



National Economic Trends



Two Questionable Conclusions Concerning The Employment- Productivity Link

Civilian employment did not regain its peak of May 1990 until February 1993, the slowest recovery in the post-World War II period. During the seven quarters since the recession trough in early 1991, however, productivity, measured by business sector output per hour, rose at a 2.8 percent annual rate, the fastest seven-quarter pace since the cyclical rebound after the 1973-75 recession. These two unusual developments have fostered two questionable conclusions: rapid productivity growth has reduced demand for workers and employment, and recent productivity gains are a normal cyclical development and are therefore transitory.

Productivity influences the demand for labor. If employers boost productivity, the contribution to profit from hiring additional workers is enhanced; competition among firms raises real wages and perhaps employment. Thus relatively weak employment typically is not consistent with increased productivity. There is an exception to this conclusion, however. If for some reason real wages are pushed up, employers will reduce the quantity of labor until the productivity of remaining workers matches the higher real wage. In this event, real wages would exhibit an unusually large rise.

In the seven quarters from the recession trough to the end of 1992, real compensation per hour (real wage) for the business sector rose at a 1.7 percent annual rate, slower than productivity growth (2.8 percent) and slower than the average rate of real wage increase (2 percent) in the seven quarters after the six previous recessions (excluding the 1980 recession). Moreover, the 1.1 percentage point excess of recent productivity growth over real wage growth matches the average in these earlier periods. Thus real wages have not risen enough to account for the recent weak employment.

The second questionable conclusion is that recent productivity growth reflects a cyclical improvement. Productivity typically falls when the unemployment rate rises in recessions, and it rises when the unemployment rate falls. For example, during the earlier seven-quarter expansion periods, productivity rose at an average 3.1 percent rate, while the unemployment rate fell by an average of 1.6 percentage points. If productivity followed only a cyclical pattern, productivity would have fallen over the most recent seven-quarter period because the unemployment rate climbed 0.8 percentage points.

If real GDP recently had grown at the 5 percent rate that it averaged in the previous seven-quarter periods instead of at a 2.3 percent rate, employment growth would have been stronger and the unemployment rate would have declined to about 5.2 percent—the lowest level since mid-1989. This is indicated by the historical relation of output growth to the unemployment rate. Furthermore, productivity would have risen even faster.

—John A. Tatom

Views expressed do not necessarily reflect official positions of the Federal Reserve System.

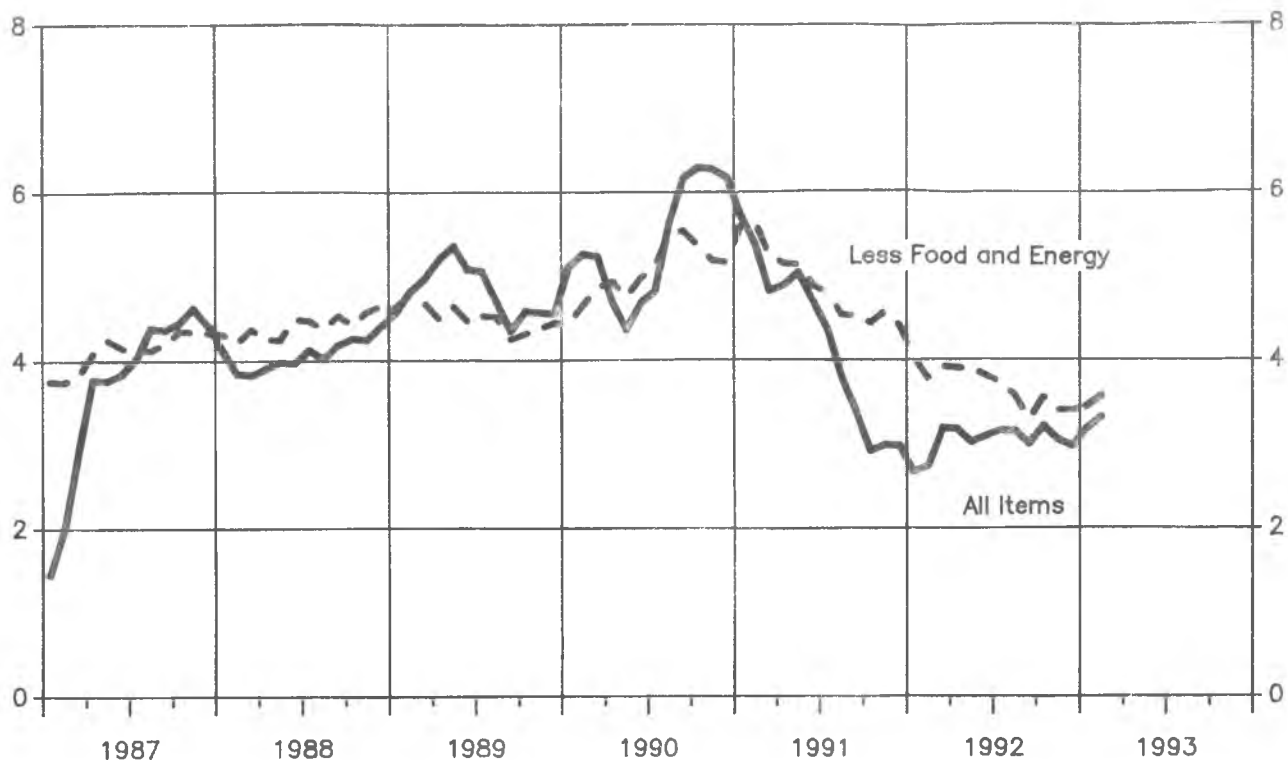
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Consumer Price Index – All Urban Consumers

