

# National Economic Trends

THE  
FEDERAL  
RESERVE  
BANK of  
ST. LOUIS

## Another Soft Inventory Landing?

Historically, most postwar recessions have coincided with inventory corrections. Inventory fluctuations can amplify what may otherwise have been a small downturn in demand. When firms overestimate growth in demand, inventory stocks increase faster than desired. If firms cut back sharply on orders and production to adjust stocks, demand can be depressed further, exacerbating the downturns. In the past two decades, changes in business practices have resulted in improved management of the supply chain. Data from this time period suggest that these changes may help to dampen business cycle fluctuations.

The chart shows the year-over-year percent change in real manufacturing and trade inventories from the first quarter of 1960 to the second quarter of 1999 and changes in real Gross Domestic Product (GDP) over the same period. The cycles of GDP and inventory investment are coincident for the most part. In the mid-eighties and again in the mid-nineties, firms reduced the pace of inventory investment without a recession occurring. In both cases, inventory growth never became negative, as the preceding inventory overhang was not too severe.

In the third quarter of 1984, annual inventory investment growth peaked at about 10 percent. The subsequent correction reduced annual inventory growth to a trough of 0.7 percent in the first quarter of 1987. The next inventory build-up reached a peak of 4.7 percent from one year before in the second and fourth quarters of 1989. Before this inventory correction hit its trough of -0.3 percent annual growth in the first quarter of 1992, the economy had already gone through a comparatively mild recession. By the first quarter of 1995, annual growth in manufacturing and trade inventories peaked at 5.6 percent. The subsequent correction slowed the annual growth in inventories by the second

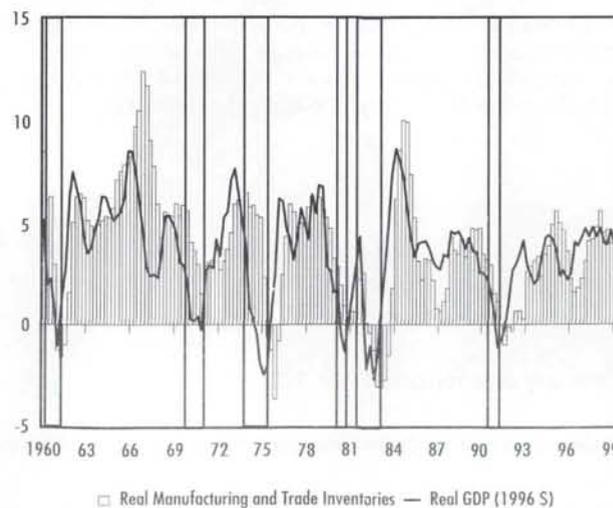
quarter of 1996 to 1.6 percent. As in 1984-87, the economy avoided recession even though inventory growth went from a peak to a trough.

Current indications are that we might again have a relatively benign inventory correction. In the first quarter of 1998, annual inventory investment growth peaked at 5.6 percent. The ensuing correction reduced inventory investment to a 2.2 percent annual growth rate by the second quarter of 1999. In the meantime, domestic demand has remained strong, and manufacturing orders and shipments now appear to be on the rise again due to recovery in international markets. Preliminary data suggest that growth in inventory investment increased in the third quarter of 1999. Better control of the supply chain is attenuating excessive accumulations of inventory and subsequent decumulations, thereby contributing to the record-breaking longevity of the current economic expansion.

—Donald S. Allen

### GDP Growth and Inventory Changes

(Quarterly Data, Year-Over-Year Percent Change)



# Table of Contents

---

Page	
3	Economy at a glance
4	Output and growth
7	Interest rates
8	Inflation and prices
10	Labor markets
12	Consumer spending
14	Investment spending
16	Government revenues, spending, and debt
18	International trade
20	Productivity and profits
22	Quick reference tables
27	Notes and sources

**Note:** Historical data for the Real Investment chart on page 14 was unavailable at press time.

## ***Conventions used in this publication:***

1. Charts and tables contain data that were current on December 1, 1999.
2. Shaded areas indicate recessions, as determined by the National Bureau of Economic Research.
3. *Percent change* refers to simple percent changes. *Percent change from year ago* refers to the percent change from the same month or quarter in the previous year. The *percent change at annual rate* shows what the growth rate would be over an entire year if the same simple percent change continued for four quarters or twelve months. The percent change at annual rate of  $X$  between the previous quarter  $t-1$  and the current quarter  $t$  is:

$$100 \times \left[ \left( \frac{X_t}{X_{t-1}} \right)^4 - 1 \right]$$

For monthly data replace 4 with 12.

4. All data with significant seasonal patterns are seasonally adjusted, unless labeled NSA.

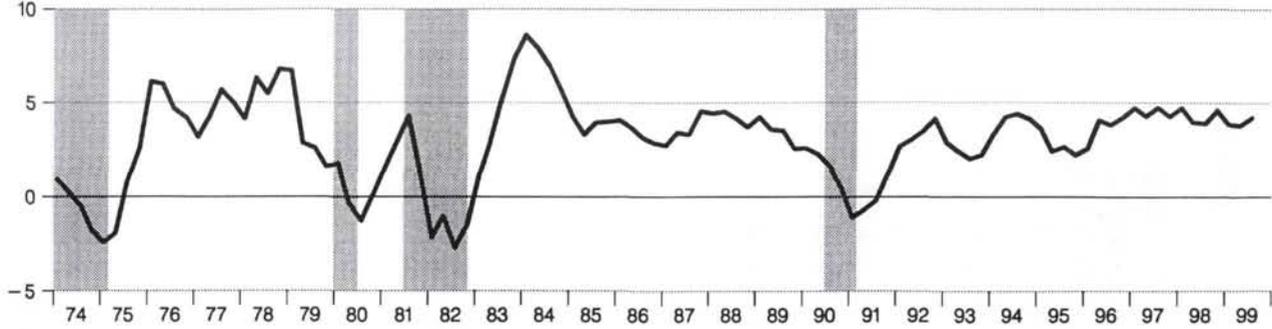
*National Economic Trends* is published monthly by the Research Division of the Federal Reserve Bank of St. Louis. Single-copy subscriptions are available free of charge by writing Public Affairs Office, Federal Reserve Bank of St. Louis, Post Office Box 442, St. Louis, MO 63166-0442 or by calling (314) 444-8808 or (314) 444-8809. Subscription forms can also be filled out electronically at <http://www.stls.frb.org/research/order/pubform.html>. For more information on data, please call (314) 444-8573. Information in this publication is also included in the Federal Reserve Economic Data (FRED) electronic bulletin board at (314) 621-1824 or internet World Wide Web server at <http://www.stls.frb.org/fred>. The entire publication is also available electronically at <http://www.stls.frb.org/publications/net>

