

Energy and the Gulf Coast Economy

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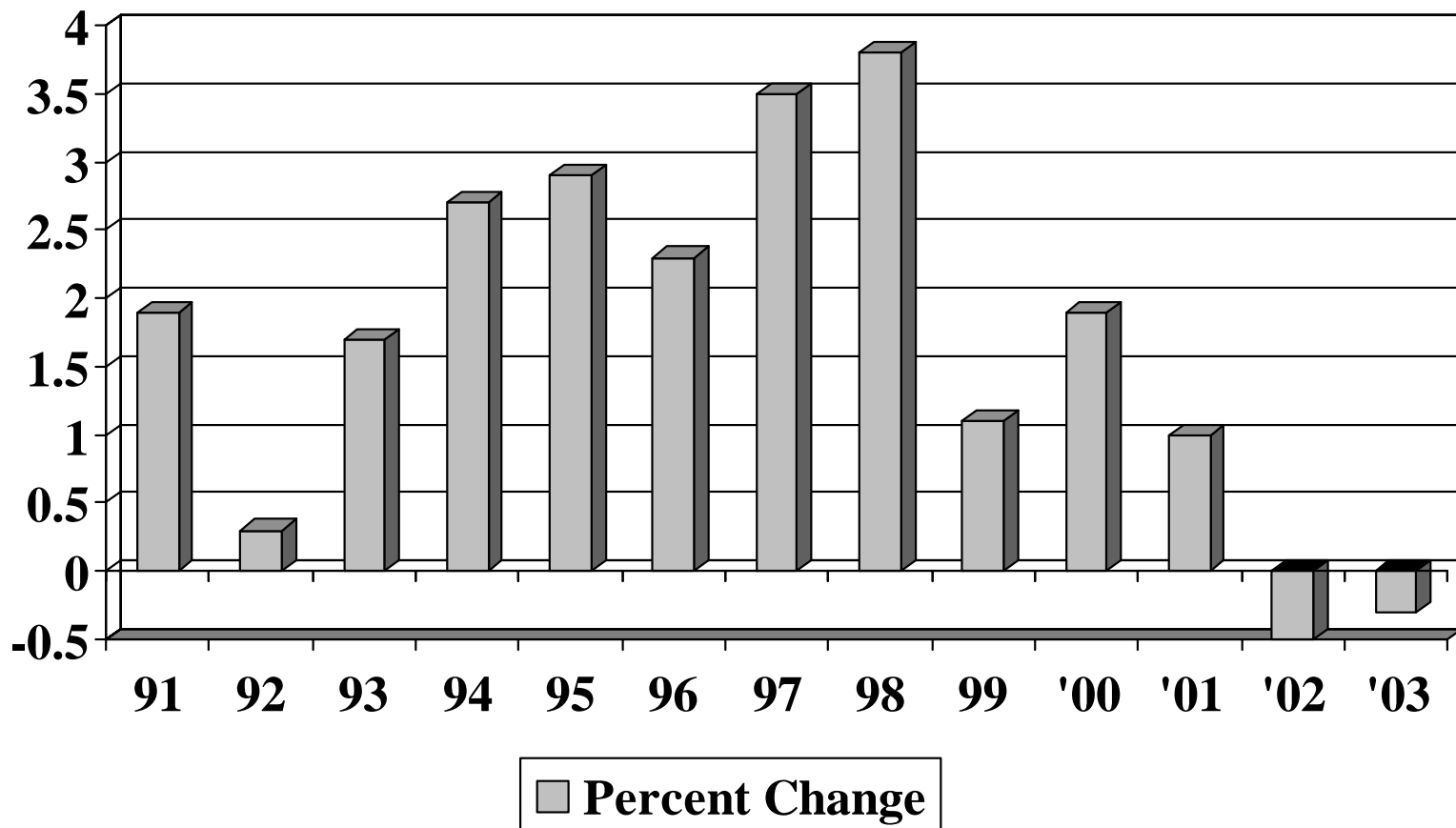
October 2004

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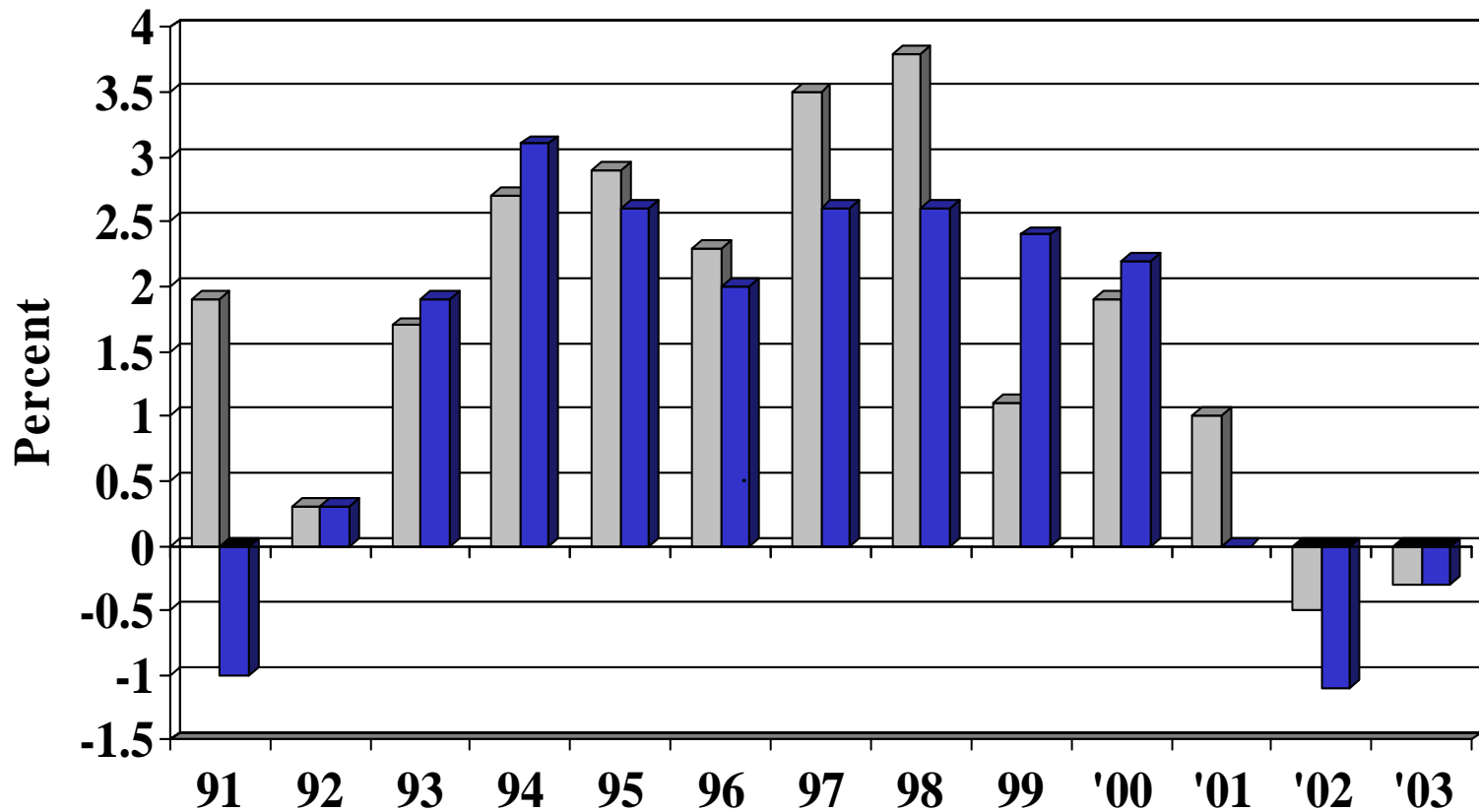
Annual Growth of Jobs in Gulf Coast Metro Areas

(Year-Over-Year-Growth)



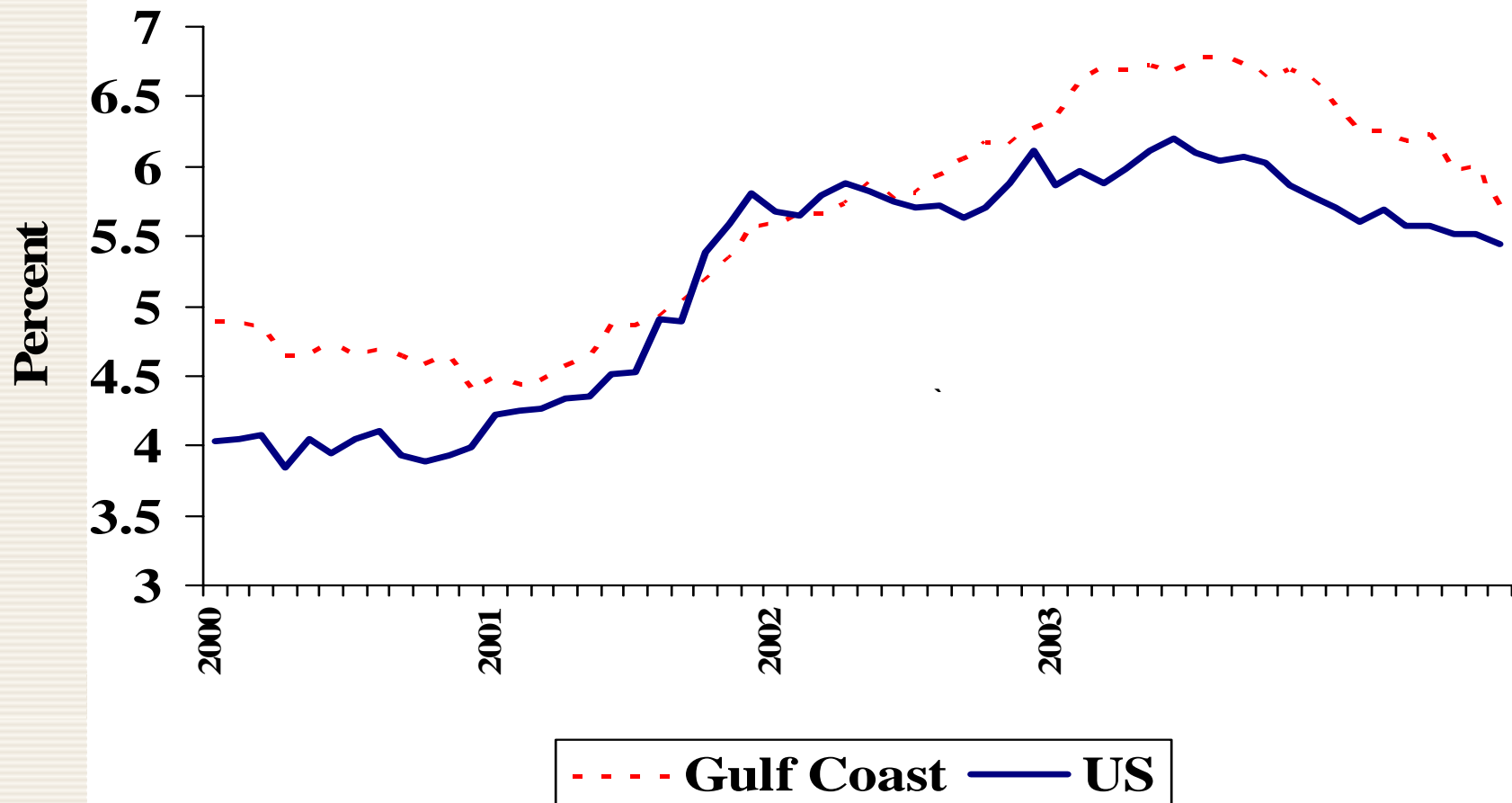
Annual Growth of Jobs in Gulf Coast Compared to U.S.