Percent Change From Previous Year
Seasonally Adjusted

Percent

Percent



Prepared by Federal Reserve Bank of St. Louis

Consumer Price Index

(Compounded Annual Rates of Change)

Terminal Month	Initial Month																			1982-84=100
	7-91	8-91	9-91	10-91	11-91	12-91	1-92	2-92	3-92	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92	1-93	
8-91	2.7																			136.6
9-91	3.1	3.6																		137.0
10-91	3.0	3.1	2.7																	137.3
11-91	3.3	3.6	3.6	4.5																137.8
12-91	3.2	3.3	3.3	3.5	2.6															138.1
1-92	3.3	3.4	3.3	3.5	3.1	3.5														138.5
2-92	3.2	3.2	3.2	3.3	2.9	3.1	2.6													138.8
3-92	3.3	3.4	3.4	3.5	3.3	3.5	3.5	4.4												139.3
4-92	3.3	3.4	3.4	3.5	3.3	3.5	3.5	4.0	3.5											139.7
5-92	3.2	3.2	3.2	3.3	3.1	3.2	3.1	3.2	2.6	1.7										139.9
6-92	3.1	3.2	3.1	3.2	3.0	3.1	3.0	3.1	2.6	2.2	2.6									140.2
7-92	3.2	3.2	3.2	3.2	3.1	3.1	3.1	3.1	2.8	2.6	3.0	3.5								140.6
8-92	3.1	3.1	3.1	3.2	3.0	3.1	3.0	3.0	2.8	2.6	2.9	3.0	2.6							140.9
9-92	3.0	3.0	3.0	3.0	2.9	2.9	2.8	2.9	2.6	2.4	2.6	2.6	2.2	1.7						141.1
10-92	3.2	3.2	3.2	3.2	3.1	3.1	3.1	3.2	3.0	2.9	3.1	3.2	3.2	3.5	5.2					141.7
11-92	3.1	3.2	3.1	3.2	3.0	3.1	3.0	3.1	2.9	2.8	3.0	3.1	3.0	3.2	3.9	2.6				142.0
12-92	3.0	3.1	3.0	3.1	2.9	3.0	2.9	2.9	2.8	2.7	2.8	2.9	2.8	2.8	3.2	2.1	1.7			142.2
1-93	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.1	3.1	3.2	3.3	3.3	3.4	3.9	3.4	3.9	6.1		142.9
2-93	3.3	3.3	3.3	3.3	3.2	3.3	3.3	3.3	3.2	3.2	3.3	3.4	3.4	3.6	4.0	3.6	4.0	5.2	4.3	143.4
	7-91	8-91	9-91	10-91	11-91	12-91	1-92	2-92	3-92	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92	1-93	

Prepared by Federal Reserve Bank of St. Louis
March 17, 1993

Consumer Price Index - Food

(Compounded Annual Rates of Change)

