

The Recession and Construction Lending

Douglas G. Duncan, MBA Chief Economist

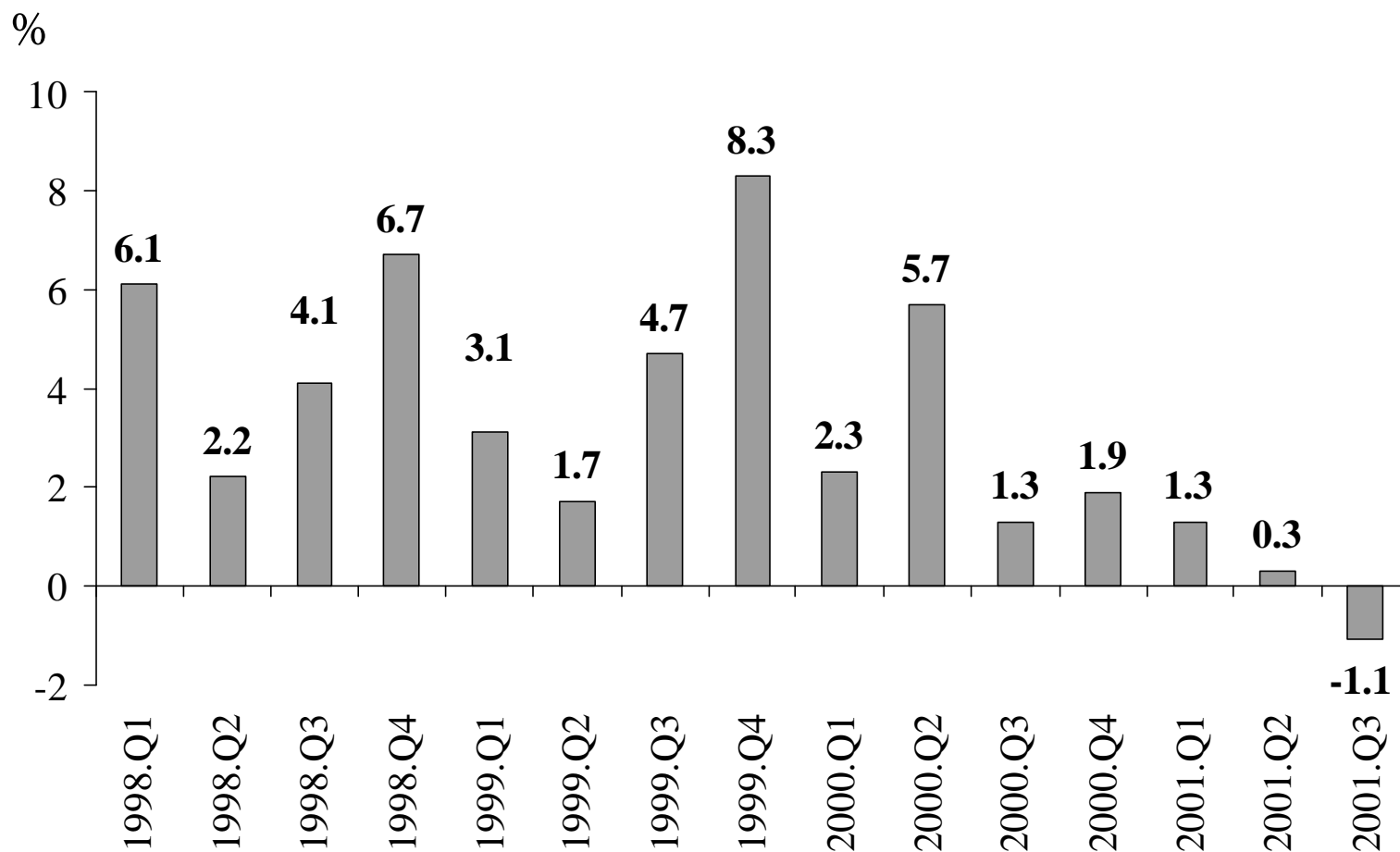
December 6, 2001

Denver, Colorado

The Economy

Real GDP Growth

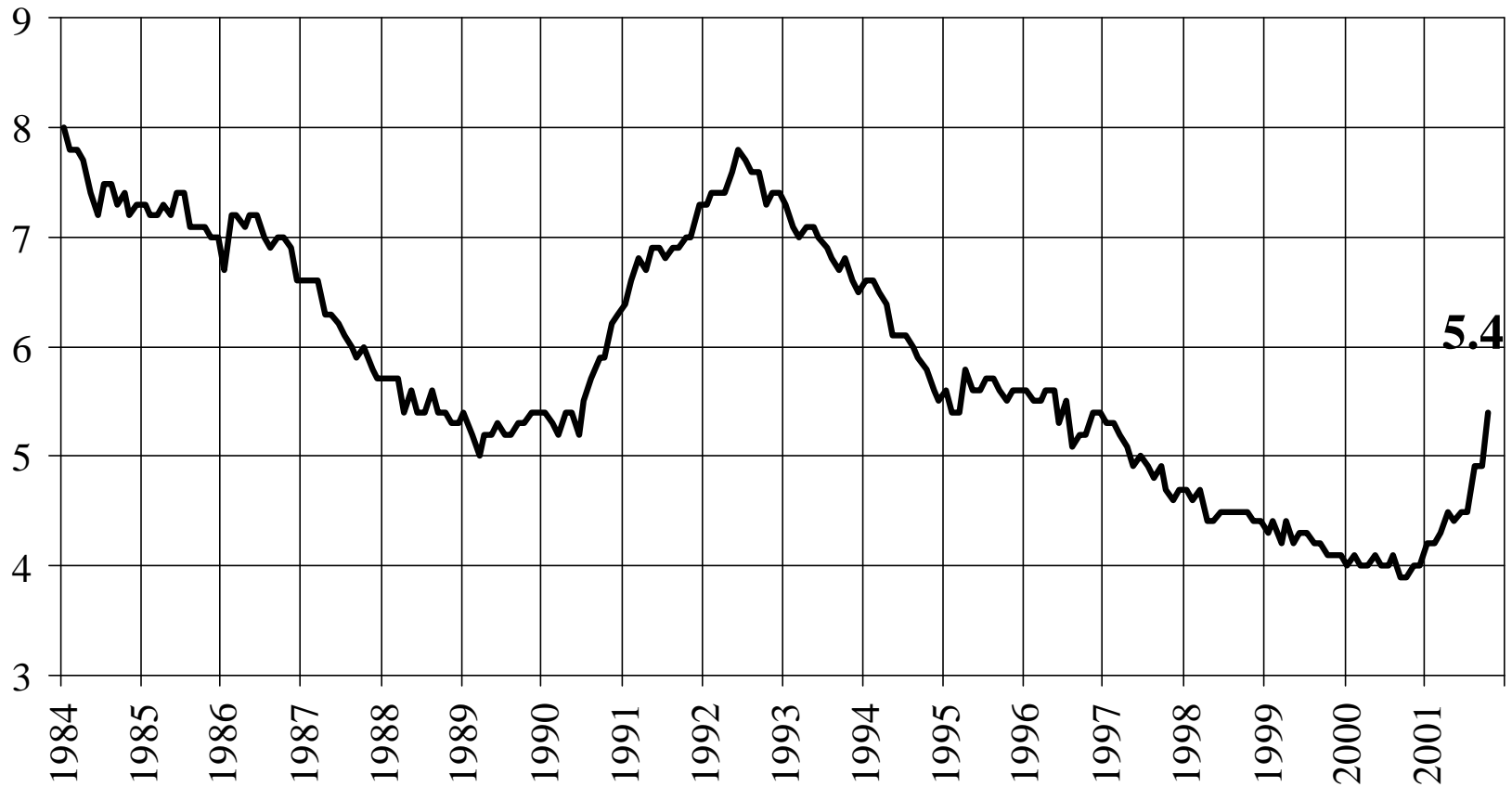
(% change, Seasonally Adjusted at Annual Rate)



Source: U.S. Department of Commerce

Unemployment Rate

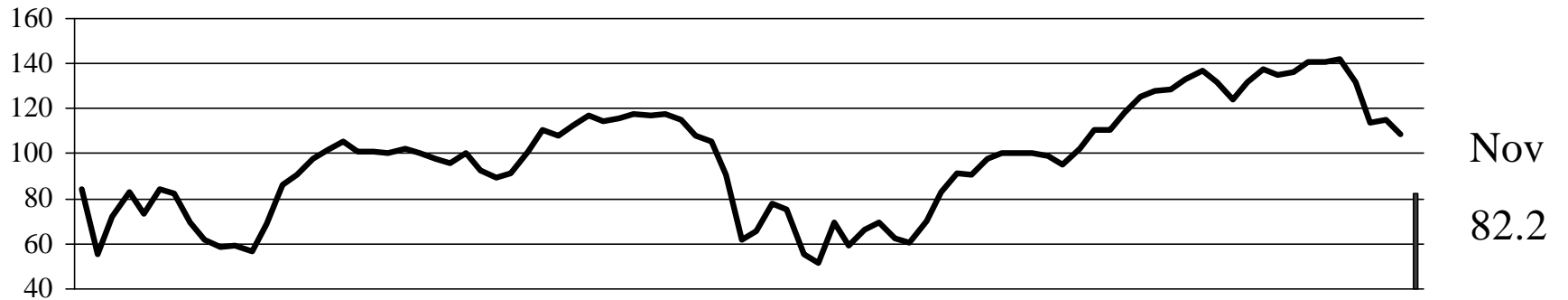
(%, monthly average)



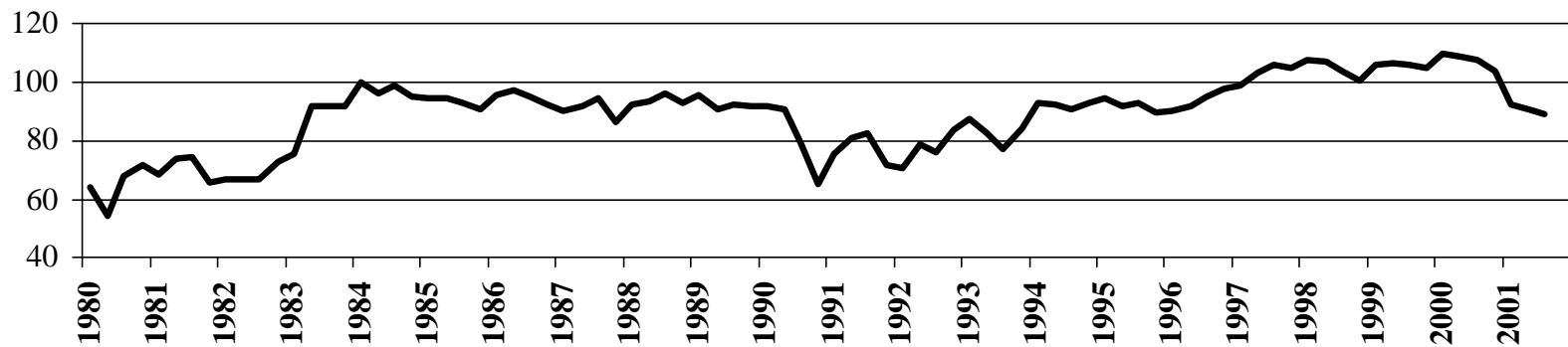
Source: Bureau of Labor Statistics

Consumer Confidence

Conference Board, 1966 Q1=100

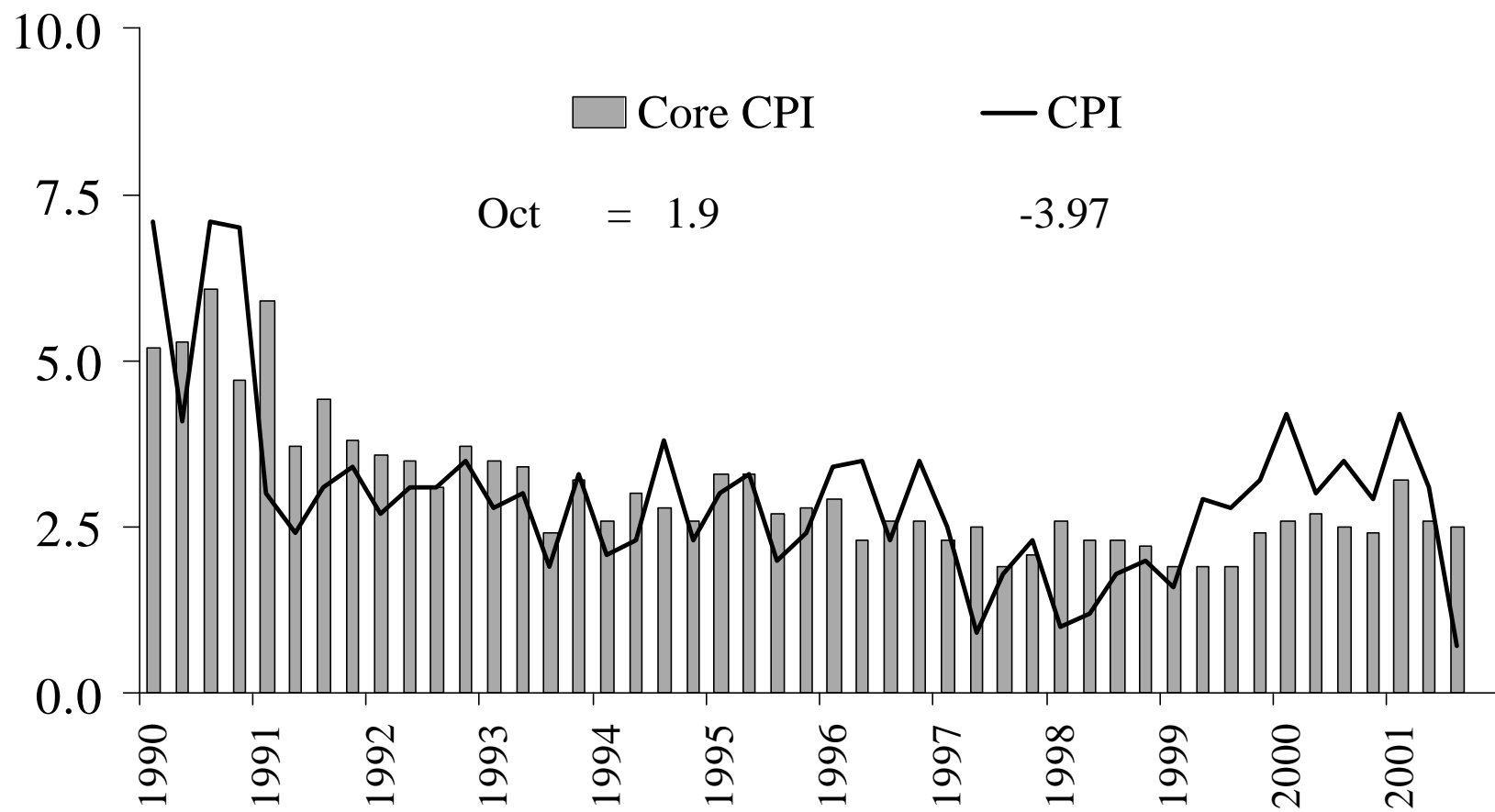


University of Michigan, 1985=100



Inflation

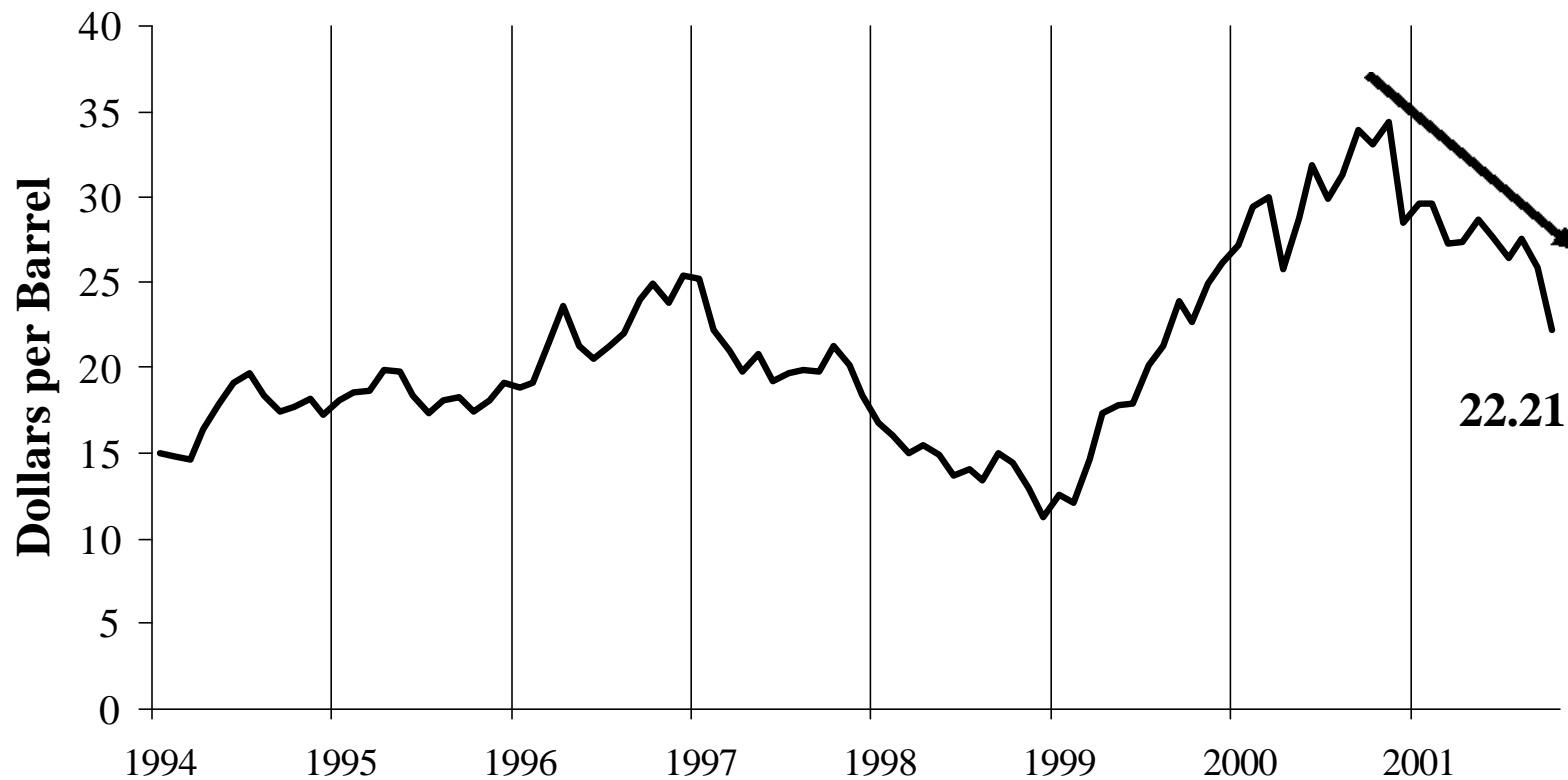
(Seasonally adjusted at annual rate, %)