(Year-Over-Year-Growth)



Unemployment Rate

Gulf Coast vs. US: 2000 to Present



External Forces that Drive the Gulf Coast Economy

- US Economy
- Global Economic Conditions
- Oil and Natural Gas Markets



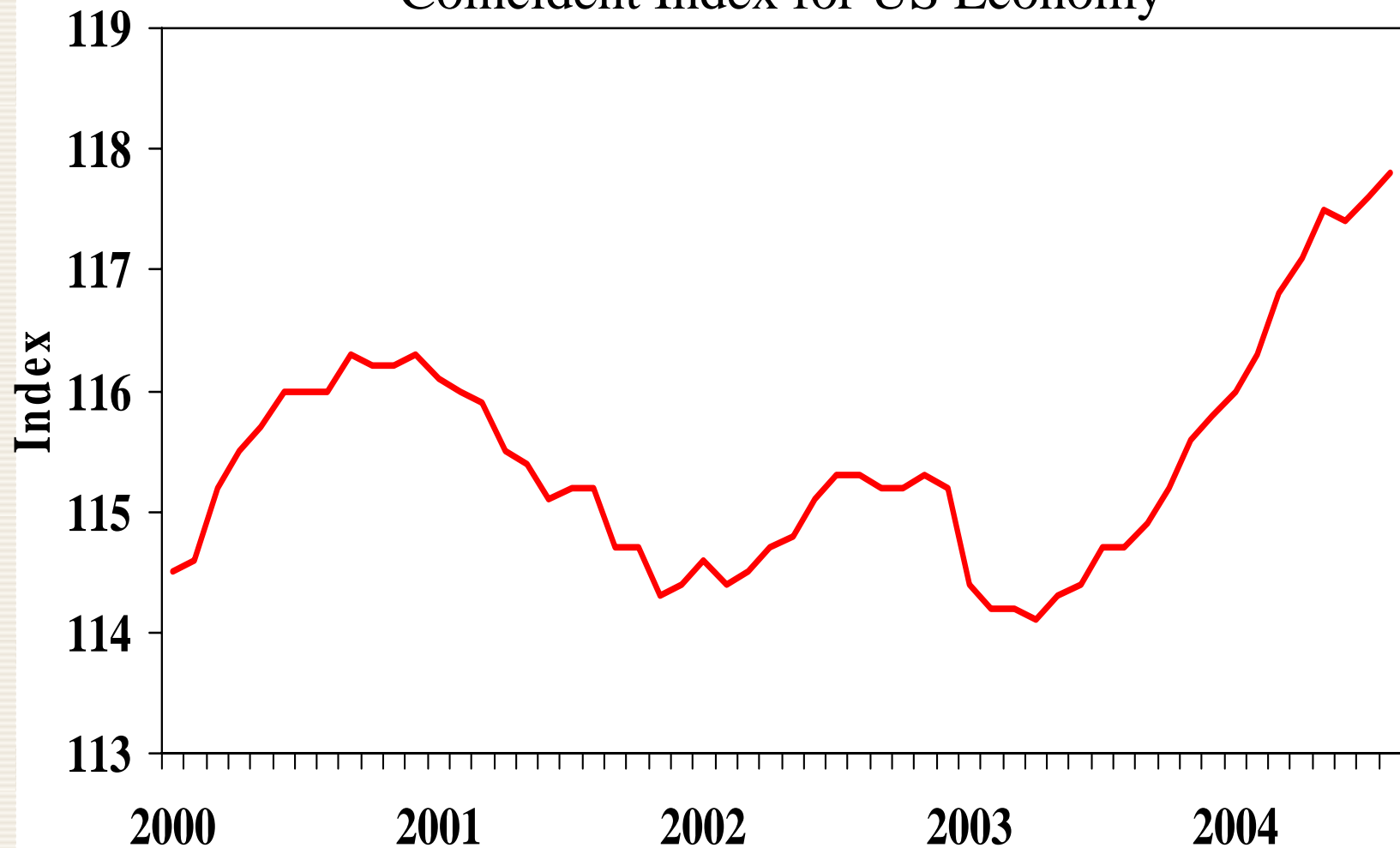
U.S. Enters Recession in 2001

- GDP growth slows to 0-2 percent in 2000 on the heels of Fed interest rate increases. Just as the Fed finished raising rates to slow the Old Economy, the NASDAQ collapsed along with the New Economy.
- By March 2001, the US economy is in recession as both Old and New Economies are hurt.
- Unprecedented rate cuts by the Fed revived the Old Economy, as housing, consumer durables and autos have done well throughout the decline and recovery.
- Recovery began in November 2001, but 9/11, accounting scandals, and Iraq provided shocks and uncertainty that kept business investment slow.



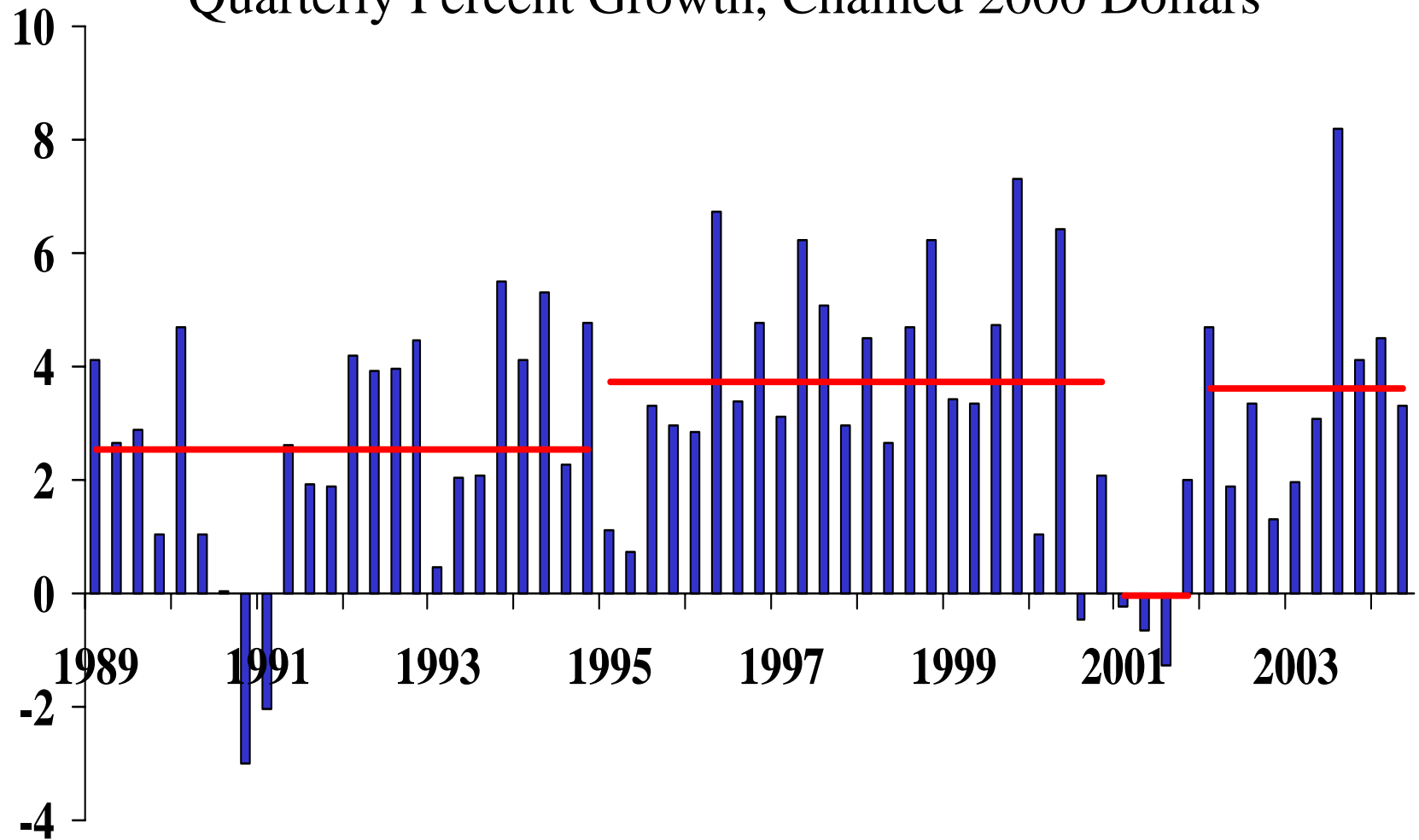
Recession Ends in November 2001

Coincident Index for US Economy



Gross Domestic Product

Quarterly Percent Growth, Chained 2000 Dollars

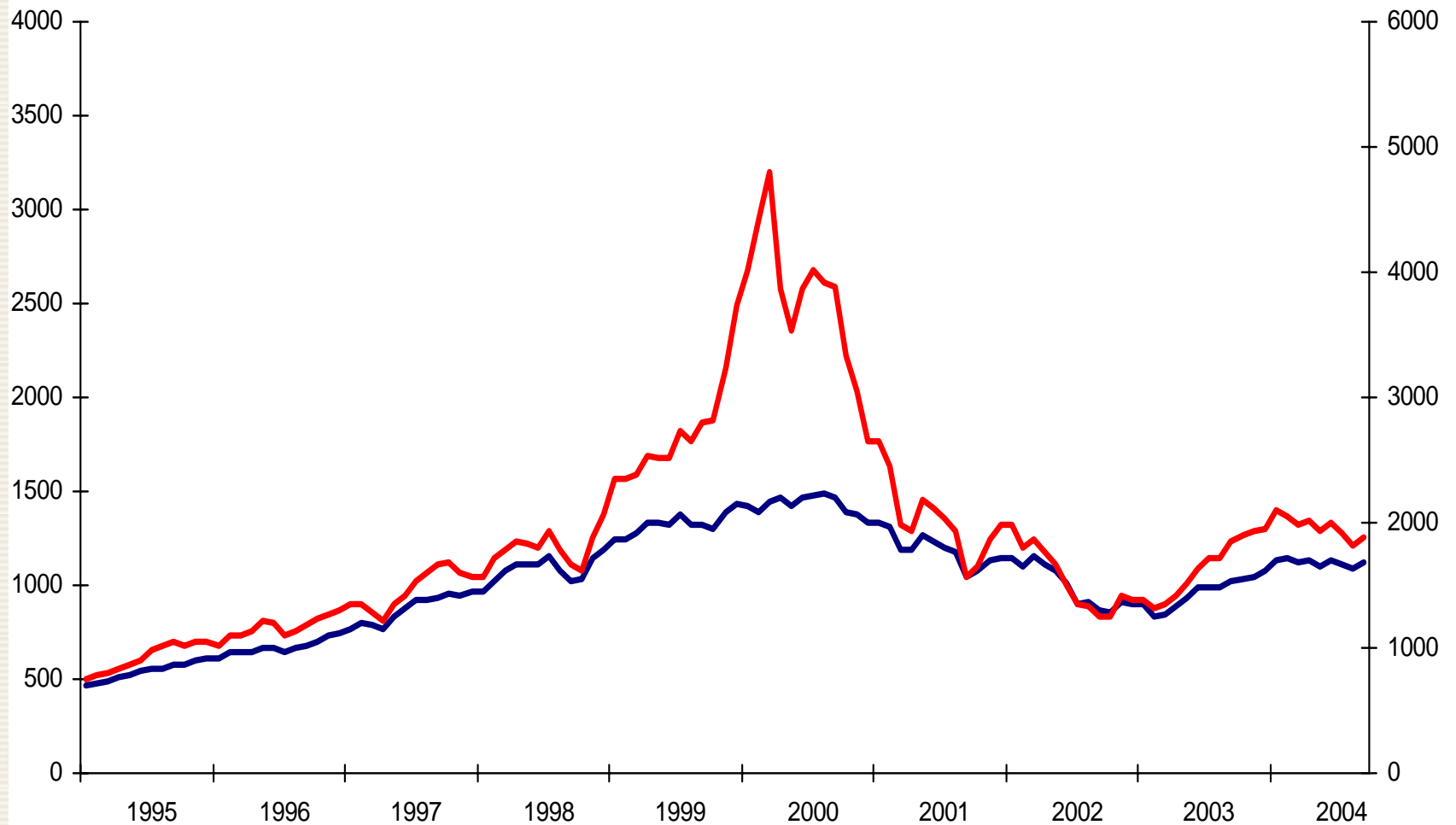


Why has Recovery Been so Slow in the US Economy?

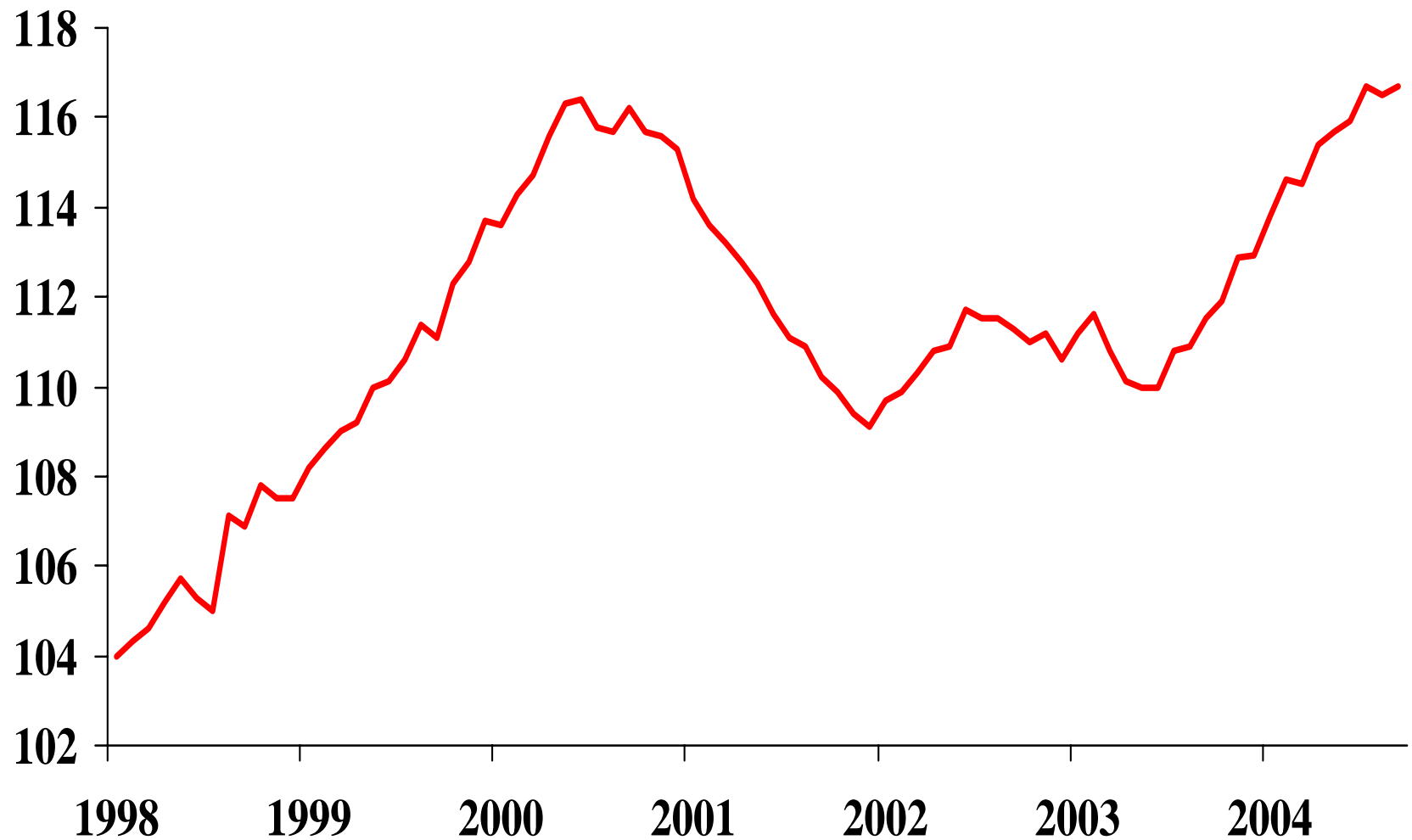
- Hangover from high-tech -- especially telecommunications.
- Series of continued shocks and uncertainty that have slowed investment: 9/11, accounting scandals, and the invasion of Iraq.
- The industrial sector was weak.
- A mild expansion implies mild recovery.