Terminal Month	Initial Month																		1982-84=100
	7-91	8-91	9-91	10-91	11-91	12-91	1-92	2-92	3-92	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92	1-93
8-91	-5.1																		136.1
9-91	-2.6	0.0																	136.1
10-91	-1.7	0.0	0.0																136.1
11-91	0.2	2.1	3.1	6.3															136.8
12-91	0.9	2.4	3.3	4.9	3.6														137.2
1-92	0.6	1.8	2.2	3.0	1.3	-0.9													137.1
2-92	1.0	2.1	2.5	3.1	2.1	1.3	3.6												137.5
3-92	1.4	2.4	2.8	3.4	2.7	2.4	4.0	4.5											138.0
4-92	1.4	2.2	2.5	3.0	2.3	2.0	2.9	2.6	0.9										138.1
5-92	0.7	1.4	1.5	1.8	1.0	0.5	0.9	0.0	-2.2	-5.1									137.5
6-92	0.7	1.3	1.5	1.7	1.0	0.6	0.9	0.2	-1.2	-2.2	0.9								137.6
7-92	0.6	1.1	1.2	1.4	0.8	0.4	0.6	0.0	-1.1	-1.7	0.0	-0.9							137.5
8-92	1.1	1.6	1.8	1.9	1.5	1.2	1.5	1.2	0.5	0.4	2.3	3.1	7.2						138.3
9-92	1.3	1.8	1.9	2.1	1.7	1.5	1.8	1.5	1.0	1.0	2.6	3.2	5.4	3.5					138.7
10-92	1.2	1.6	1.8	1.9	1.5	1.3	1.6	1.3	0.9	0.9	2.1	2.4	3.5	1.7	0.0				138.7
11-92	1.1	1.6	1.7	1.8	1.5	1.3	1.5	1.3	0.9	0.9	1.9	2.1	2.9	1.5	0.4	0.9			138.8
12-92	1.3	1.7	1.8	1.9	1.6	1.5	1.7	1.5	1.2	1.2	2.1	2.3	3.0	2.0	1.4	2.2	3.5		139.2
1-93	1.5	1.9	2.0	2.1	1.8	1.7	1.9	1.7	1.5	1.5	2.4	2.6	3.2	2.4	2.2	2.9	4.0	4.4	139.7
2-93	1.5	1.9	2.0	2.1	1.8	1.7	1.9	1.7	1.5	1.6	2.3	2.5	3.0	2.3	2.1	2.6	3.2	3.1	139.9
7-91	8-91	9-91	10-91	11-91	12-91	1-92	2-92	3-92	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92	1-93	

Prepared by Federal Reserve Bank of St. Louis
March 17, 1993

Consumer Price Index - Energy

(Compounded Annual Rates of Change)