Source: Bureau of Labor Statistics

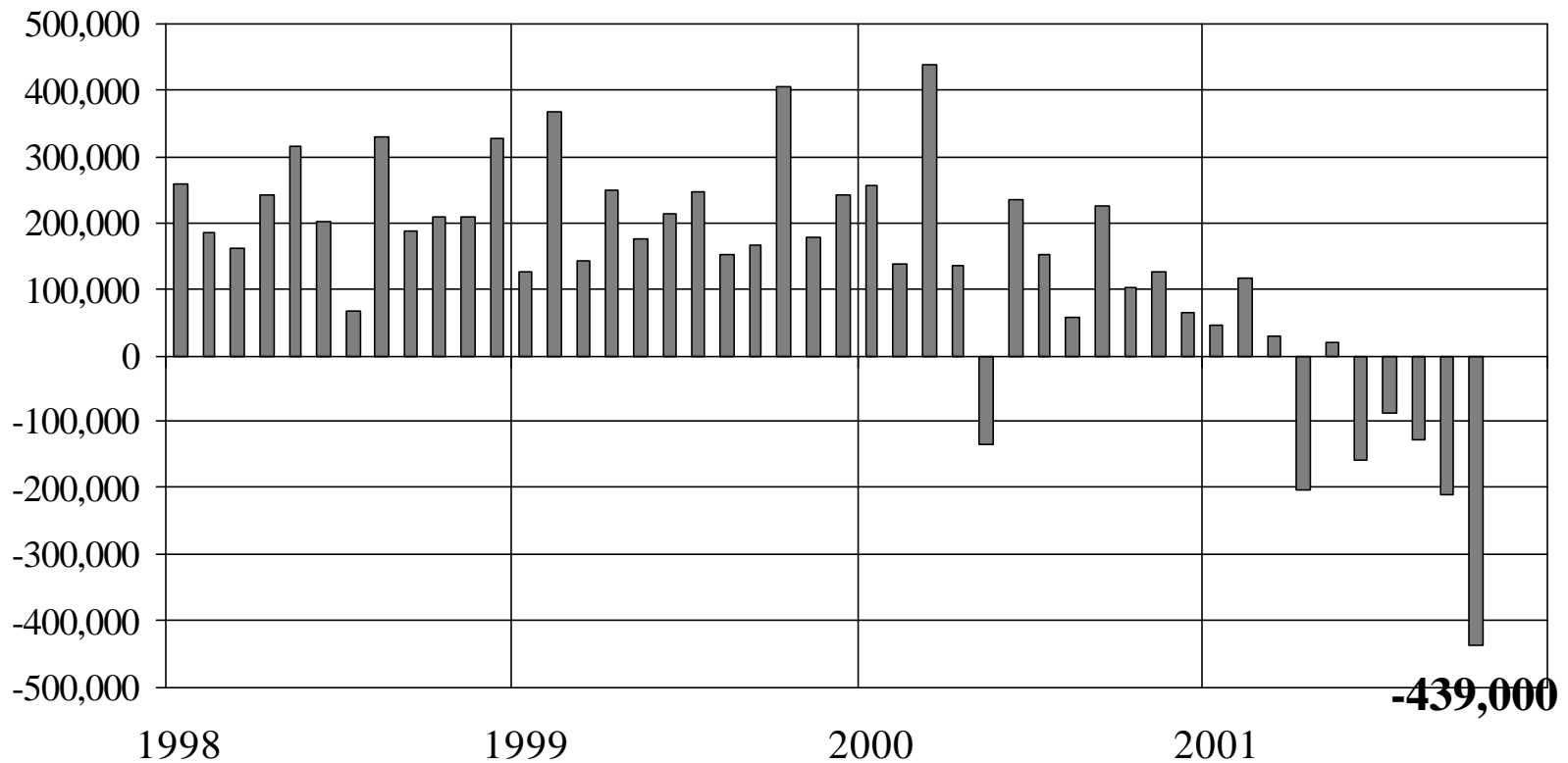
Crude Oil Price

(Domestic Spot Oil Price, West Texas Intermediate)



Employment Growth

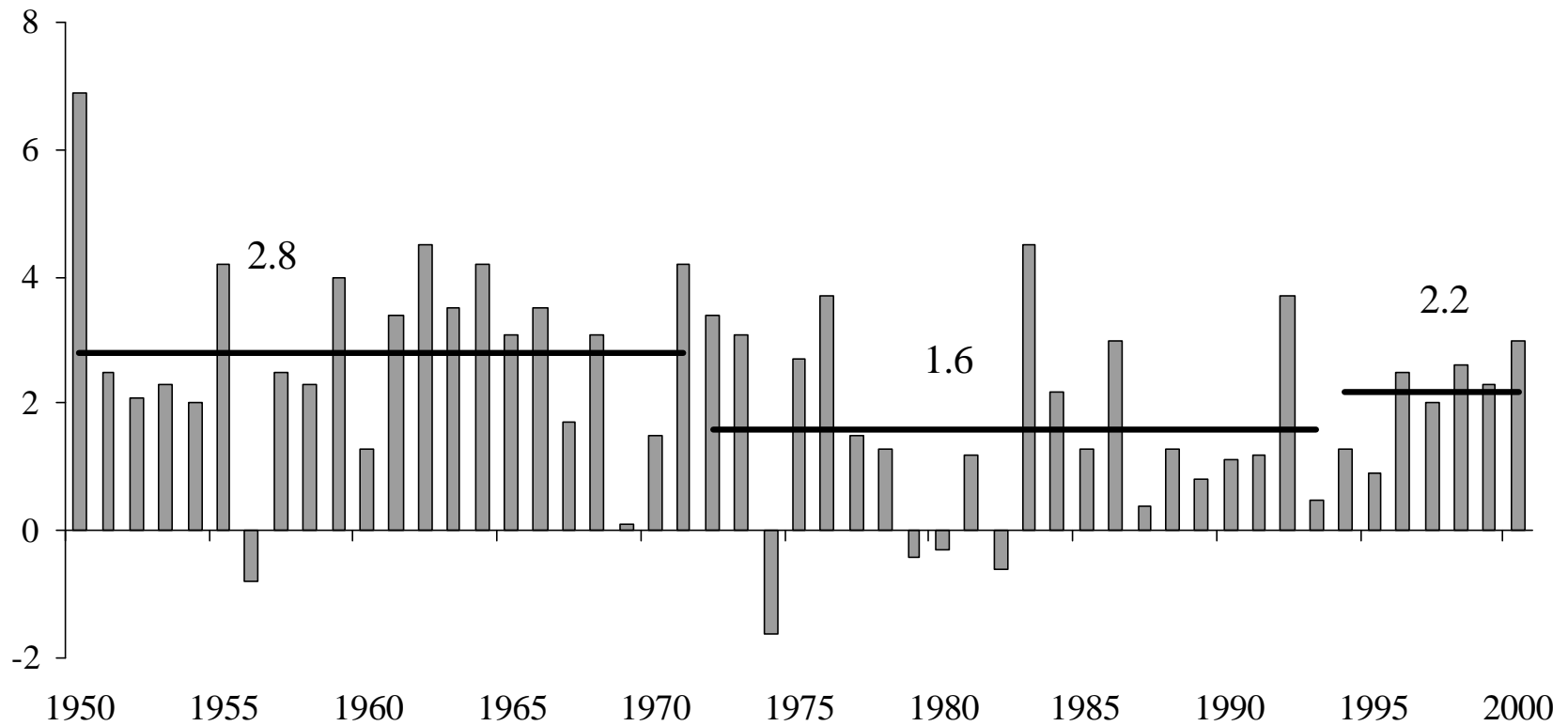
(Monthly Change in Private Nonfarm Employment, Number of Persons)



Source: BLS Establishment Survey

Annual Productivity Growth

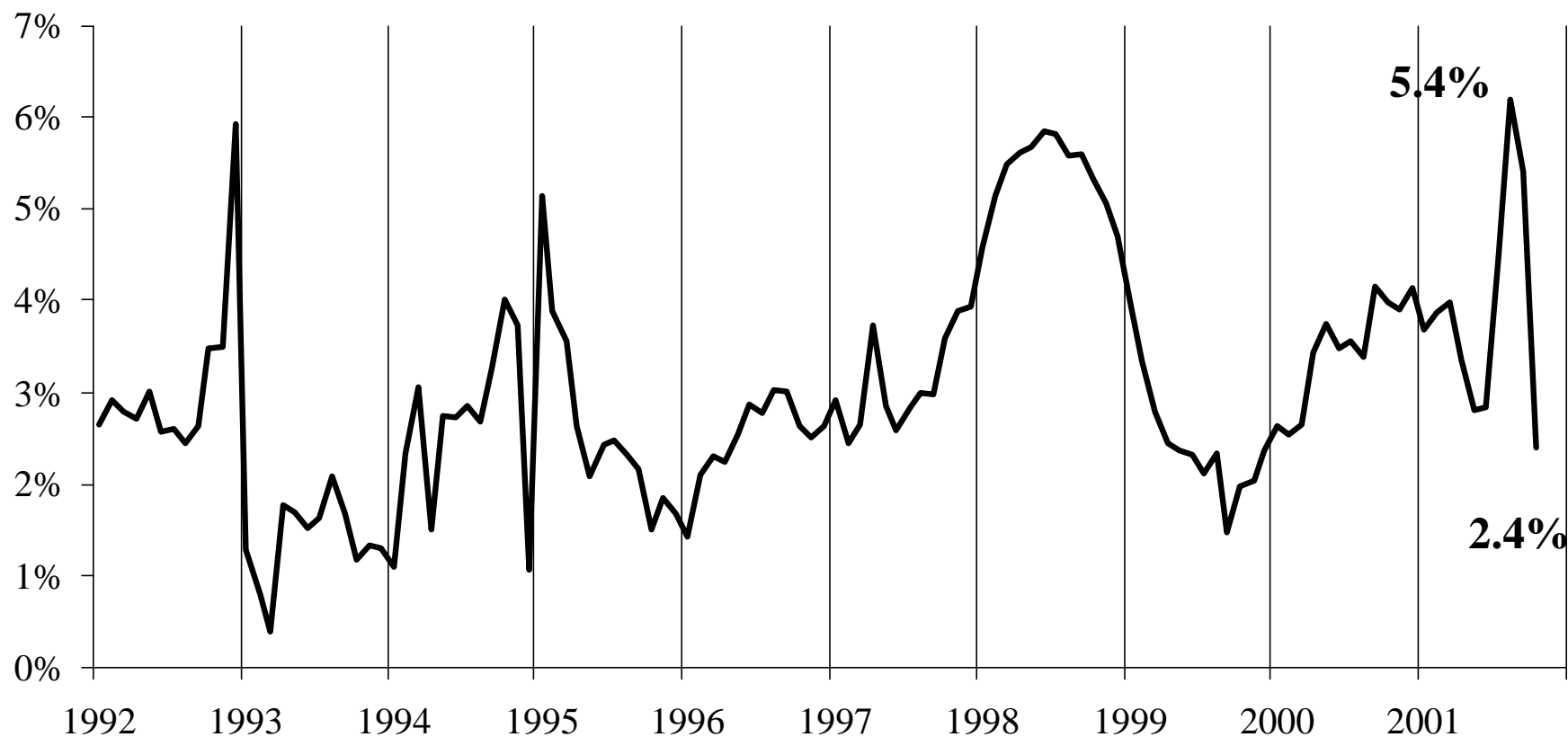
(Nonfarm Business Sector, Percent)



Source: Bureau of Labor Statistics

Real Personal Disposable Income

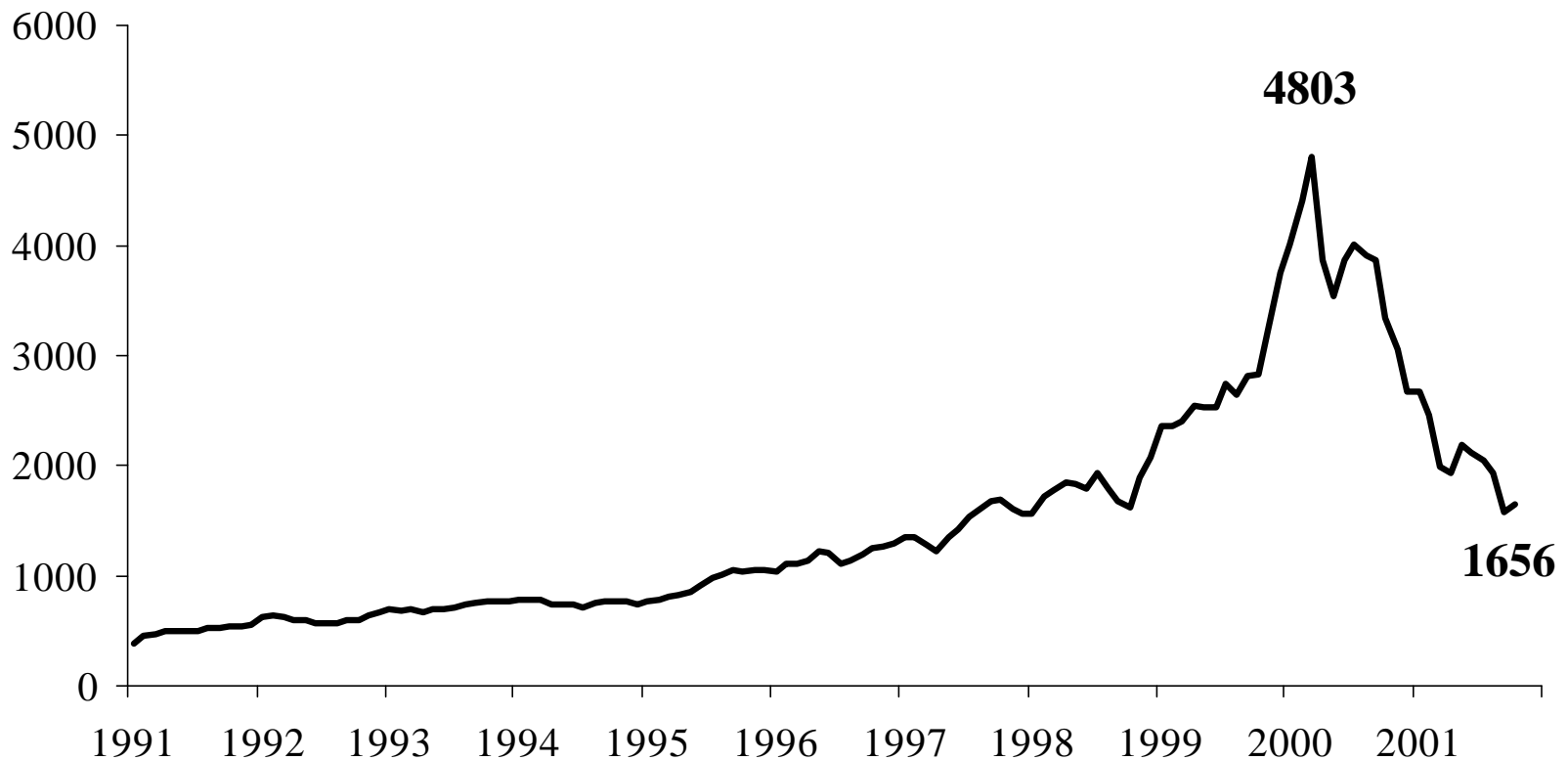
(year/year, % change by month)