---



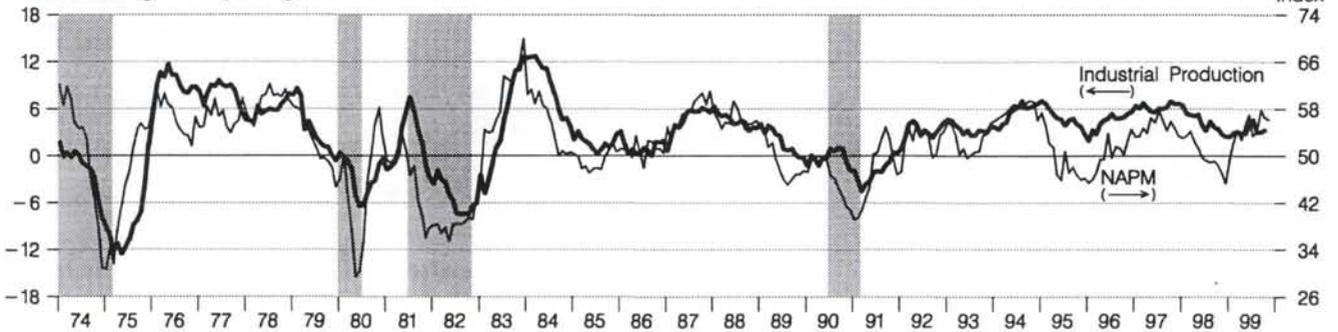
## Real Gross Domestic Product

Percent change from year ago



## Industrial Production and Purchasing Managers' (NAPM) Indexes

Percent change from year ago



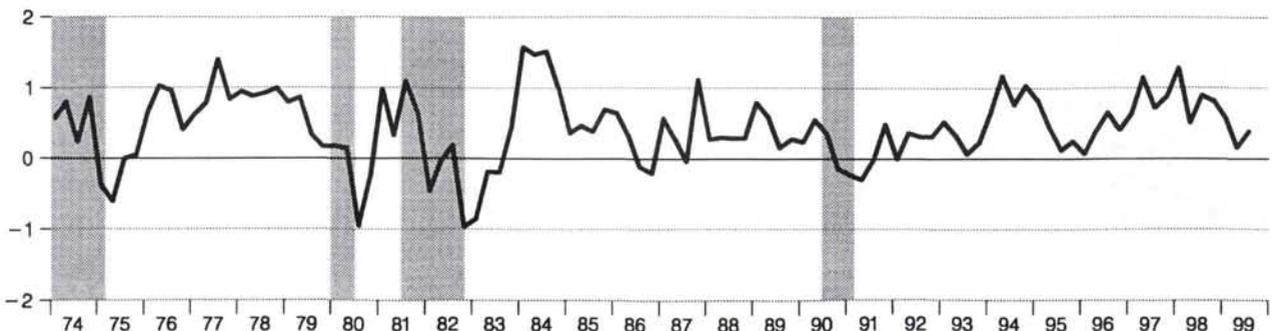
## Aggregate Private Nonfarm Hours

Percent change from year ago

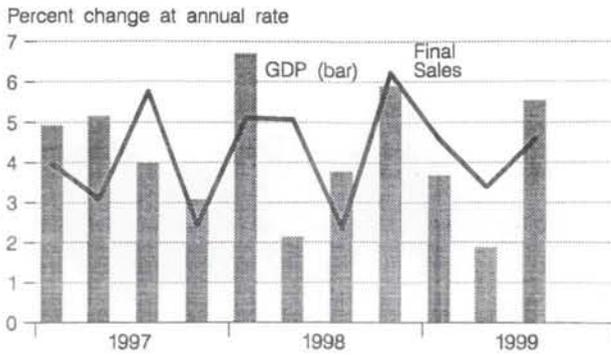


## Real Change in Private Inventories

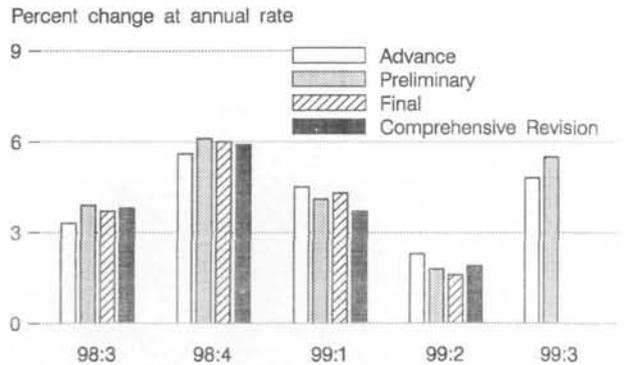
Percent of GDP



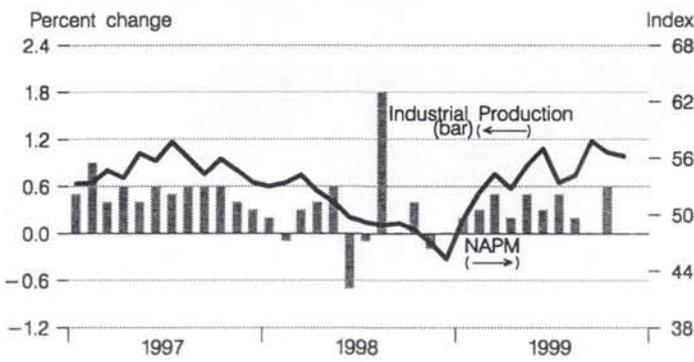
## Real Final Sales and GDP



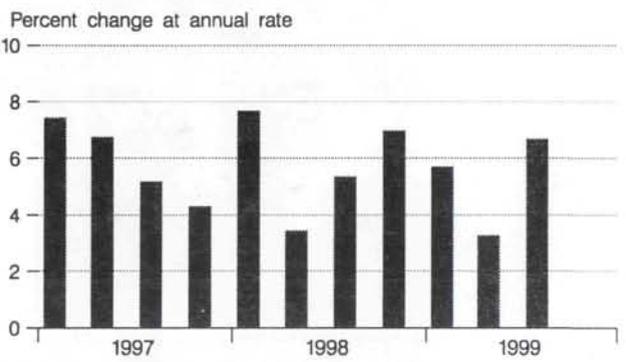
## Real GDP Revisions



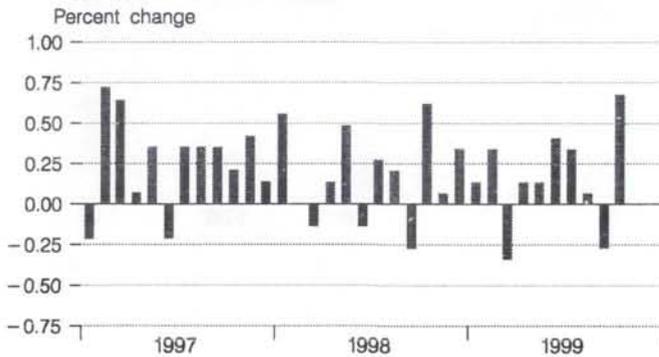
## Industrial Production and NAPM Index



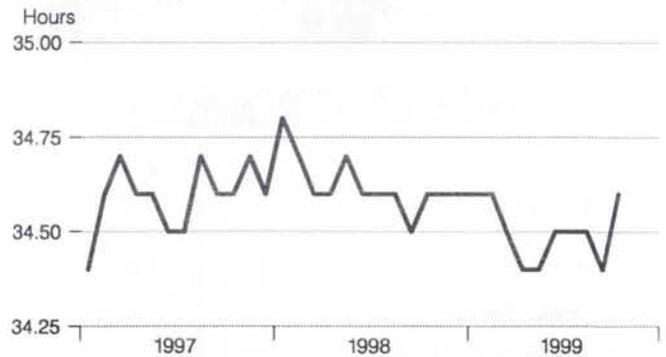
## Nominal Gross Domestic Product



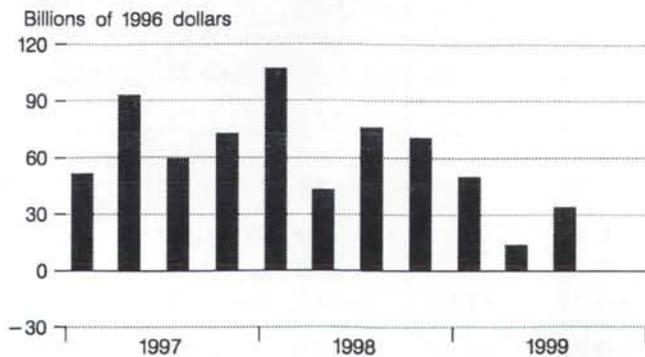
## Aggregate Private Nonfarm Hours



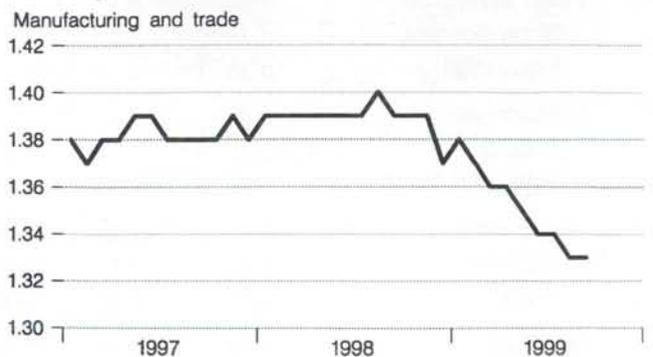
## Average Weekly Private Nonfarm Hours



## Real Change in Private Inventories

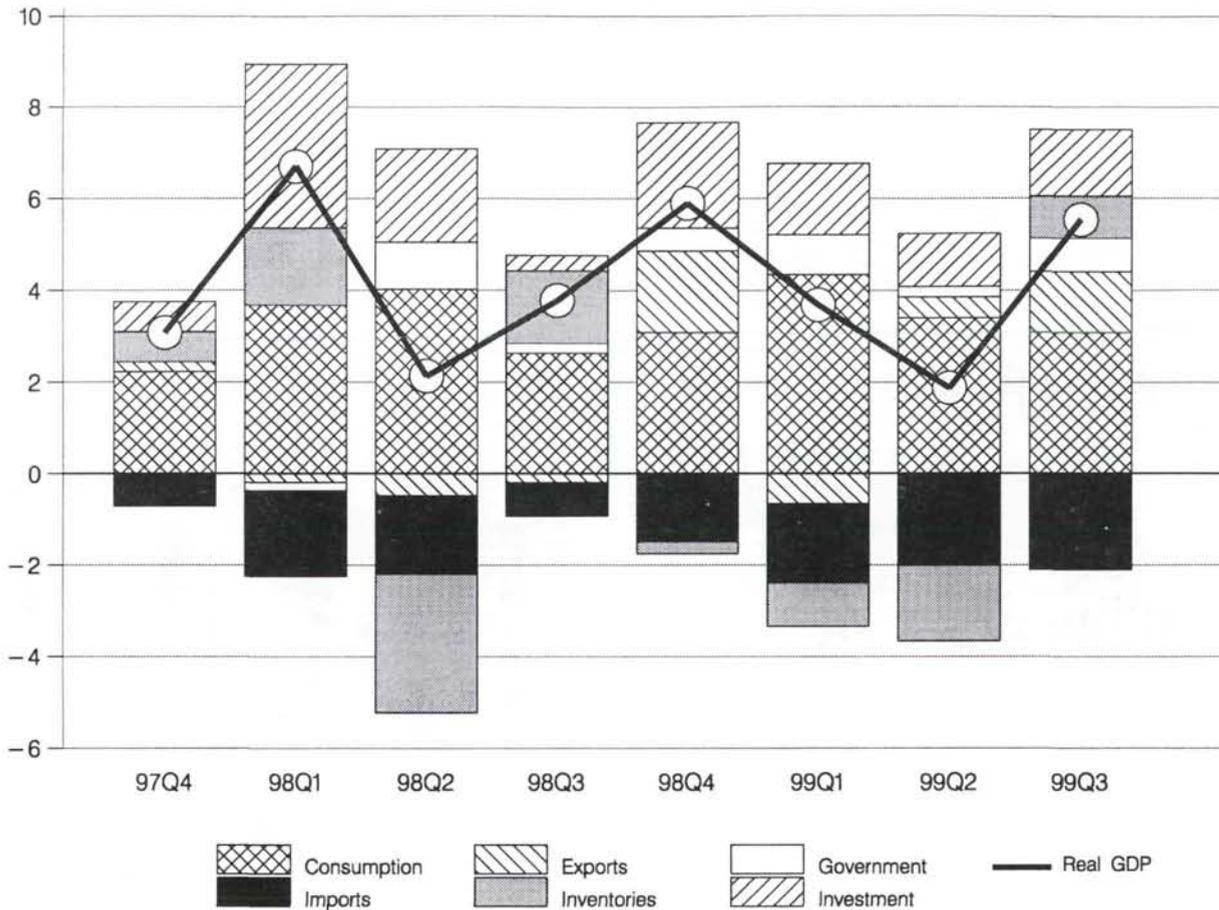


## Inventory-Sales Ratio



## Contribution of Components to Real GDP Growth

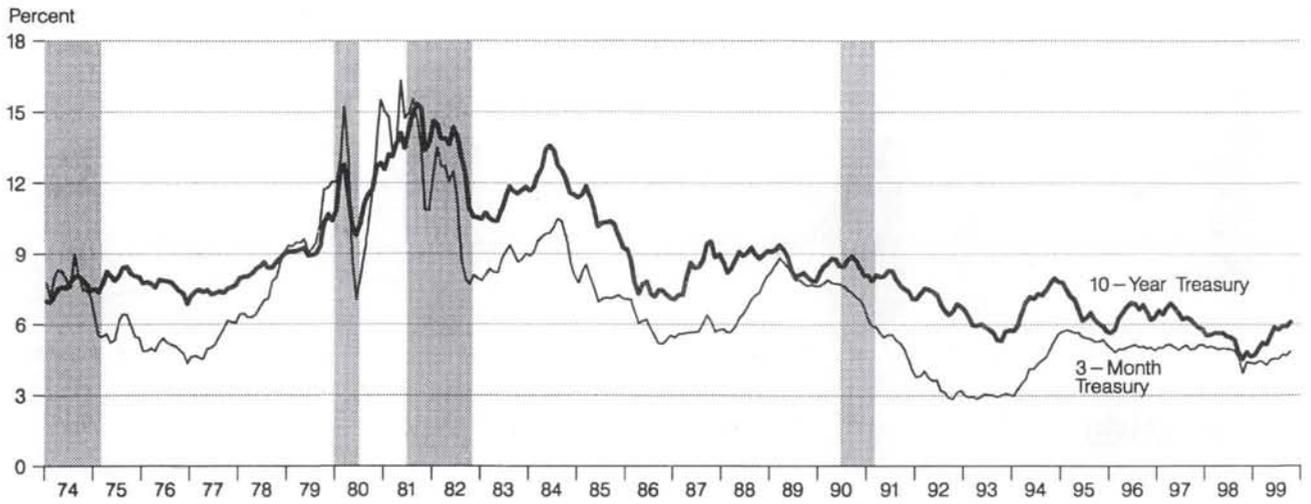
Percent change at annual rate



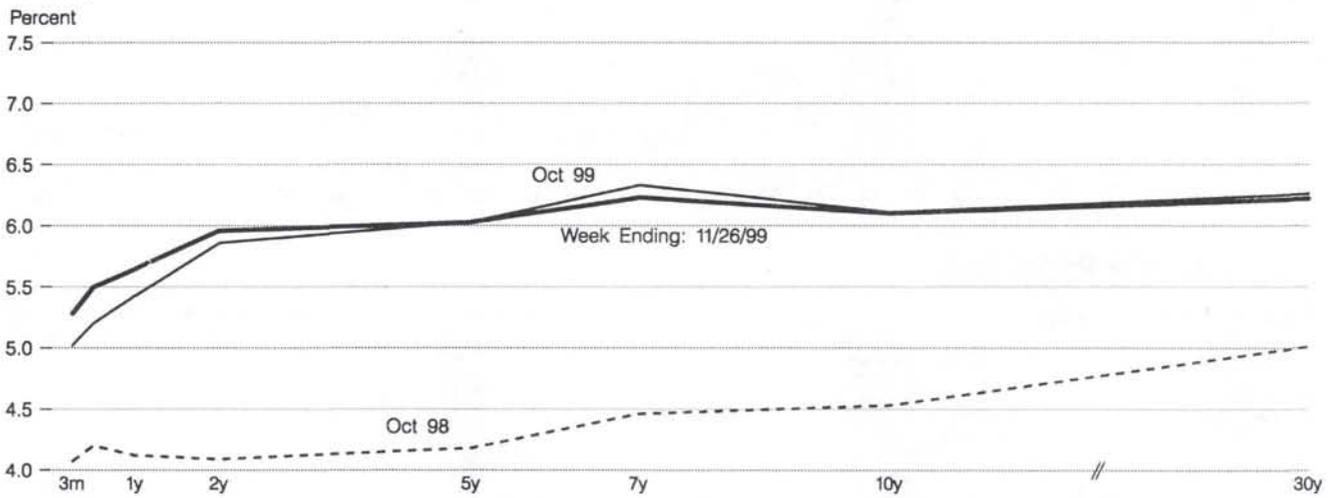
## Contributions to Real GDP Growth Rate

	1997	1998				1999		
	4th	1st	2nd	3rd	4th	1st	2nd	3rd
Real GDP	3.08	6.71	2.13	3.78	5.90	3.69	1.88	5.54
Final Sales	2.41	5.06	5.01	2.35	6.17	4.55	3.37	4.57
Change in Inventory	0.66	1.68	-3.02	1.57	-0.25	-0.95	-1.64	0.91
Consumption	2.22	3.68	4.02	2.63	3.09	4.35	3.40	3.09
Fixed Investment	0.65	3.57	2.04	0.35	2.29	1.55	1.15	1.45
Nonresidential	0.39	3.05	1.51	0.00	1.91	1.02	0.93	1.75
Residential	0.25	0.52	0.52	0.32	0.39	0.51	0.23	-0.21
Government	-0.01	-0.18	1.03	0.22	0.50	0.87	0.22	0.73
Federal	-0.28	-0.65	0.70	-0.15	0.23	-0.03	0.13	0.23
State and Local	0.27	0.46	0.33	0.36	0.26	0.89	0.10	0.49
Net Exports	-0.49	-2.06	-2.20	-0.92	0.27	-2.39	-1.57	-0.80
Exports	0.21	-0.19	-0.48	-0.20	1.78	-0.66	0.46	1.32
Imports	-0.70	-1.88	-1.73	-0.73	-1.50	-1.73	-2.02	-2.10
Residual	0.03	-0.04	0.38	-0.05	-0.07	0.33	0.35	0.03

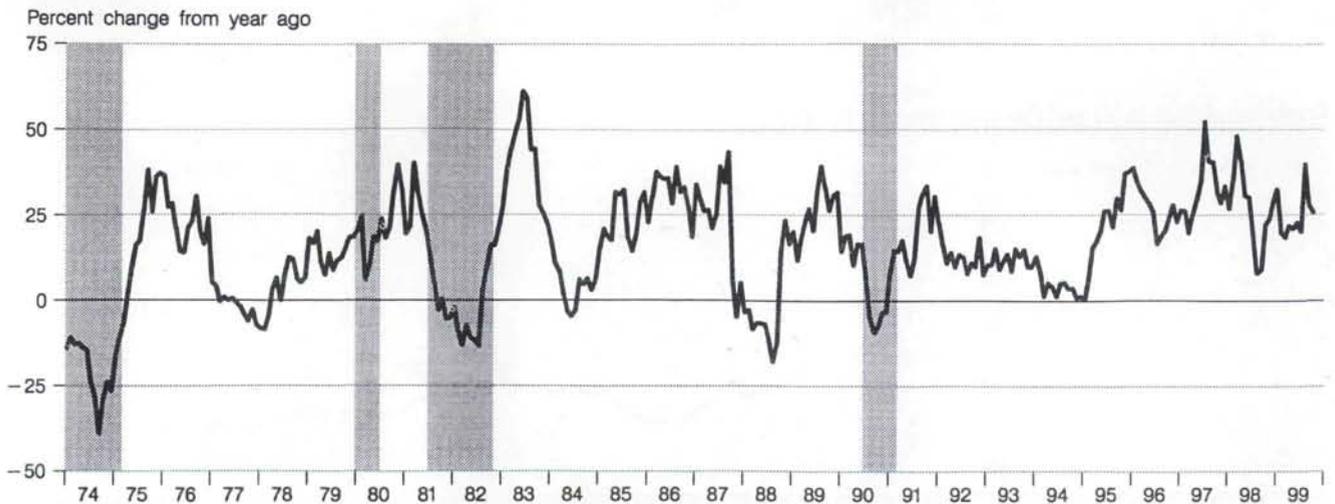
Interest Rates



Treasury Yield Curve

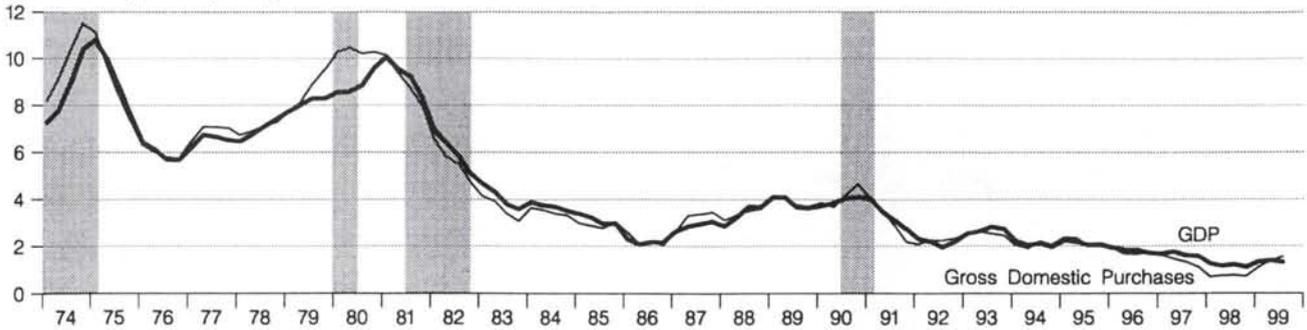


Standard and Poor's 500 Index with Reinvested Dividends



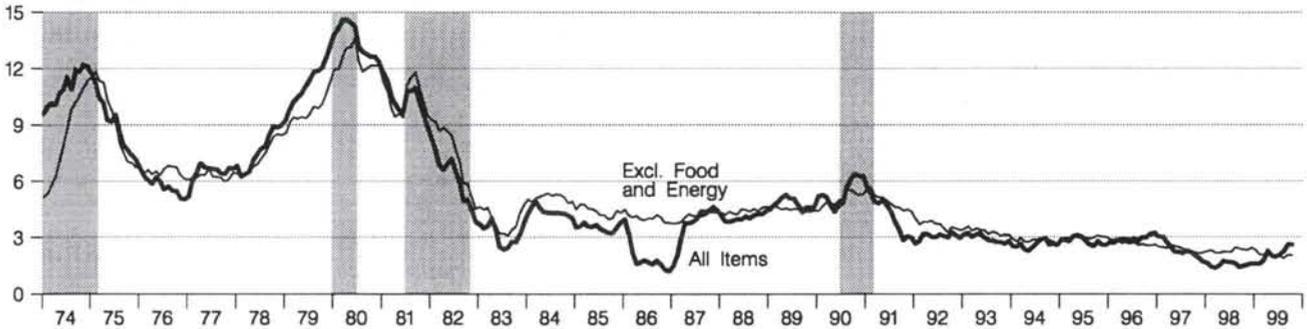
## NIPA Chain Price Indexes

Percent change from year ago



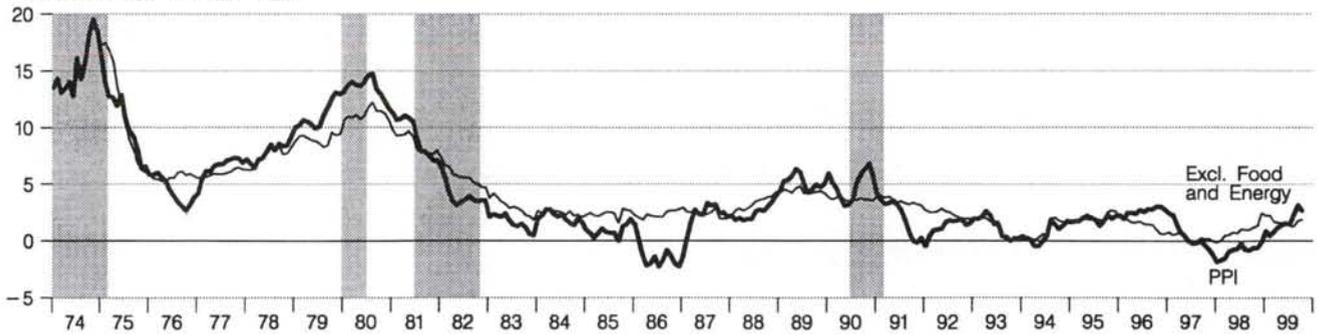
## Consumer Price Index

Percent change from year ago



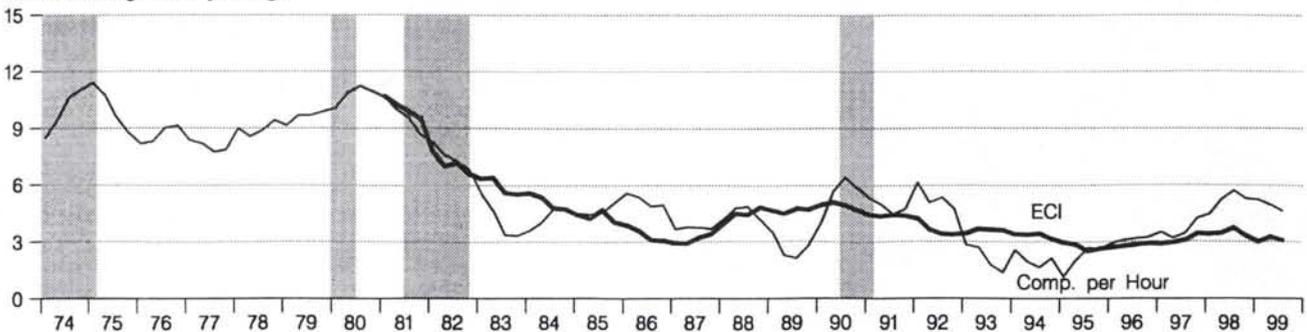
## Producer Price Index, Finished Goods

Percent change from year ago



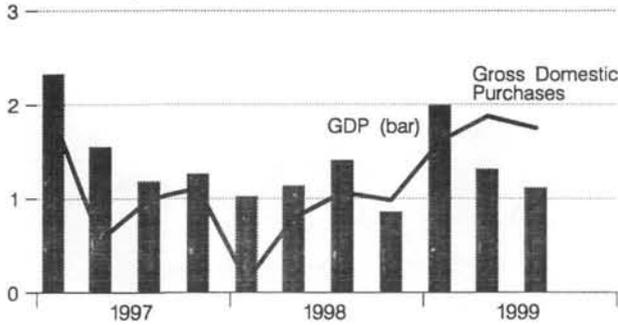
## Employment Cost Index and Compensation per Hour