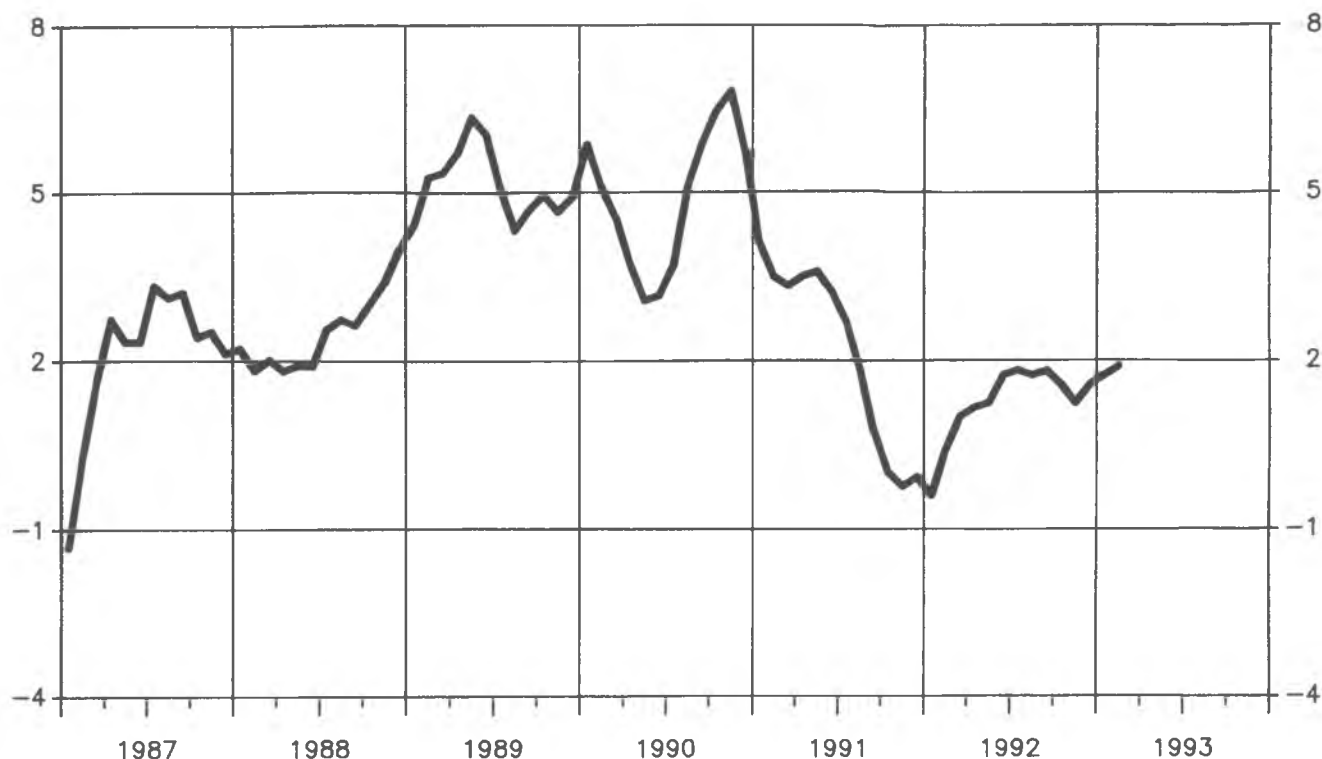
Terminal Month	Initial Month																			1982-84=100
	7-91	8-91	9-91	10-91	11-91	12-91	1-92	2-92	3-92	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92	1-93	
8-91	3.6																			100.9
9-91	3.0	2.4																		101.1
10-91	2.4	1.8	1.2																	101.2
11-91	2.7	2.4	2.4	3.6																101.5
12-91	3.4	3.3	3.6	4.8	6.1															102.0
1-92	1.0	0.5	0.0	-0.4	-2.3	-10.1														101.1
2-92	0.2	-0.4	-0.9	-1.5	-3.1	-7.4	-4.6													100.7
3-92	0.6	0.2	-0.2	-0.5	-1.5	-3.9	-0.6	3.6												101.0
4-92	0.9	0.6	0.3	0.2	-0.5	-2.0	0.8	3.6	3.6											101.3
5-92	1.4	1.2	1.0	1.0	0.6	-0.5	2.1	4.4	4.8	6.1										101.8
6-92	2.7	2.6	2.6	2.8	2.7	2.2	4.8	7.3	8.6	11.1	16.4									103.1
7-92	3.2	3.1	3.2	3.4	3.4	3.0	5.4	7.5	8.5	10.2	12.4	8.5								103.8
8-92	2.6	2.5	2.5	2.6	2.5	2.1	3.9	5.4	5.8	6.3	6.4	1.8	-4.5							103.4
9-92	2.4	2.3	2.3	2.4	2.3	1.8	3.4	4.6	4.8	5.0	4.8	1.2	-2.3	0.0						103.4
10-92	2.6	2.5	2.6	2.7	2.6	2.2	3.7	4.8	5.0	5.2	5.0	2.3	0.4	2.9	6.0					103.9
11-92	2.6	2.5	2.5	2.6	2.6	2.2	3.6	4.5	4.6	4.8	4.6	2.3	0.9	2.7	4.1	2.3				104.1
12-92	2.3	2.2	2.2	2.3	2.2	1.9	3.0	3.8	3.8	3.9	3.6	1.6	0.2	1.5	1.9	0.0	-2.3			103.9
1-93	2.5	2.4	2.4	2.5	2.4	2.2	3.3	4.0	4.1	4.1	3.9	2.2	1.2	2.3	2.9	1.9	1.7	5.9		104.4
2-93	2.1	2.0	2.0	2.1	2.0	1.7	2.6	3.3	3.2	3.2	2.9	1.3	0.3	1.2	1.4	0.3	-0.4	0.6	-4.5	104.0
	7-91	8-91	9-91	10-91	11-91	12-91	1-92	2-92	3-92	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92	1-93	

Prepared by Federal Reserve Bank of St. Louis
March 17, 1993

Percent Change From Previous Year
Seasonally Adjusted

Percent

Percent



Prepared by Federal Reserve Bank of St. Louis

(Compounded Annual Rates of Change)