Source: U.S. Department of Commerce

NASDAQ Composite Index

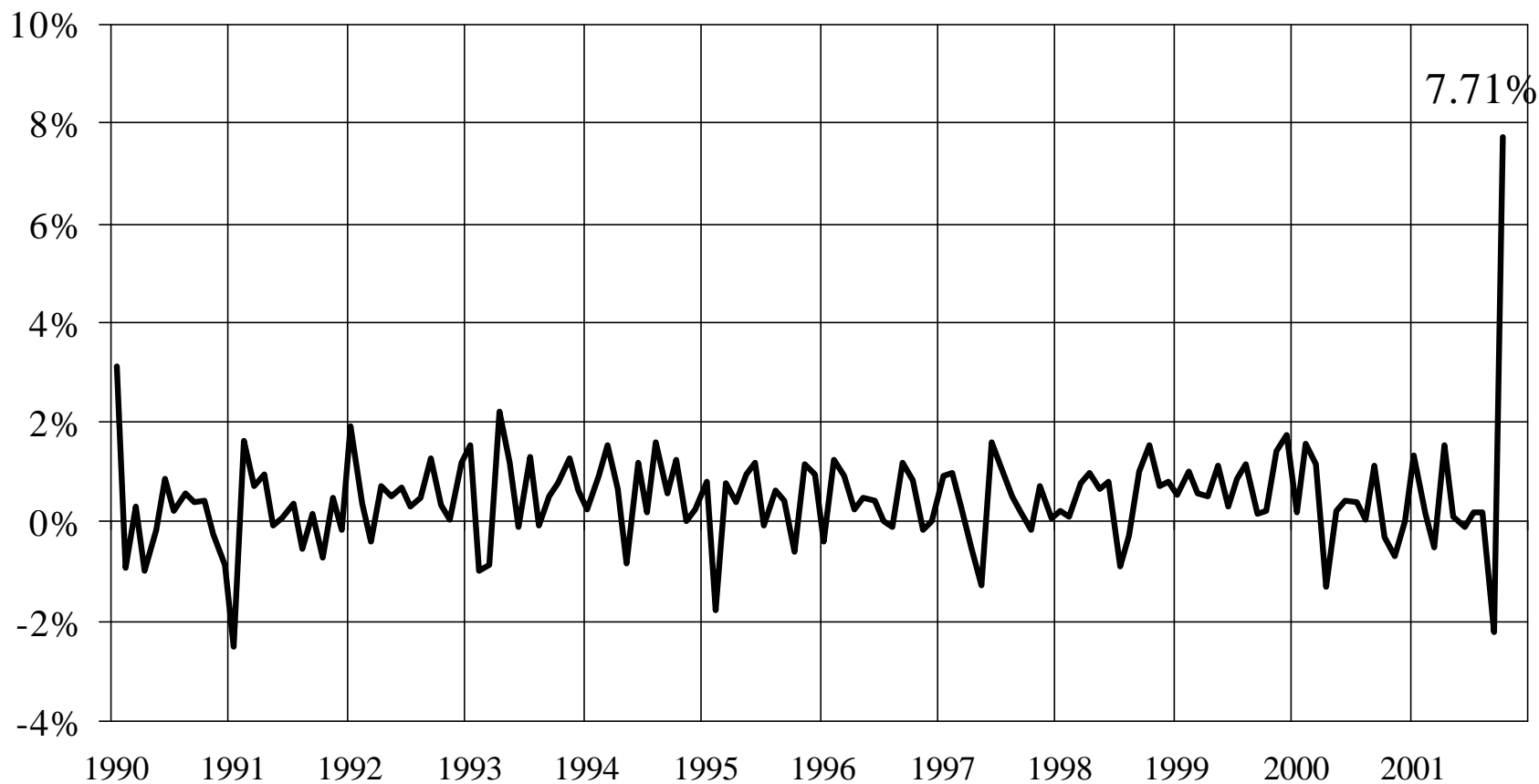
(2/5/71=100)



Source: The Wall Street Journal

Actual Retail Sales

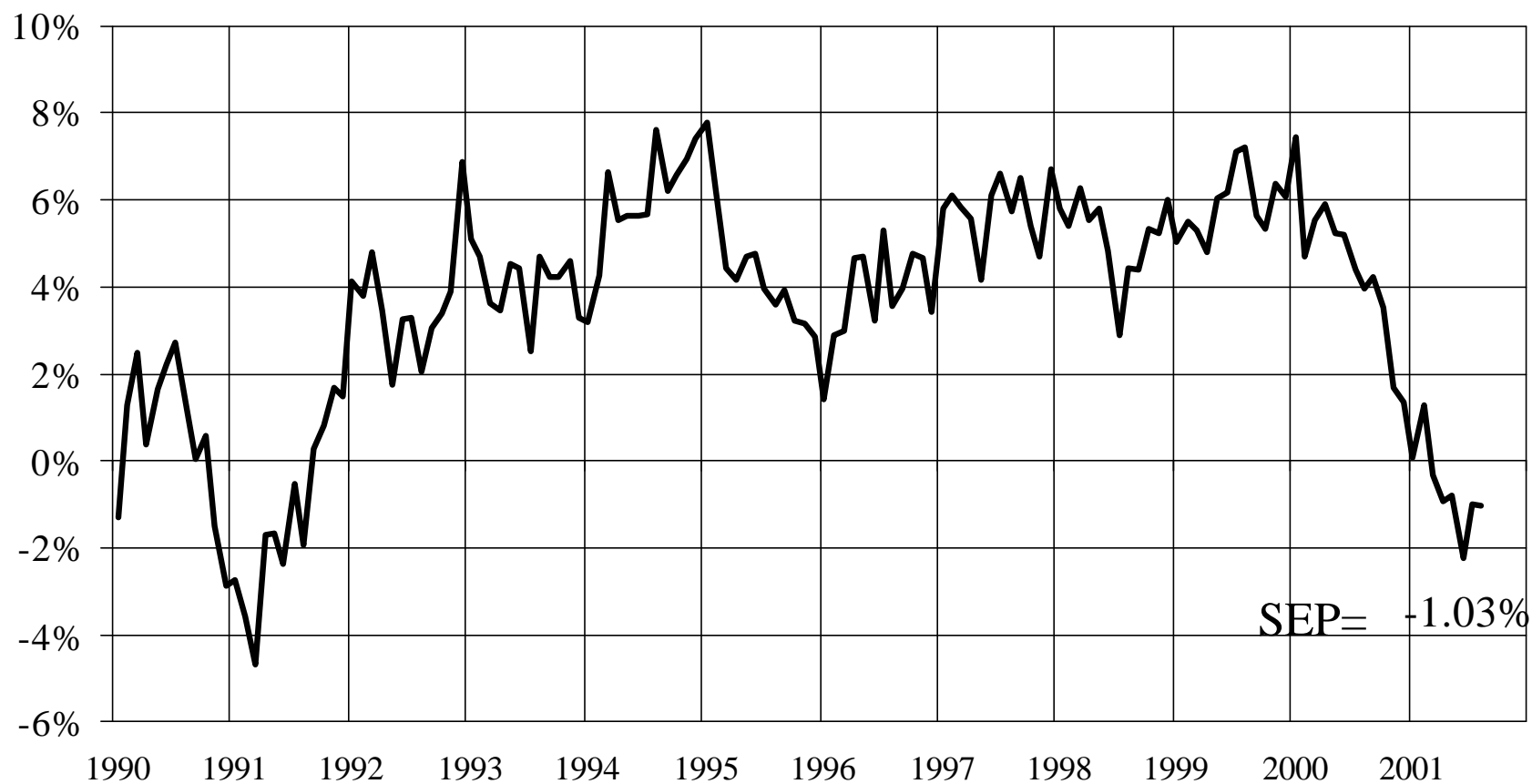
(year/year, % change, by month)



Source: Census Bureau

Real Manufacturing and Trade Sales

(year/year, % change, by month)



Source: Unpublished table, Bureau of Economic Analysis

Economic Forecast



	Actual		Forecast				Q4 to Q4		Year to Year	
	2001:2	2001:3	2001:4	2002:1	2002:2	2002:3	2001	2002	2001	2002
Percent Change, Annual Rate:										
Gross Domestic Product (Chain 96\$)	0.3	-0.4	-3.2	1.9	3.0	3.8	-0.5	3.1	1.0	1.1
Personal Consumption Expenditures	2.5	1.2	1.1	-2.4	4.9	3.6	2.0	2.3	2.8	1.4
Business Fixed Investment	-14.6	-11.9	-18.4	-11.5	-1.3	7.6	-11.5	1.2	-3.9	-7.8
Residential Investment	5.9	1.9	-11.9	-6.8	3.2	6.0	0.8	1.5	0.9	-1.9
Govt. Consumption & Investment	5.0	1.8	5.6	5.5	8.2	4.0	4.4	4.5	3.5	5.0
Net Exports *	-407	-395	-409	-416	-435	-453	-409	-475	-404	-445
Inventory Investment *	-38	-50	-90	25	-4	-1	-90	17	-51	9
GDP Deflator	2.1	2.1	-0.3	1.5	1.5	1.6	1.8	1.6	2.2	1.3
Consumer Prices	3.1	0.7	1.1	2.3	2.1	1.9	2.2	2.2	2.9	1.8
Unemployment Rate (%)*	4.5	4.8	5.6	5.9	5.9	5.8	5.6	5.7	4.8	5.8
3-Month Treasury Bill Rate (%)*	3.8	3.3	1.8	1.4	1.3	1.6	1.8	2.6	3.5	1.7
10-Year Treasury Bond Rate (%)*	5.3	5.0	4.4	4.3	4.3	4.5	4.4	4.9	4.9	4.5

*Shown as a level. Figures for the entire year are averages for the four quarters.

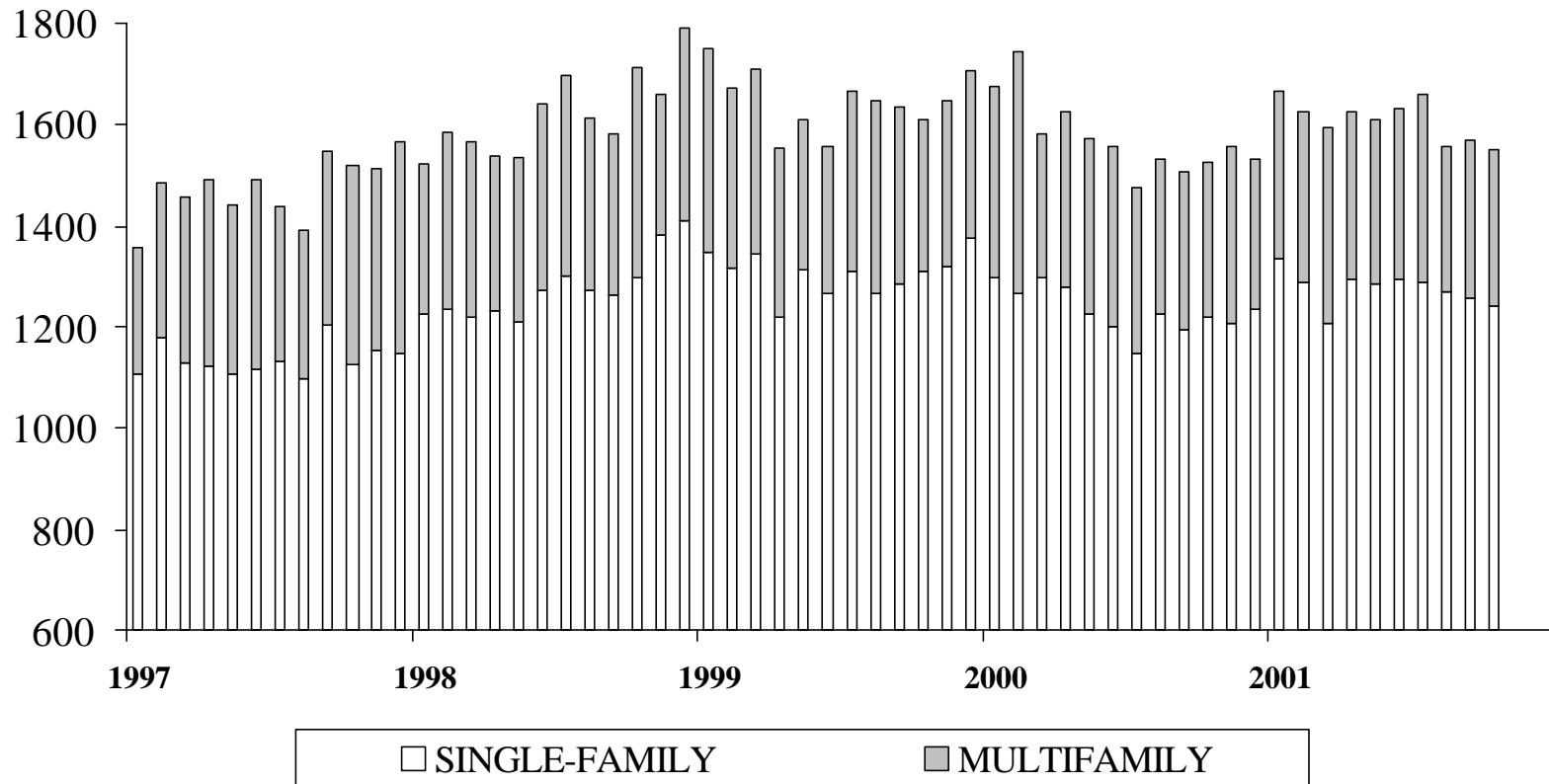
All data except interest rates are seasonally adjusted.

Forecast produced with the assistance of the Macroeconomic Advisers Econometric Model.

Housing

Housing Starts

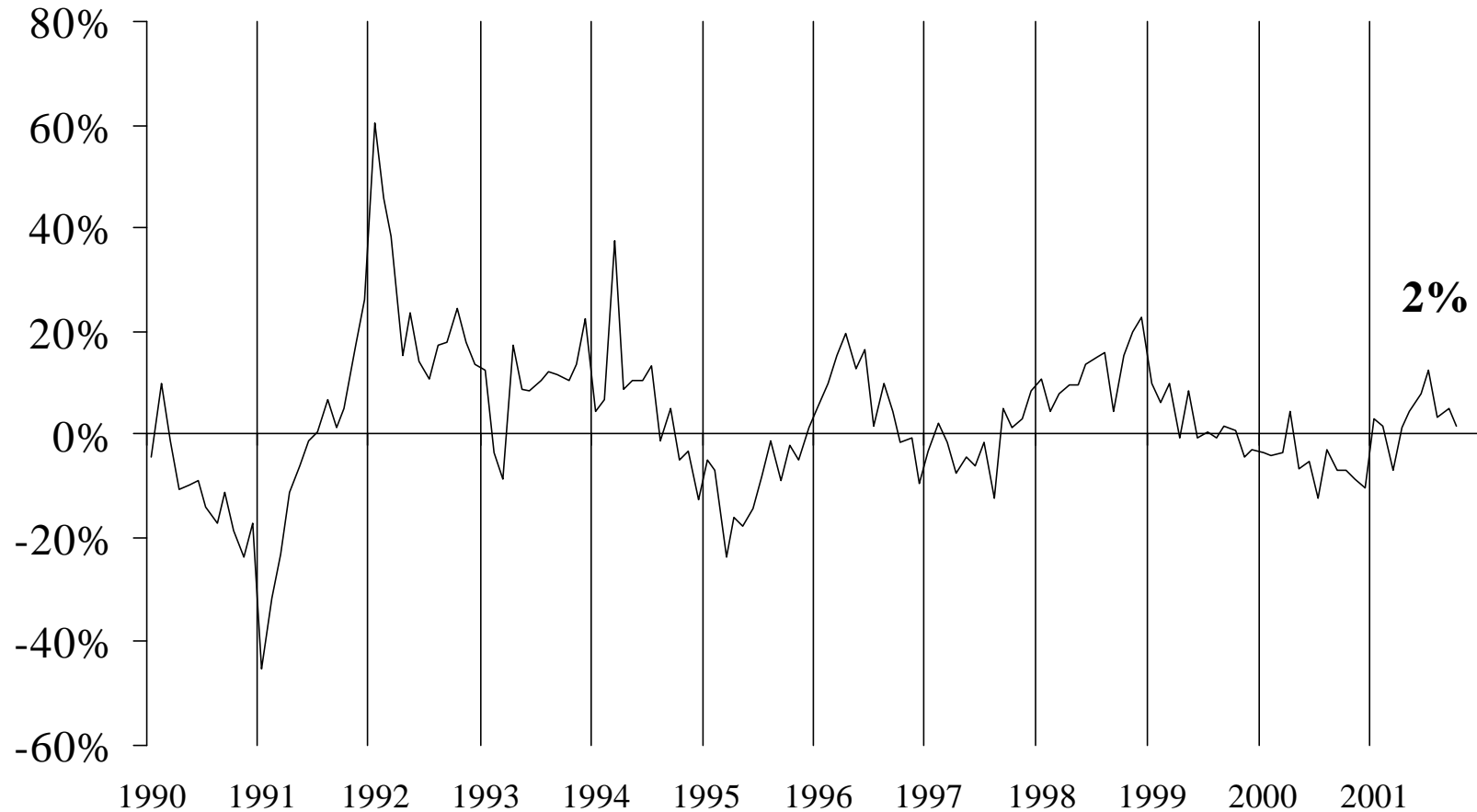
(Seasonally Adjusted at Annual Rate, Thousands of Units)