Percent change from year ago



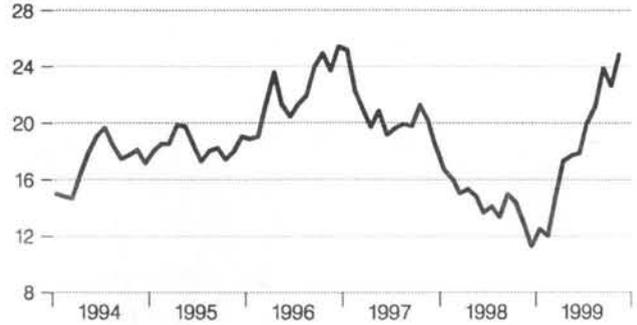
## NIPA Chain Price Indexes

Percent change at annual rate



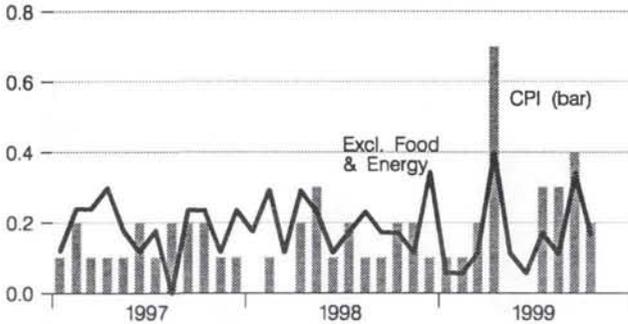
## Crude Oil Price

Dollars per barrel



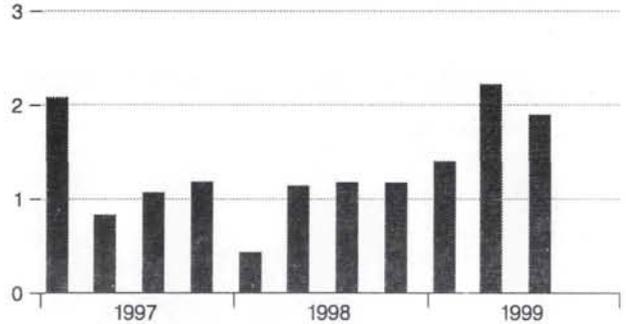
## Consumer Price Index

Percent change



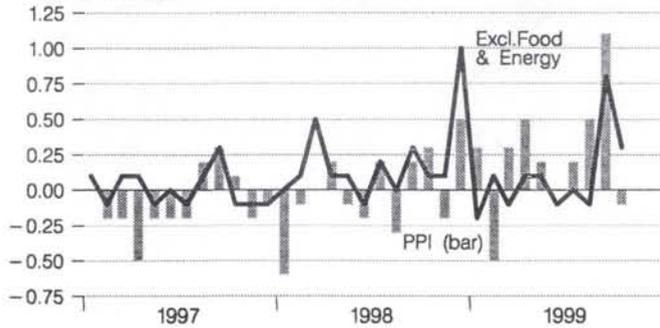
## Consumption Chain Price Index

Percent change at annual rate



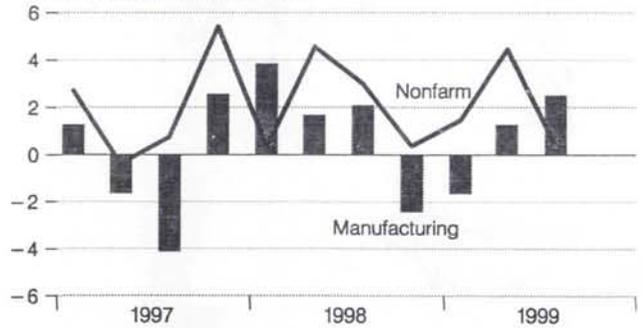
## Producer Price Index, Finished Goods

Percent change



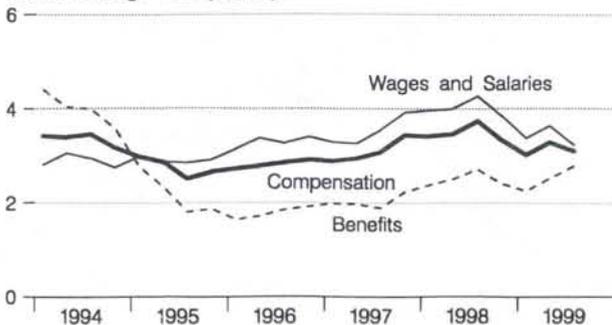
## Unit Labor Cost

Percent change at annual rate



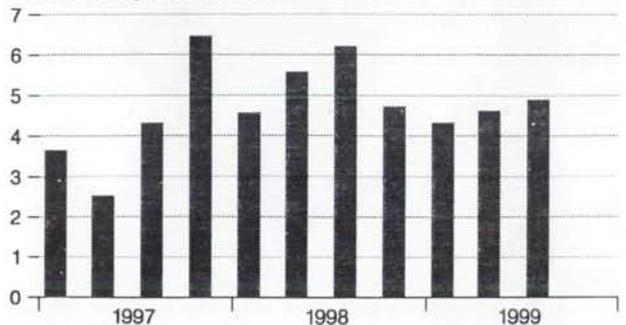
## Employment Cost Index

Percent change from year ago



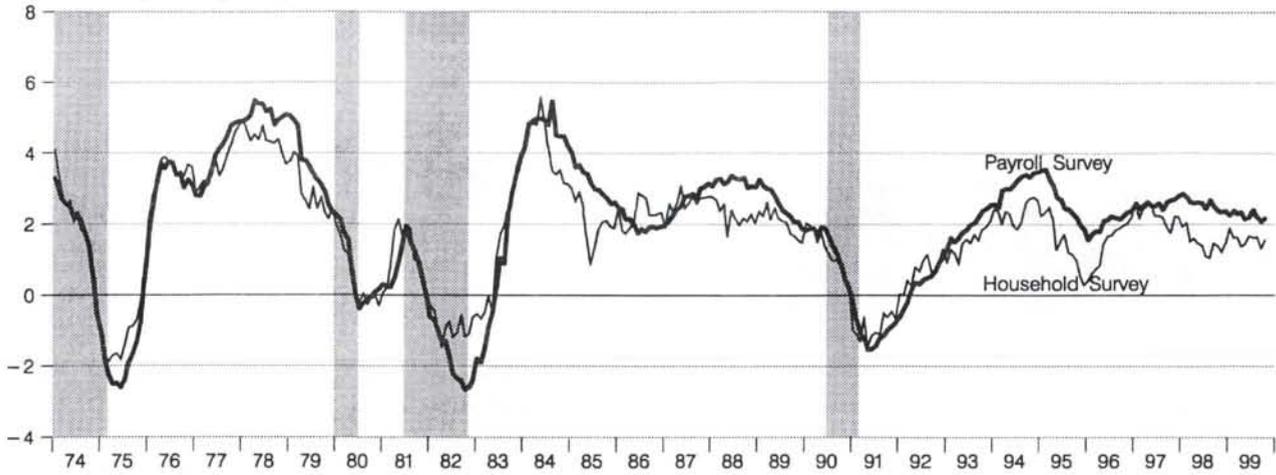
## Compensation per Hour

Percent change at annual rate



## Employment

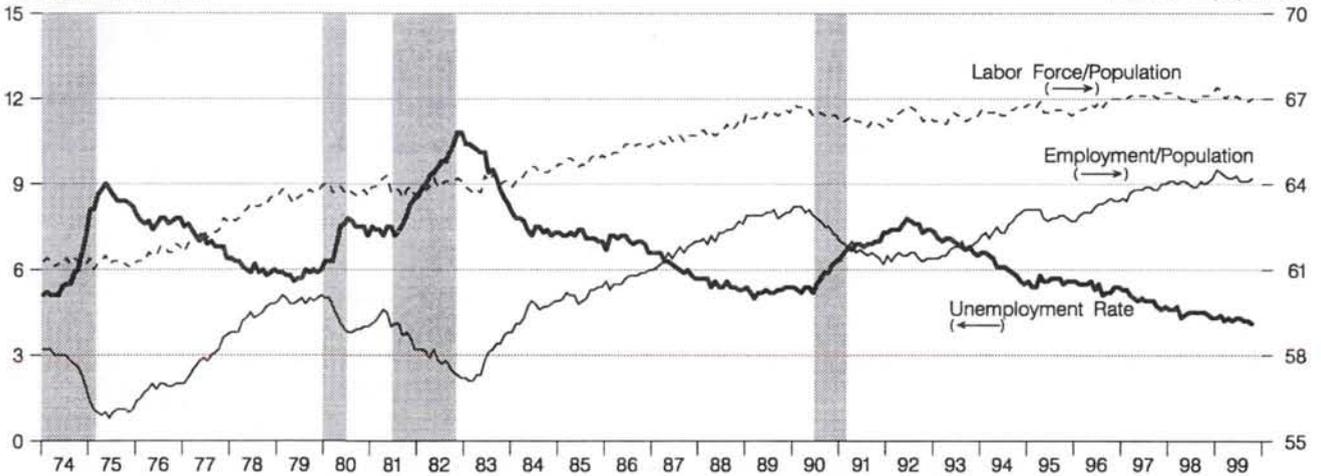
Percent change from year ago



## Unemployment, Labor Force Participation and Employment Rates

Percent of labor force

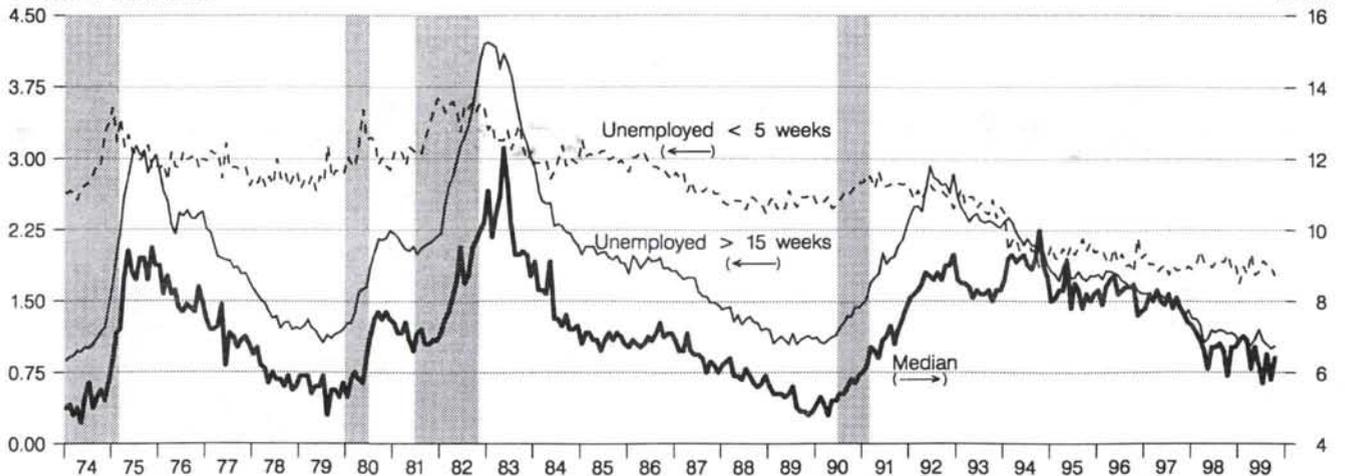
Percent of population



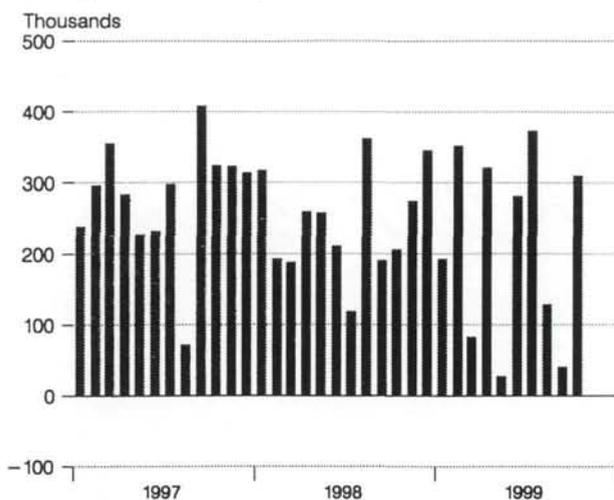
## Duration of Unemployment

Percent of labor force

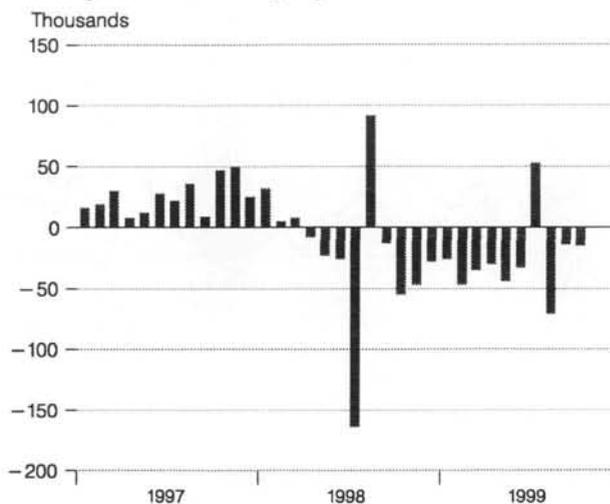
Weeks



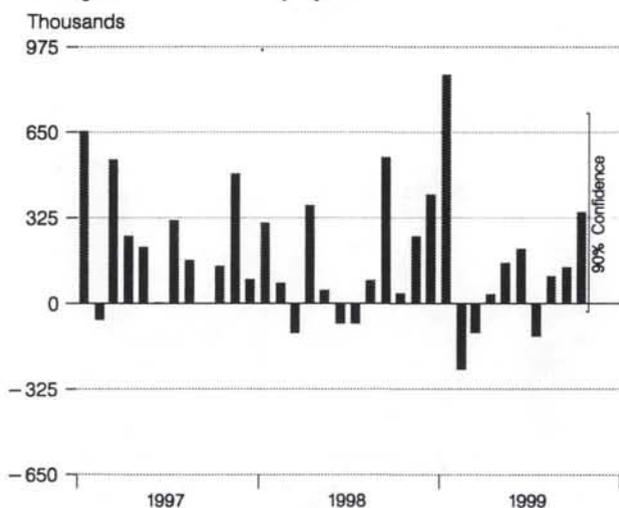
### Change in Nonfarm Payrolls



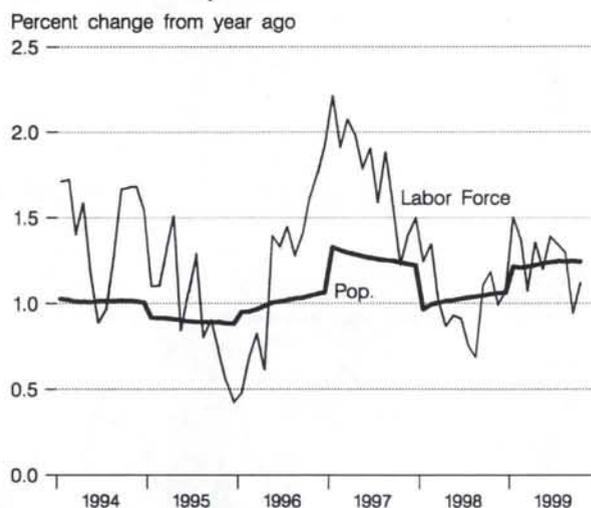
### Change in Manufacturing Payrolls



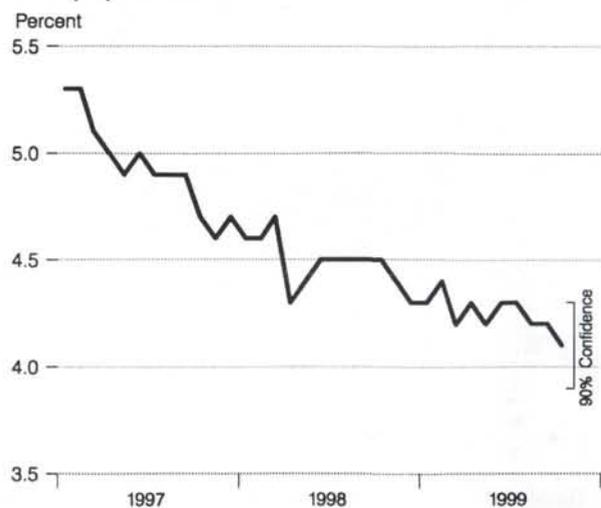
### Change in Household Employment



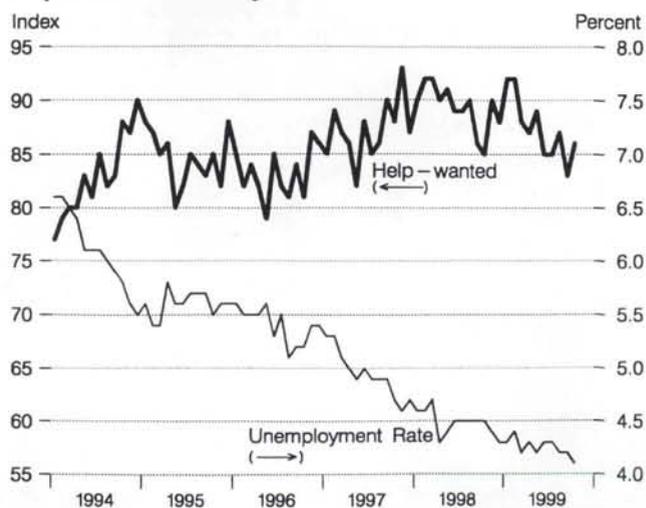