Terminal Month	Initial Month																		1982 = 100	
	7-91	8-91	9-91	10-91	11-91	12-91	1-92	2-92	3-92	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92		1-93
8-91	2.0																			121.5
9-91	2.0	2.0																		121.7
10-91	2.3	2.5	3.0																	122.0
11-91	2.2	2.3	2.5	2.0																122.2
12-91	1.2	1.0	0.7	-0.5	-2.9															121.9
1-92	1.0	0.8	0.5	-0.3	-1.5	0.0														121.9
2-92	1.3	1.2	1.0	0.5	0.0	1.5	3.0													122.2
3-92	1.5	1.4	1.3	1.0	0.7	2.0	3.0	3.0												122.5
4-92	1.7	1.6	1.6	1.3	1.2	2.2	3.0	3.0	3.0											122.8
5-92	1.9	1.9	1.9	1.7	1.6	2.6	3.2	3.3	3.5	4.0										123.2
6-92	2.0	2.0	2.0	1.8	1.8	2.6	3.2	3.2	3.3	3.5	3.0									123.5
7-92	1.8	1.8	1.8	1.6	1.6	2.3	2.6	2.6	2.5	2.3	1.5	0.0								123.5
8-92	1.7	1.7	1.7	1.6	1.5	2.1	2.4	2.3	2.2	2.0	1.3	0.5	1.0							123.6
9-92	1.8	1.8	1.8	1.7	1.7	2.2	2.5	2.4	2.3	2.2	1.7	1.3	2.0	3.0						123.9
10-92	1.7	1.7	1.7	1.6	1.5	2.0	2.2	2.1	2.0	1.8	1.4	1.0	1.3	1.5	0.0					123.9
11-92	1.5	1.4	1.4	1.3	1.2	1.6	1.8	1.6	1.5	1.3	0.8	0.4	0.5	0.3	-1.0	-1.9				123.7
12-92	1.5	1.4	1.4	1.3	1.2	1.6	1.7	1.6	1.4	1.2	0.8	0.5	0.6	0.5	-0.3	-0.5	1.0			123.8
1-93	1.5	1.4	1.4	1.3	1.3	1.6	1.7	1.6	1.5	1.3	1.0	0.7	0.8	0.8	0.2	0.3	1.5	2.0		124.0
2-93	1.7	1.6	1.6	1.5	1.5	1.8	2.0	1.9	1.8	1.7	1.4	1.2	1.4	1.5	1.2	1.5	2.6	3.4	4.9	124.5
	7-91	8-91	9-91	10-91	11-91	12-91	1-92	2-92	3-92	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92	1-93	

7-91 8-91 9-91 10-91 11-91 12-91 1-92 2-92 3-92 4-92 5-92 6-92 7-92 8-92 9-92 10-92 11-92 12-92 1-93

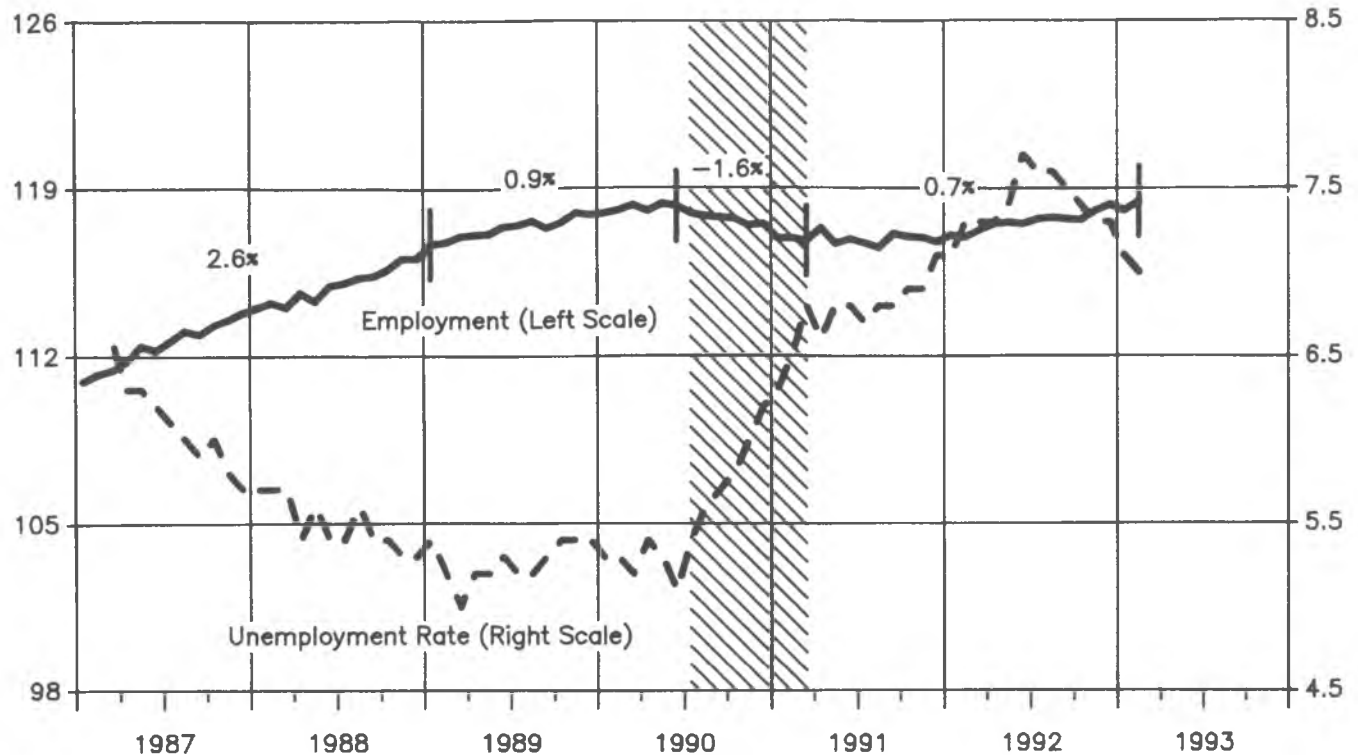
Prepared by Federal Reserve Bank of St. Louis
March 12, 1993