Source: Census Bureau

Single-Family Housing Starts

(year/year, % change by month)



Source: Census Bureau

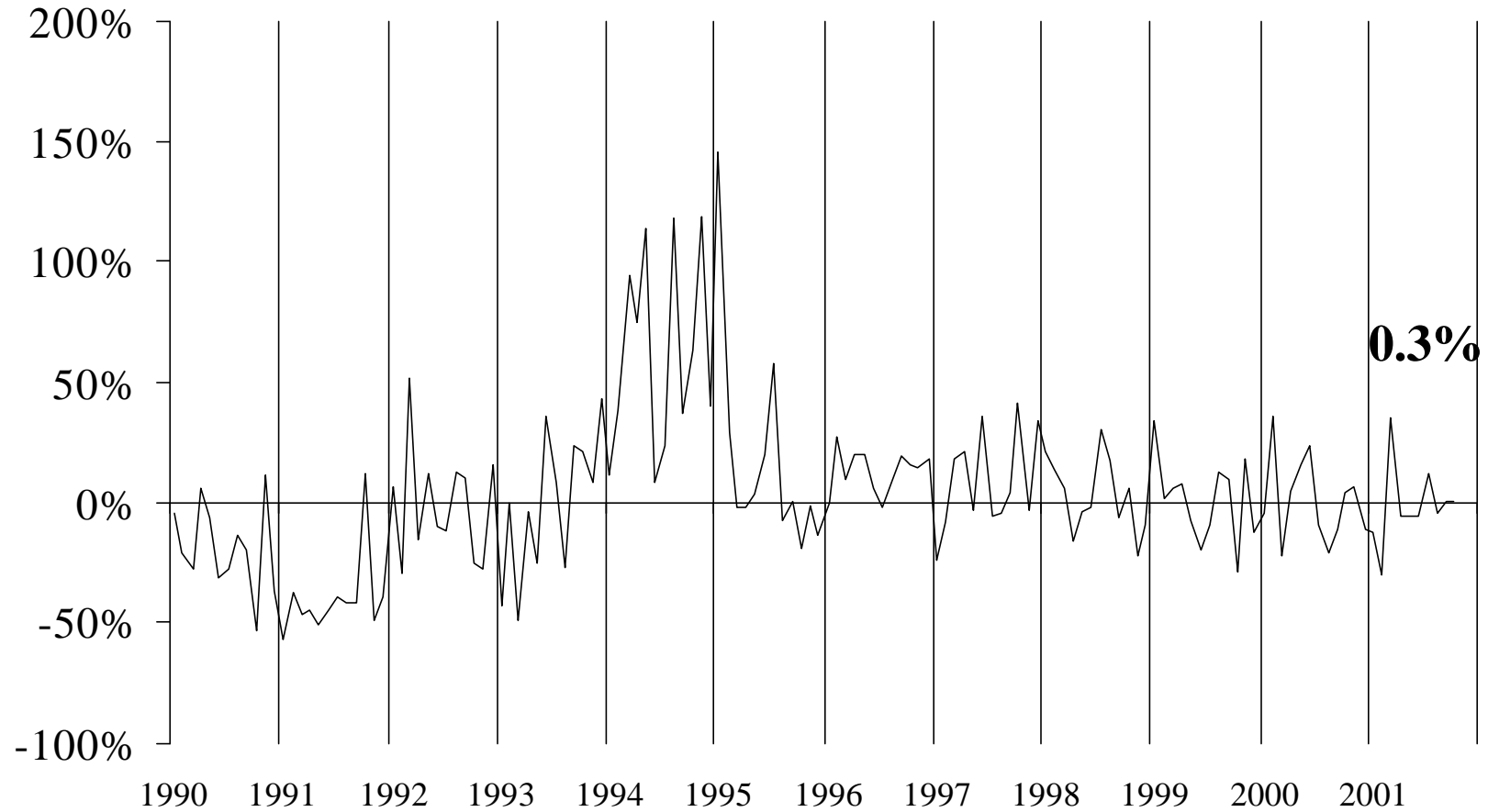
Actual Starts, One-Family Housing Units (thousands)

	<i>Through October 2000</i>	<i>Through October 2001</i>	<i>Annual change (Percent)</i>
U.S.	1063.9	1099.9	3.4
Northeast	99.5	92.8	-6.7
Midwest	230.3	230.9	0.3
South	483.4	513.9	6.3
West	251.1	262.5	4.5

Source: Bureau of the Census

Multi-Family Housing Starts

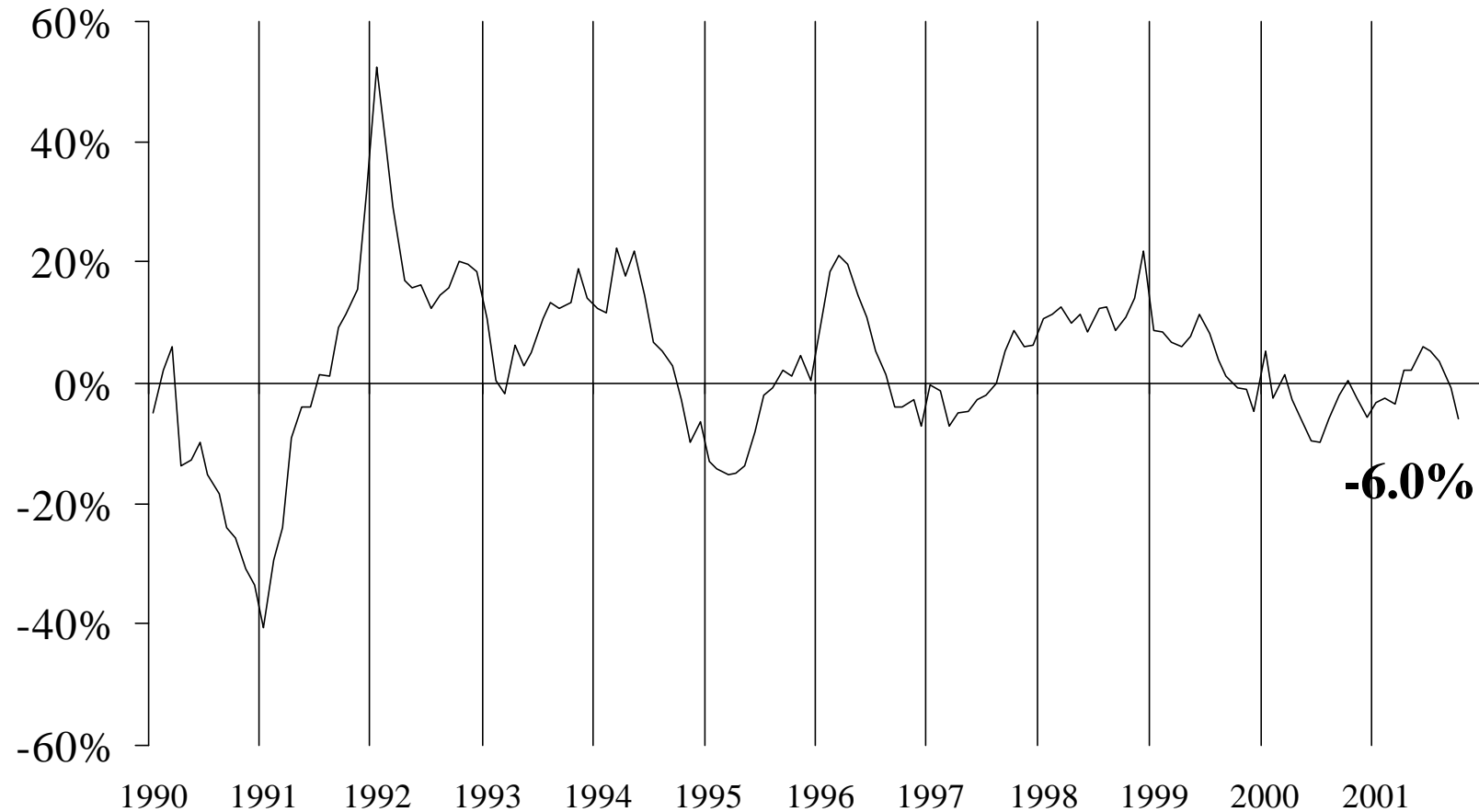
(year/year, % change by month)



Source: Census Bureau

One-Family Housing Permits

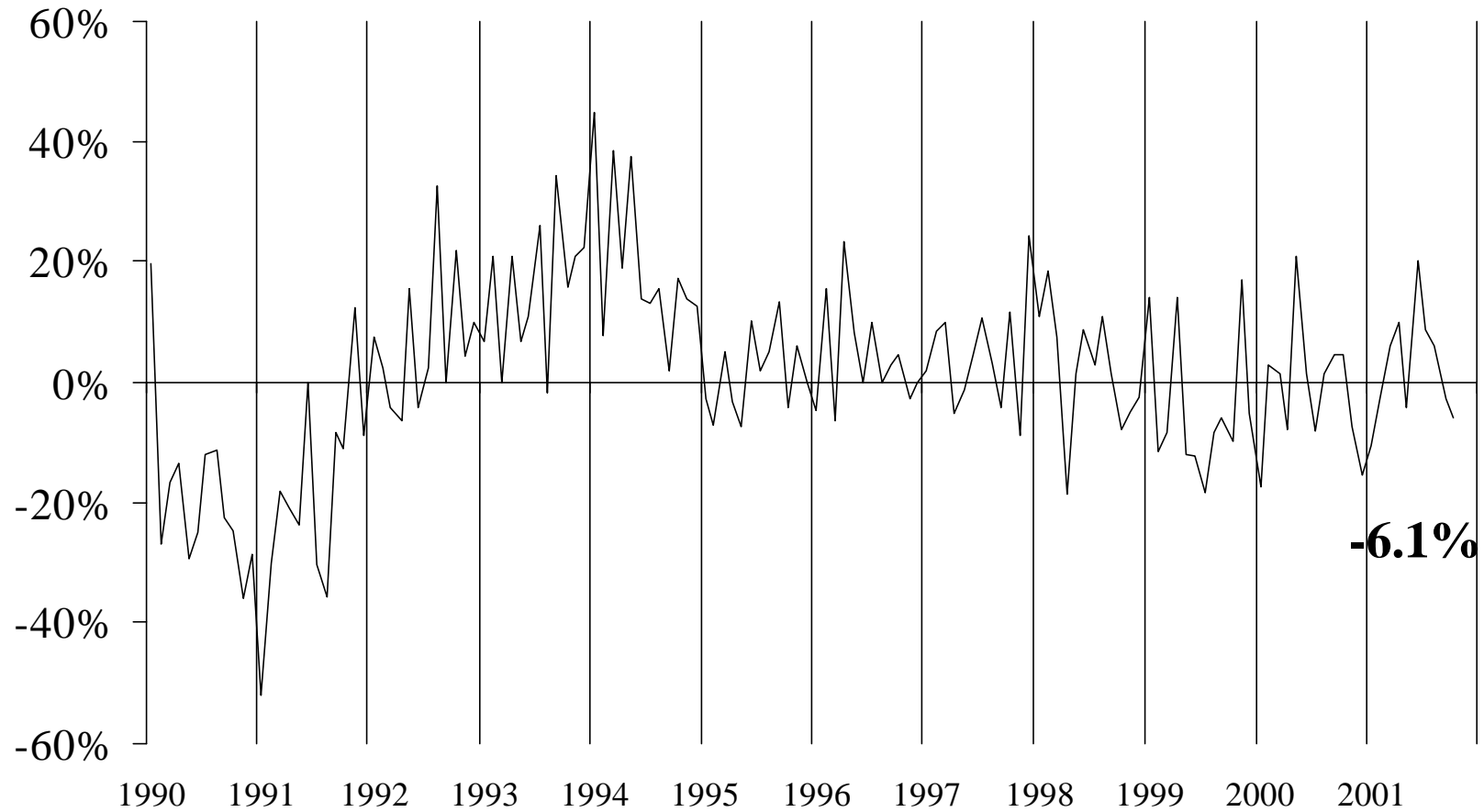
(year/year, % change by month)



Source: Census Bureau

2- to 4-Family Housing Permits

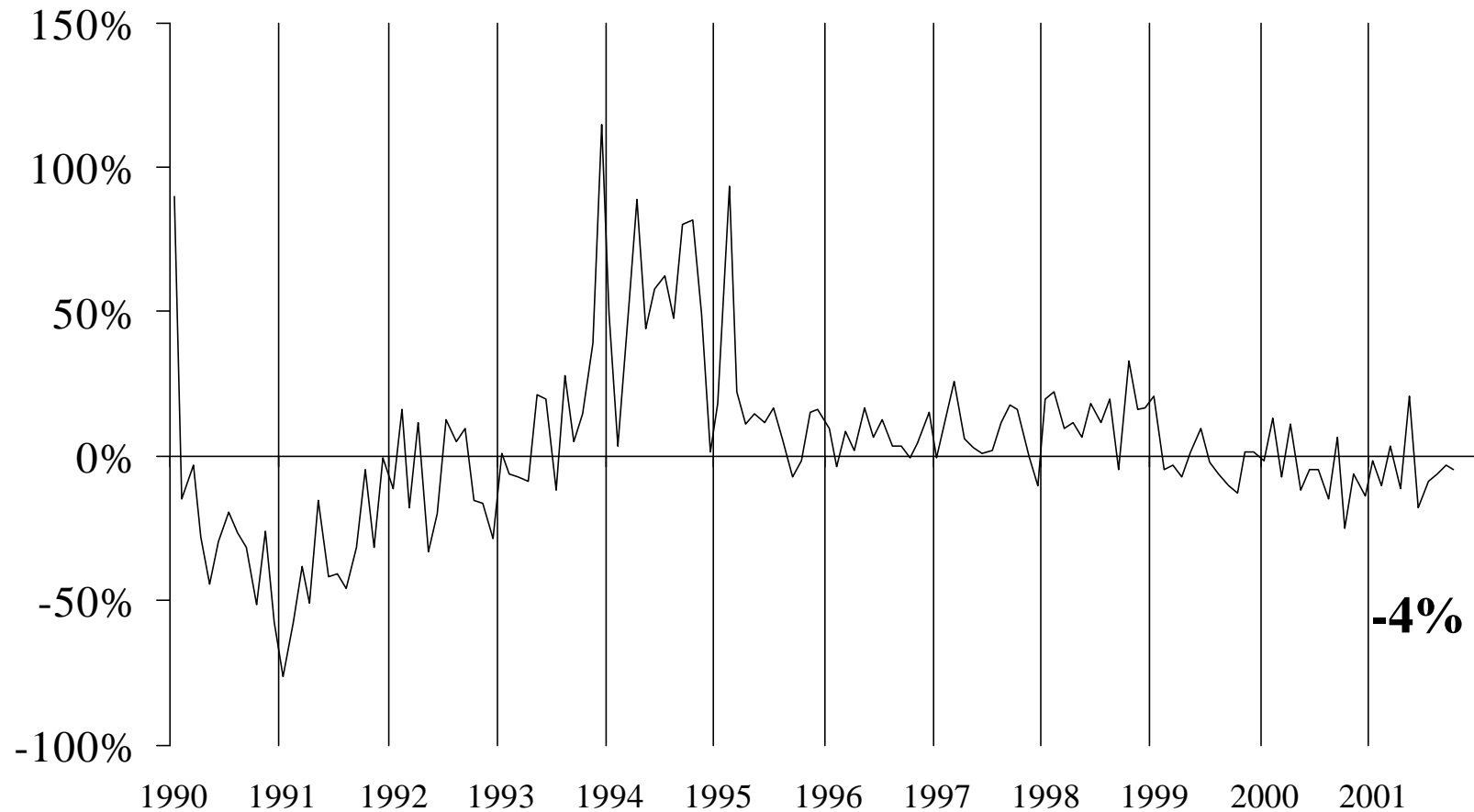
(year/year, % change by month)