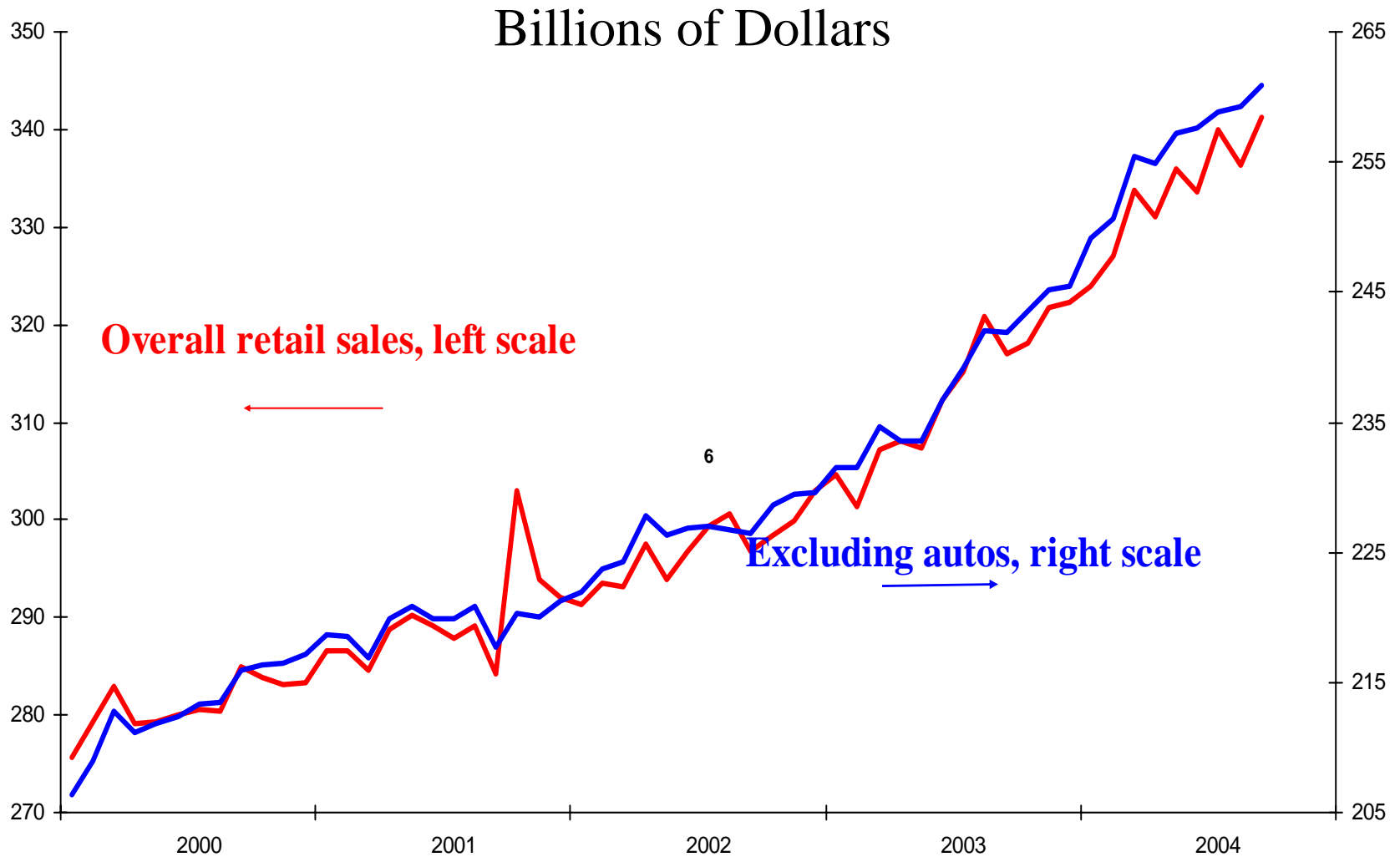
NASDAQ and S&P 500 are Once Again in Sync



Industrial Production Increases...

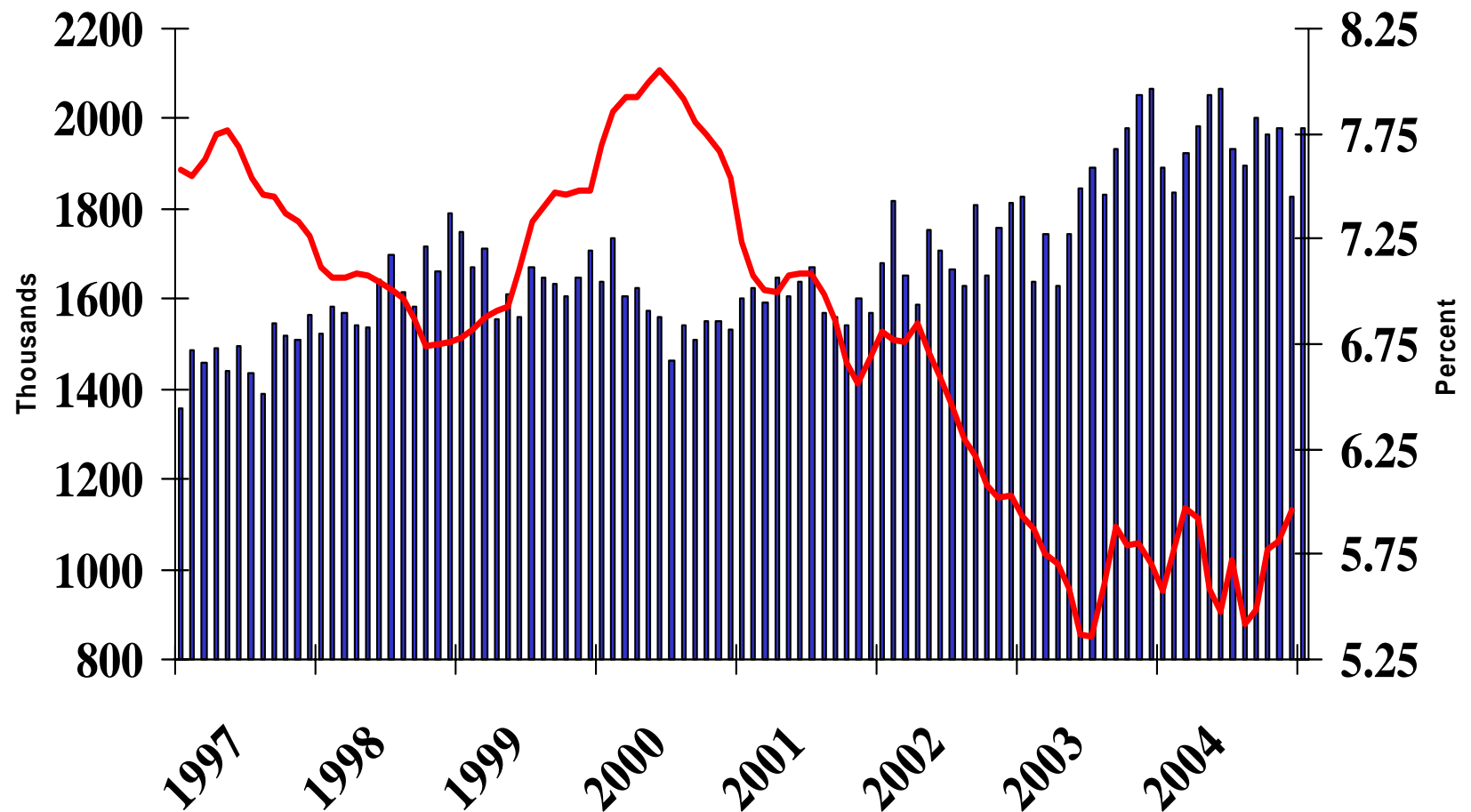


Retail Sales Growth Continues...