### Labor Force and Population



### Unemployment Rate

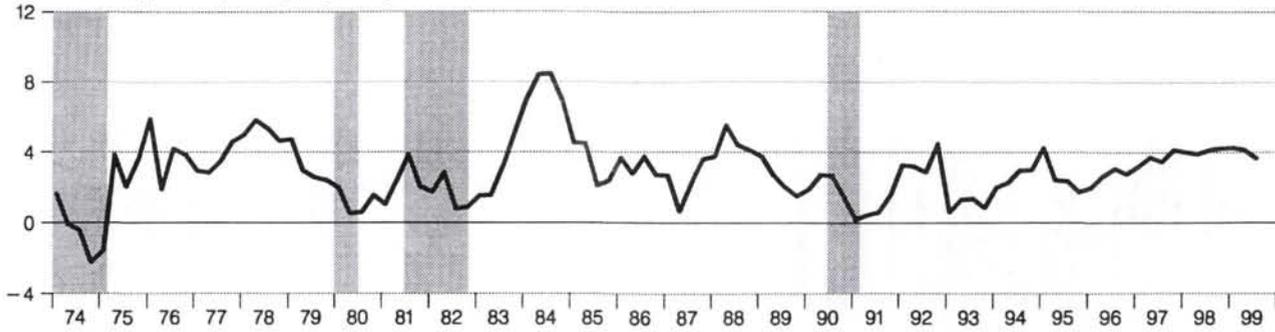


### Help-Wanted Advertising



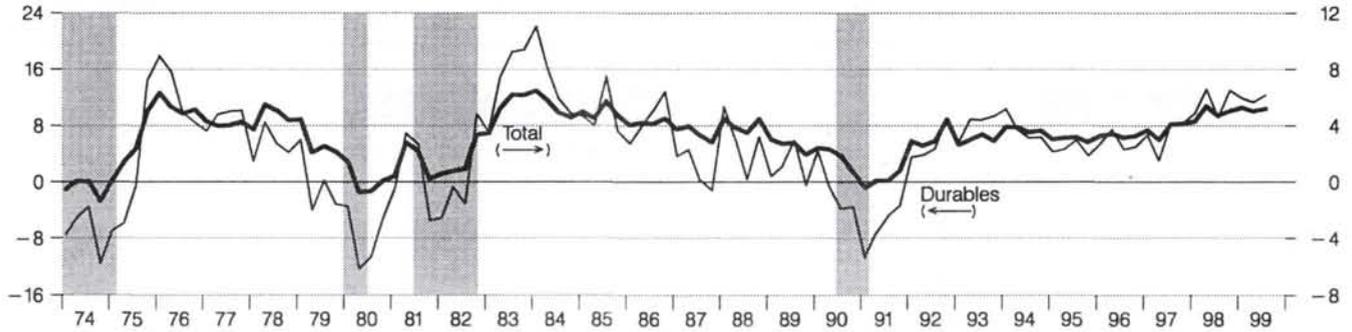
## Real Disposable Personal Income

Percent change from year ago, quarterly data



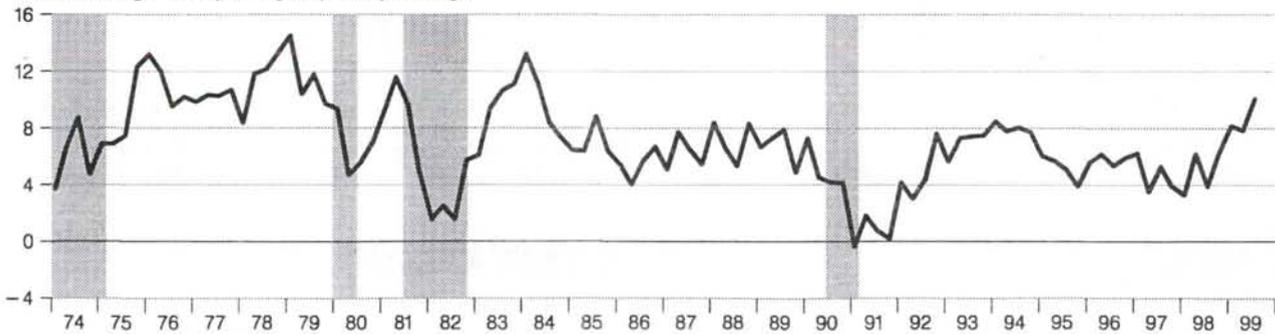
## Real Consumption

Percent change from year ago, quarterly data



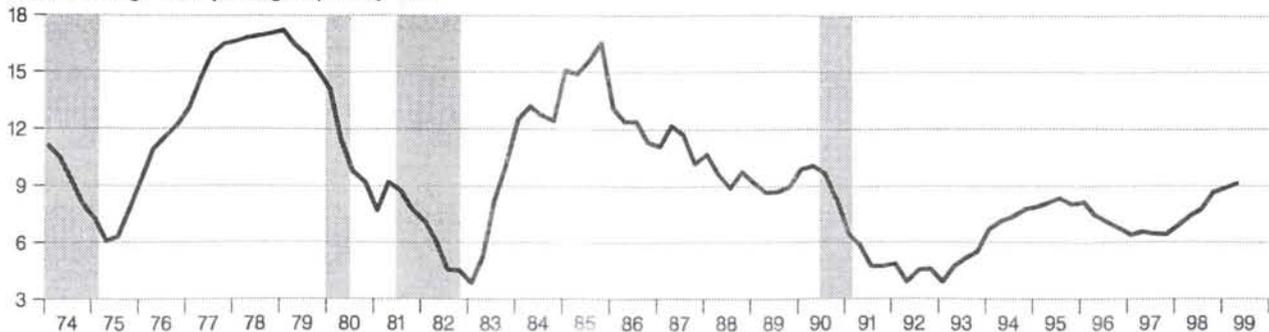
## Retail Sales

Percent change from year ago, quarterly average

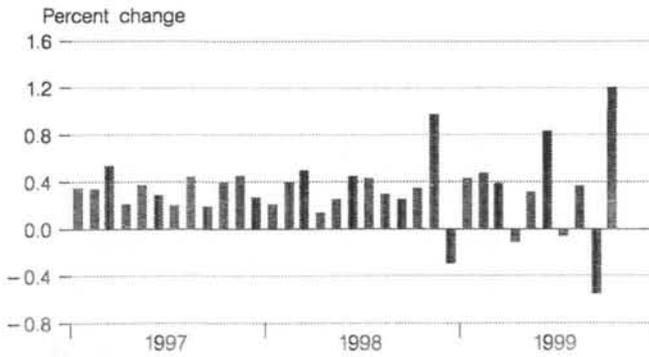


## Household Debt Outstanding

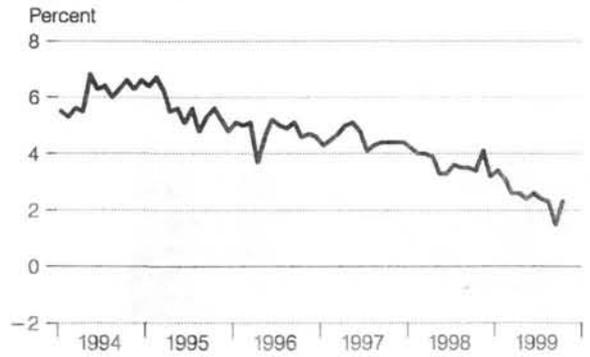
Percent change from year ago, quarterly data



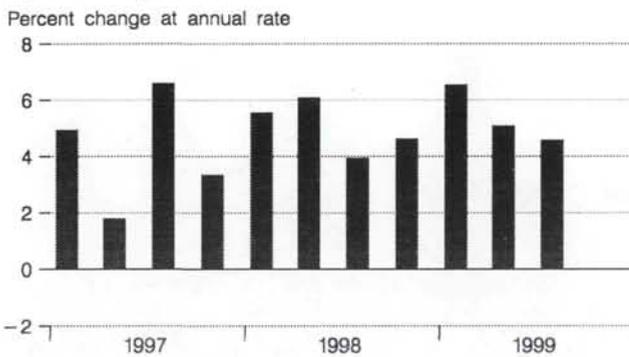
## Real Disposable Personal Income



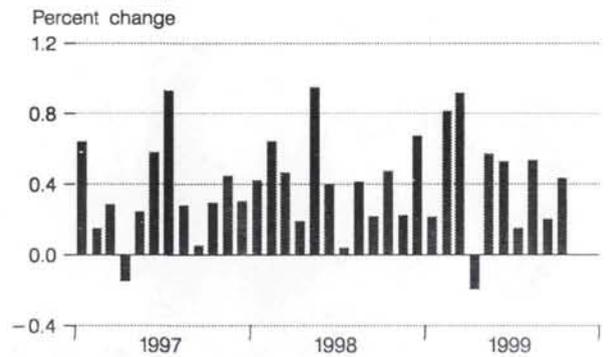
## Personal Saving Rate



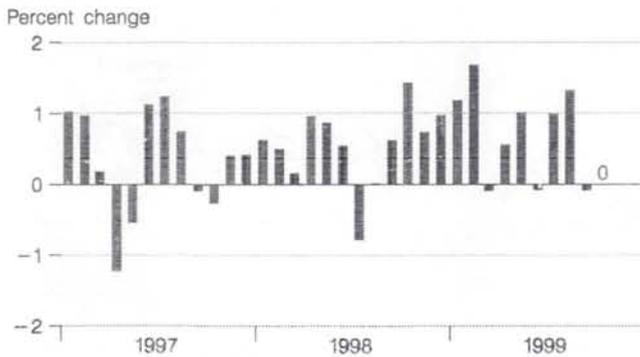
## Real Consumption



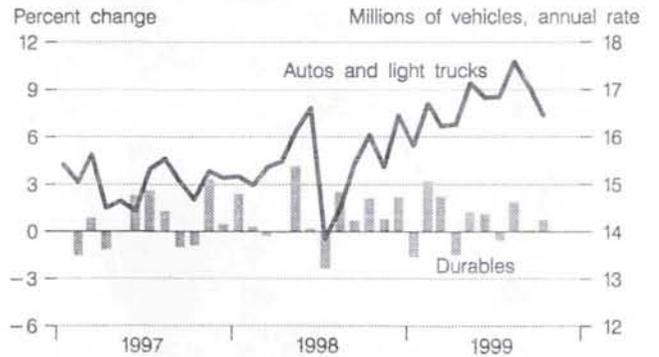
## Real Consumption



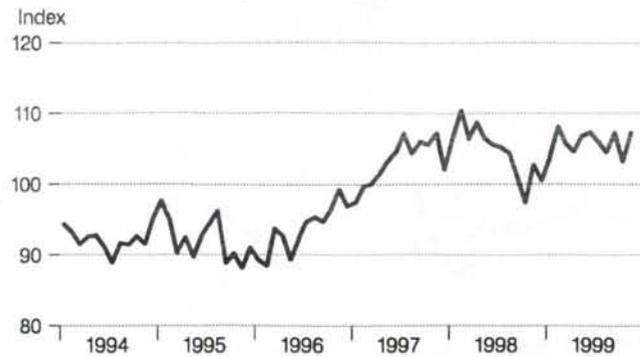
## Retail Sales



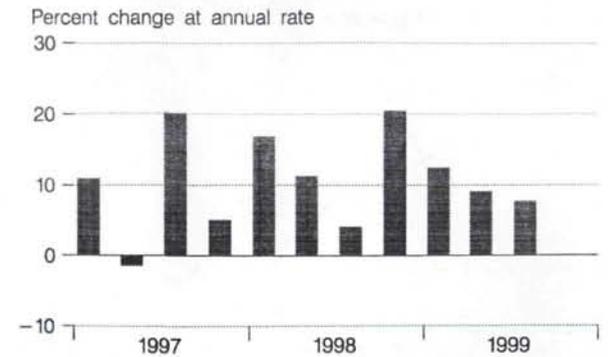
## Real Durables Consumption and Vehicle Sales



## Consumer Sentiment (U. of Michigan)

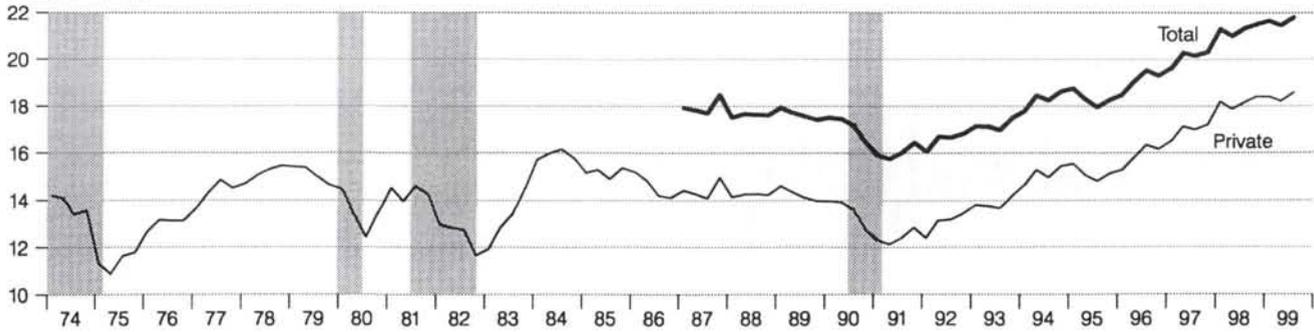


## Real Durables Consumption



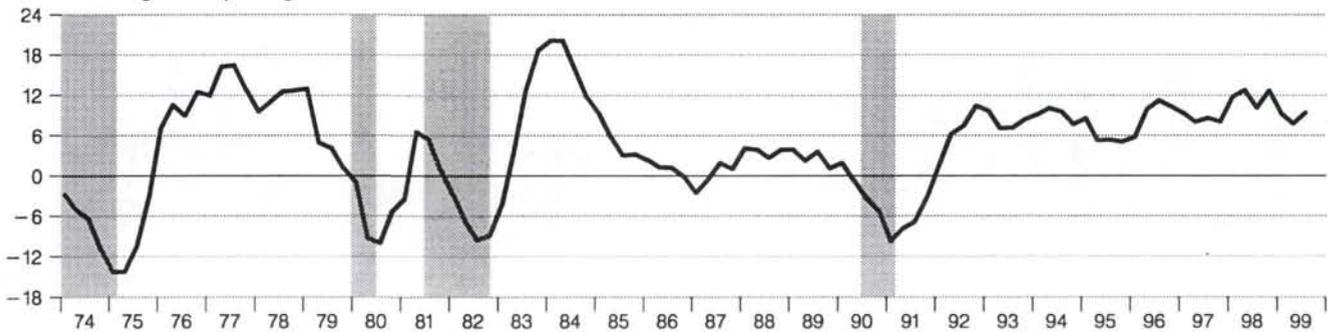
## Real Investment

Percent of GDP



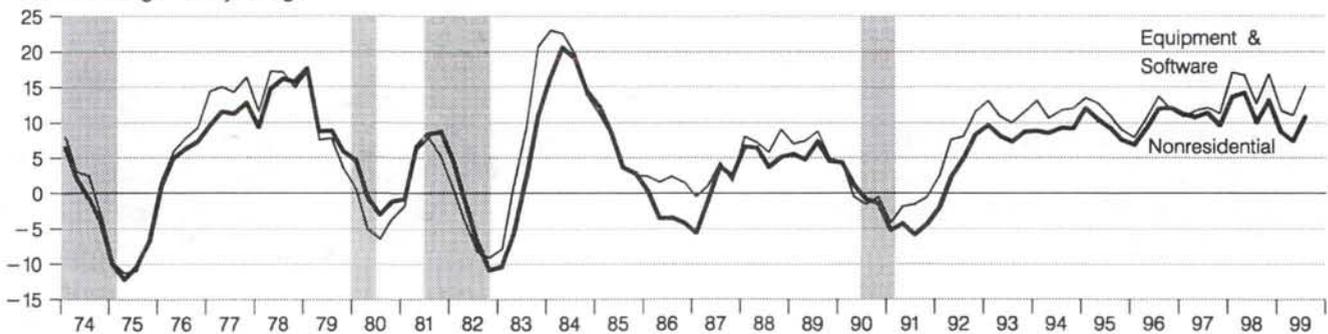
## Real Private Fixed Investment

Percent change from year ago



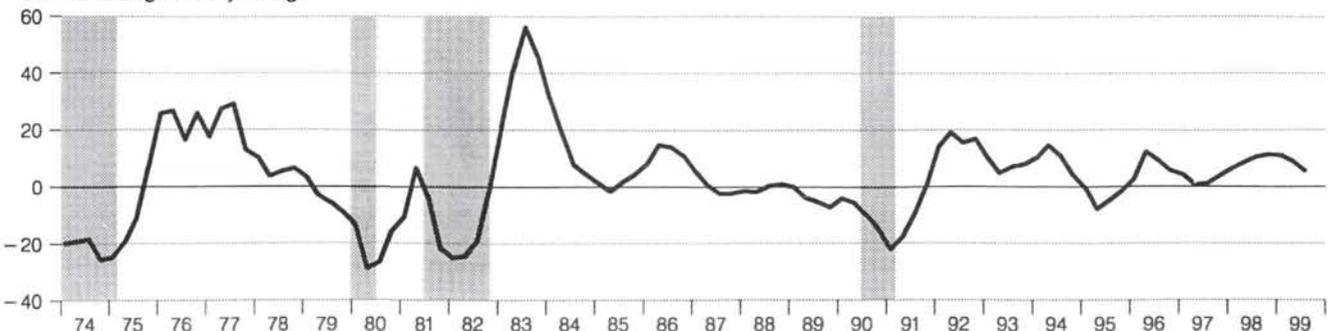
## Real Nonresidential Fixed and Equipment & Software Investment