Source: Census Bureau

5 or More Family Housing Permits

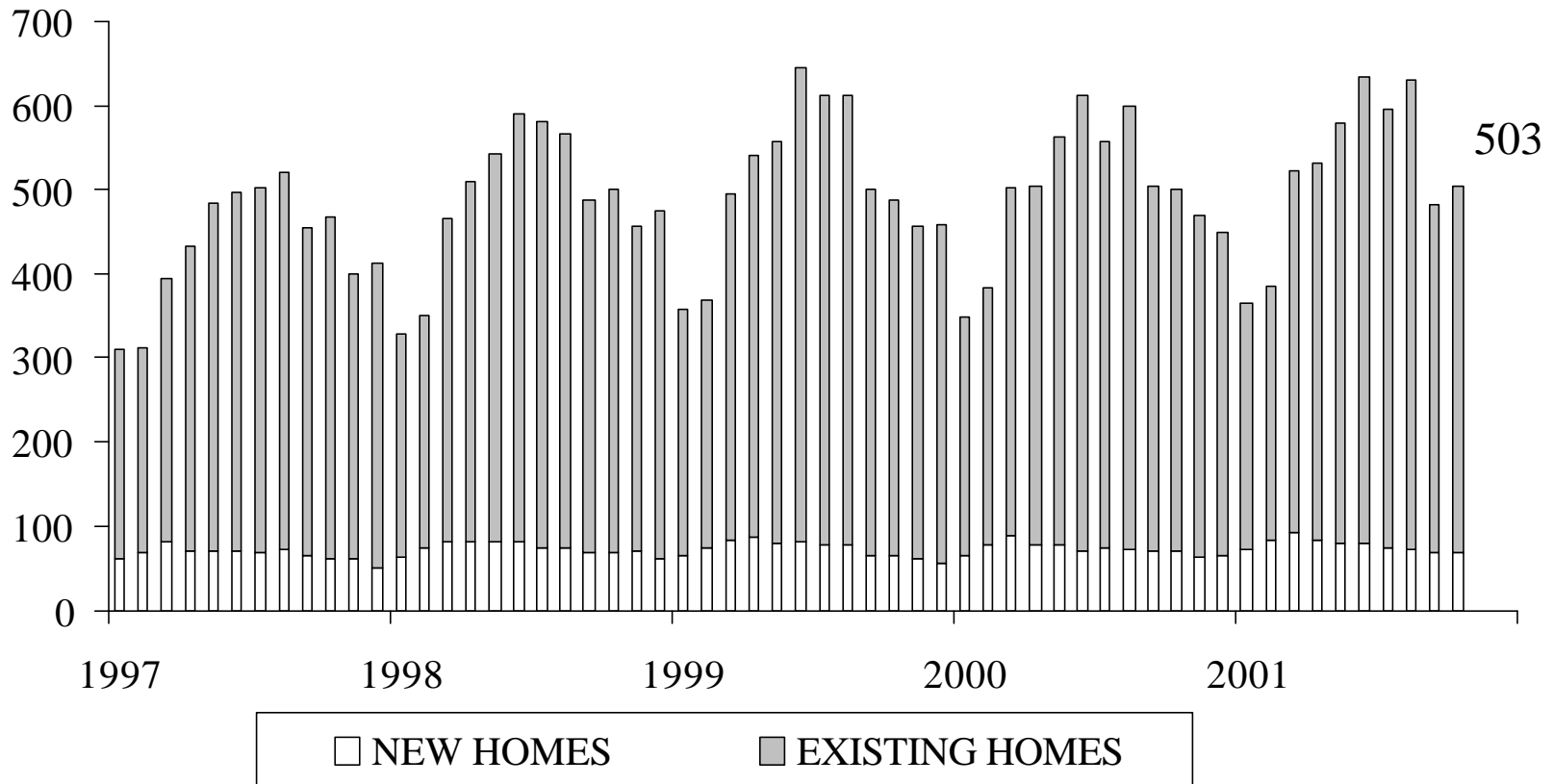
(year/year, % change by month)



Source: Census Bureau

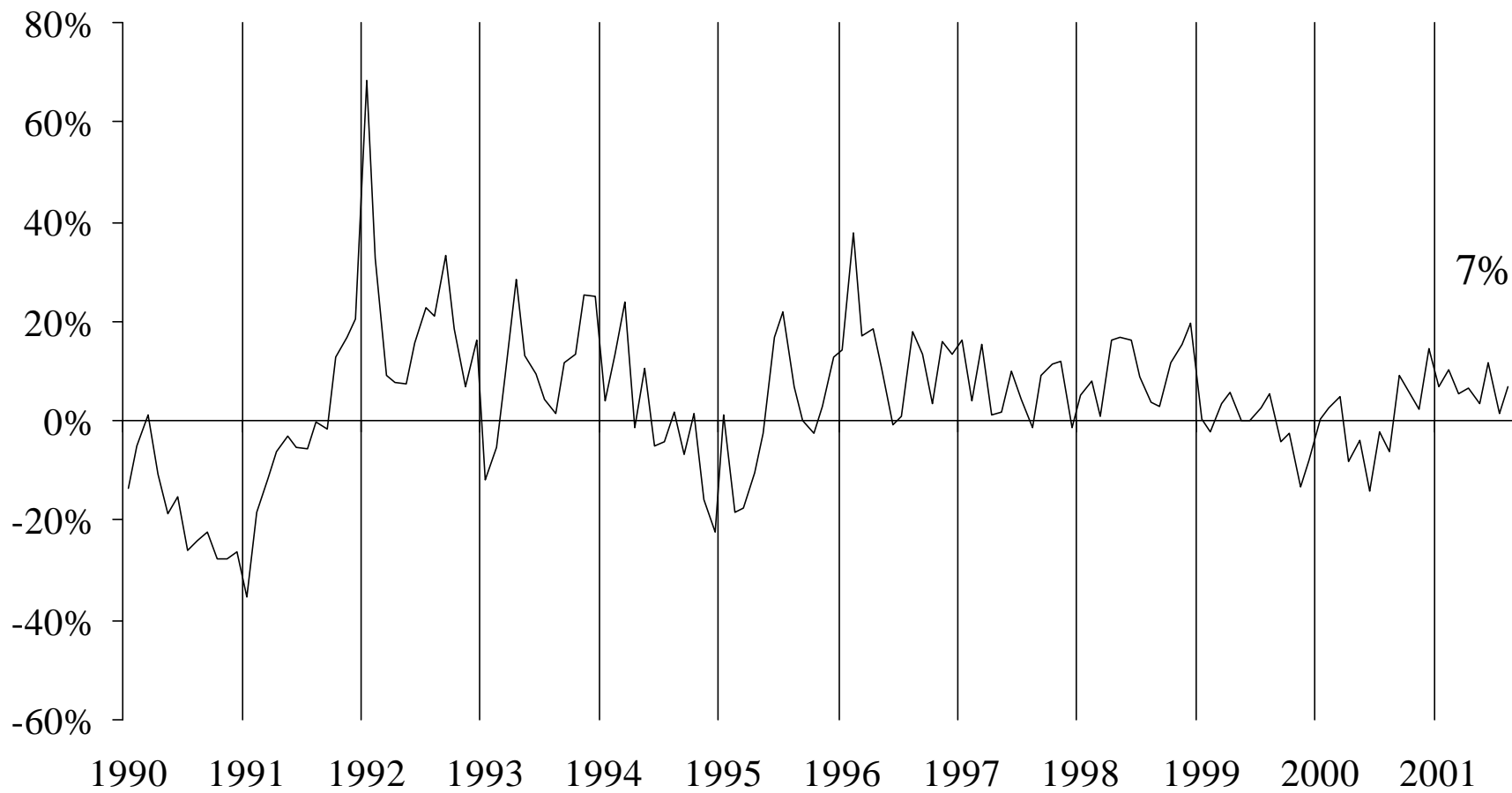
Home Sales

(Not Seasonally Adjusted, Thousands of Units)



New Home Sales

(year/year, % change by month)



Source: Census Bureau

Actual Sales, New Homes

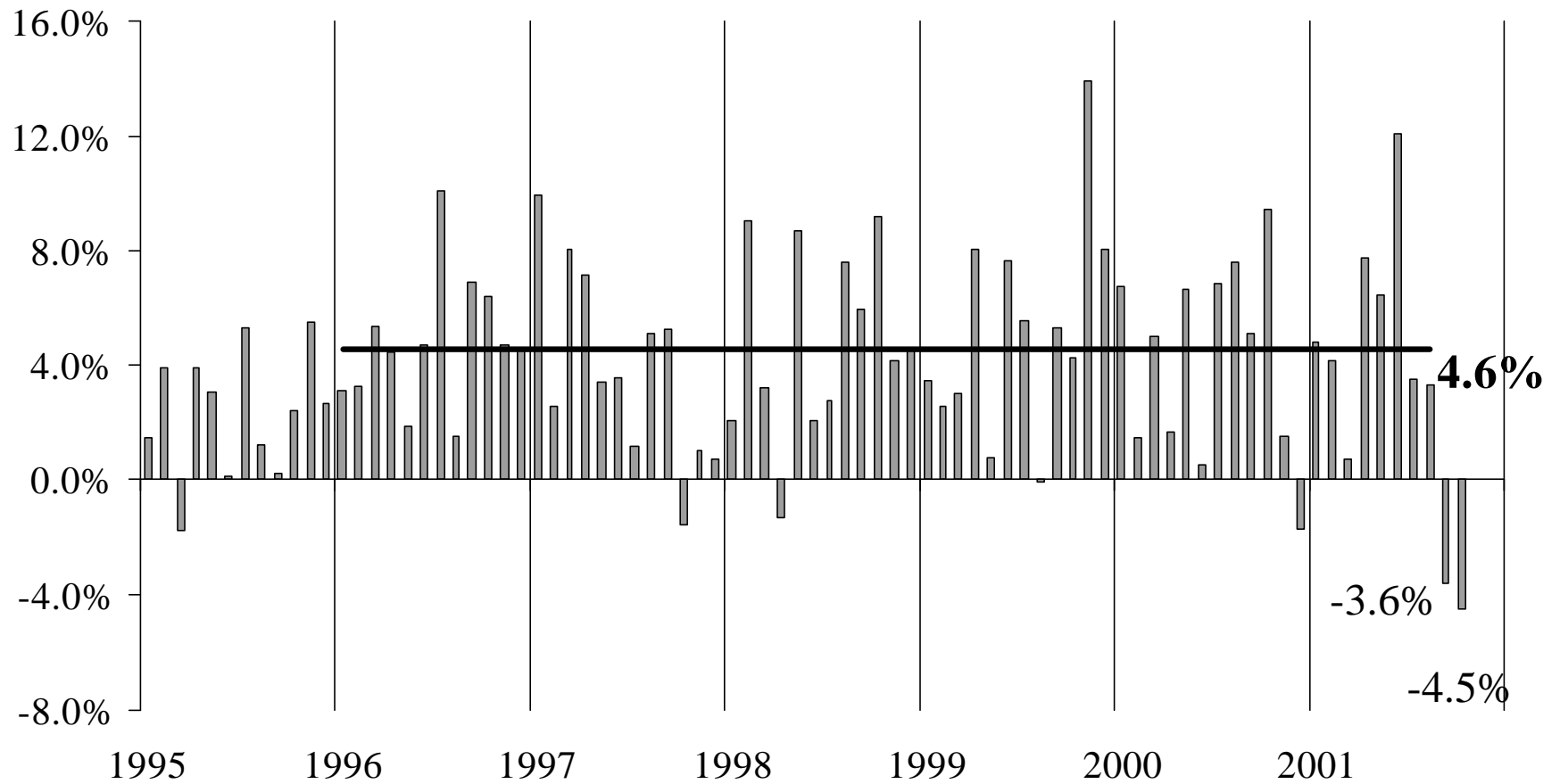
(thousands)

	<i>Through October 2000</i>	<i>Through October 2001</i>	<i>Annual change (Percent)</i>
U.S.	749	780	4.1
Northeast	62	57	-8.1
Midwest	135	140	3.7
South	345	373	8.1
West	209	210	0.5

Source: Bureau of the Census & HUD

New Home Median Price

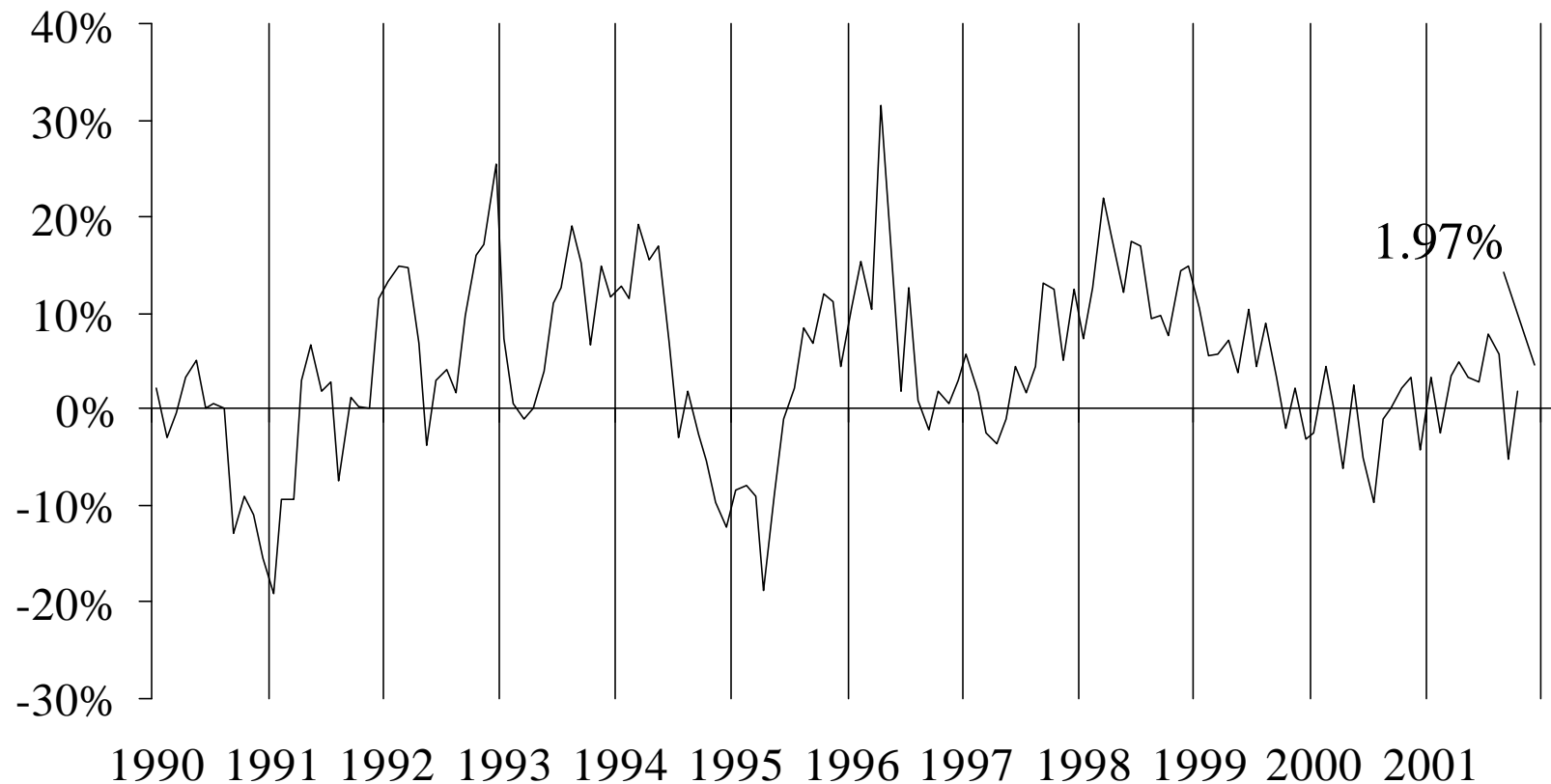
(year/year, % change by month)



Source: Census Bureau

Existing Home Sales

(year/year, % change by month)



