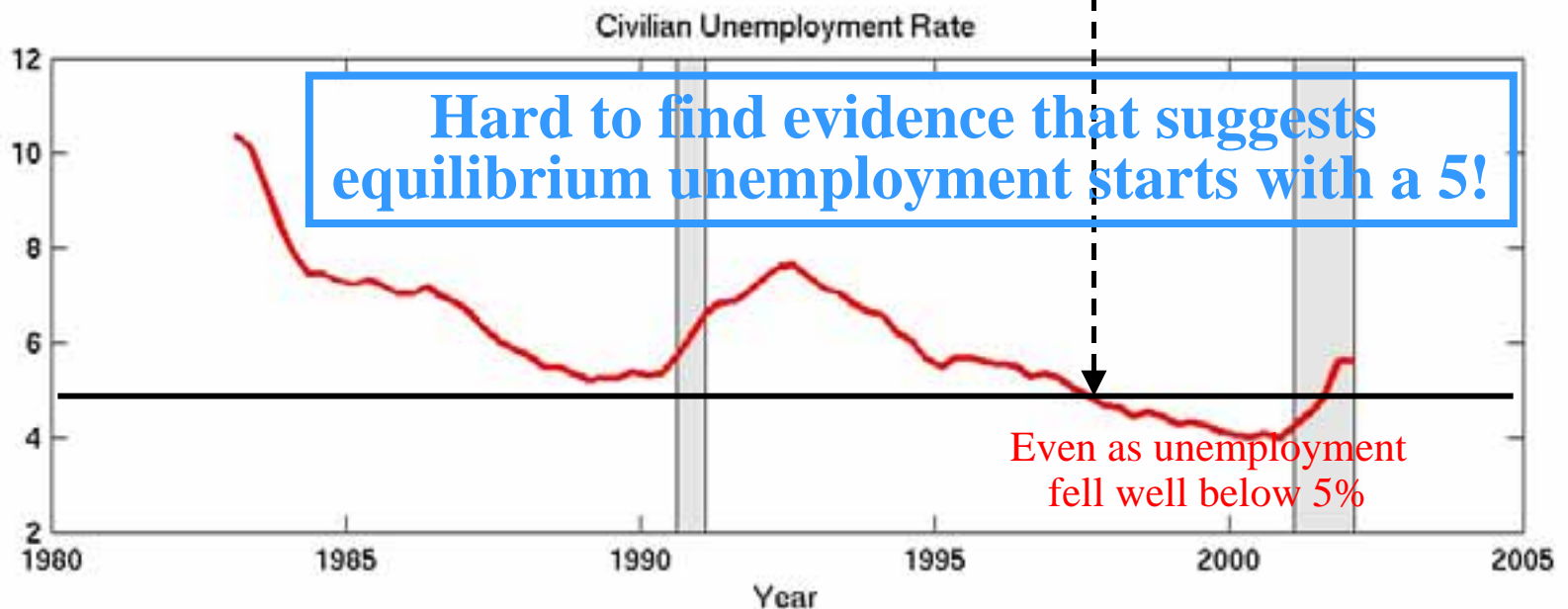
Improvements in Trend Productivity Growth



What's Equilibrium Unemployment?

- In long run, not up to the Fed
- With potential in the 3's, the outlook implies unemployment remains fairly high (Blue Chip may be optimistic)--low to mid-5's
- Is that "equilibrium unemployment"?
- We functioned pretty well in late 90s with an unemployment rate in the 4's.
- Were there signs of trouble at 4+? Look at labor market data (real wages, productivity).

What Do Real Compensation and Productivity Growth Tell Us About Equilibrium Unemployment



Real Wage defined as 4-quarter growth in employment cost index less 4-quarter inflation in the core PCE chain-weighted price index

Productivity growth equals the 12-quarter growth in nonfarm business productivity.