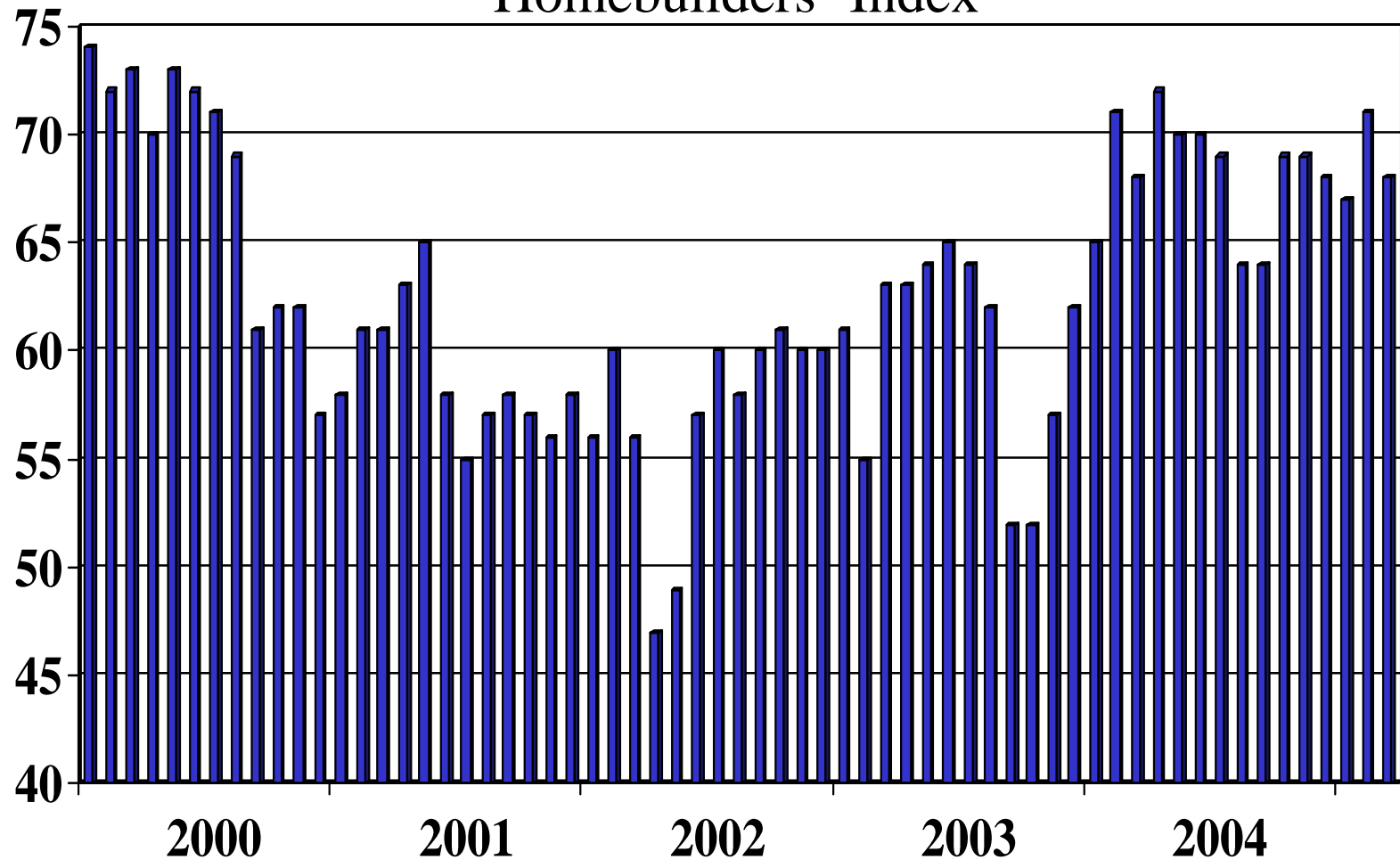
Housing Starts and Mortgage Rates

1997 to 2004



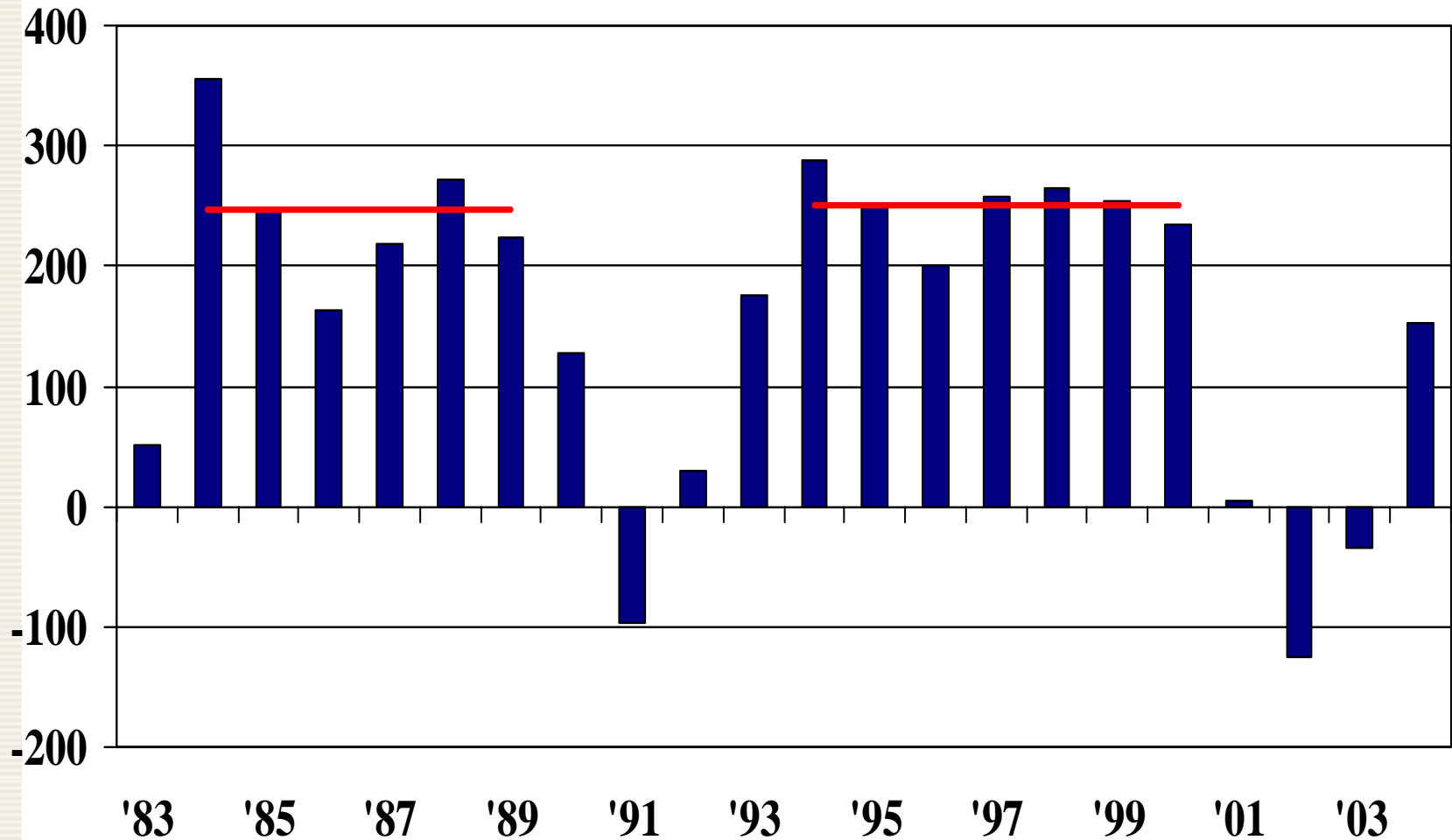
Housing Market Index Indicates Strength

Homebuilders' Index



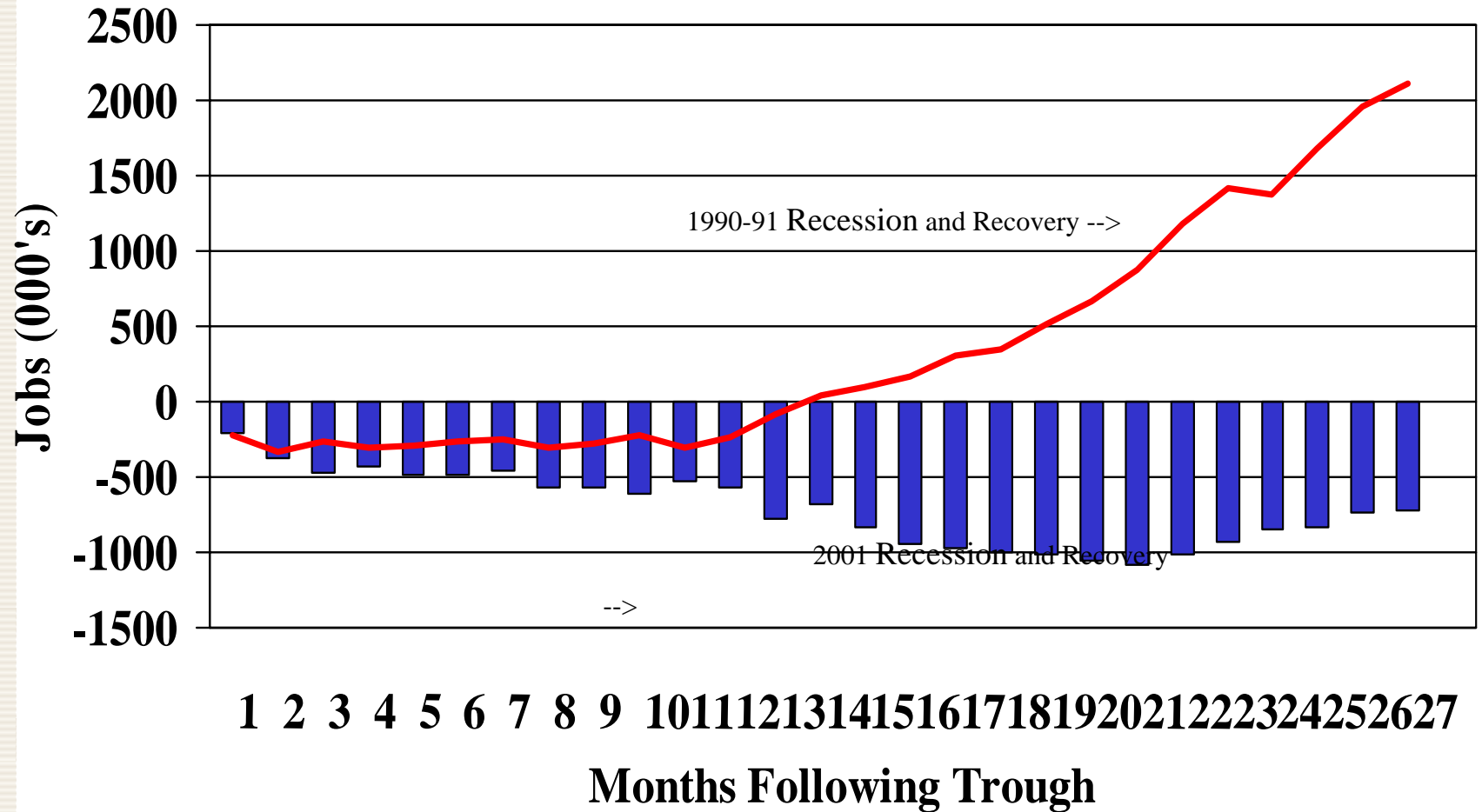
Employment Growth

Thousands per Month 1983 to 2004

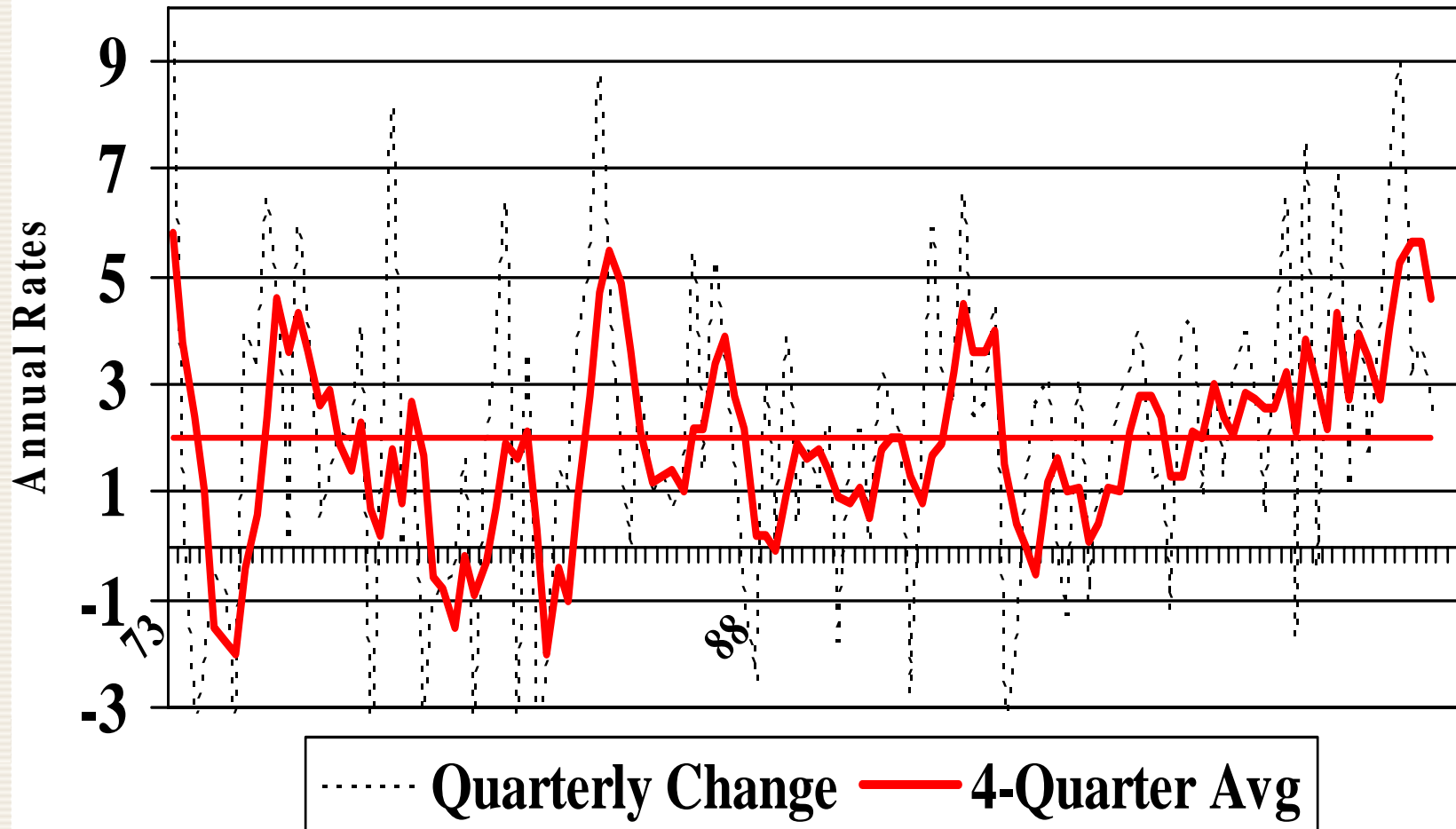


Cumulative Job Growth After the Recession

1990-1991 Recession Compared to 2001



Productivity Growth Has Accelerated Since 1994



High Oil Prices Have Been With Us for Some Time Now

- \$10-\$11 in winter 1997-98, but back over \$20 by July 1999, touched \$30 per barrel in February 2000, and \$35 the following September.
- U.S. recession pushed crude under \$20 per barrel, but back over \$30 in September 2002.
- This year we saw \$40, \$45 and \$50 per barrel in May, August and September.



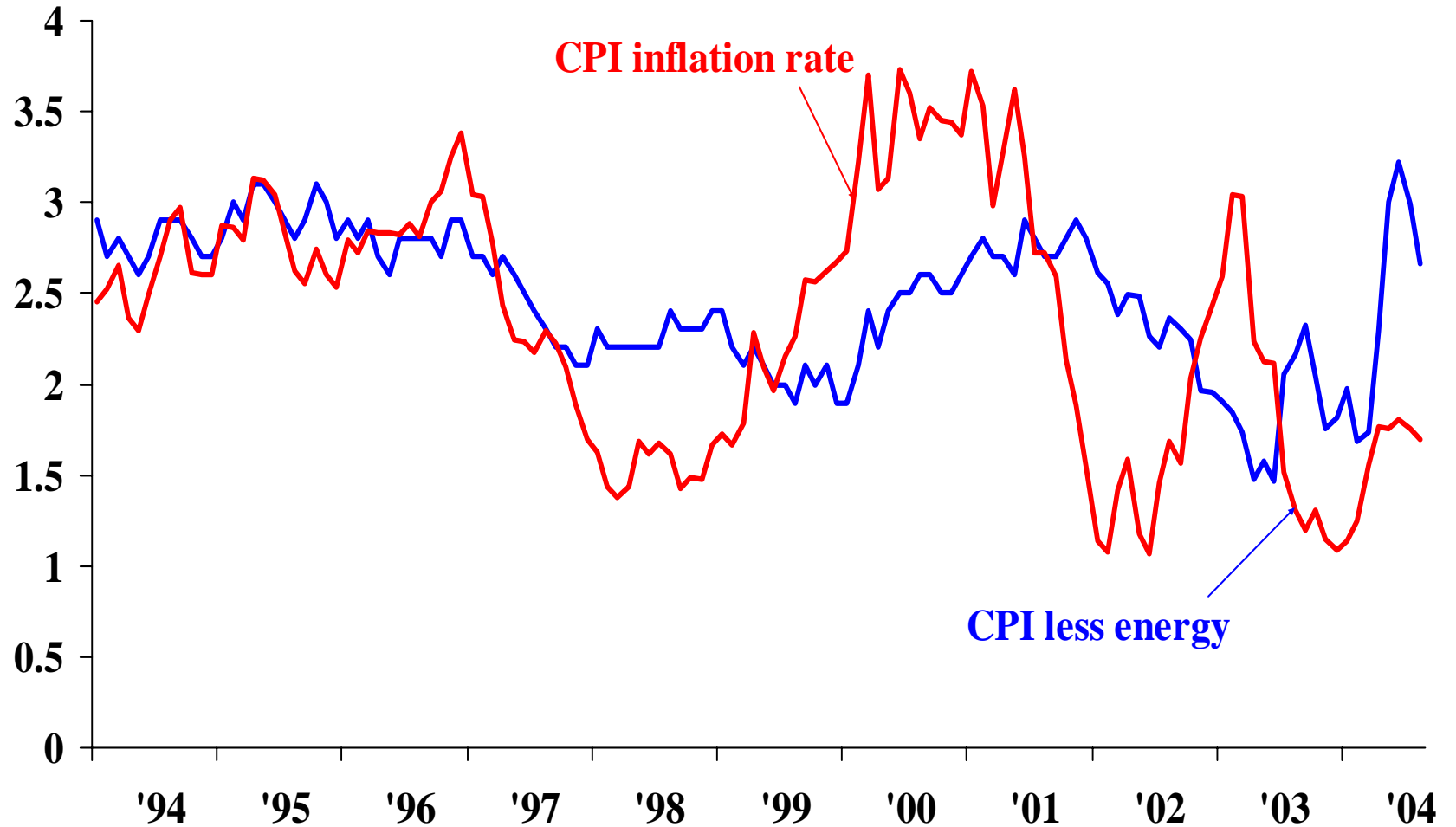
Oil Matters Less to the Economy Today

- \$50 barrel of oil today is \$13 in 1973 or \$27 in 1982.
- We have exported many of our most energy intensive industries.
- Energy conservation now part of building codes, fleet mileage standards, etc.