Source: National Associations of Realtors

Actual Sales, Existing Homes

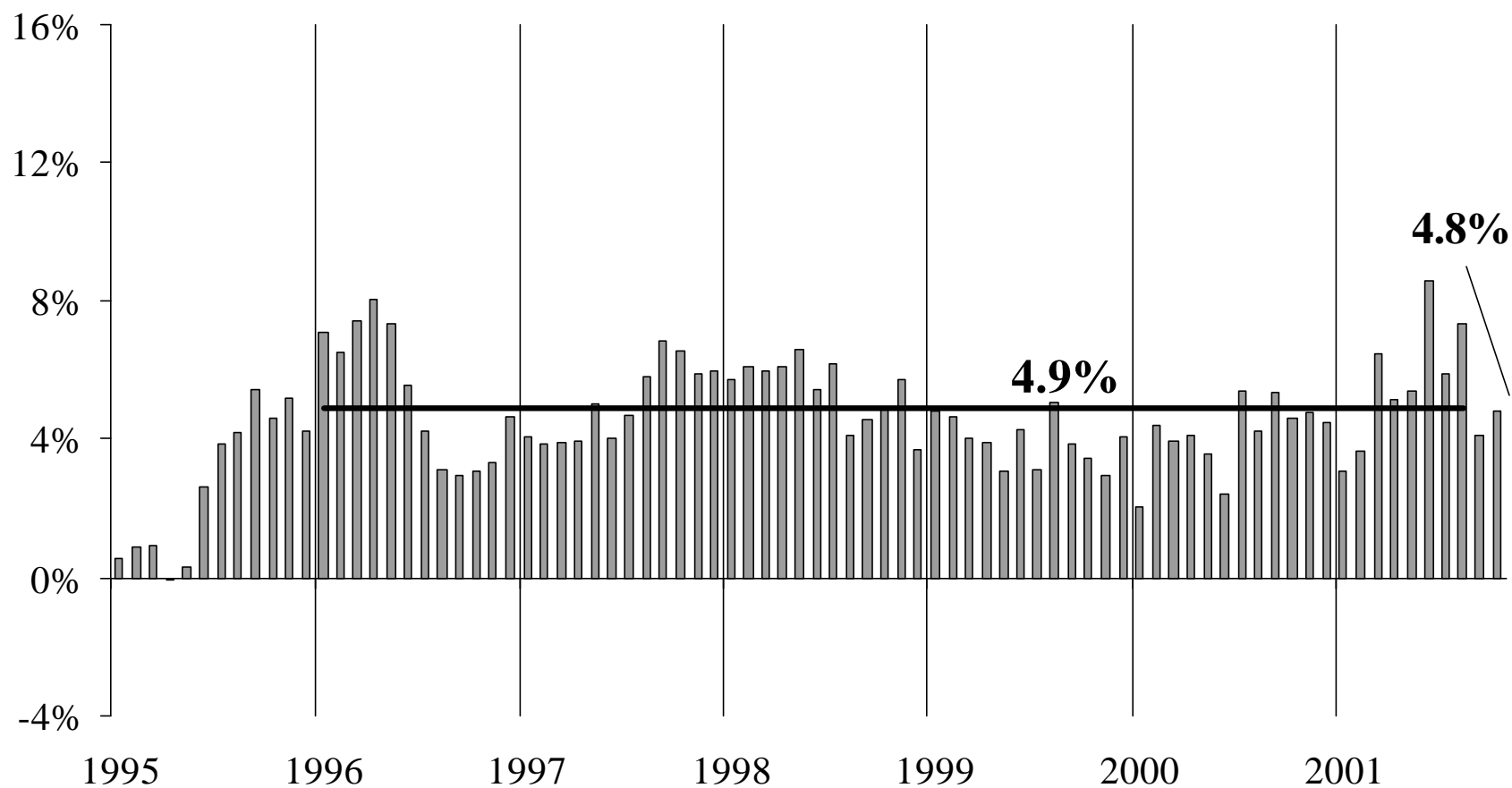
(thousands)

	<i>Through October 2000</i>	<i>Through October 2001</i>	<i>Annual change (Percent)</i>
U.S.	4323	4446	2.8
Northeast	547	541	-1.1
Midwest	956	983	2.8
South	1681	1759	4.6
West	1140	1163	2.0

Source: National Association of Realtors

Existing Home Median Price

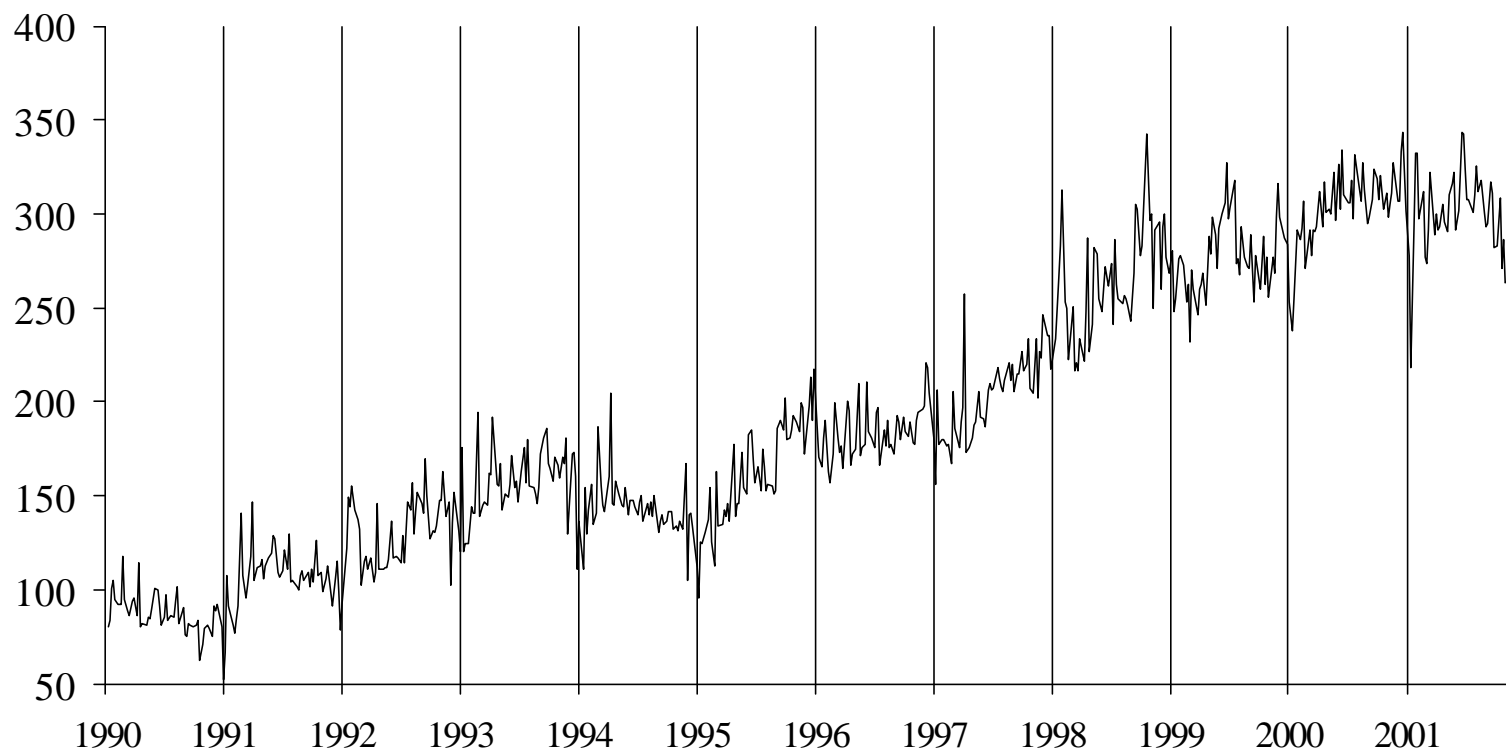
(year/year, % change by month)



Source: National Association of Realtors

Purchase Mortgage Index

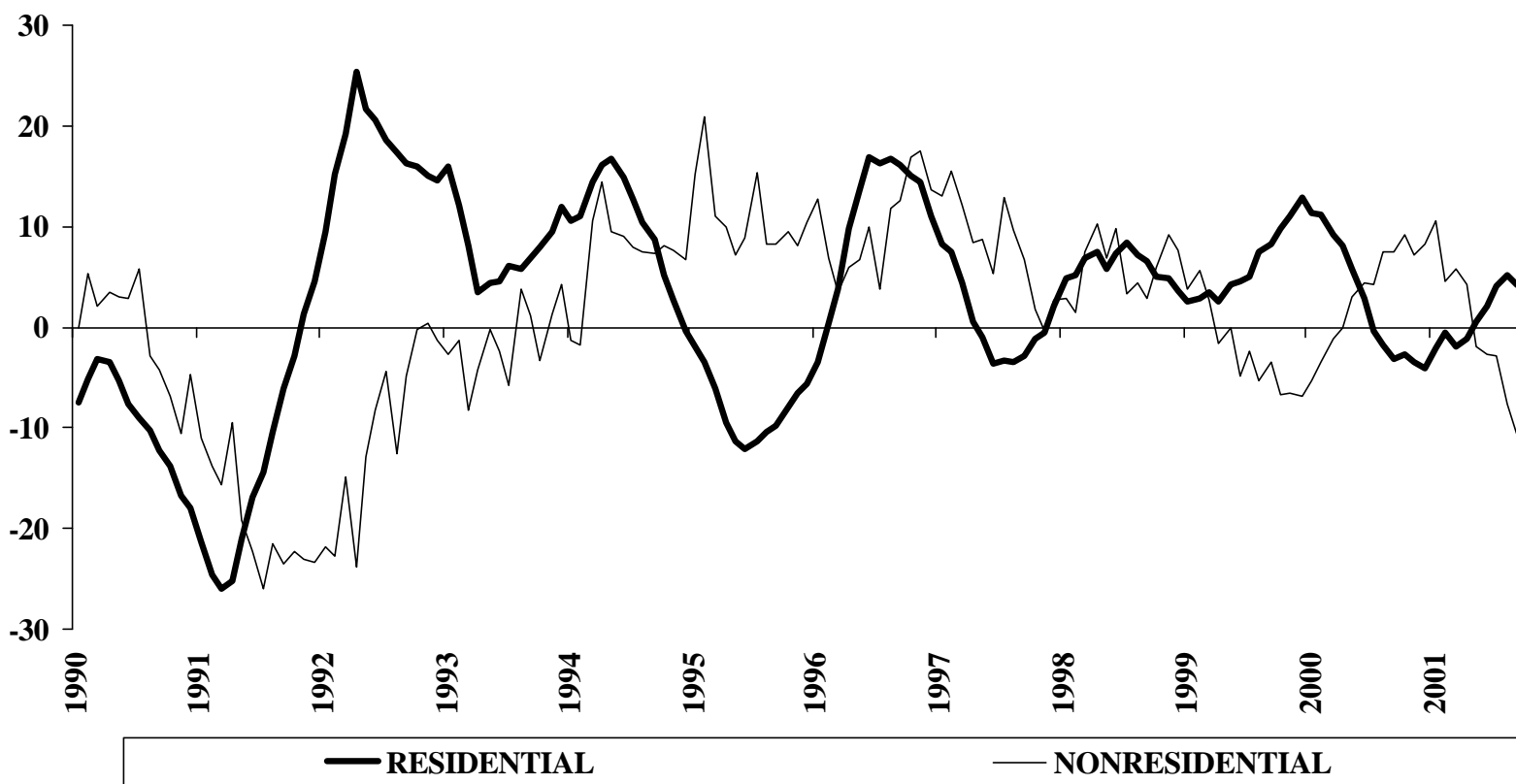
(March 1990=100, Seasonally Adjusted)



Source: MBA Weekly Mortgage Applications Survey

New Private Construction Put in Place

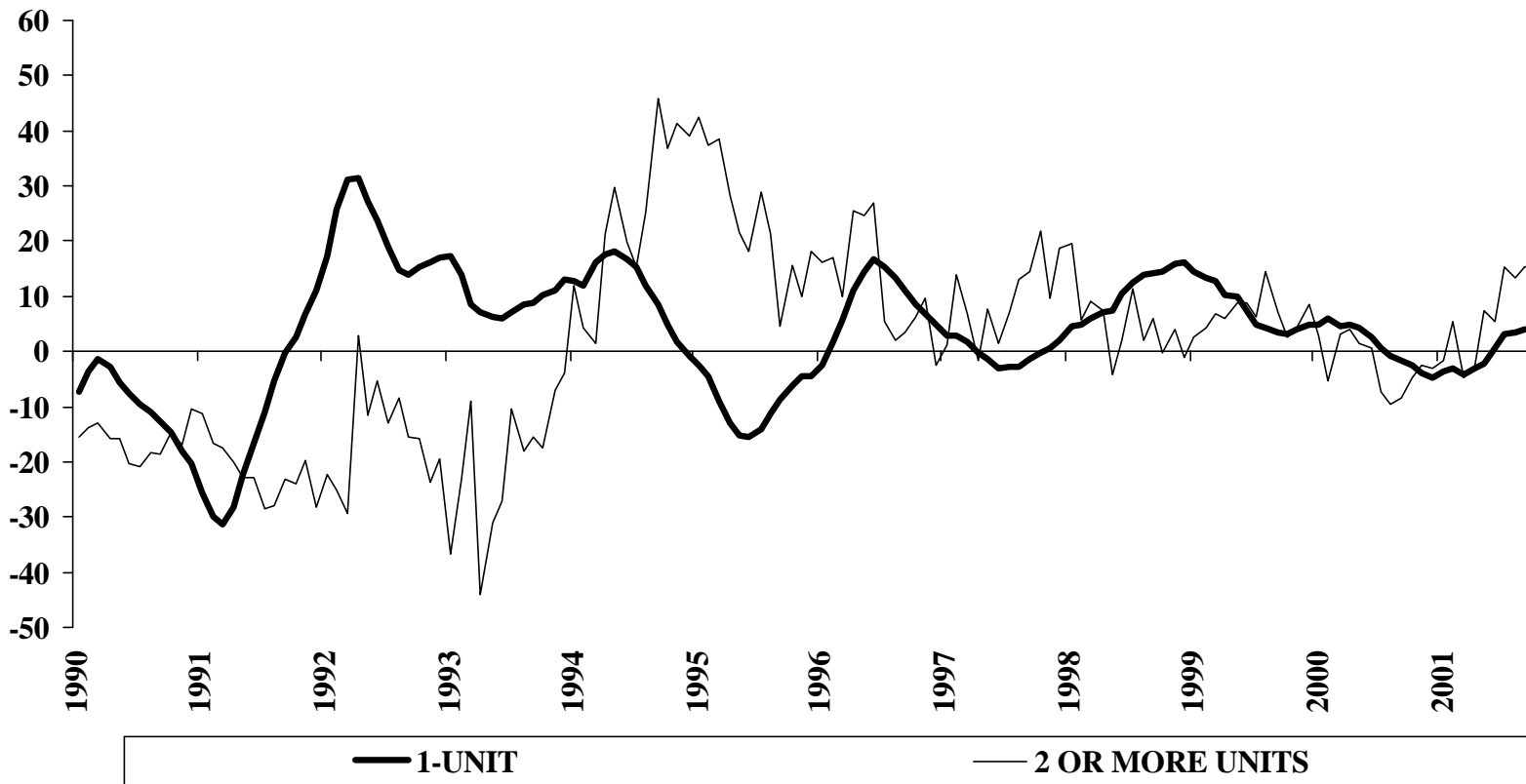
(year/year, % change by month)



Source: U.S. Department of Commerce, Current Construction Reports

New Private Residential Construction Put in Place

(year/year, % change by month)



Source: U.S. Department of Commerce, Current Construction Reports

Record Breaking Years

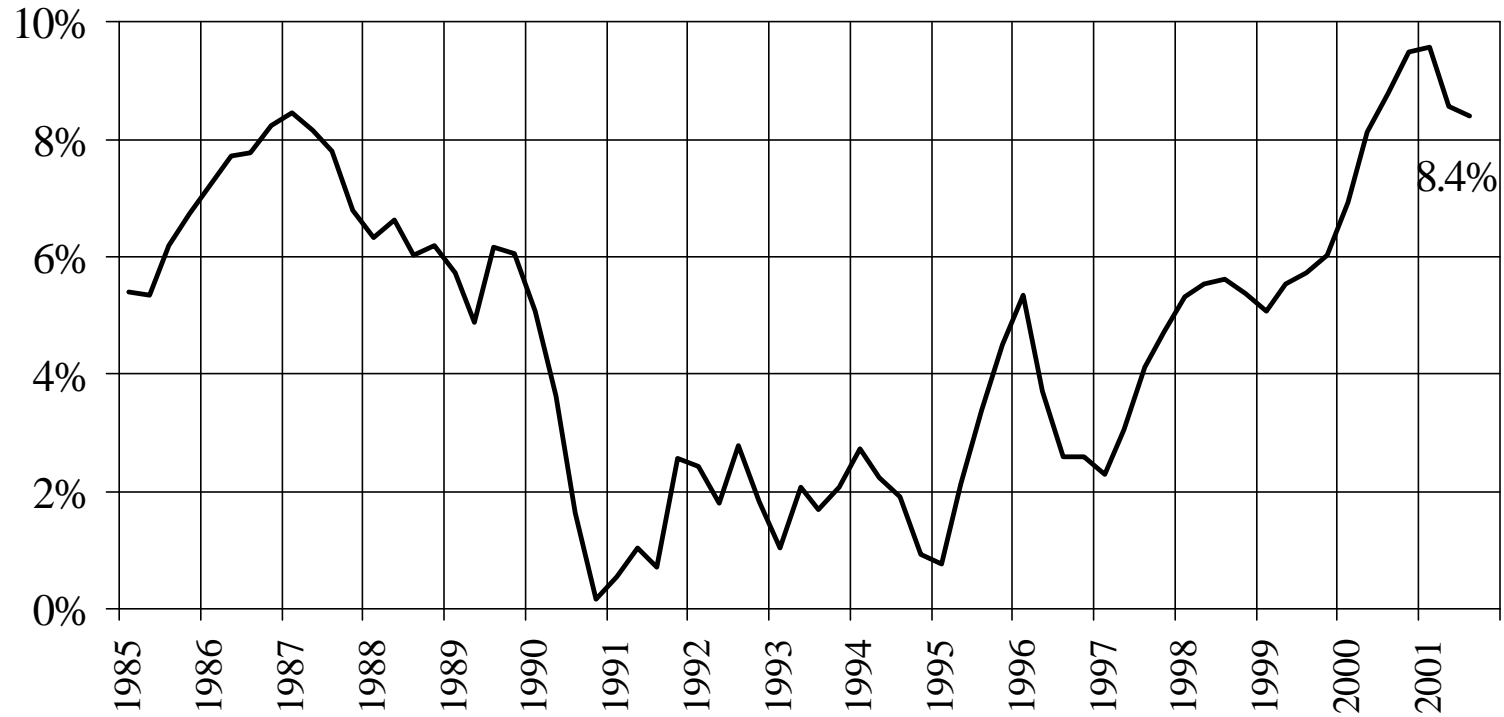
	1998	1999	2000	2001*
One-family Housing Starts	1.27 M	1.30 M	1.23 M	1.26 M
Existing Home Sales	4.97 M	5.20 M	5.11 M	5.16 M
New Home Sales	885,000	881,000	877,000	901,000

* Projected

Price Bubble?