Percent change from year ago

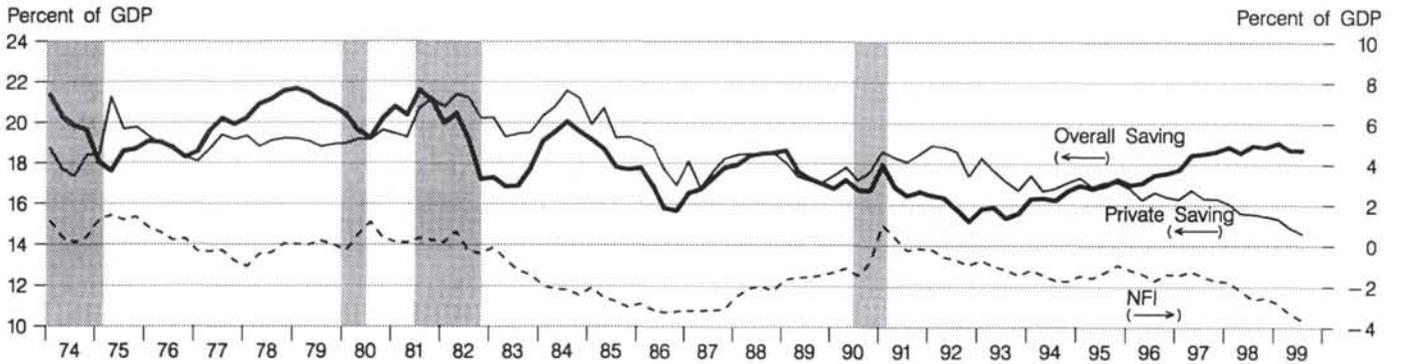


## Real Residential Fixed Investment

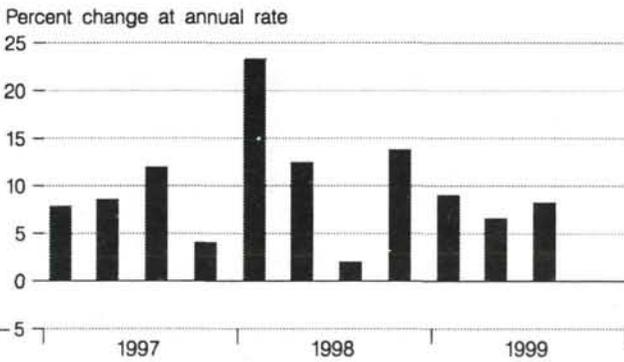
Percent change from year ago



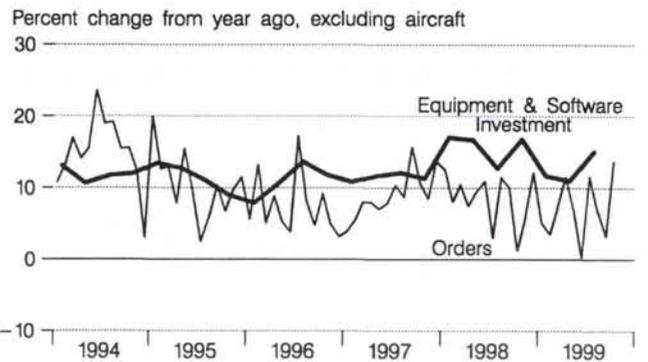
### Gross Saving Rates and Net Foreign Investment



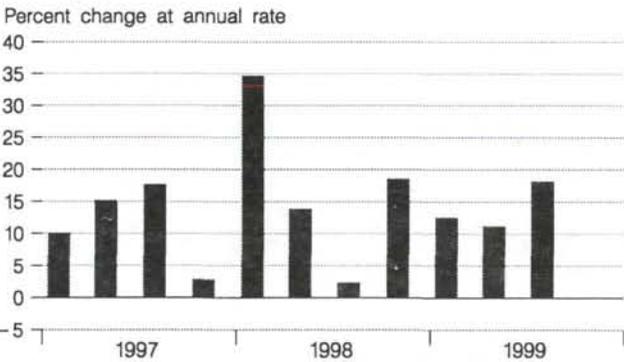
### Real Private Fixed Investment



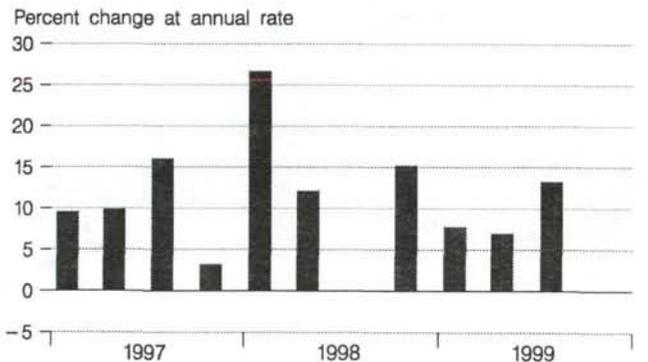
### Nondefense Capital Goods Orders



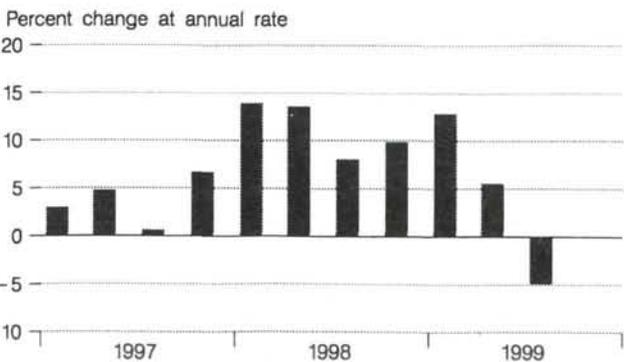
### Real Equipment & Software Investment



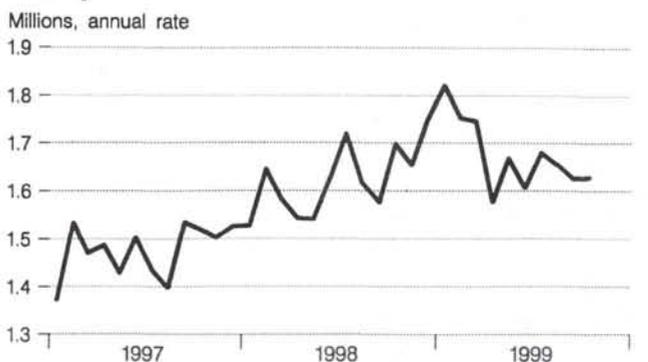
### Real Nonresidential Fixed Investment



### Real Residential Fixed Investment

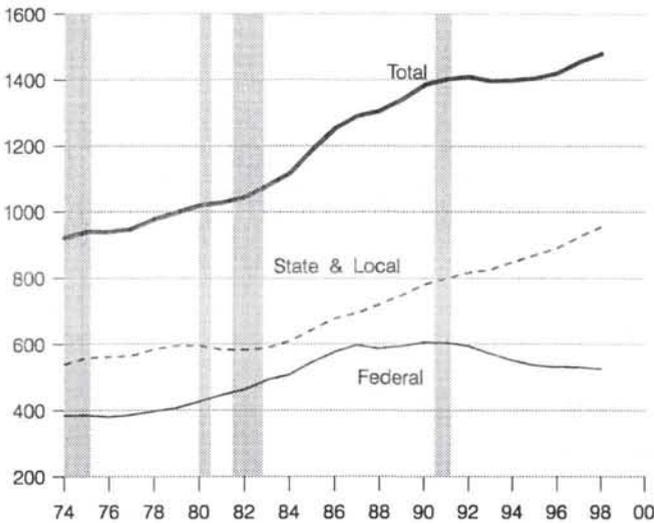


### Housing Starts



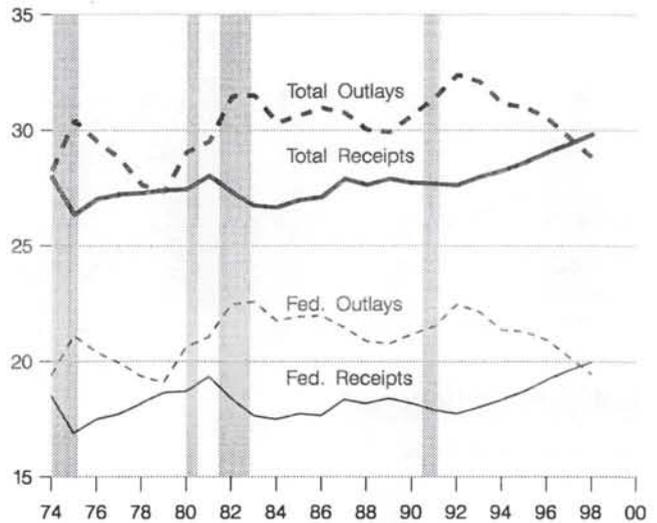
## Govt. Consumption and Investment

Billions of 1996 dollars



## Government Receipts and Outlays

Percent of GDP



## Government Budgets

Billions of dollars

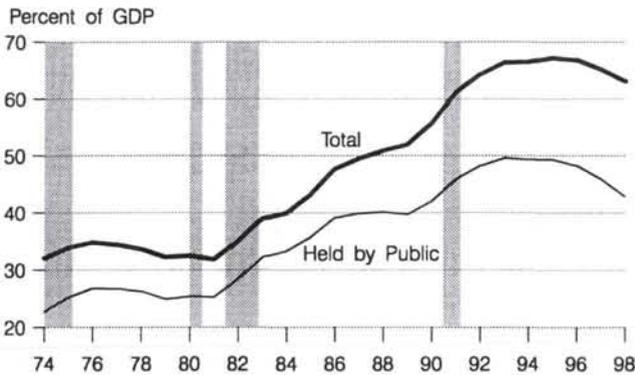
### National Income Accounts Calendar Years

	State and Local			Federal		
	Receipts	Expenditures	Surplus or Deficit(-)	Receipts	Expenditures	Surplus or Deficit(-)
1975	199.6	197.2	2.4	276.1	345.4	-69.3
1976	224.5	217.2	7.3	318.9	371.9	-53.0
1977	249.5	236.4	13.1	359.9	405.0	-45.1
1978	274.3	255.6	18.7	417.3	444.2	-26.9
1979	290.8	277.8	13.0	478.3	489.6	-11.3
1980	316.6	307.8	8.8	522.8	576.6	-53.8
1981	344.4	336.9	7.5	605.6	659.3	-53.7
1982	360.3	362.5	-2.2	599.5	732.1	-132.6
1983	392.1	387.3	4.8	623.9	797.8	-173.9
1984	436.4	412.6	23.8	688.1	856.1	-168.0
1985	469.2	447.0	22.2	747.4	924.6	-177.2
1986	507.9	487.2	20.7	786.4	978.5	-192.1
1987	536.0	523.8	12.2	870.5	1018.4	-147.9
1988	573.7	558.1	15.6	928.9	1066.2	-137.3
1989	618.9	599.6	19.3	1010.3	1140.3	-130.0
1990	663.4	660.8	2.6	1055.7	1228.7	-173.0
1991	716.0	723.8	-7.8	1072.3	1287.6	-215.3
1992	772.2	777.2	-5.0	1121.3	1418.9	-297.6
1993	823.2	821.7	1.5	1197.3	1471.5	-274.2
1994	873.8	865.2	8.6	1293.7	1506.0	-212.3
1995	917.9	902.5	15.4	1383.7	1575.7	-192.0
1996	960.4	939.0	21.4	1499.1	1635.9	-136.8
1997	1009.0	981.5	27.5	1627.2	1676.0	-48.8
1998	1070.4	1028.7	41.7	1750.7	1703.8	46.9

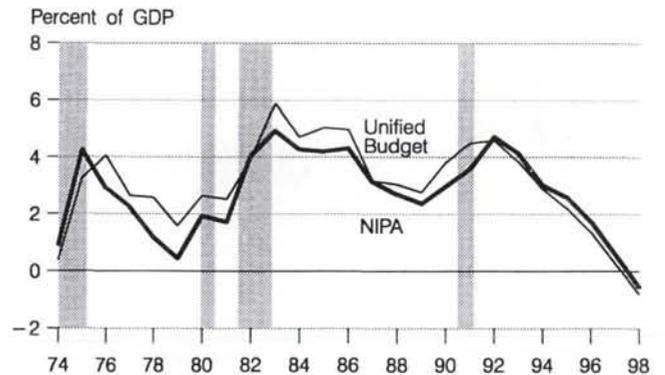
### Unified Budget Fiscal Years

Federal		
Receipts	Outlays	Surplus or Deficit(-)
279.1	332.3	-53.2
298.1	371.8	-73.7
355.6	409.2	-53.7
399.6	458.7	-59.2
463.3	504.0	-40.7
517.1	590.9	-73.8
599.3	678.2	-79.0
617.8	745.8	-128.0
600.6	808.4	-207.8
666.5	851.9	-185.4
734.1	946.4	-212.3
769.2	990.5	-221.2
854.4	1004.1	-149.8
909.3	1064.5	-155.2
991.2	1143.7	-152.5
1032.0	1253.2	-221.2
1055.0	1324.4	-269.4
1091.3	1381.7	-290.4
1154.4	1409.4	-255.0
1258.6	1461.7	-203.1
1351.8	1515.7	-163.9
1453.1	1560.5	-107.5
1579.3	1601.2	-21.9
1721.8	1652.6	69.2

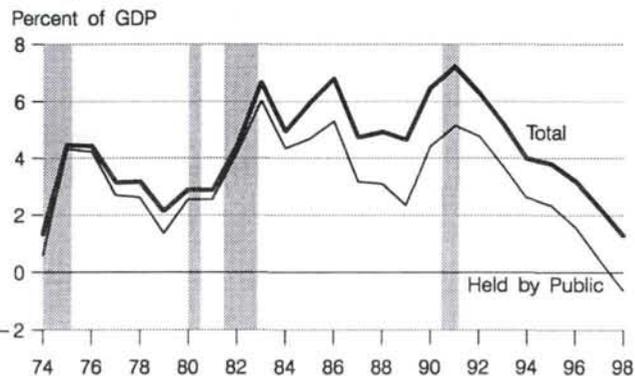
## Federal Debt



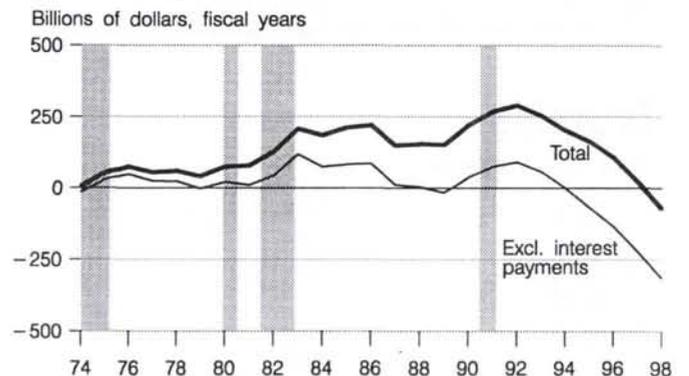
## Federal Deficit



## Change in Federal Debt



## Federal Deficit, Unified Basis

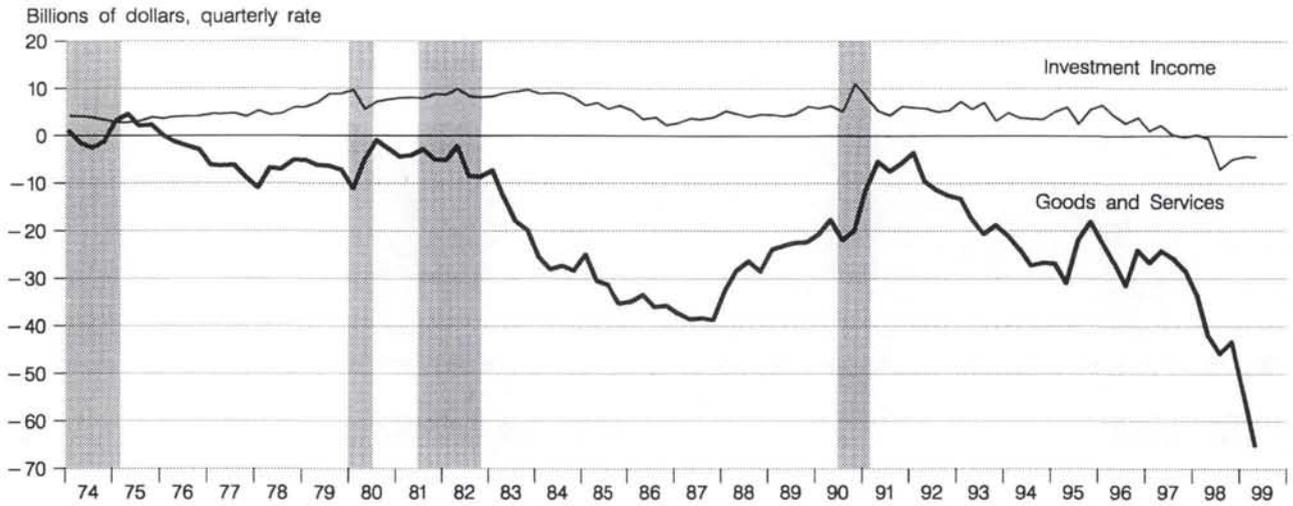


## Federal Government Debt

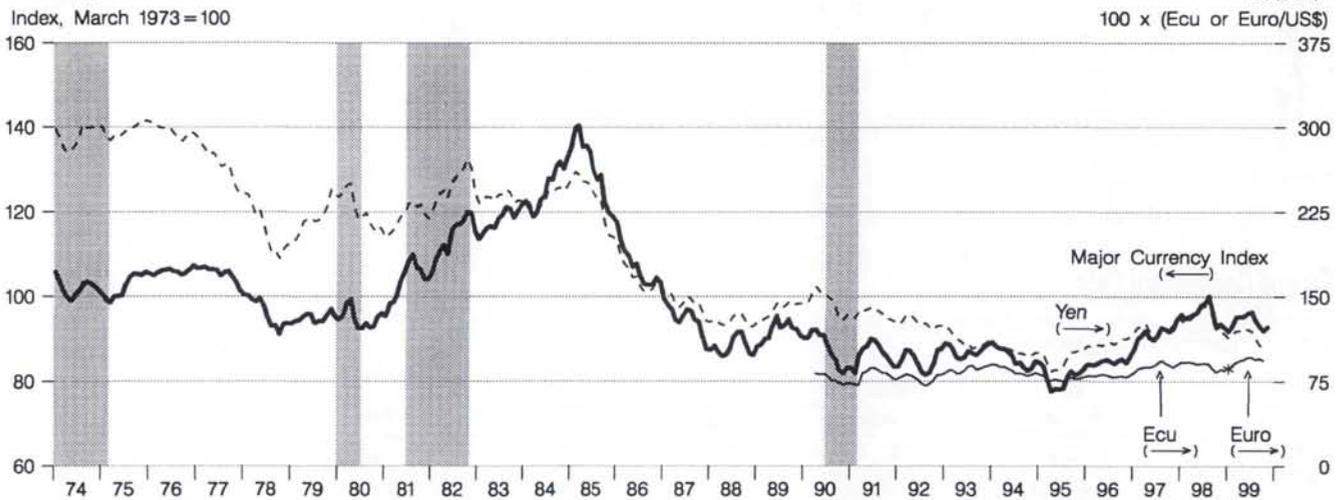
Billions of dollars, end of month or fiscal year, excluding agency-issued debt