Consumer Price Inflation Remains Low

12-month growth rate



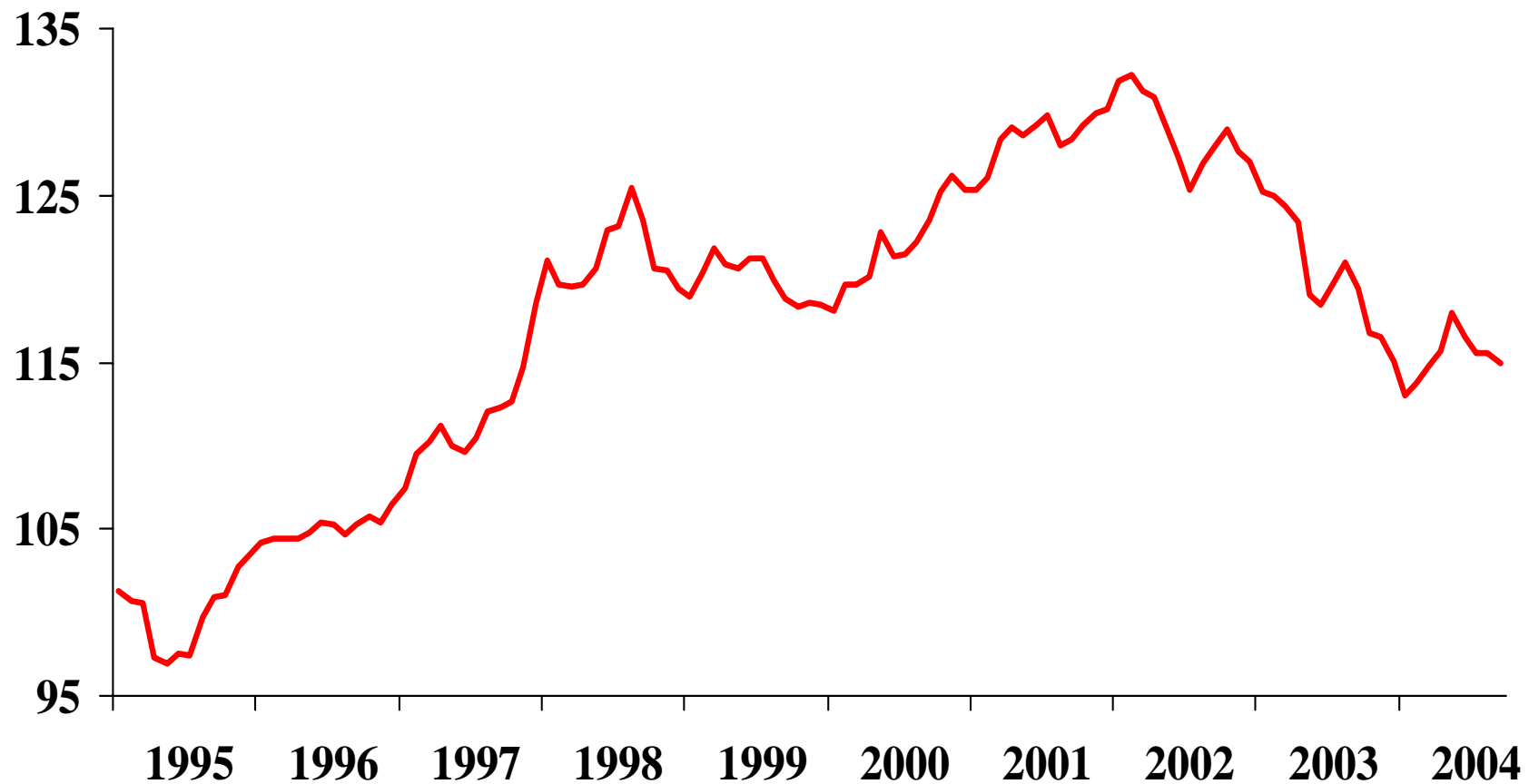
IMF World Economic Outlook

Annual Percent Growth

	2003	2004	2005
US	2.1	3.6	2.9
China	9.1	9.0	7.5
India	7.2	6.4	6.7
Euro Area	0.5	2.2	2.2
Japan	2.5	4.4	2.3

Trade Weighted Value of the Dollar

1995 to Present

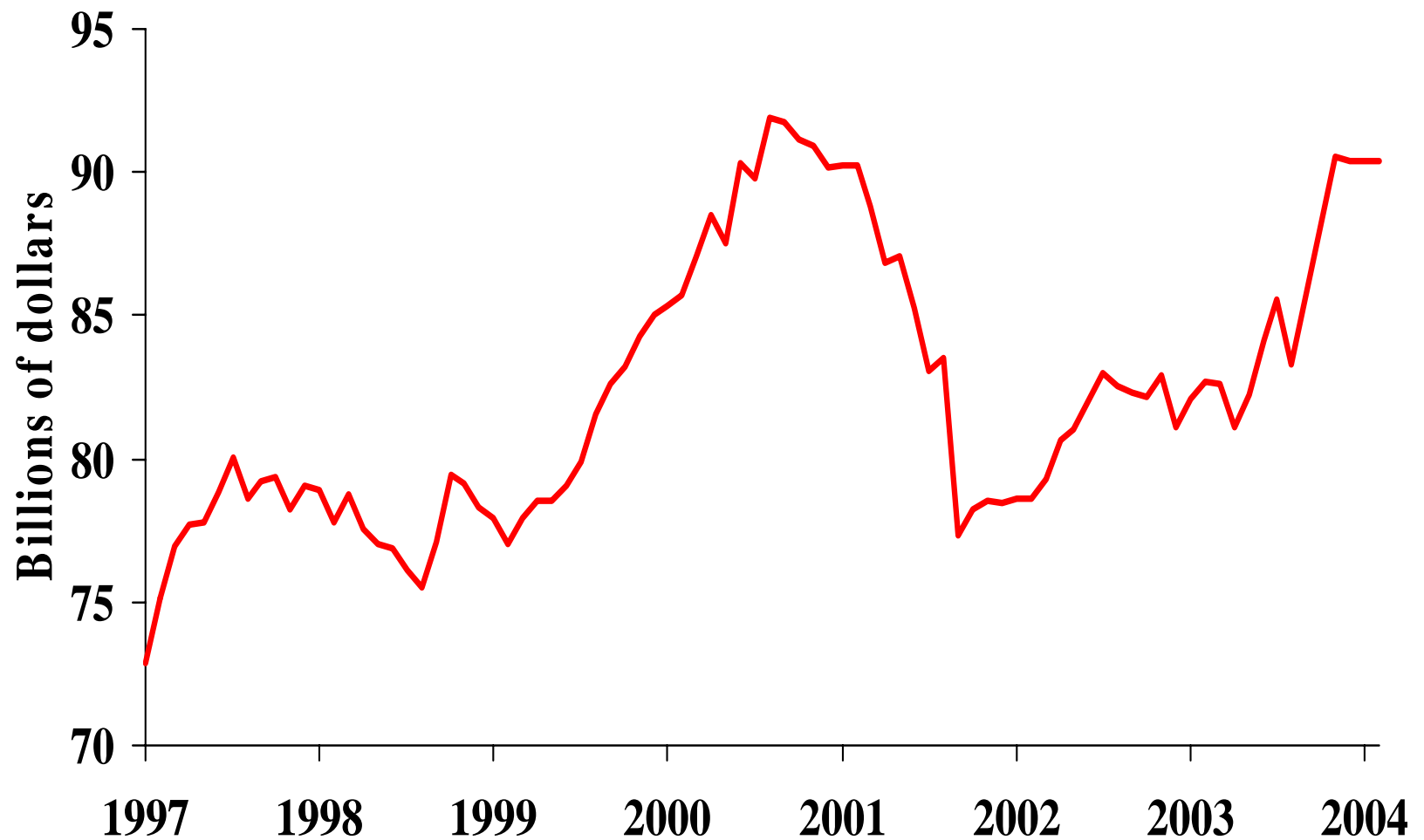


Four Effects on the Gulf Coast Economy

- Stimulates local exports.
- Reduces foreign competition for domestic business.
- Direct impact on the US economy – indirect impact on Houston.
- Energy prices. Oil is denominated in dollars.



Exports Increase with Weak Dollar



Gulf Coast and Interior Cities

- Baton Rouge
- Beaumont-Port Arthur
- Brazoria
- Corpus Christi
- Galveston-Texas City
- Houma-Thibodaux
- Houston
- Lafayette
- Lake Charles
- New Orleans
- Victoria
- Abilene
- Alexandria
- Austin
- Bryan-College Station
- Dallas
- Fort Worth
- Killeen-Temple
- Longview-Marshall
- Monroe
- Sherman-Denison
- Shreveport
- Texarkana
- Tyler
- Waco
- Wichita Falls



Industrial Strengths of Gulf Coast and Interior Metro Areas – Selected Industries

- On the Gulf Coast ...
- Oil and Gas
- Heavy Construction
- Chemicals Refining
- Water Transportation
- Pipelines
- Misc. Repair
- Engineering and Management
- Inland Cities ...
- Oil and Gas
- Electrical Machinery
- Communication
- Wholesale Trade
- Transportation Services
- Banking and Finance
- Military



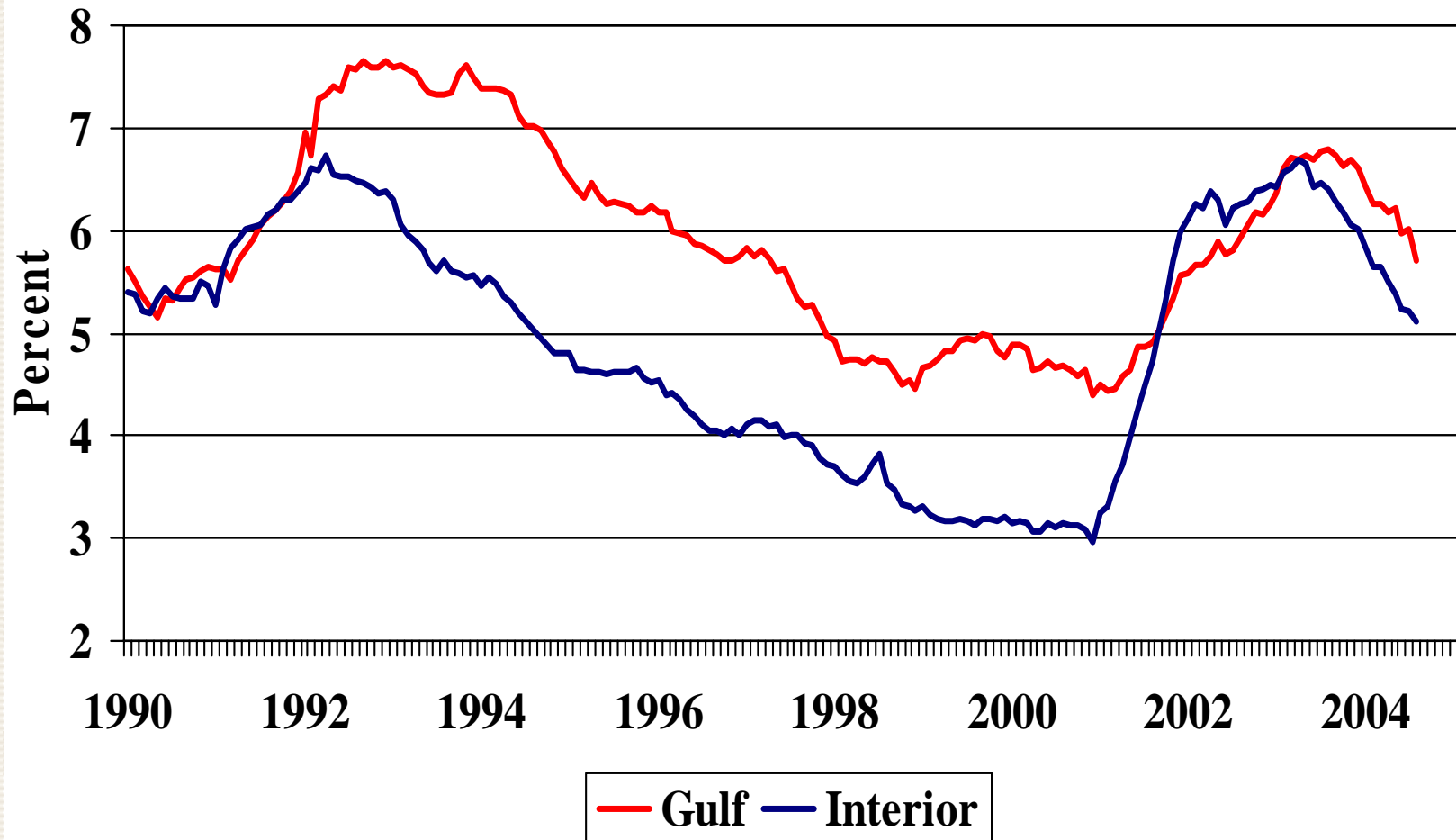
Employment Growth: Gulf Coast vs. Interior Metros