House Price Index

(year/year, % change by quarter)



Source: OFHEO

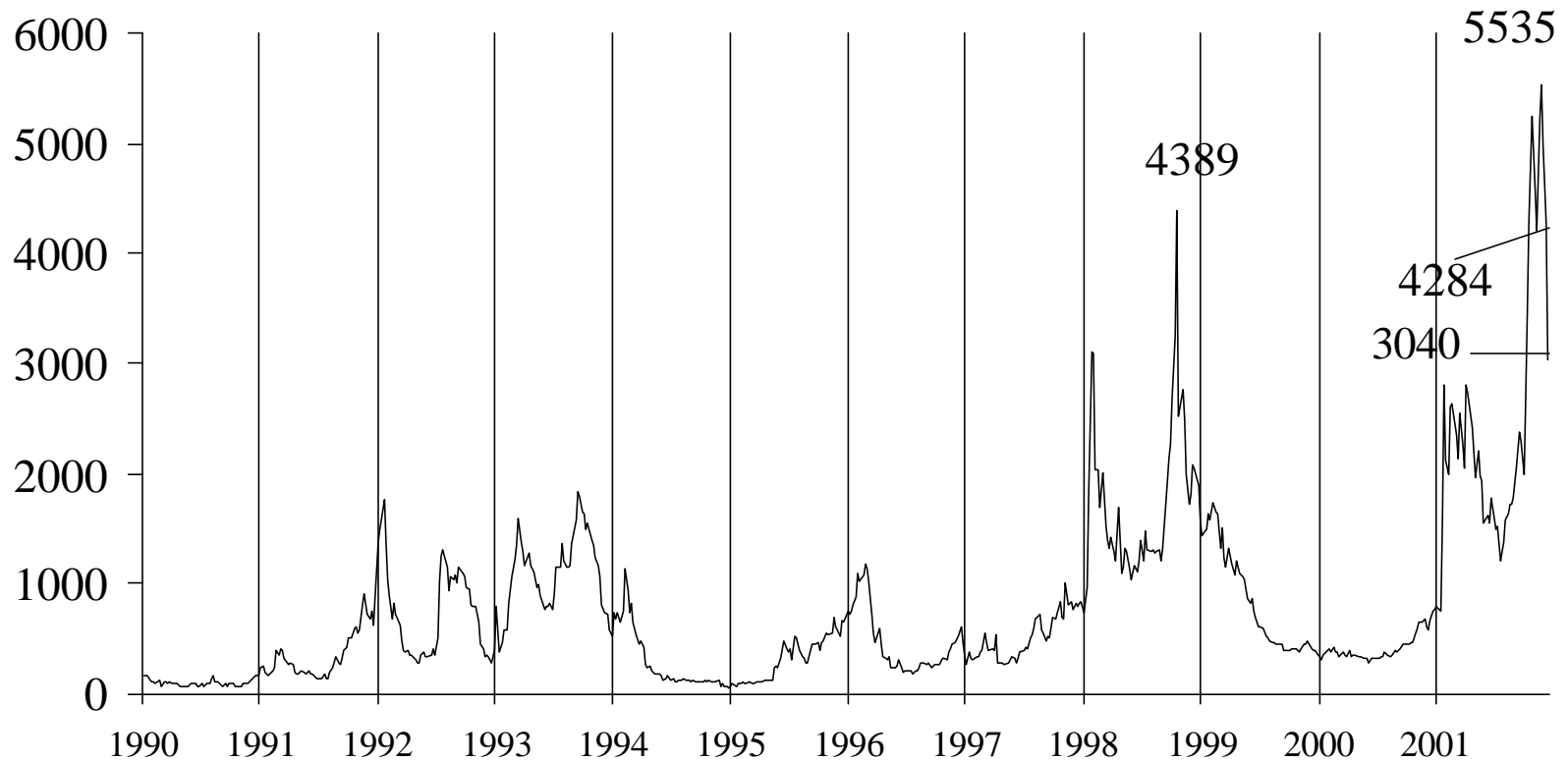
One- and Five-Year Percentage Changes in Home Prices

	1 - Year	5 - Year
OFHEO	8.6	34.8
Median New Home Price	7.7	26.0
Average New Home Price	3.5	25.2
Median Existing Home Price	6.4	26.2
Average Existing Home Price	5.0	29.9
BLS Shelter	3.8	17.6
BLS Housing	4.5	16.5
BLS Rent	4.6	18.5
BLS Owners Equivalent of Rent	3.8	16.7

Sources: New home prices - Census Bureau;
Existing Home Prices - National Association of Realtors

Refinance Mortgage Index

(March 1990=100, Seasonally Adjusted)



Source: MBA Weekly Mortgage Applications Survey

Conventional Conforming Refinance Loan Characteristics

(Relationship between old and new loans)

Total U.S.	Higher Loan Amount	Lower Loan Amount	Median Interest-Rate Reduction (Old-to-New Rate Ratio)	Median Age of Refinanced Loan	Refinance Volume (\$ Billion)
1990	86	5	1.03	3.7	105
1991	62	14	1.18	3.5	169
1992	47	16	1.24	3.1	429
1993	34	20	1.27	1.8	561
1994	47	12	1.25	2.2	246
1995	50	14	1.15	2.4	160
1996	54	12	1.16	3	228
1997	59	14	1.08	3.8	258
1998	51	14	1.18	4	754
1999	59	13	1.18	5.2	463
2000 Q1	79	11	0.97	6.6	42

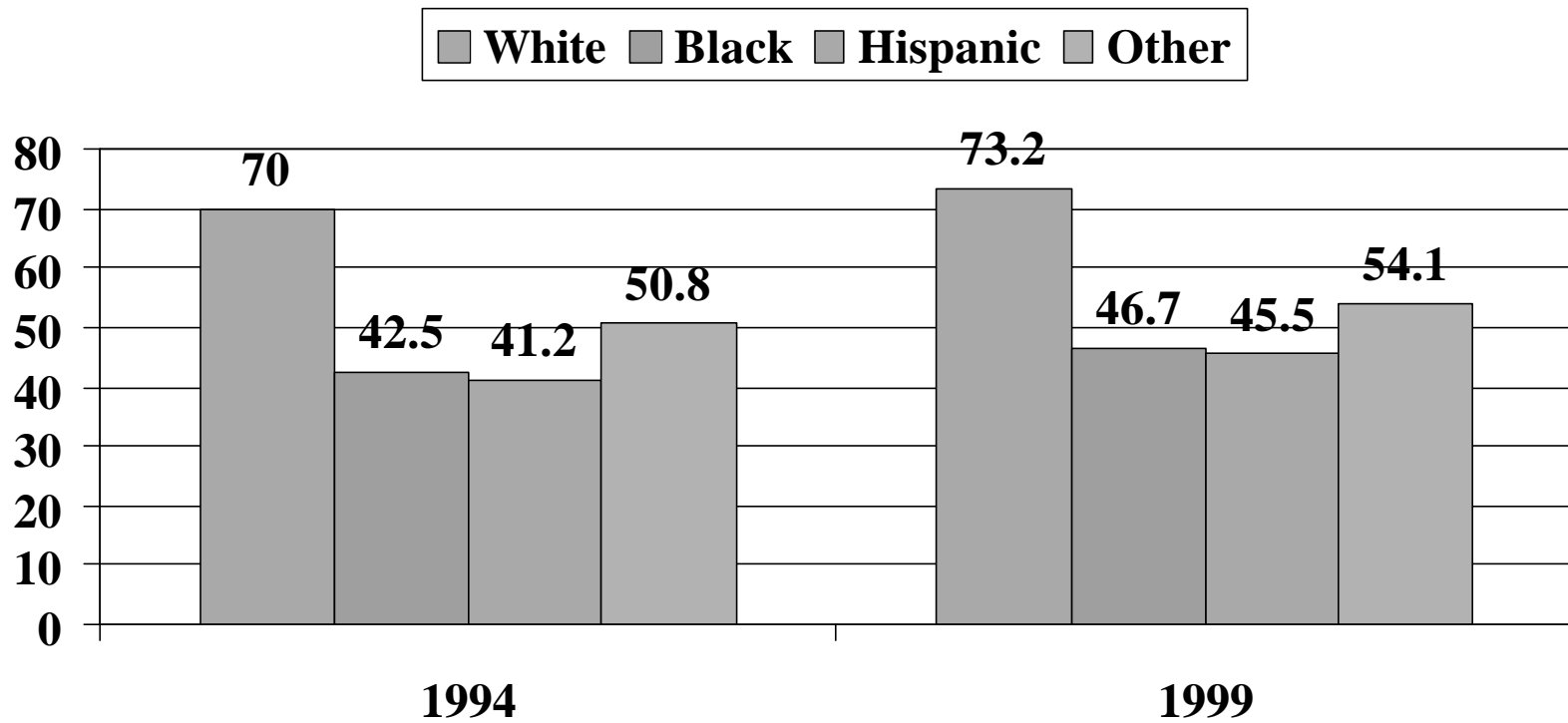
Source : Freddie Mac

United States Population and Home Ownership Rates

Age	Population	Percent of Population	Home-ownership Rate
Total	281,421,906		67.2
Under 5	19,175,798	6.8	
5 to 9	20,549,505	7.3	
10 to 14	20,528,072	7.3	
15 to 19	20,219,890	7.2	
20 to 24	18,964,001	6.7	21.1
25 to 34	39,891,724	14.2	45.0
35 to 44	45,148,527	16.0	67.5
45 to 54	37,677,952	13.4	76.7
55 to 59	13,469,237	4.8	79.8
60 to 64	10,805,447	3.8	80.9
65 to 74	18,390,986	6.5	82.0
75 to 84	12,361,180	4.4	77.9
Over 85	4,239,587	1.5	

Source: U.S. Census Bureau, Census 2000 and Housing Vacancy Survey Note:
Homeownership rates for age categories 25 to 34 and 65 to 74 are MBA estimates.

Homeownership Rates by Race/Ethnicity

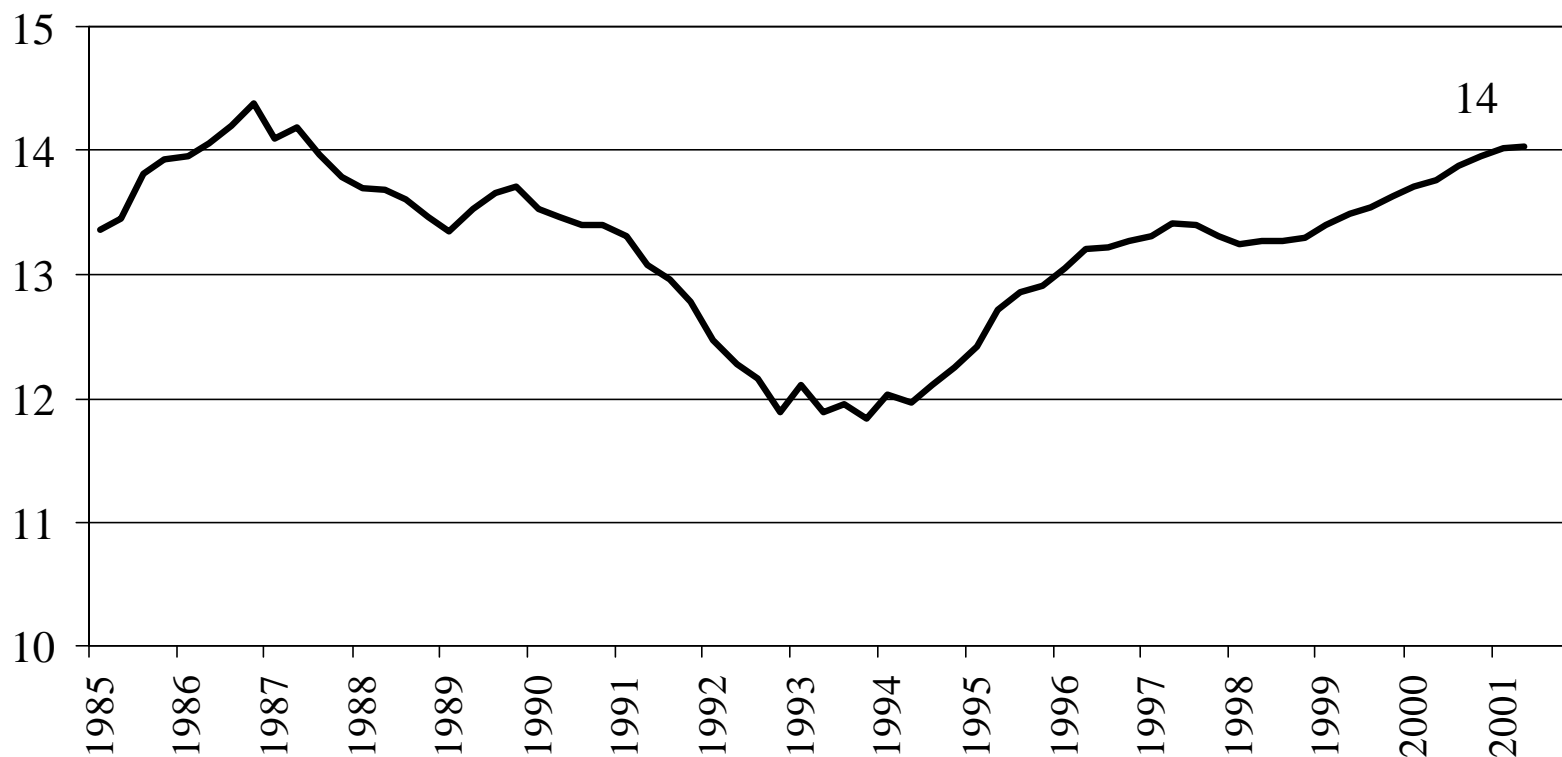


Source : Harvard Joint Center

Quality Concerns

Household Debt Service Burden

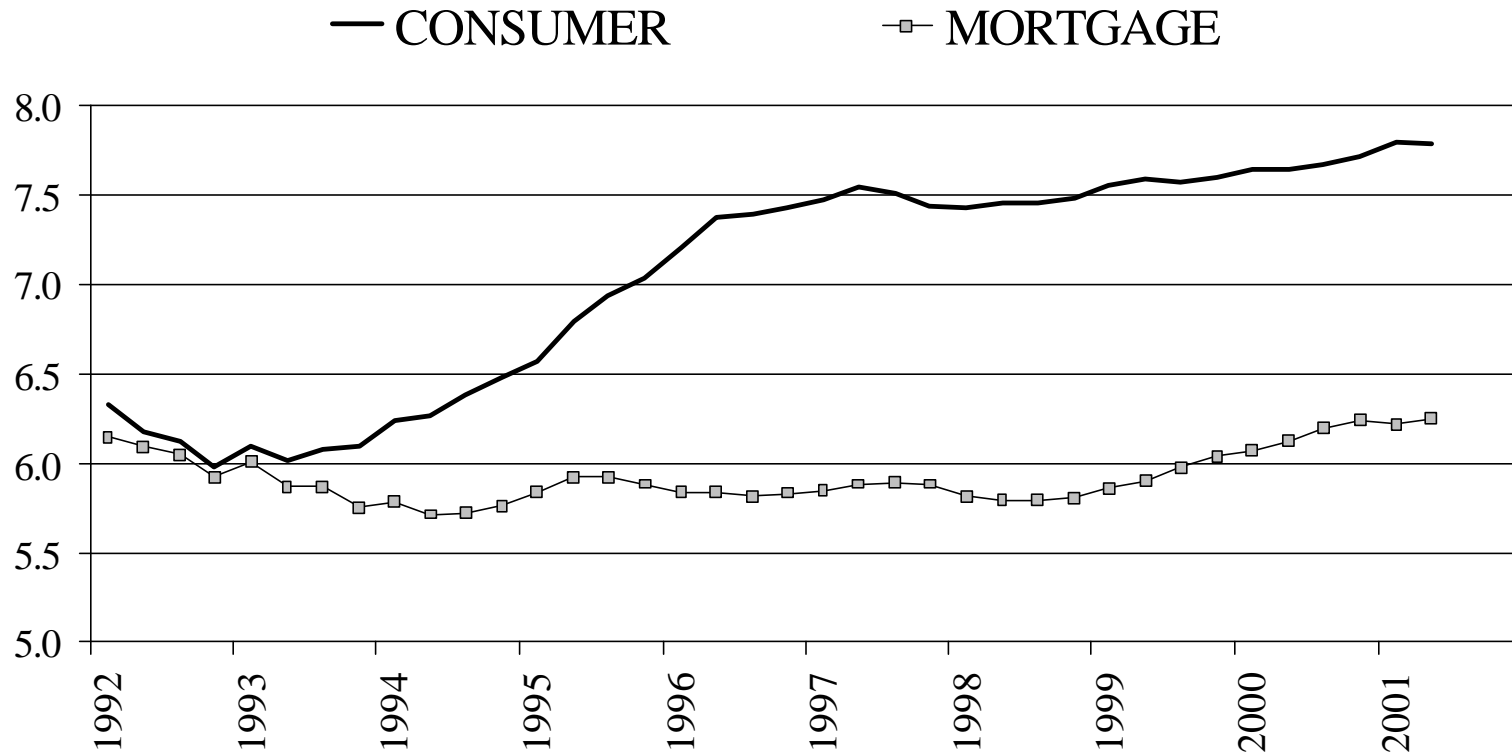
(Household debt service payments as % of disposable personal income)