	Total Public Debt	Held by Agencies and Trusts	Held by Public		Held by Private Investors	
			Total	Federal Reserve Banks	Total	Foreign and International
1996	5224.8	1447.0	3777.8	390.9	3393.2	993.4
1997	5413.1	1598.5	3814.7	436.5	3401.6	1230.5
1998	5526.2	1765.6	3760.6	458.1	3313.2	1224.2
1996						
March	5117.8	1353.8	3764.0	381.0	3386.7	908.1
June	5161.1	1422.4	3738.6	391.0	3354.4	929.7
September	5224.8	1447.0	3777.8	390.9	3393.2	993.4
December	5323.2	1497.2	3826.0	410.9	3431.2	1102.1
1997						
March	5380.9	1506.8	3874.1	405.6	3452.2	1157.6
June	5376.2	1571.6	3804.6	426.4	3377.3	1182.7
September	5413.1	1598.5	3814.7	436.5	3401.6	1230.5
December	5502.4	1655.7	3846.7	451.9	3414.6	1241.6
1998						
March	5542.4	1670.4	3872.1	400.0	3437.5	1250.5
June	5547.9	1757.6	3790.4	458.4	3349.3	1256.0
September	5526.2	1765.6	3760.6	458.1	3313.2	1224.2
December	5614.2	1826.8	3787.4	471.7	3334.0	1278.7
1999						
March	5651.6	1857.1	3794.5	464.5	3327.6	1270.8
June	5638.8	1953.6	3685.2	493.8	3199.3	1257.3

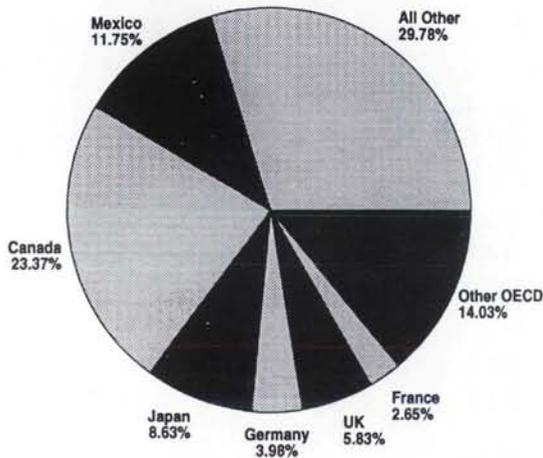
## Trade and Investment Income Balances



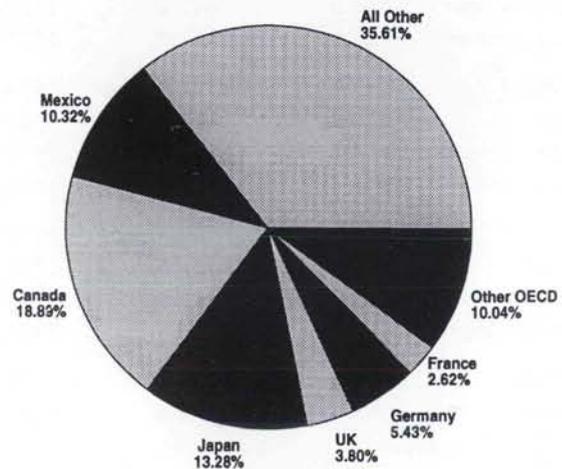
## Exchange Rates



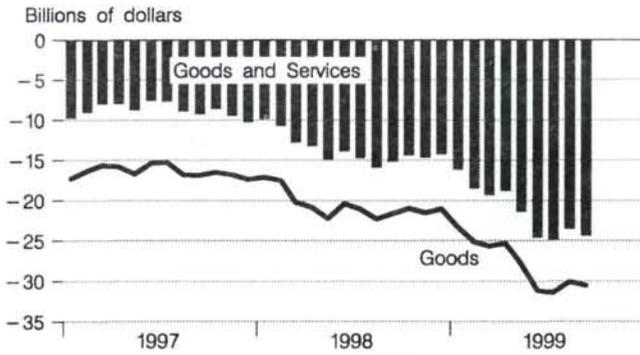
## Goods Export Shares, 1998



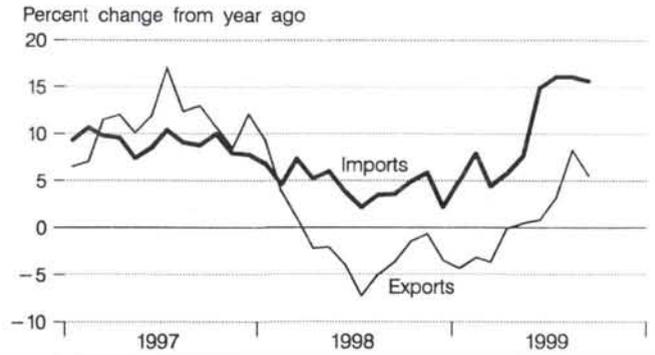
## Goods Import Shares, 1998



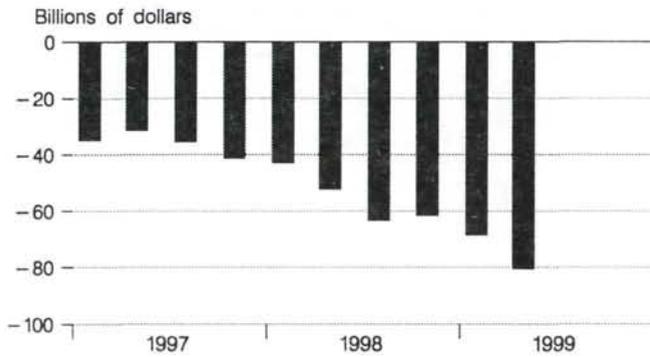
## Trade Balance



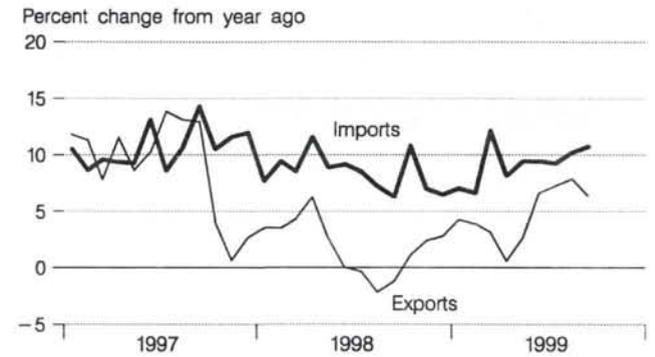
## Goods Trade



## Current Account Balance



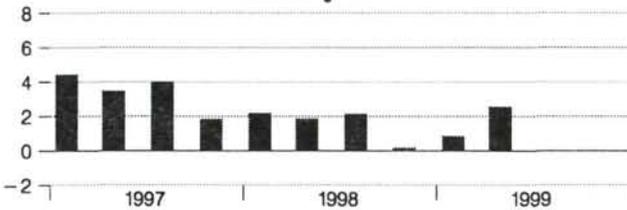
## Services Trade



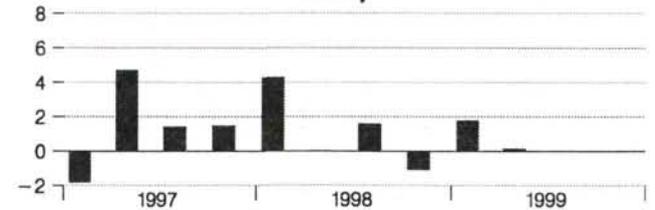
## Real GDP Growth of Major Trading Partners

Percent change at annual rate

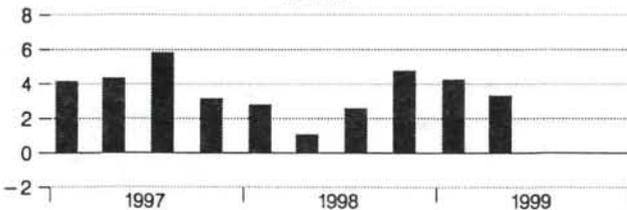
### United Kingdom



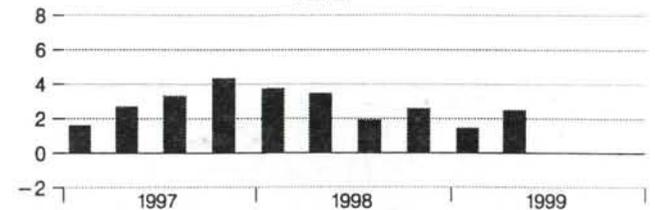
### Germany



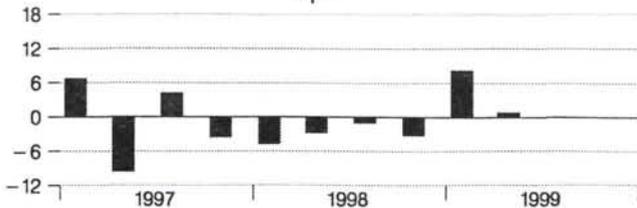
### Canada



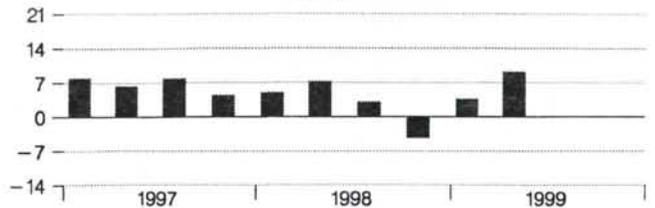
### France



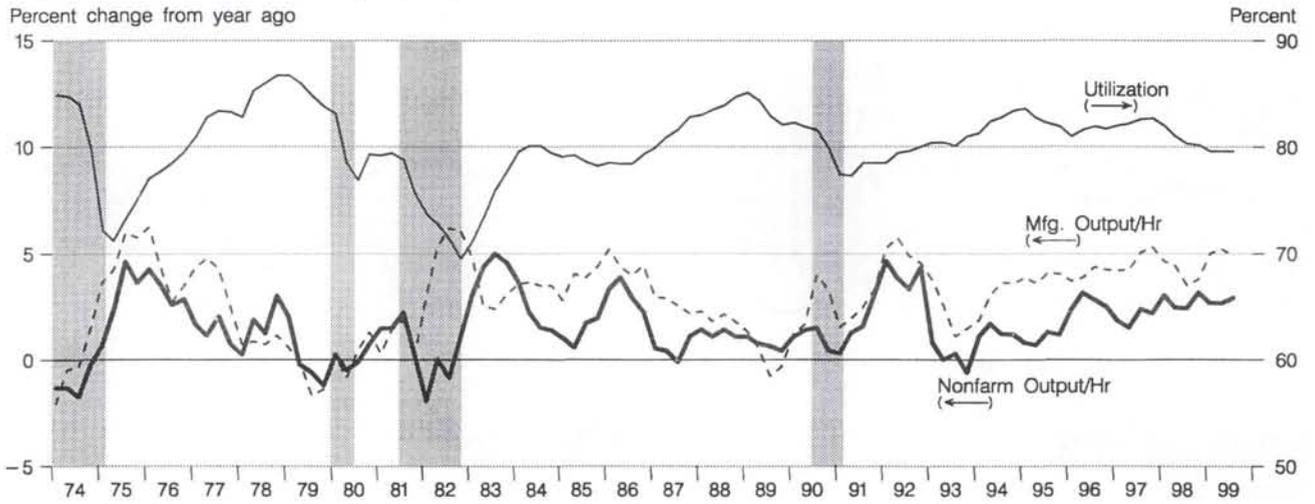
### Japan



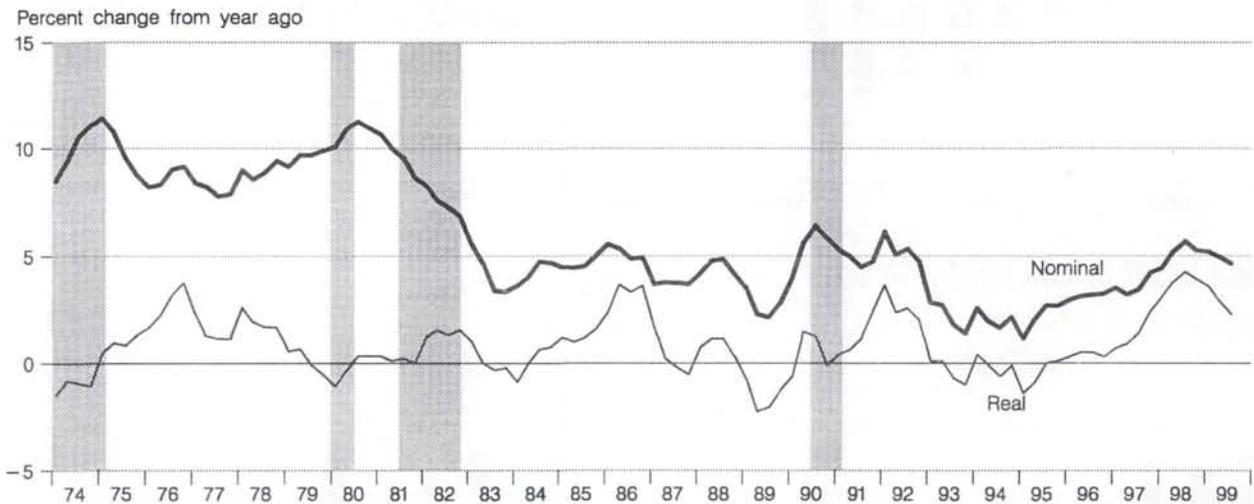
### Mexico



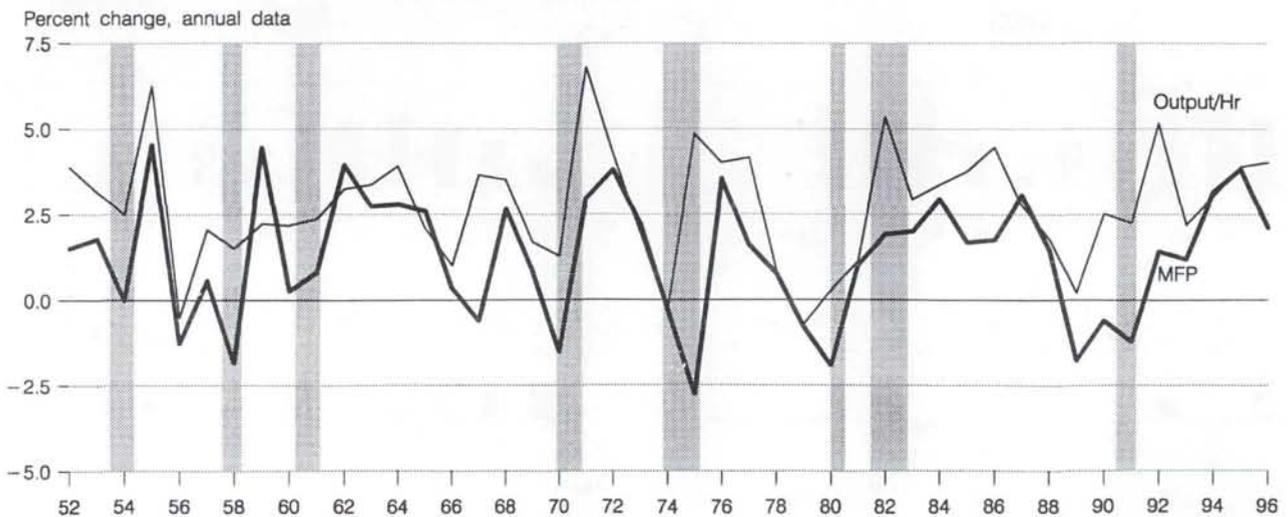
### Output per Hour and Manufacturing Capacity Utilization