(Annual Rates)

	Gulf Coast Metro	Interior Metro	U.S	Texas	Louisiana
July 1990- March 2001	2.1	3.2	1.8	2.8	1.8
March 2001-Nov 2001	-0.8	-2.9	-1.6	-1.5	-1.6
Nov 2001- Present	0.0	-0.3	0.1	0.0	0.1

Unemployment Rates on the Gulf Coast and Interior Metros

1990 to Present



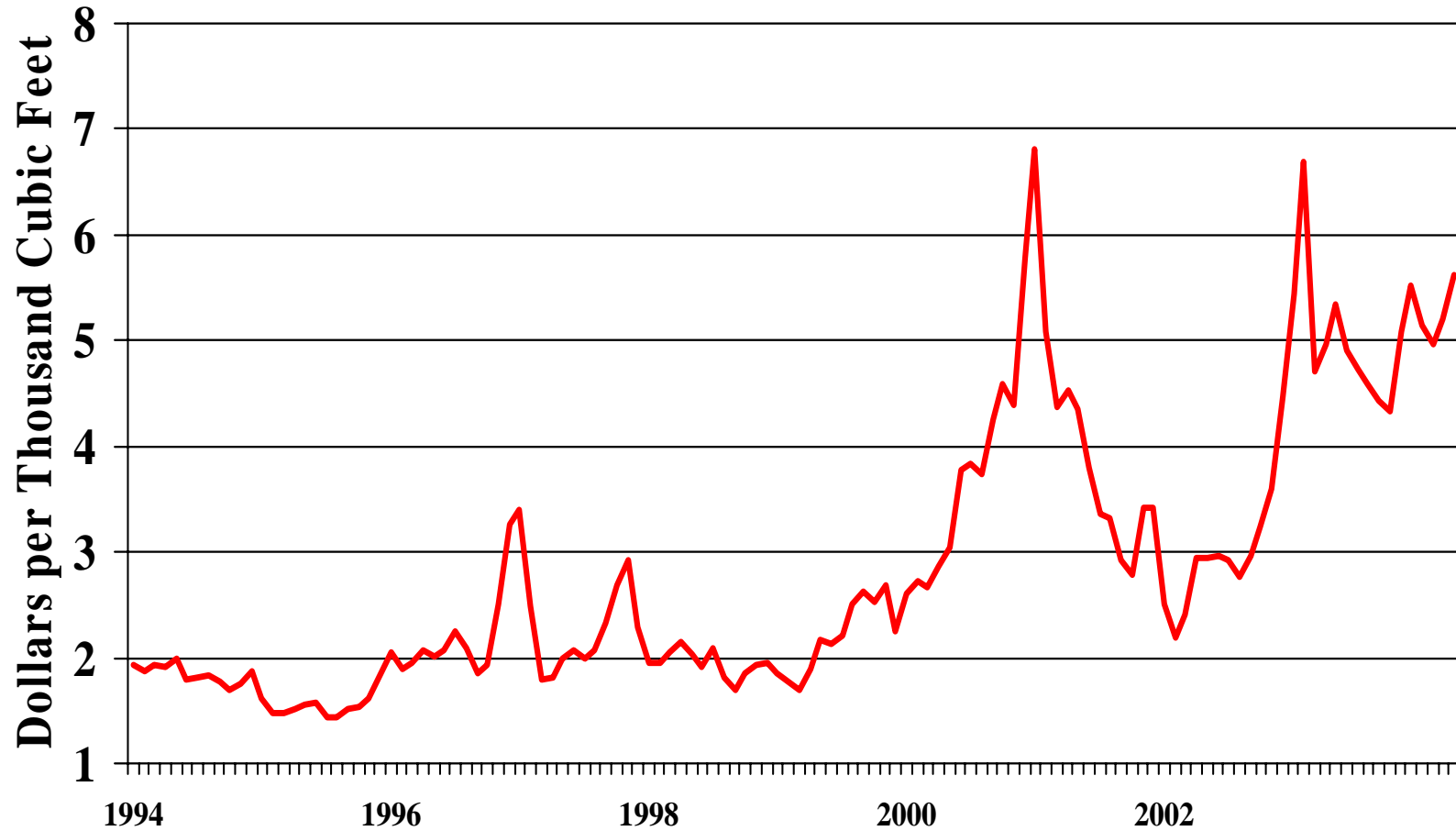
Refiners' Acquisition Cost of Crude Oil

1994 to Present



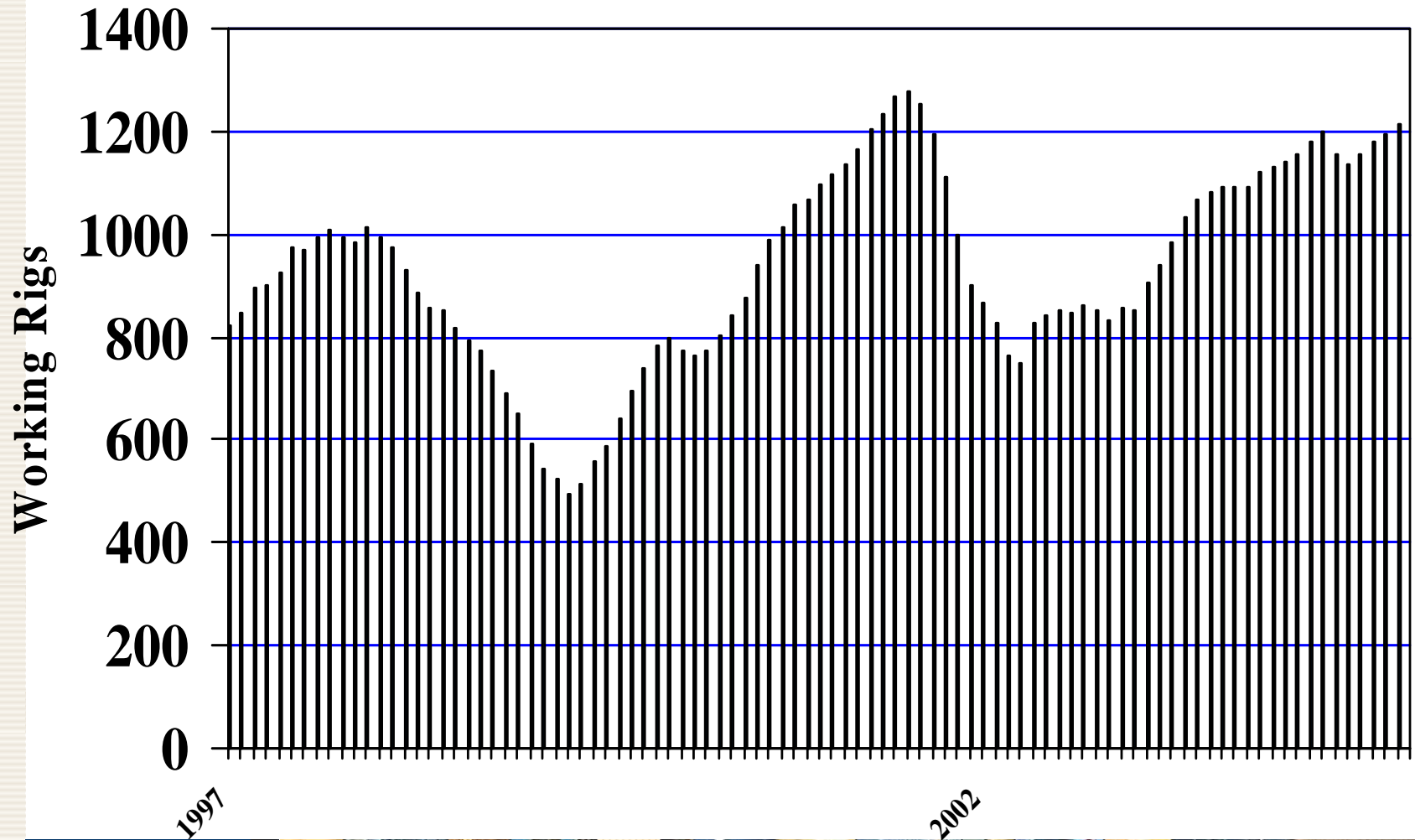
Wellhead Price of Natural Gas

1994 to Present

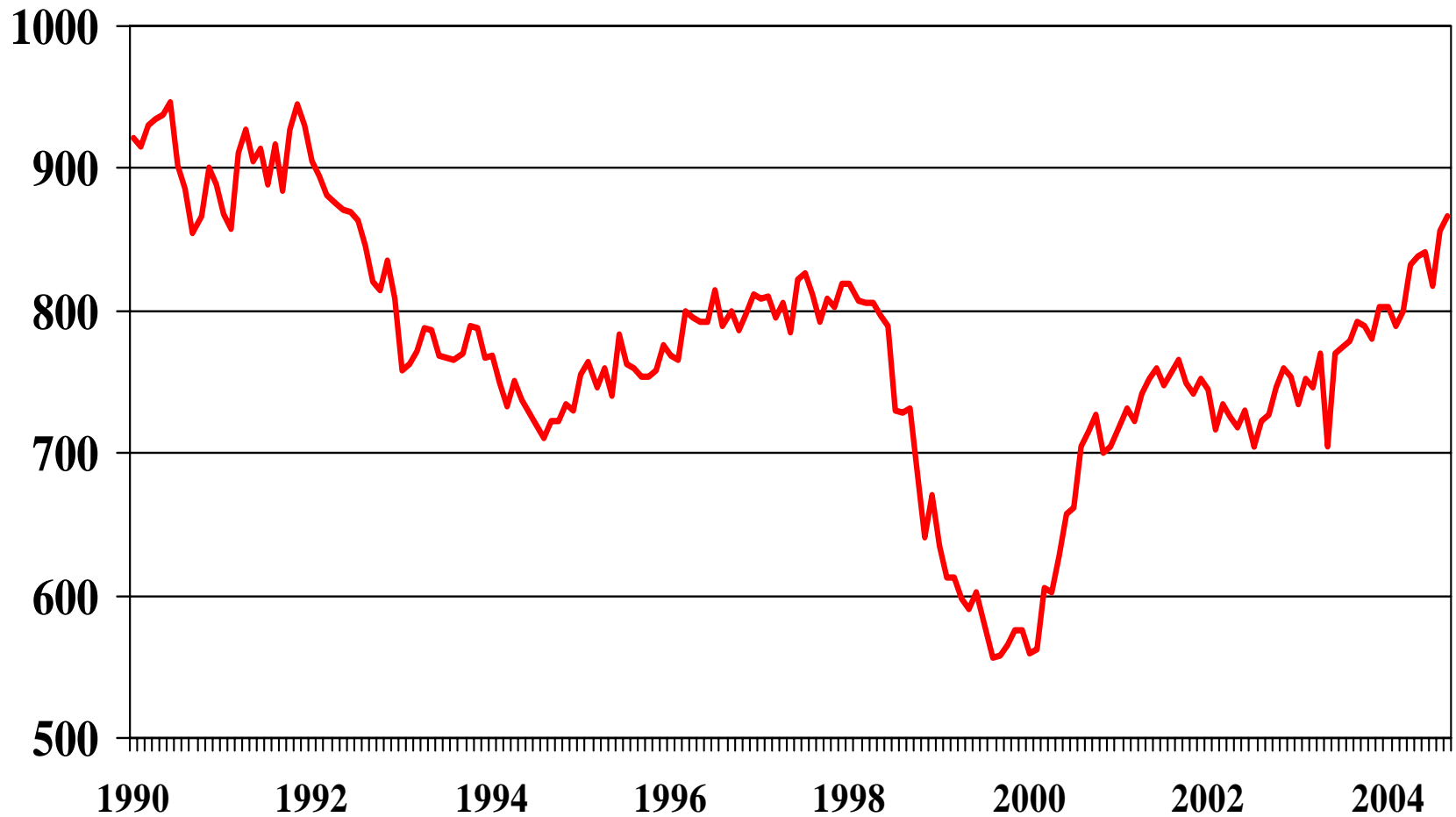


Oil at \$30, Gas at \$5

What is Wrong With Drilling?