Source: Federal Reserve Board

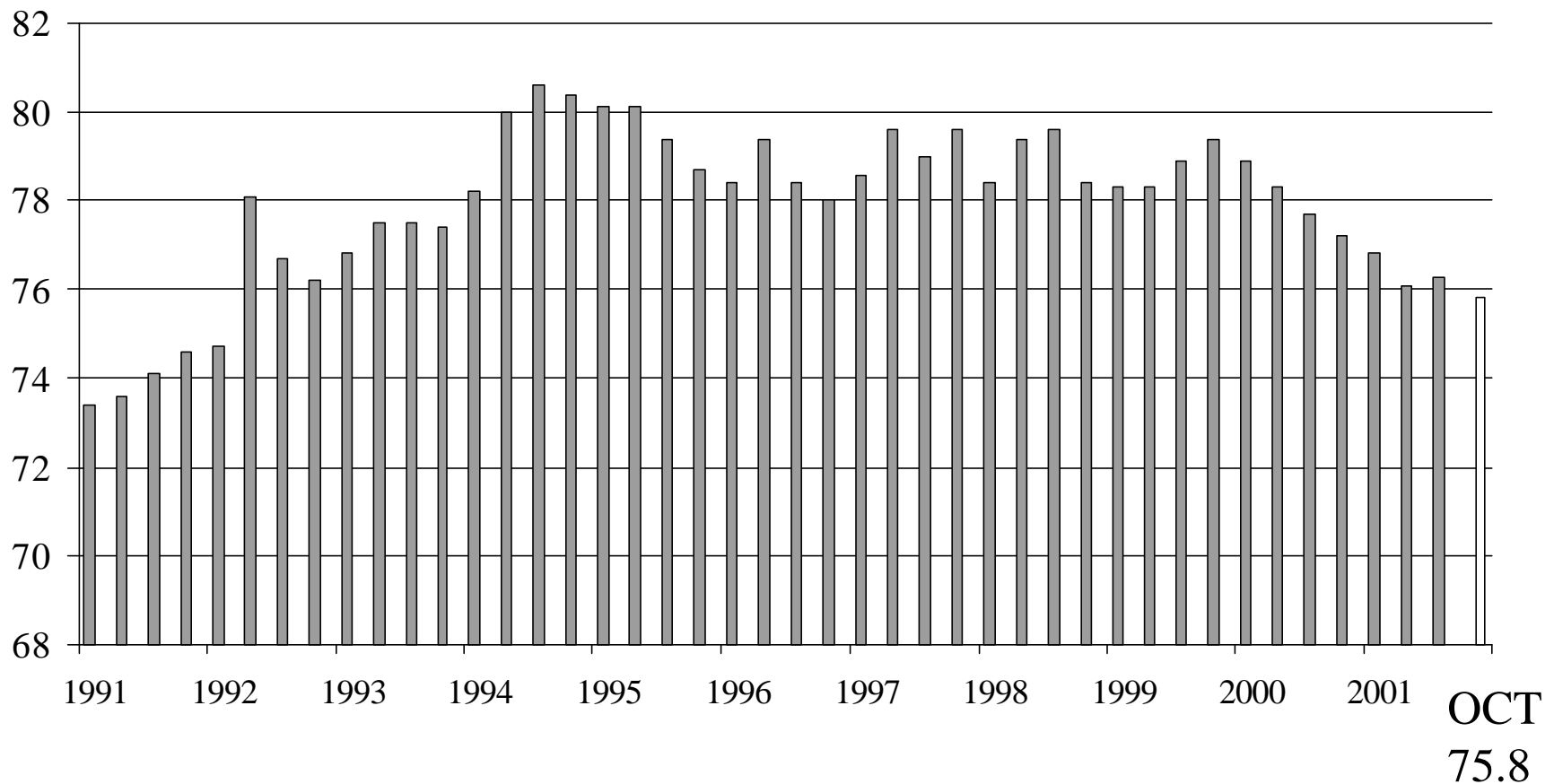
Household Debt Service Burden

(Debt service payments as % of disposable personal income)



Source: Federal Reserve Board

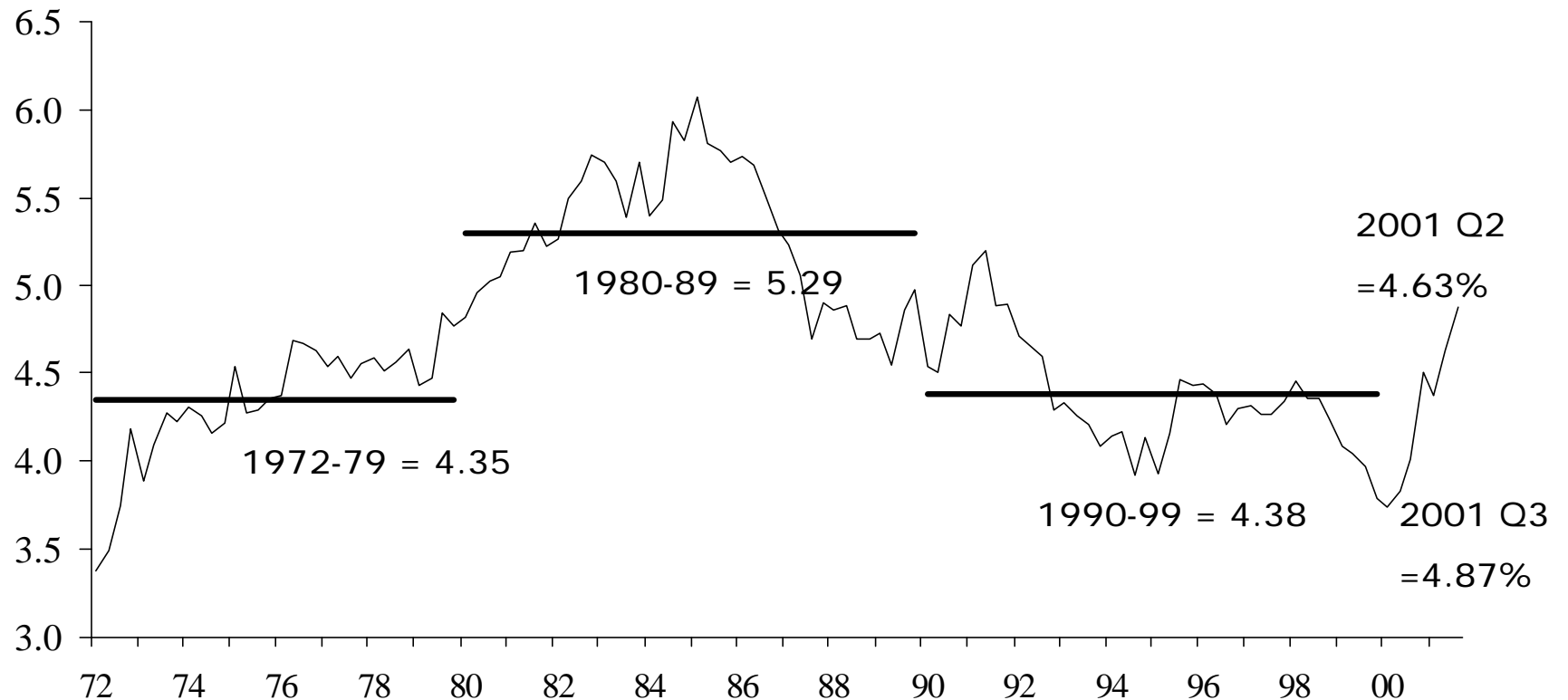
Average Loan-to-Price Ratio Conventional Fixed Rate Loans (%, quarterly)



Source: Federal Housing Finance Board

Residential Delinquency Rate

(Percent, Seasonally Adjusted)



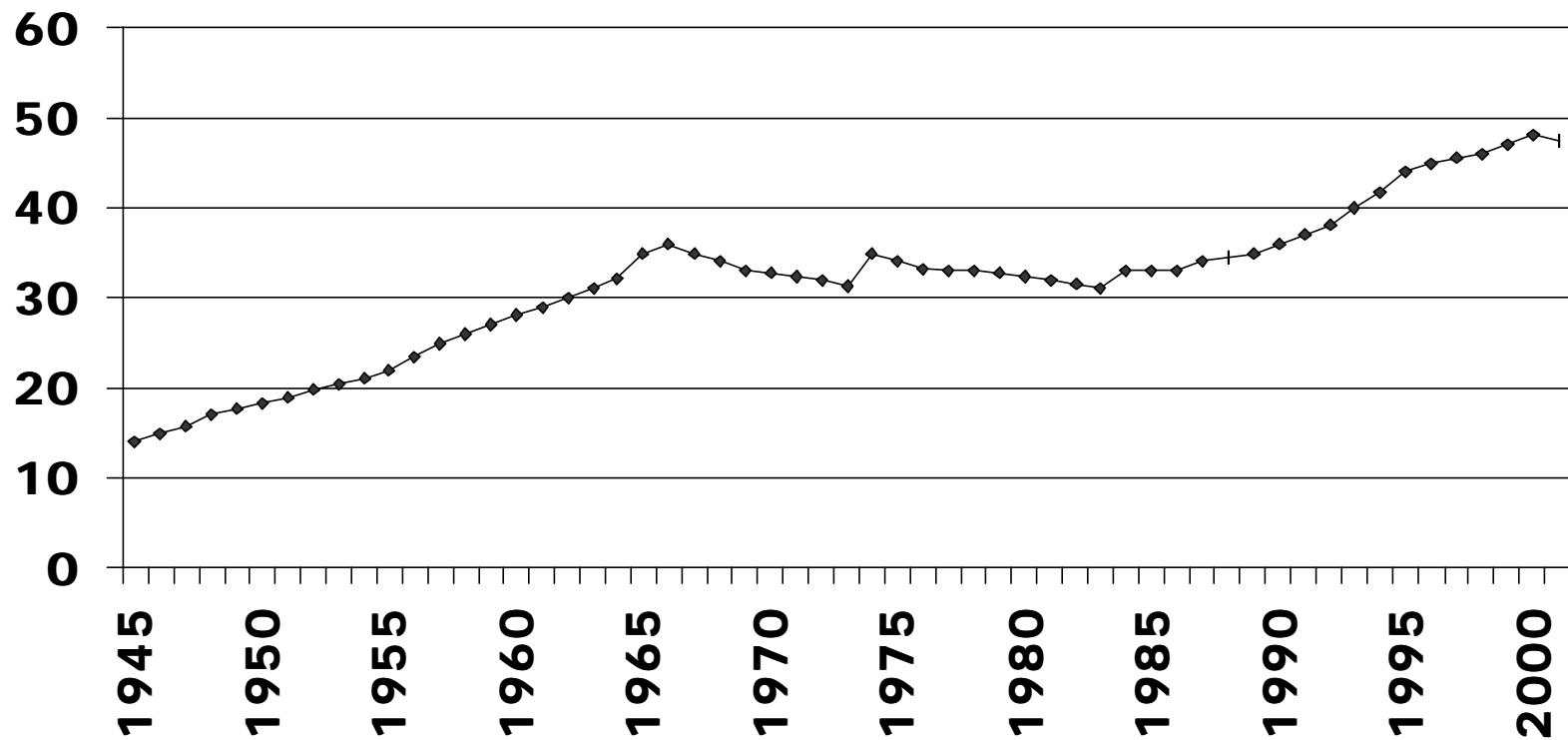
Source: MBA National Delinquency Survey

Proportion of Real Estate Assets to Total Assets by Wealth Distribution

	1989	1998
Bottom 25%	\$38.78	\$56.34
25 to 49.9%	\$30.53	\$32.72
50 to 74.9%	\$22.36	\$19.89
75 to 89.9%	\$19.51	\$16.51
Top 10%	\$12.17	\$11.49

Source: Census Bureau Survey of Consumer Finances

Loan to Value (LTV) of U.S. Households in Aggregate



Source: Federal Reserve Data

Analysis of Consumer Debt at End of Decade

(\$Billion)

	1960	1970	1980	1990	2000
Non-Mortgage Debt	59.4	132.2	358.4	813.1	1,622.2
Mortgage Debt	129.6	280.2	855.8	2,395.5	4,790.7
Total Consumer Debt	189.0	412.4	1,214.2	3,208.6	6,412.9

Sources: Federal Reserve and Census Bureau

Analysis of Consumer Debt at End of Decade

	1960	1970	1980	1990	2000
Income Per Household	6,939.9	11,260.3	24,261.3	44,027.4	64,712.1
Debt Per Household	3,669.9	6,496.3	15,588.8	34,544.5	61,253.5
Debt to Income Ratio	0.53	0.58	0.64	0.79	0.95

Sources: Federal Reserve and Census Bureau

Mortgage Finance Outlook

Record Breaking Years*

	1998	1999	2000	2001
Mortgage Originations	\$1.5 T	\$1.3 B	\$1.0 T	\$2.0 T
Purchase Originations	\$754 B	\$848 B	\$829 B	\$878 B
Refinance Originations	\$754 B	\$437 B	\$195 B	\$1,075 B
Refi Share	50%	34%	19%	55%
30-Year Fixed Rate	6.9%	7.4%	8.1%	6.9%

* MBA estimates

Mortgage Finance Forecasts

November 14, 2001



	2001				2002				2000	2001	2002
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Housing Measures (Thous)											
Housing Starts	1,627	1,623	1,594	1,485	1,525	1,550	1,580	1,565	1,569	1,582	1,555
Single-family	1,277	1,291	1,273	1,190	1,210	1,235	1,255	1,250	1,231	1,258	1,238
Multi-family	350	333	321	295	315	315	325	315	338	325	318
Existing Home Sales	5,273	5,303	5,210	4,858	4,876	4,987	5,057	5,012	5,114	5,161	4,983
New Home Sales	950	890	881	882	866	882	888	872	877	901	877
Existing Home Prices (Thous \$)	139.7	146.8	151.2	146.9	146.6	151.5	154.4	152.4	138.4	146.1	151.2
New Home Prices (Thous \$)	168.9	176.6	169.2	172.7	170.7	174.9	179.5	178.2	166.5	171.9	175.8
Interest Rates (%)											
30-Year FRM Contract Rate	7.0	7.1	7.0	6.5	6.6	6.7	6.9	7.2	8.1	6.9	6.9
10-Year Treasury Yield	5.1	5.3	5.0	4.4	4.3	4.3	4.5	4.9	6.0	4.9	4.5
1-Year ARM Contract Rate	6.5	5.9	5.7	5.1	5.1	5.2	5.4	5.6	7.0	5.8	5.3
1-Year Treasury Yield	4.6	3.8	3.3	2.0	1.7	1.6	2.0	2.9	6.1	3.4	2.1
Mortgage Originations											
Total 1-4 Family (Bil \$)	396	502	467	588	375	380	362	280	1,024	1,953	1,397
Refinance Share (%)	55	50	45	67	55	35	30	25	19	55	37
ARM Share (%)	11	11	15	11	12	12	14	14	24	12	13

Notes:

Housing Starts, Existing Home Sales, and New Home Sales are seasonally adjusted at annual rate.

Existing Home Prices and New Home Prices are median prices.

Total 1-4 Family Originations and Refi Share are MBA estimates.

Refinance Share is percent of total dollar volume of loans closed.