### Nonfarm Compensation per Hour

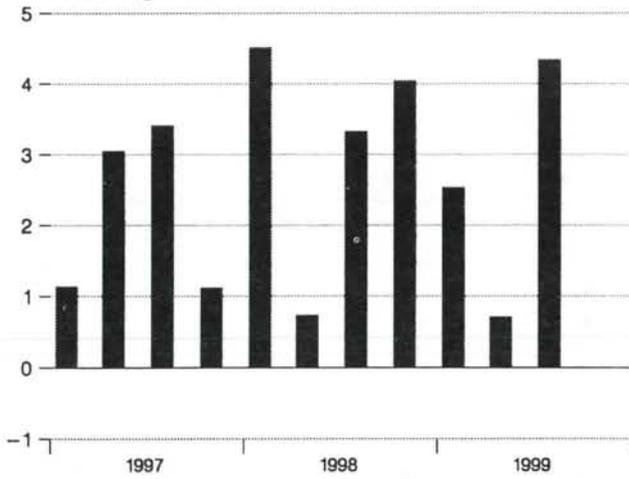


### Output per Hour and Multifactor Productivity, Manufacturing



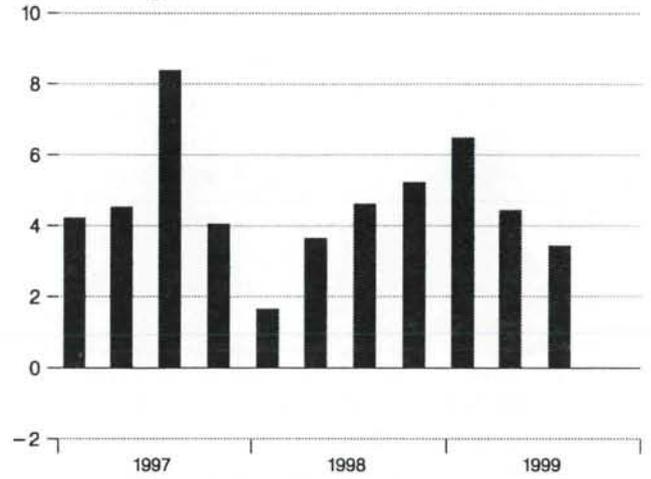
## Nonfarm Output per Hour

Percent change at annual rate



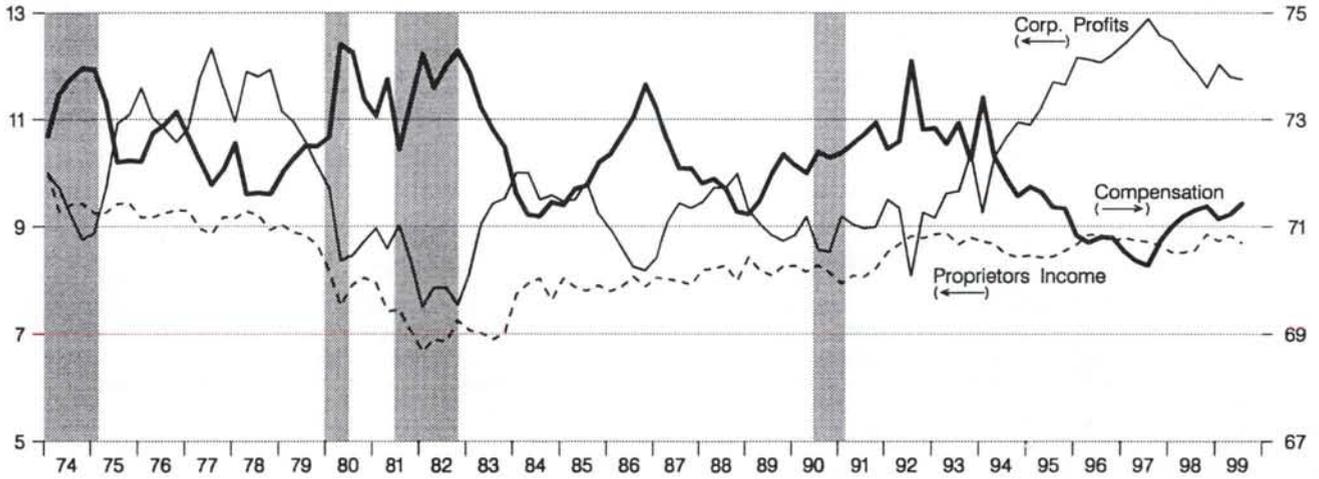
## Manufacturing Output per Hour

Percent change at annual rate



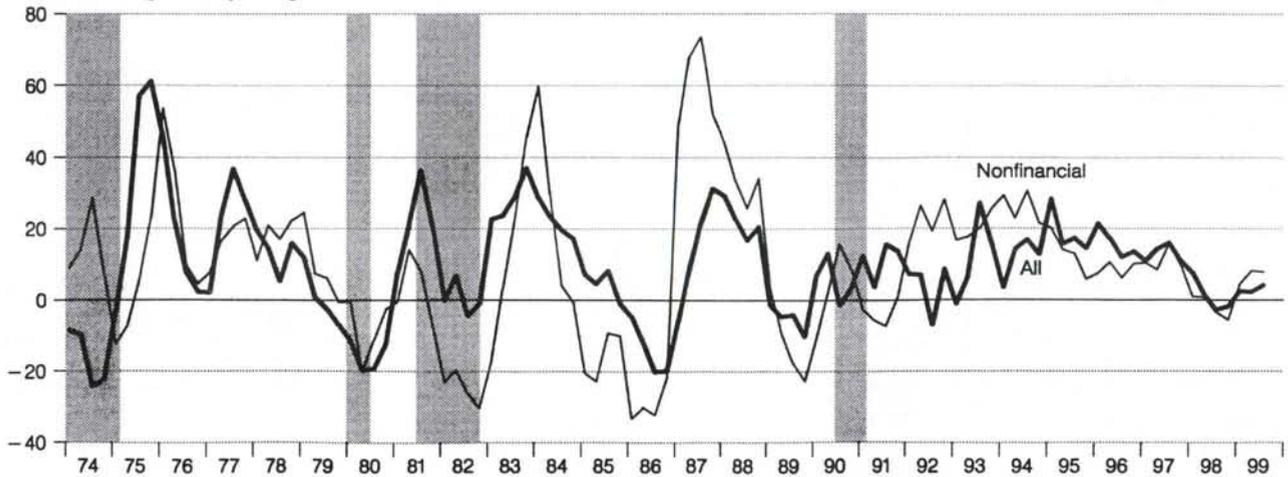
## Selected Component Shares of National Income

Percent



## Corporate Profits after Tax (with IVA and CCAAdj)

Percent change from year ago



# National Economic Trends

	Nominal GDP			Real GDP			Final Sales			Change in Private Inventories		
	Billions of \$	Percent change		Billions of 1996 \$	Percent change		Billions of 1996 \$	Percent change		Billions of 1996 \$		
		Annual rate	Year ago		Annual rate	Year ago		Annual rate	Year ago	Last qtr	Year/Year ago	
1995	7400.5	4.9		7537.100	2.7		7505.500	3.2		30.400		
1996	7813.2	5.6		7813.200	3.7		7783.200	3.7		30.000		
1997	8300.8	6.2		8165.100	4.5		8095.700	4.0		69.100		
1998	8759.9	5.5		8516.300	4.3		8441.300	4.3		74.300		
1996 1	7629.6	5.4	4.6	7671.400	2.9	2.6	7664.600	3.6	3.3	5.600	16.275	
2	7782.7	8.3	6.0	7800.500	6.9	4.1	7770.900	5.7	4.1	30.300	15.725	
3	7859.0	4.0	5.7	7843.300	2.2	3.8	7793.500	1.2	3.3	51.200	26.275	
4	7981.4	6.4	6.0	7937.500	4.9	4.2	7903.700	5.8	4.0	32.900	30.000	
1997 1	8125.9	7.4	6.5	8033.400	4.9	4.7	7981.100	4.0	4.1	51.500	41.475	
2	8259.5	6.7	6.1	8134.800	5.1	4.3	8042.000	3.1	3.5	93.100	57.175	
3	8364.5	5.2	6.4	8214.800	4.0	4.7	8155.300	5.8	4.6	59.200	59.175	
4	8453.0	4.3	5.9	8277.300	3.1	4.3	8204.300	2.4	3.8	72.700	69.125	
1998 1	8610.6	7.7	6.0	8412.700	6.7	4.7	8307.000	5.1	4.1	107.300	83.075	
2	8683.7	3.4	5.1	8457.200	2.1	4.0	8410.400	5.1	4.6	43.100	70.575	
3	8797.9	5.4	5.2	8536.000	3.8	3.9	8459.600	2.4	3.7	76.100	74.800	
4	8947.6	7.0	5.9	8659.200	5.9	4.6	8588.300	6.2	4.7	70.700	74.300	
1999 1	9072.7	5.7	5.4	8737.900	3.7	3.9	8685.200	4.6	4.6	50.100	60.000	
2	9146.2	3.3	5.3	8778.600	1.9	3.8	8757.900	3.4	4.1	14.000	52.725	
3	9295.3	6.7	5.7	8897.700	5.5	4.2	8856.600	4.6	4.7	33.900	42.175	
	Consumption			Durables Consumption			Private Fixed Investment			Nonresidential Fixed Investment		
	Billions of 1996 \$	Percent change		Billions of 1996 \$	Percent change		Billions of 1996 \$	Percent change		Billions of 1996 \$	Percent change	
		Annual rate	Year ago		Annual rate	Year ago		Annual rate	Year ago		Annual rate	Year ago
1995	5070.100	3.1		583.500	4.6		1109.200	6.1		817.500	9.8	
1996	5237.500	3.3		616.500	5.7		1212.700	9.3		899.400	10.0	
1997	5433.700	3.7		657.400	6.6		1316.000	8.5		995.700	10.7	
1998	5698.600	4.9		731.500	11.3		1471.800	11.8		1122.500	12.7	
1996 1	5170.300	3.3	3.3	601.700	4.1	5.5	1165.200	12.0	5.7	861.600	13.1	6.8
2	5227.500	4.5	3.4	620.400	13.0	7.4	1203.700	13.9	9.9	885.600	11.6	9.1
3	5255.400	2.2	3.2	618.100	-1.5	4.6	1231.600	9.6	11.2	914.300	13.6	12.0
4	5296.800	3.2	3.3	625.700	5.0	5.0	1250.200	6.2	10.4	936.200	9.9	12.1
1997 1	5361.100	4.9	3.7	642.100	10.9	6.7	1274.100	7.9	9.3	957.900	9.6	11.2
2	5385.100	1.8	3.0	639.700	-1.5	3.1	1300.600	8.6	8.1	980.800	9.9	10.7
3	5471.800	6.6	4.1	669.700	20.1	8.3	1337.900	12.0	8.6	1018.000	16.1	11.3
4	5517.100	3.4	4.2	678.000	5.1	8.4	1351.300	4.1	8.1	1026.100	3.2	9.6
1998 1	5592.300	5.6	4.3	704.900	16.8	9.8	1424.200	23.4	11.8	1088.600	26.7	13.6
2	5675.600	6.1	5.4	723.900	11.2	13.2	1466.700	12.5	12.8	1120.200	12.1	14.2
3	5730.700	3.9	4.7	731.200	4.1	9.2	1474.000	2.0	10.2	1120.300	0.0	10.0
4	5795.800	4.6	5.1	766.000	20.4	13.0	1522.500	13.8	12.7	1160.800	15.3	13.1
1999 1	5888.400	6.5	5.3	788.800	12.4	11.9	1555.900	9.1	9.2	1182.700	7.8	8.6
2	5961.800	5.1	5.0	806.100	9.1	11.4	1581.000	6.6	7.8	1202.900	7.0	7.4
3	6028.800	4.6	5.2	821.200	7.7	12.3	1612.700	8.3	9.4	1241.000	13.3	10.8



		Household Survey Employment				Nonfarm Payroll Employment				Nonfarm Aggregate Hours			
		Thousands	Change	Percent change		Thousands	Change	Percent change		Index	Percent change		
				Annual rate	Year ago			Annual rate	Year ago		Monthly rate	Annual rate	Year ago
1994		123071	2813		2.3	114135	3443		3.1	129.8			4.2
1995		124906	1834		1.5	117189	3054		2.7	133.4			2.7
1996		126710	1805		1.4	119594	2405		2.1	136.6			2.4
1997		129559	2848		2.2	122673	3079		2.6	141.4			3.5
1998		131458	1899		1.5	125803	3130		2.6	145.1			2.6
1997	1	128612	829	2.6	2.4	121447	779	2.6	2.5	139.7	0.9	3.7	3.9
	2	129355	743	2.3	2.4	122294	847	2.8	2.5	140.9	0.9	3.7	3.4
	3	129855	500	1.6	2.1	123006	712	2.4	2.5	141.9	0.7	2.8	3.3
	4	130413	558	1.7	2.1	123946	940	3.1	2.7	143.2	0.9	3.6	3.4
1998	1	130957	544	1.7	1.8	124771	825	2.7	2.7	144.2	0.7	3.0	3.3
	2	131288	330	1.0	1.5	125462	691	2.2	2.6	144.7	0.3	1.3	2.7
	3	131419	132	0.4	1.2	126113	651	2.1	2.5	145.3	0.4	1.6	2.4
	4	132166	746	2.3	1.3	126865	752	2.4	2.4	146.2	0.7	2.7	2.1
1999	1	133191	1025	3.1	1.7	127640	776	2.5	2.3	147.0	0.5	2.0	1.9
	2	133242	51	0.2	1.5	128246	606	1.9	2.2	147.3	0.2	1.0	1.8
	3	133423	181	0.5	1.5	128916	669	2.1	2.2	148.2	0.6	2.5	2.0
1997	Oct	130055	144	1.3	1.8	123626	324	3.2	2.7	142.7	0.2	2.6	3.5
	Nov	130546	491	4.6	2.2	123949	323	3.2	2.7	143.3	0.4	5.2	3.6
	Dec	130638	92	0.8	2.2	124263	314	3.1	2.8	143.5	0.1	1.7	3.2
1998	Jan	130943	305	2.8	1.9	124580	317	3.1	2.8	144.3	0.6	6.9	4.0
	Feb	131021	78	0.7	2.0	124773	193	1.9	2.8	144.3	0.0	0.0	3.3
	Mar	130908	-113	-1.0	1.5	124961	188	1.8	2.6	144.1	-0.1	-1.7	2.5
	Apr	131280	372	3.5	1.6	125220	259	2.5	2.6	144.3	0.1	1.7	2.6
	May	131330	50	0.5	1.5	125478	258	2.5	2.6	145.0	0.5	6.0	2.7
	Jun	131253	-77	-0.7	1.4	125689	211	2.0	2.6	144.8	-0.1	-1.6	2.8
	Jul	131176	-77	-0.7	1.1	125808	119	1.1	2.4	145.2	0.3	3.4	2.7
	Aug	131264	88	0.8	1.0	126170	362	3.5	2.7	145.5	0.2	2.5	2.5
	Sep	131818	554	5.2	1.5	126361	191	1.8	2.5	145.1	-0.3	-3.2	1.9
	Oct	131858	40	0.4	1.4	126567	206	2.0	2.4	146.0	0.6	7.7	2.3
	Nov	132113	255	2.3	1.2	126841	274	2.6	2.3	146.1	0.1	0.8	2.0
	Dec	132526	413	3.8	1.4	127186	345	3.3	2.4	146.6	0.3	4.2	2.2
1999	Jan	133396	870	8.2	1.9	127378	192	1.8	2.2	146.8	0.1	1.6	1.7
	Feb	133144	-252	-2.2	1.6	127730	352	3.4	2.4	147.3	0.3	4.2	2.1
	Mar	133033	-111	-1.0	1.6	127813	83	0.8	2.3	146.8	-0.3	-4.0	1.9
	Apr	133069	36	0.3	1.4	128134	321	3.1	2.3	147.0	0.1	1.6	1.9
	May	133224	155	1.4	1.4	128162	28	0.3	2.1	147.2	0.1	1.6	1.5
	Jun	133432	208	1.9	1.7	128443	281	2.7	2.2	147.8	0.4	5.0	2.1
	Jul	133307	-125	-1.1	1.6	128816	373	3.5	2.4	148.3	0.3	4.1	2.1
	Aug	133411	104	0.9	1.6	128945	129	1.2	2.2	148.4	0.1	0.8	2.0
	Sep	133550	139	1.3	1.3	128986	41	0.4	2.1	148.0	-0.3	-3.2	2.0
	Oct	133896	346	3.2	1.5	129296	310	2.9	2.2	149.0	0.7	8.4	2.1