International Rig Count



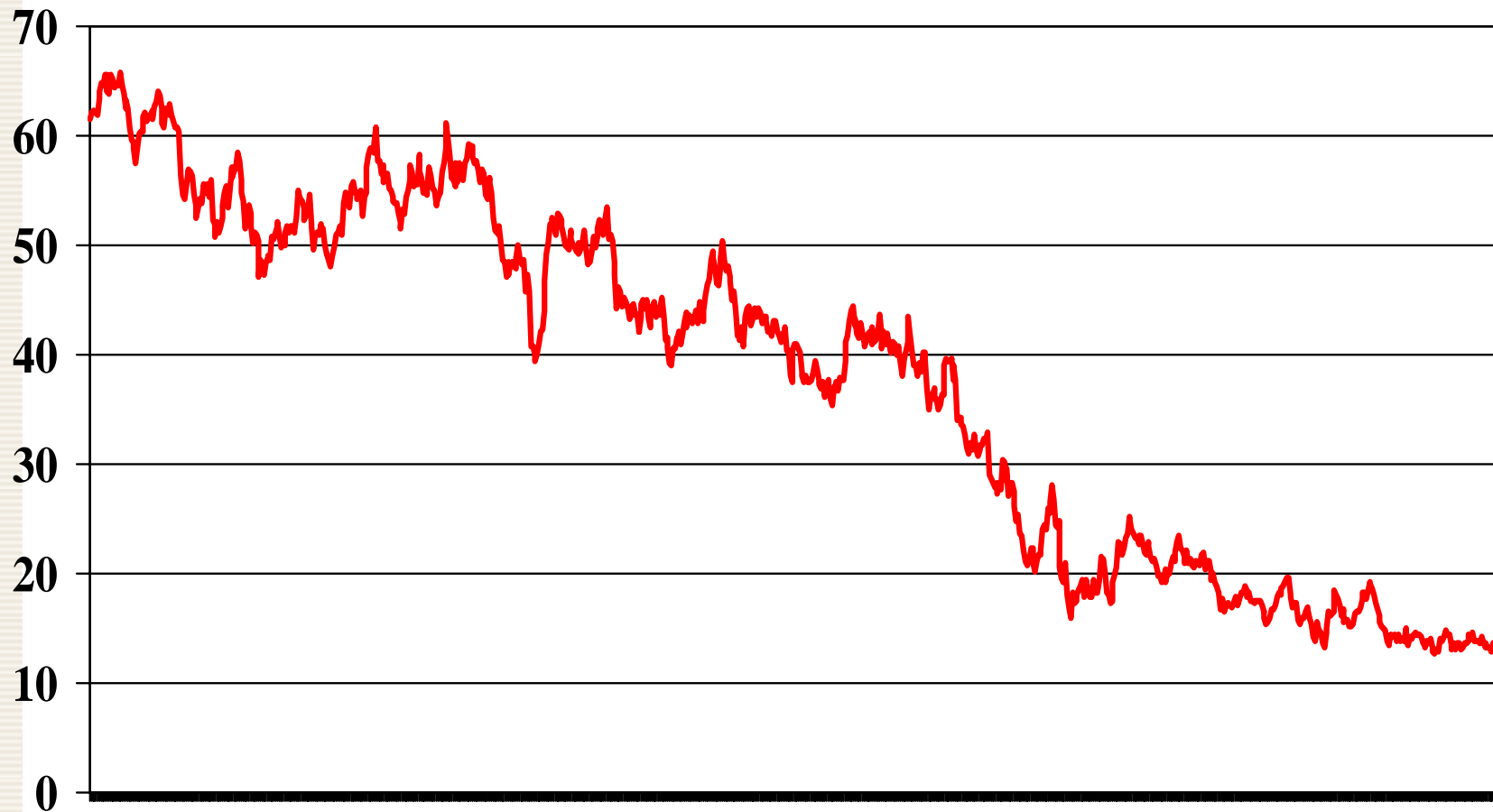
Where is the Drilling Boom?

- Distrust of OPEC/ Distrust of Price/ New-found Discipline
- Big Company Consolidations/ Property Sales
- Balance Sheet Concerns/Uncertainty Over Iraq
- No Prospects at Home
- Only Bad Places to Go Overseas



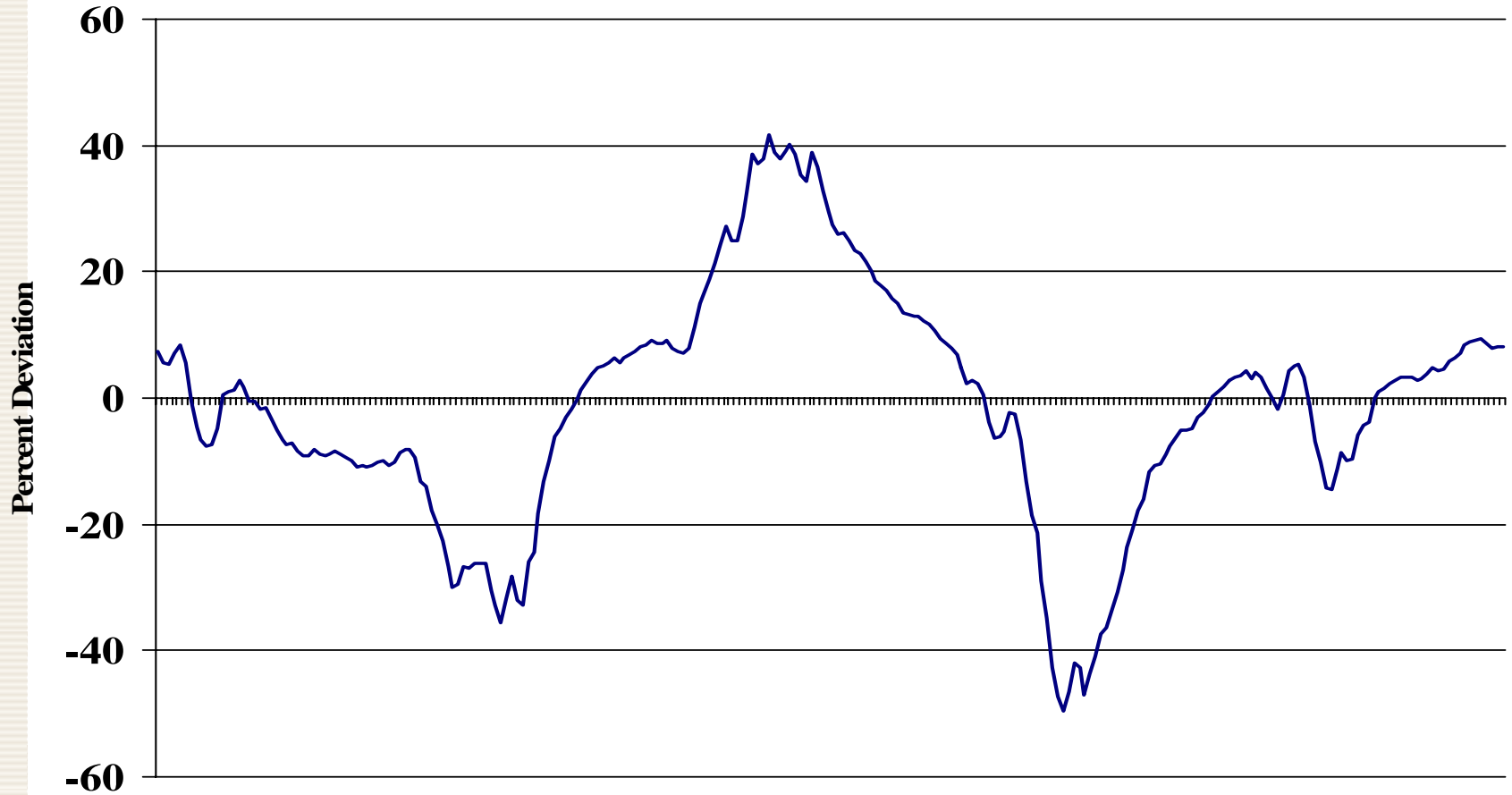
Percent of Drilling Directed to Oil

1987 to Present



Natural Gas Inventory Swing 2001-2003

Percent Deviation from Five-Year Average

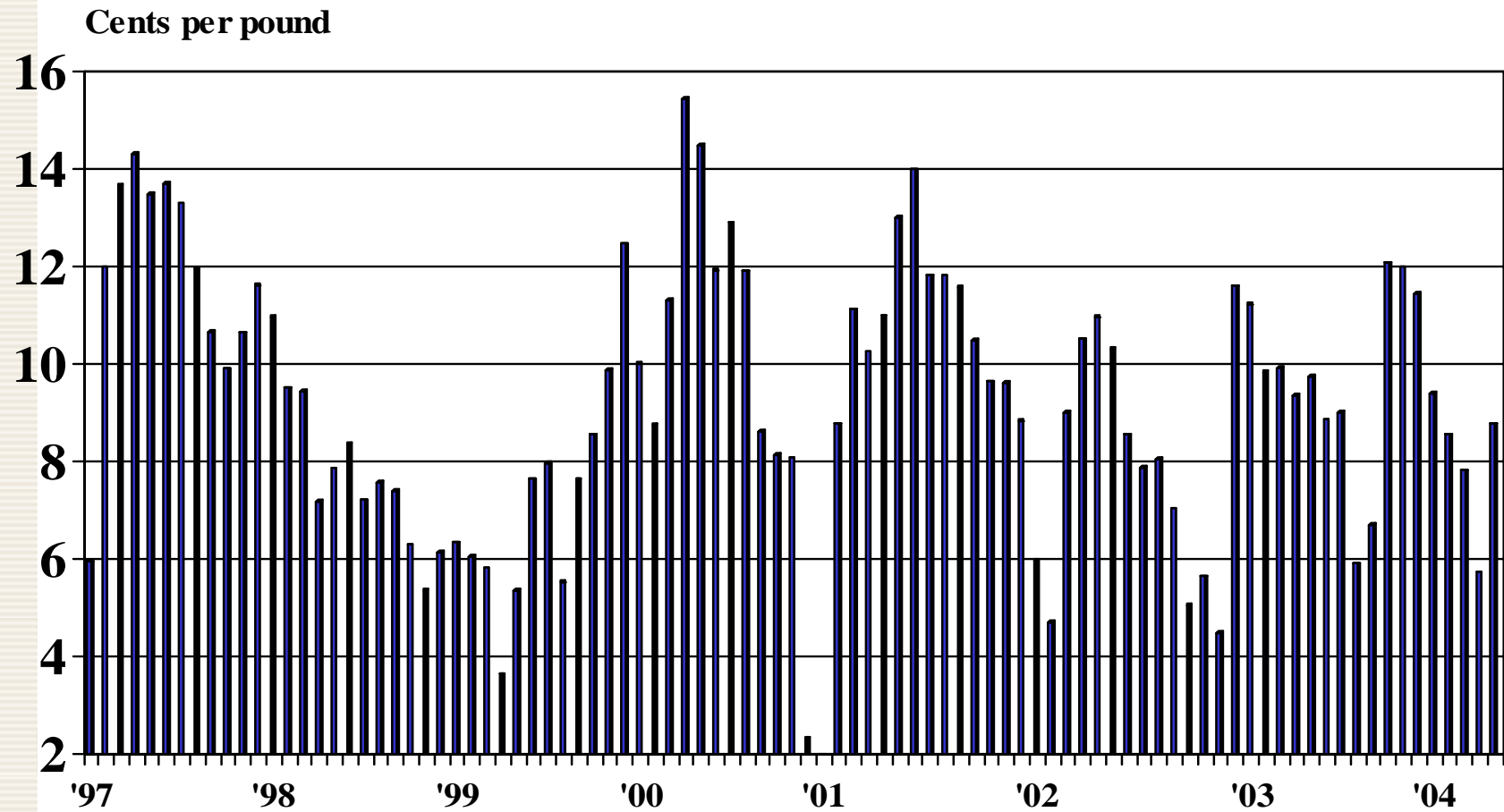


Breakeven Input Prices for Oil and Natural Gas to Produce Ethylene

Price of Natural Gas (\$/Mcf)	Price of Oil (\$/Bbl)	Price of Ethylene (\$/lb)
\$1	\$10	\$.04
\$2	\$13	\$.07
\$3	\$17	\$.16
\$4	\$22	\$.22
\$5	\$27	\$.27