Civilian Employment and Unemployment Rate

Seasonally Adjusted

Millions of Persons

Percent



Prepared by Federal Reserve Bank of St. Louis

Civilian Employment

(Compounded Annual Rates of Change)

Terminal Month	Initial Month																			Thousands of Persons
	7-91	8-91	9-91	10-91	11-91	12-91	1-92	2-92	3-92	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92	1-93	
8-91	-1.9																			116,522
9-91	2.1	6.2																		117,108
10-91	0.9	2.4	-1.3																	116,980
11-91	0.6	1.4	-0.9	-0.5																116,932
12-91	0.1	0.6	-1.2	-1.2	-1.8															116,752
1-92	0.6	1.1	-0.2	0.2	0.5	3.0														117,036
2-92	0.4	0.8	-0.3	0.0	0.1	1.1	-0.8													116,962
3-92	0.7	1.1	0.3	0.6	0.9	1.8	1.2	3.1												117,264
4-92	0.9	1.3	0.6	0.9	1.2	2.0	1.7	2.9	2.6											117,518
5-92	0.9	1.2	0.6	0.9	1.1	1.7	1.4	2.1	1.6	0.6										117,580
6-92	0.7	1.0	0.5	0.7	0.8	1.3	1.0	1.4	0.8	0.0	-0.7									117,510
7-92	0.9	1.1	0.6	0.8	1.0	1.4	1.2	1.6	1.2	0.7	0.7	2.2								117,722
8-92	0.8	1.1	0.6	0.8	1.0	1.3	1.1	1.4	1.1	0.7	0.7	1.4	0.6							117,780
9-92	0.7	1.0	0.5	0.7	0.8	1.1	0.9	1.1	0.8	0.4	0.4	0.7	0.0	-0.6						117,724
10-92	0.7	0.9	0.5	0.6	0.7	1.0	0.7	0.9	0.6	0.3	0.2	0.5	-0.1	-0.5	-0.4					117,687
11-92	0.9	1.1	0.7	0.9	1.0	1.2	1.1	1.3	1.0	0.8	0.8	1.1	0.9	1.0	1.7	3.9				118,064
12-92	1.0	1.1	0.8	1.0	1.1	1.3	1.2	1.4	1.2	1.0	1.1	1.4	1.2	1.4	2.0	3.2	2.5			118,311
1-93	0.8	0.9	0.6	0.7	0.8	1.0	0.9	1.0	0.8	0.6	0.6	0.8	0.6	0.6	0.9	1.3	0.0	-2.4		118,071
2-93	0.9	1.1	0.8	0.9	1.0	1.2	1.1	1.3	1.1	1.0	1.0	1.2	1.1	1.1	1.5	2.0	1.3	0.7	3.9	118,451
	7-91	8-91	9-91	10-91	11-91	12-91	1-92	2-92	3-92	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92	1-93	

7-91 8-91 9-91 10-91 11-91 12-91 1-92 2-92 3-92 4-92 5-92 6-92 7-92 8-92 9-92 10-92 11-92 12-92 1-93