		Unempl. Rate	Retail Sales				Industrial Production				Treasury Yields	
			Billions of dollars	Percent change			Index	Percent change			3-mo	10-yr
				Monthly/ quarterly	Annual rate	Year ago		Monthly/ quarterly	Annual rate	Year ago		
1994		6.1	2247.847			8.0	109.112			5.5	4.25	7.08
1995		5.6	2364.120			5.2	114.418			4.9	5.49	6.58
1996		5.4	2500.076			5.8	119.445			4.4	5.01	6.44
1997		4.9	2617.854			4.7	126.953			6.3	5.06	6.35
1998		4.5	2746.626			4.9	132.365			4.3	4.78	5.26
1997	1	5.2	650.319	2.0	8.2	6.2	123.834	1.6	6.5	6.4	5.06	6.56
	2	5.0	645.245	-0.8	-3.1	3.5	125.860	1.6	6.7	5.8	5.05	6.70
	3	4.9	660.049	2.3	9.5	5.3	127.989	1.7	6.9	6.1	5.05	6.24
	4	4.7	662.241	0.3	1.3	3.9	130.127	1.7	6.9	6.8	5.09	5.90
1998	1	4.6	671.704	1.4	5.8	3.3	130.897	0.6	2.4	5.7	5.05	5.59
	2	4.4	685.168	2.0	8.3	6.2	131.856	0.7	3.0	4.8	4.98	5.60
	3	4.5	685.670	0.1	0.3	3.9	132.811	0.7	2.9	3.8	4.82	5.20
	4	4.4	704.084	2.7	11.2	6.3	133.895	0.8	3.3	2.9	4.26	4.67
1999	1	4.3	726.609	3.2	13.4	8.2	134.569	0.5	2.0	2.8	4.41	4.98
	2	4.3	739.004	1.7	7.0	7.9	136.109	1.1	4.7	3.2	4.45	5.54
	3	4.2	754.785	2.1	8.8	10.1	137.534	1.0	4.3	3.6	4.65	5.88
1997	Oct	4.7	219.841	-0.3	-3.2	3.5	129.609	0.6	7.7	7.0	4.97	6.03
	Nov	4.6	220.740	0.4	5.0	4.0	130.173	0.4	5.3	6.6	5.14	5.87
	Dec	4.7	221.660	0.4	5.1	4.0	130.598	0.3	4.0	6.7	5.16	5.81
1998	Jan	4.6	223.038	0.6	7.7	3.6	130.872	0.2	2.5	6.4	5.04	5.54
	Feb	4.6	224.158	0.5	6.2	3.1	130.738	-0.1	-1.2	5.4	5.09	5.57
	Mar	4.7	224.508	0.2	1.9	3.1	131.082	0.3	3.2	5.3	5.03	5.65
	Apr	4.3	226.659	1.0	12.1	5.4	131.654	0.4	5.4	5.1	4.95	5.64
	May	4.4	228.631	0.9	11.0	6.9	132.434	0.6	7.3	5.3	5.00	5.65
	Jun	4.5	229.878	0.5	6.7	6.3	131.481	-0.7	-8.3	3.9	4.98	5.50
	Jul	4.5	228.067	-0.8	-9.1	4.1	131.291	-0.1	-1.7	3.2	4.96	5.46
	Aug	4.5	228.098	0.0	0.2	3.4	133.593	1.8	23.2	4.4	4.90	5.34
	Sep	4.5	229.505	0.6	7.7	4.1	133.548	-0.0	-0.4	3.7	4.61	4.81
	Oct	4.5	232.794	1.4	18.6	5.9	134.108	0.4	5.1	3.5	3.96	4.53
	Nov	4.4	234.504	0.7	9.2	6.2	133.777	-0.2	-2.9	2.8	4.42	4.83
	Dec	4.3	236.786	1.0	12.3	6.8	133.801	0.0	0.2	2.5	4.39	4.64
1999	Jan	4.3	239.595	1.2	15.2	7.4	134.052	0.2	2.3	2.4	4.34	4.72
	Feb	4.4	243.619	1.7	22.1	8.7	134.509	0.3	4.2	2.9	4.44	5.00
	Mar	4.2	243.395	-0.1	-1.1	8.4	135.147	0.5	5.8	3.1	4.44	5.23
	Apr	4.3	244.748	0.6	6.9	8.0	135.472	0.2	2.9	2.9	4.29	5.18
	May	4.2	247.228	1.0	12.9	8.1	136.215	0.5	6.8	2.9	4.50	5.54
	Jun	4.3	247.028	-0.1	-1.0	7.5	136.639	0.3	3.8	3.9	4.57	5.90
	Jul	4.3	249.468	1.0	12.5	9.4	137.363	0.5	6.5	4.6	4.55	5.79
	Aug	4.2	252.768	1.3	17.1	10.8	137.597	0.2	2.1	3.0	4.72	5.94
	Sep	4.2	252.549	-0.1	-1.0	10.0	137.643	0.0	0.4	3.1	4.68	5.92
	Oct	4.1	252.540	-0.0	-0.0	8.5	138.502	0.6	7.8	3.3	4.86	6.11

# National Economic Trends

		Consumer Price Index					Consumer Price Index less Food and Energy					Producer Price Index Finished Goods			
		Index	Percent change				Index	Percent change				Index	Percent change		
			Monthly/ quarterly	Annual rate	Year ago	Year to date		Monthly/ quarterly	Annual rate	Year ago	Year to date		Monthly/ quarterly	Annual rate	Year ago
1994		148.3			2.6		156.7			2.8		125.5		0.6	
1995		152.5			2.8		161.4			3.0		127.9		1.9	
1996		157.0			2.9		165.8			2.7		131.3		2.6	
1997		160.6			2.3		169.7			2.4		131.8		0.4	
1998		163.1			1.6		173.7			2.3		130.7		-0.9	
1997	1	159.7	0.6	2.5	2.9	2.5	168.3	0.5	2.2	2.5	2.2	132.7	0.1	0.4	2.1
	2	160.2	0.3	1.2	2.3	1.9	169.5	0.7	2.8	2.5	2.5	131.6	-0.9	-3.4	0.4
	3	160.9	0.5	1.9	2.2	1.9	170.1	0.4	1.6	2.3	2.2	131.3	-0.2	-0.8	-0.1
	4	161.7	0.5	1.8	1.9	1.9	171.1	0.5	2.2	2.2	2.2	131.6	0.2	0.7	-0.8
1998	1	162.1	0.2	1.0	1.5	1.0	172.1	0.6	2.4	2.3	2.4	130.5	-0.8	-3.1	-1.7
	2	162.8	0.5	1.8	1.6	1.4	173.2	0.7	2.7	2.2	2.5	130.6	0.0	0.1	-0.8
	3	163.5	0.4	1.6	1.6	1.5	174.2	0.5	2.2	2.4	2.4	130.5	-0.0	-0.1	-0.6
	4	164.2	0.4	1.7	1.5	1.5	175.1	0.6	2.2	2.4	2.4	131.0	0.4	1.4	-0.4
1999	1	164.8	0.4	1.5	1.7	1.5	175.8	0.4	1.6	2.2	1.6	131.4	0.3	1.3	0.7
	2	166.2	0.9	3.5	2.1	2.5	176.9	0.6	2.4	2.1	2.0	132.3	0.7	2.8	1.4
	3	167.3	0.6	2.6	2.3	2.5	177.6	0.4	1.7	2.0	1.9	133.5	0.9	3.7	2.3
1997	Oct	161.5	0.1	1.5	2.0	1.8	170.8	0.2	2.9	2.2	2.2	131.8	0.1	0.9	-0.4
	Nov	161.7	0.1	1.5	1.9	1.8	171.0	0.1	1.4	2.2	2.1	131.5	-0.2	-2.7	-0.8
	Dec	161.8	0.1	0.7	1.7	1.7	171.4	0.2	2.8	2.2	2.2	131.4	-0.1	-0.9	-1.2
1998	Jan	162.0	0.1	1.5	1.6	1.5	171.7	0.2	2.1	2.3	2.1	130.6	-0.6	-7.1	-1.8
	Feb	162.1	0.1	0.7	1.4	1.1	172.2	0.3	3.6	2.3	2.8	130.5	-0.1	-0.9	-1.7
	Mar	162.1	0.0	0.0	1.4	0.7	172.4	0.1	1.4	2.2	2.4	130.5	0.0	0.0	-1.5
	Apr	162.5	0.2	3.0	1.5	1.3	172.9	0.3	3.5	2.2	2.6	130.7	0.2	1.9	-0.9
	May	162.9	0.2	3.0	1.7	1.6	173.3	0.2	2.8	2.2	2.7	130.6	-0.1	-0.9	-0.8
	Jun	163.0	0.1	0.7	1.7	1.5	173.5	0.1	1.4	2.2	2.5	130.4	-0.2	-1.8	-0.7
	Jul	163.3	0.2	2.2	1.7	1.6	173.8	0.2	2.1	2.2	2.4	130.7	0.2	2.8	-0.2
	Aug	163.5	0.1	1.5	1.6	1.6	174.2	0.2	2.8	2.5	2.5	130.3	-0.3	-3.6	-0.8
	Sep	163.6	0.1	0.7	1.4	1.5	174.5	0.2	2.1	2.4	2.4	130.6	0.2	2.8	-0.8
	Oct	163.9	0.2	2.2	1.5	1.6	174.8	0.2	2.1	2.3	2.4	131.0	0.3	3.7	-0.6
	Nov	164.2	0.2	2.2	1.5	1.6	175.0	0.1	1.4	2.3	2.3	130.7	-0.2	-2.7	-0.6
	Dec	164.4	0.1	1.5	1.6	1.6	175.6	0.3	4.2	2.5	2.5	131.3	0.5	5.7	-0.1
1999	Jan	164.6	0.1	1.5	1.6	1.5	175.7	0.1	0.7	2.3	0.7	131.7	0.3	3.7	0.8
	Feb	164.7	0.1	0.7	1.6	1.1	175.8	0.1	0.7	2.1	0.7	131.1	-0.5	-5.3	0.5
	Mar	165.0	0.2	2.2	1.8	1.5	176.0	0.1	1.4	2.1	0.9	131.5	0.3	3.7	0.8
	Apr	166.2	0.7	9.1	2.3	3.3	176.7	0.4	4.9	2.2	1.9	132.2	0.5	6.6	1.1
	May	166.2	0.0	0.0	2.0	2.6	176.9	0.1	1.4	2.1	1.8	132.4	0.2	1.8	1.4
	Jun	166.2	0.0	0.0	2.0	2.2	177.0	0.1	0.7	2.0	1.6	132.4	0.0	0.0	1.5
	Jul	166.7	0.3	3.7	2.1	2.4	177.3	0.2	2.1	2.0	1.7	132.6	0.2	1.8	1.5
	Aug	167.2	0.3	3.7	2.3	2.6	177.5	0.1	1.4	1.9	1.6	133.3	0.5	6.5	2.3
	Sep	167.9	0.4	5.1	2.6	2.8	178.1	0.3	4.1	2.1	1.9	134.7	1.1	13.4	3.1
	Oct	168.2	0.2	2.2	2.6	2.8	178.4	0.2	2.0	2.1	1.9	134.5	-0.1	-1.8	2.7

## Notes

**Pages 4, 5: Final sales** is gross domestic product (GDP) minus change in private inventories. **Advance, preliminary, and final GDP growth rates** are released during the first, second, and third months of the following quarter. Changes result from incorporation of more complete information. Beginning with the **comprehensive revision**, which was released with the advance third-quarter GDP report on Oct. 28, 1999, real GDP is measured in 1996 dollars. The **Purchasing Managers' Index** is a weighted average of diffusion indexes for new orders, production, supplier deliveries, inventories, and employment. The National Association of Purchasing Management (NAPM) surveys over 300 firms in 20 manufacturing industries, weighting responses by industry share of GDP. **Aggregate and average weekly hours** are paid hours of production and nonsupervisory employees. The inventory-sales ratio uses nominal (current-dollar) inventory and sales data.

**Page 6:** The **contribution** of a component  $X_t$  to the overall GDP growth rate in quarter  $t$  is  $100 \times [(1 + (X_t - X_{t-1})/GDP_{t-1})^4 - 1]$ . The sign is changed for **imports**. This calculation forces components to add up to the GDP growth rate before compounding and does not exactly match *Survey of Current Business*, Table 8.2. The **residual** line is calculated using the finest level of detail in the table.

**Page 7:** Ten-year **Treasury yields** are adjusted to constant maturity. Three-month yields are secondary market averages, but all rates used in the yield curves are adjusted to constant maturity. **Standard and Poor's 500 Index with Reinvested Dividends** shows the total return: capital gains plus dividends.

**Pages 8,9: Oil prices** are monthly averages of daily spot prices for West Texas intermediate crude (*Wall Street Journal*). **Consumer price index** is for all urban consumers. The **consumption chain price index** is the index associated with the personal consumption expenditures component of GDP. The **Employment Cost Index (ECI)** covers private nonfarm employers. **ECI compensation** refers to a fixed sample of jobs, while **compensation per hour** covers all workers in the non-farm business sector in a given quarter. In both cases, **compensation** is wages and salaries plus benefits.

**Pages 10,11: Nonfarm payroll employment** is counted in a survey of about 390,000 establishments (Current Employment Survey). It excludes self-employed individuals and workers in private households, but double-counts individuals with more than one job. The **household survey** (Current Population Survey) of about 50,000 households provides estimates of civilian employment, unemployment rate, labor force participation rate, and employment-population ratio. **Population** is civilian, noninstitutional, 16 years and over. New population controls introduced in January 1997 affect levels and growth rates of household survey employment, labor force and population. The unemployment rate and other ratios are minimally affected. 90 percent confidence intervals for the unemployment rate ( $\pm 0.2$  percentage points) and change in household survey employment ( $\pm 376,000$ ) measure uncertainty due to sample size. The household survey was changed in January 1994, so care should be exercised in making short-term comparisons around this date, particularly with the duration data shown on page 10. Other changes in the survey are detailed in Bureau of Labor Statistics, *Employment and Earnings*, Appendix A.

**Pages 13:** The **Michigan consumer sentiment index** shows changes in a summary measure of consumers' answers to five questions about their current and expected financial situation, expectations about future economic conditions, and attitudes about making large purchases. The survey is based on a representative sample of U.S. households.

**Pages 14, 15:** Overall **gross saving** includes government saving, which is the sum of the government surplus and capital consumption (see notes for pages 16 and 17). **Net foreign investment (NFI)** is U.S. investment abroad minus foreign investment in the U.S. Aside from a statistical discrepancy, NFI also equals the difference between gross domestic investment and saving. The comprehensive revision introduced the **equipment & software** component of business investment.

**Pages 16, 17: Government consumption and investment** is current expenditures on goods and services, including capital consumption (depreciation) and gross investment, as reported in the National Income and Product Accounts (NIPA). The **unified federal budget deficit** differs from **NIPA basis** in four main ways: (1) NIPA excludes transactions involving existing assets; (2) NIPA outlays exclude government investment and include consumption of government capital, while unified budget outlays do the reverse; (3) NIPA accounts exclude Puerto Rico and U.S. territories; and (4) various timing issues are handled differently. **Outlays and receipts** are from the NIPAs, except as noted. Since 1977, the federal **fiscal year** starts on October 1. Excluded agency debt was 0.6 percent of federal debt at the end of fiscal 1997. **Federal debt held by the public** includes holdings of the Federal Reserve System and excludes holdings of the social security and other federal trust funds. Federal grants in aid to state and local governments appear in both state and local receipts and federal outlays.

**Pages 18, 19:** The **trade balance** (shown on a balance of payments basis) is the difference between exports and imports of goods (merchandise) and services. It is nearly identical in concept to the **net exports** component of GDP, but differs slightly in accounting details. The **investment income balance** equals income received from U.S.-owned assets in other countries minus income paid on foreign-owned assets in the U.S. The investment income balance is nearly identical in concept to the difference between gross national product and gross domestic product, but differs in accounting details. The **current account balance** is the trade balance plus the balance on investment income plus net unilateral transfers to the U.S. from other countries.

**Pages 20, 21: Output per hour (Y/H), unit labor cost (C/Y), and compensation per hour (C/H)** are indexes which approximately obey the following relationship:  $\%(Y/H) + \%(C/Y) = \%(C/H)$  with  $\%$  meaning percent changes. Unit labor cost is shown on page 9. **Real compensation per hour** uses the CPI to adjust for the effects of inflation. **Multifactor productivity** estimates changes in output that do not correspond to changes in quantities of labor, capital, or intermediate inputs. **Inventory valuation adjustments (IVA)** remove the effect of changes in the value of existing inventories from corporate profits and proprietors' income. (This change in value does not correspond to current production and therefore is not part of GDP). **Capital consumption adjustments (CCAdj)** increase profits and proprietors' income by the difference between estimates of economic depreciation and depreciation allowed by the tax code. Components of national income not shown are rental income of persons and net interest.

## Sources

*Bureau of Economic Analysis (BEA), U.S. Dept. of Commerce*

National income and product accounts, international trade and investment data (except by country), auto and light truck sales

*Census Bureau, U.S. Dept. of Commerce*

Inventory-sales ratios, retail sales, capital goods orders, housing starts, exports and imports by country

*Bureau of Labor Statistics (BLS), U.S. Dept. of Labor*

All employment-related data, employment cost index, consumer and producer price indexes, unit labor cost, output per hour, compensation per hour, multifactor productivity

*United States Department of Treasury*

Unified budget receipts, outlays, deficit, debt

*Federal Reserve Board*

Index of industrial production, treasury yields, exchange rates, capacity utilization, household debt

*The Survey Research Center, The University of Michigan*

Consumer sentiment index

*The Conference Board*

Help-wanted advertising index

*Organization for Economic Cooperation and Development (OECD)*

GDP for major trading partners (not available on FRED)