Ethylene Margins

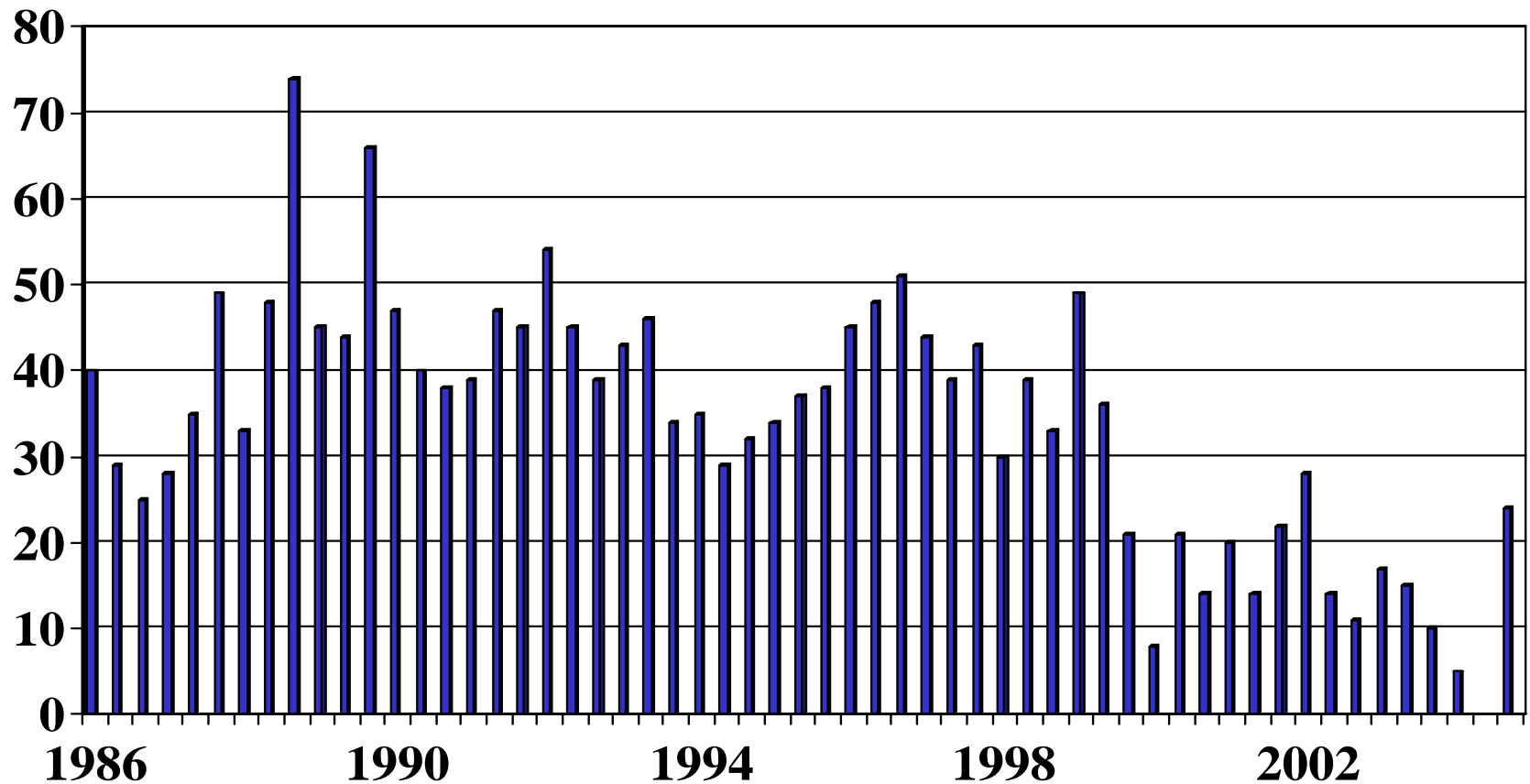
Cash Margins, Ethane



New Hydrocarbon Project Announcements

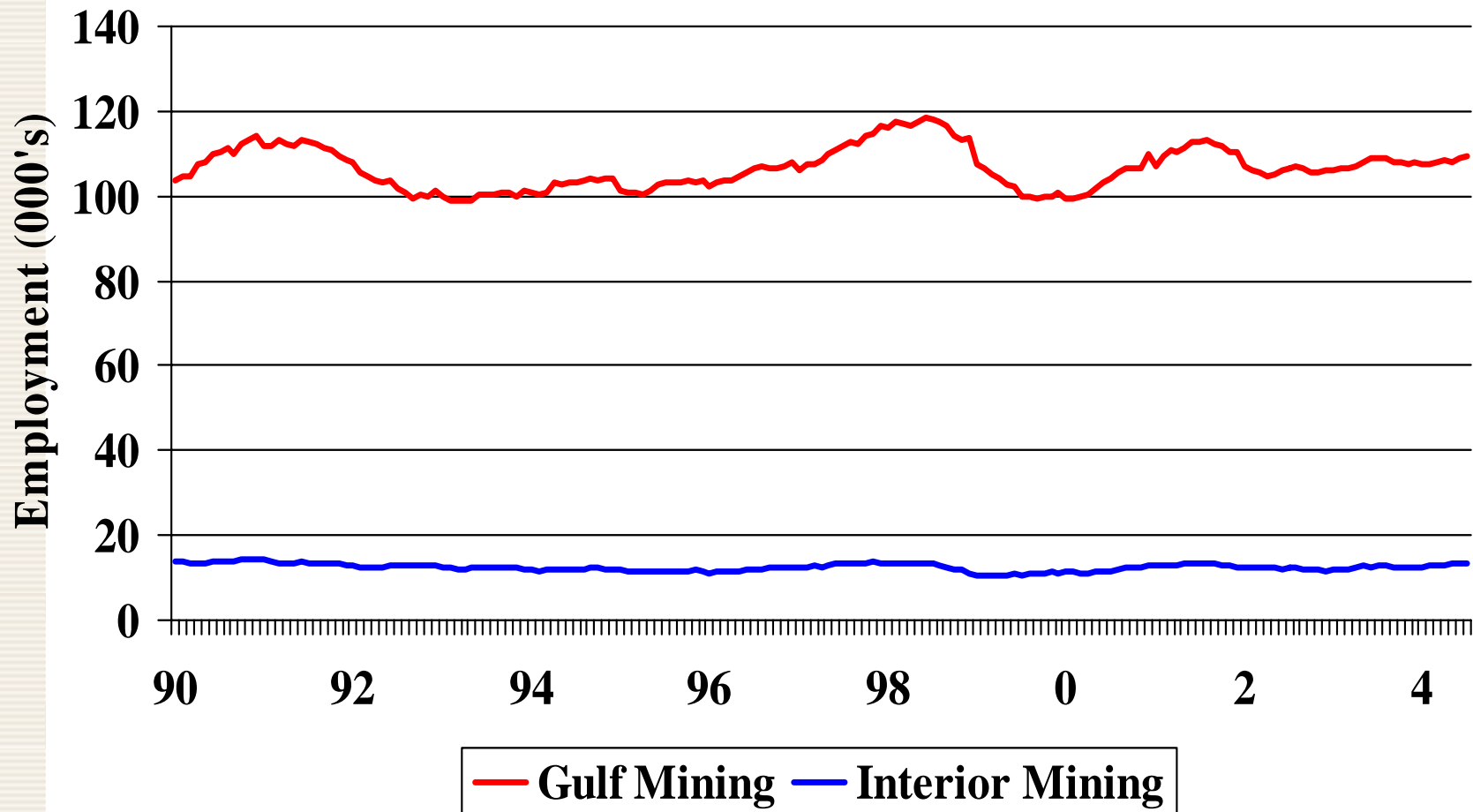
Texas and Louisiana Gulf Coast, 1986 to Present

No. of Projects



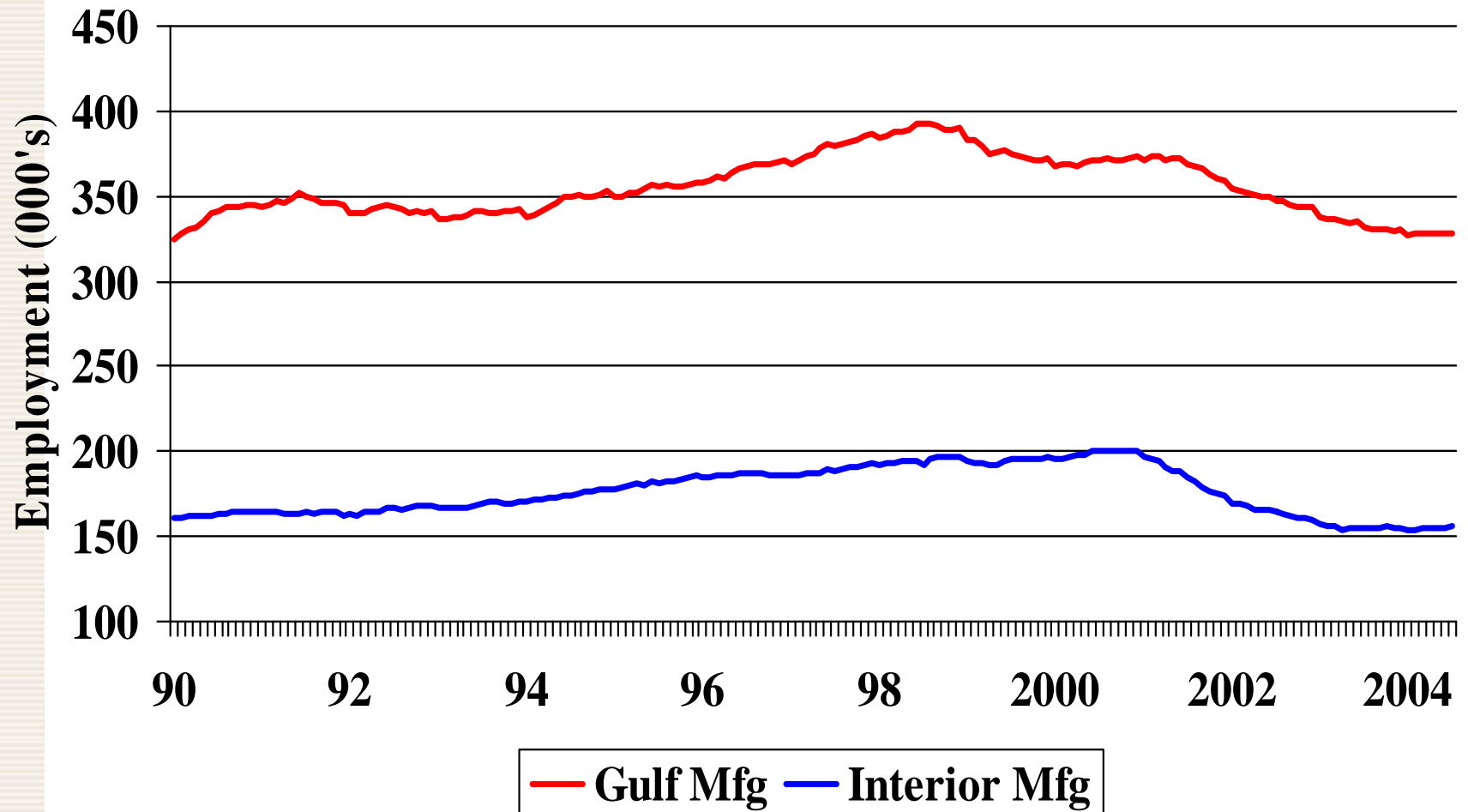
No Boom in Oil Extraction Jobs in Gulf and Interior Cities

1990 to Present



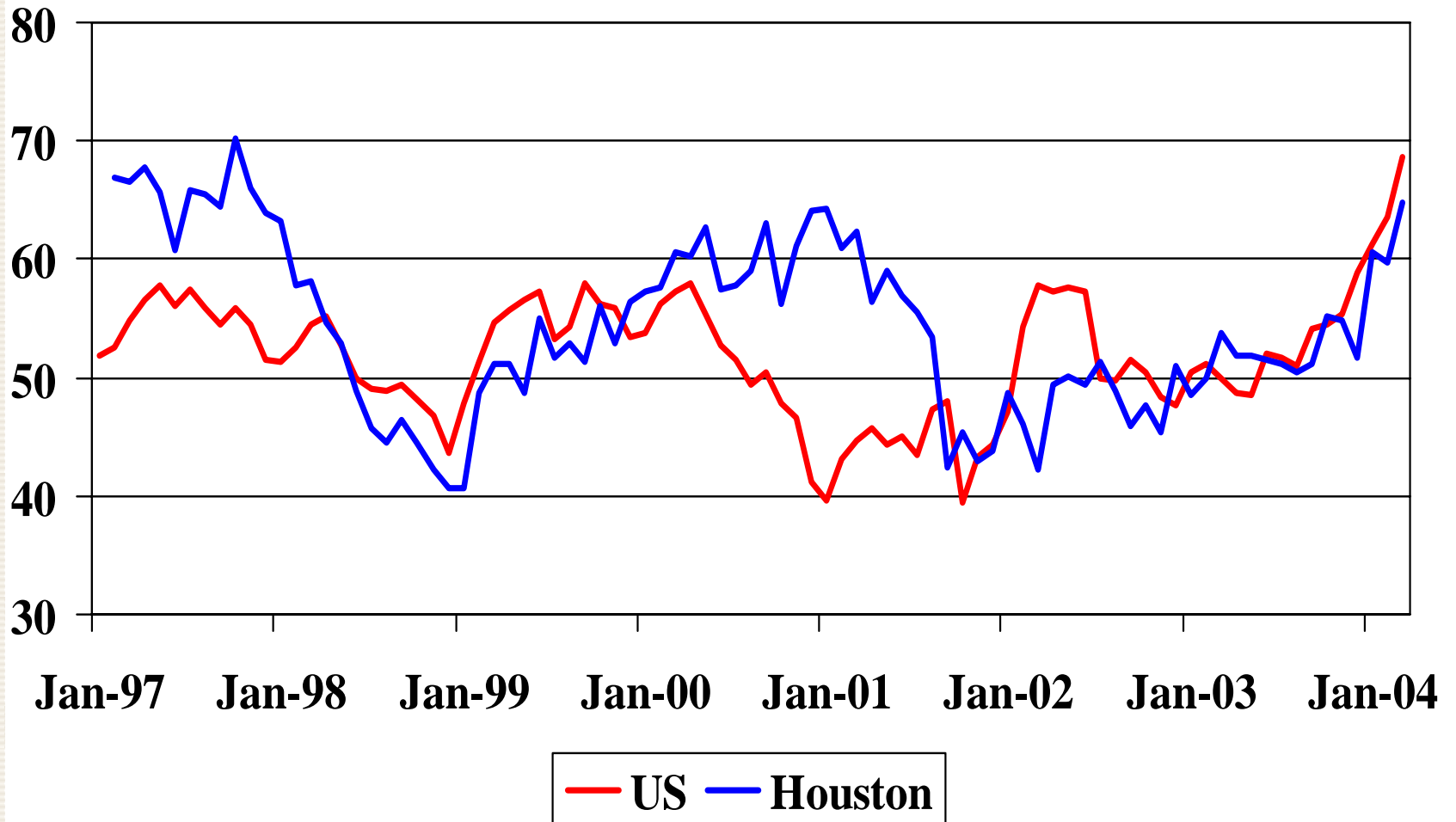
...Or in Manufacturing Jobs

1990 to Present



Purchasing Managers' Index

Not Seasonally Adjusted, Based on Five Weights



Conclusions

- The Gulf Coast economy is growing strongly, but not generating jobs -- even with high energy prices. Sharing in U.S. productivity growth explains part of the weakness.
- Energy helps, but not like it used to. Oil does not drive drilling now, there is a lack of prospects for natural gas, and an unwillingness to invest in U.S.
- Chemicals have lost their competitive advantage if natural gas is no longer a surplus commodity on the Gulf Coast.
- In the past strong U.S. and world growth, combined with high energy prices, would have meant annual rates of growth of 4-5 percent or higher. Times are clearly changing.