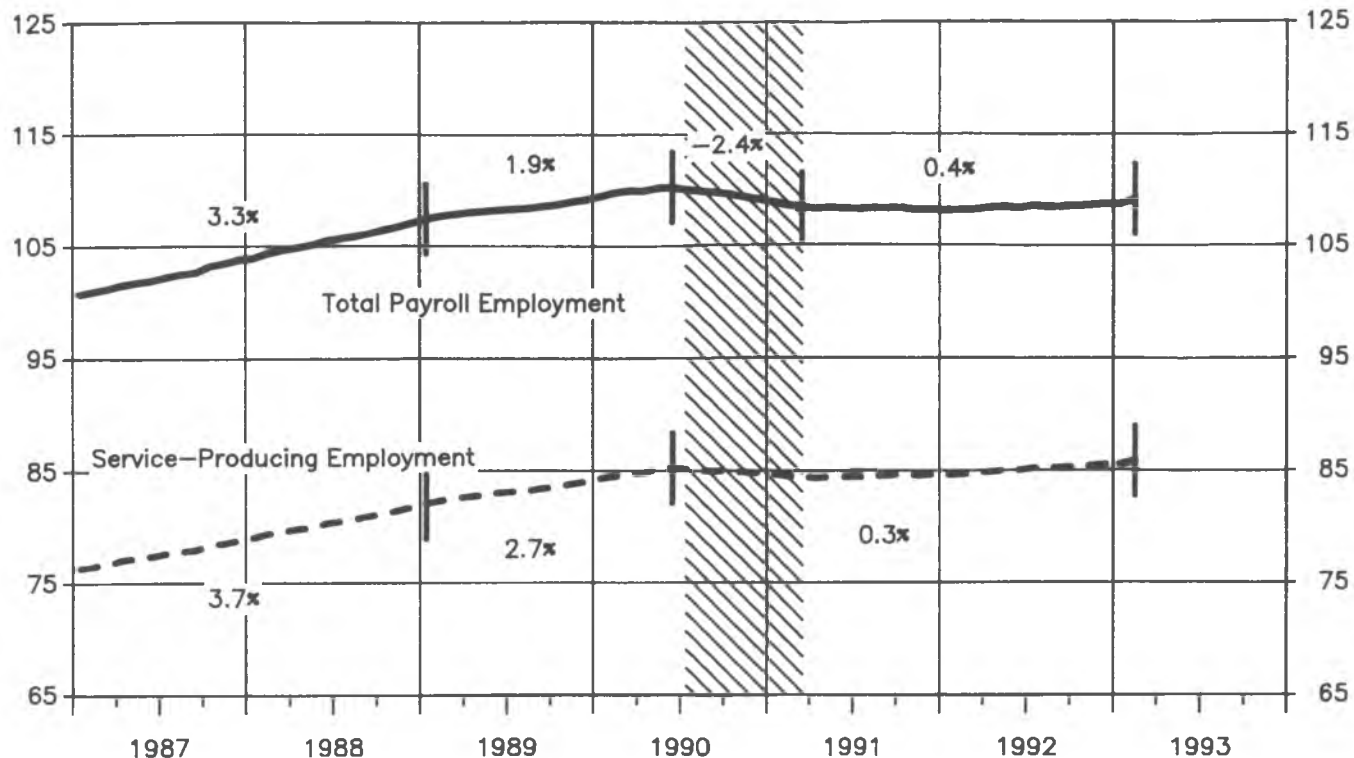
Prepared by Federal Reserve Bank of St. Louis
March 5, 1993

Payroll Employment

Seasonally Adjusted

Millions of Persons

Millions of Persons



Shaded area represents a period of business recession.

Percentages are annual rates of change for periods indicated.

Prepared by Federal Reserve Bank of St. Louis

Payroll Employment

(Compounded Annual Rates of Change)

Terminal Month	Initial Month																			Thousands of Persons
	7-91	8-91	9-91	10-91	11-91	12-91	1-92	2-92	3-92	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92	1-93	
8-91	0.9																			108,267
9-91	0.6	0.3																		108,293
10-91	0.4	0.1	-0.1																	108,285
11-91	-0.1	-0.5	-0.9	-1.6																108,139
12-91	-0.1	-0.3	-0.5	-0.7	0.2															108,154
1-92	-0.2	-0.4	-0.5	-0.7	-0.2	-0.6														108,100
2-92	-0.1	-0.2	-0.3	-0.4	0.0	-0.1	0.5													108,142
3-92	0.0	-0.1	-0.2	-0.2	0.2	0.2	0.6	0.6												108,200
4-92	0.2	0.2	0.1	0.2	0.5	0.6	1.0	1.3	2.0											108,377
5-92	0.3	0.3	0.3	0.3	0.7	0.8	1.1	1.3	1.7	1.3										108,496
6-92	0.2	0.2	0.2	0.2	0.5	0.5	0.7	0.8	0.8	0.3	-0.8									108,423
7-92	0.4	0.3	0.3	0.4	0.6	0.7	0.9	1.0	1.1	0.8	0.5	1.9								108,594
8-92	0.3	0.2	0.2	0.2	0.4	0.5	0.6	0.6	0.6	0.3	0.0	0.3	-1.2							108,485
9-92	0.2	0.2	0.2	0.2	0.4	0.4	0.6	0.6	0.5	0.3	0.0	0.3	-0.5	0.1						108,497
10-92	0.3	0.2	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.4	0.2	0.4	-0.1	0.5	0.8					108,571
11-92	0.3	0.3	0.3	0.3	0.5	0.5	0.6	0.6	0.6	0.4	0.3	0.5	0.1	0.6	0.8	0.8				108,646
12-92	0.4	0.3	0.3	0.4	0.5	0.6	0.7	0.7	0.7	0.5	0.4	0.6	0.3	0.7	0.9	1.0	1.2			108,752
1-93	0.4	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.7	0.5	0.4	0.6	0.4	0.7	0.8	0.8	0.8	0.5		108,796
2-93	0.6	0.5	0.6	0.6	0.8	0.8	0.9	0.9	1.0	0.9	0.8	1.0	0.9	1.3	1.5	1.6	1.9	2.3	4.1	109,161
	7-91	8-91	9-91	10-91	11-91	12-91	1-92	2-92	3-92	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92	1-93	

7-91 8-91 9-91 10-91 11-91 12-91 1-92 2-92 3-92 4-92 5-92 6-92 7-92 8-92 9-92 10-92 11-92 12-92 1-93

Prepared by Federal Reserve Bank of St. Louis
March 5, 1993

Service-Producing Employment

(Compounded Annual Rates of Change)

Terminal Month	Initial Month																				Thousands of Persons
	7-91	8-91	9-91	10-91	11-91	12-91	1-92	2-92	3-92	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92	1-93		
8-91	1.1																			84,476	
9-91	1.0	0.9																		84,538	
10-91	0.9	0.7	0.6																	84,581	
11-91	0.5	0.2	-0.1	-0.8																84,526	
12-91	0.5	0.3	0.2	-0.1	0.6															84,570	
1-92	0.4	0.3	0.1	0.0	0.3	0.0														84,573	
2-92	0.4	0.3	0.2	0.1	0.4	0.3	0.6													84,617	
3-92	0.5	0.4	0.3	0.2	0.5	0.5	0.7	0.7												84,668	
4-92	0.7	0.7	0.6	0.6	0.9	1.0	1.3	1.6	2.6											84,847	
5-92	0.8	0.7	0.7	0.7	1.0	1.1	1.3	1.6	2.0	1.4										84,948	
6-92	0.7	0.7	0.7	0.7	0.9	0.9	1.1	1.2	1.4	0.8	0.1									84,953	
7-92	0.9	0.9	0.8	0.9	1.1	1.1	1.3	1.5	1.7	1.4	1.3	2.6								85,135	
8-92	0.8	0.8	0.8	0.8	0.9	1.0	1.1	1.2	1.3	1.0	0.8	1.2	-0.2							85,123	
9-92	0.8	0.8	0.8	0.8	1.0	1.0	1.1	1.2	1.3	1.0	0.9	1.2	0.5	1.1						85,201	
10-92	0.9	0.8	0.8	0.9	1.0	1.0	1.1	1.2	1.3	1.1	1.0	1.2	0.8	1.3	1.4					85,301	
11-92	0.9	0.8	0.8	0.9	1.0	1.0	1.1	1.2	1.2	1.1	1.0	1.2	0.8	1.1	1.2	0.9				85,366	
12-92	0.9	0.9	0.9	0.9	1.1	1.1	1.2	1.2	1.3	1.1	1.1	1.3	1.0	1.3	1.4	1.3	1.7			85,489	
1-93	0.9	0.9	0.9	0.9	1.0	1.0	1.1	1.2	1.2	1.1	1.0	1.2	0.9	1.2	1.2	1.1	1.2	0.6		85,530	
2-93	1.0	1.0	1.1	1.1	1.2	1.2	1.3	1.4	1.5	1.4	1.3	1.5	1.3	1.6	1.7	1.8	2.1	2.2	3.9	85,801	
	7-91	8-91	9-91	10-91	11-91	12-91	1-92	2-92	3-92	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92	1-93		

Prepared by Federal Reserve Bank of St. Louis
March 5, 1993

Goods-Producing Employment

(Compounded Annual Rates of Change)

Terminal Month	Initial Month																				Thousands of Persons
	7-91	8-91	9-91	10-91	11-91	12-91	1-92	2-92	3-92	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92	1-93		
8-91	-0.1																			23,791	
9-91	-0.9	-1.8																		23,755	
10-91	-1.5	-2.2	-2.5																	23,704	
11-91	-2.2	-3.0	-3.5	-4.5																23,613	
12-91	-2.1	-2.6	-2.8	-3.0	-1.5															23,584	
1-92	-2.2	-2.6	-2.9	-3.0	-2.2	-2.9														23,527	
2-92	-1.9	-2.2	-2.3	-2.2	-1.5	-1.5	-0.1													23,525	
3-92	-1.6	-1.9	-1.9	-1.7	-1.0	-0.9	0.1	0.4												23,532	
4-92	-1.5	-1.6	-1.6	-1.5	-0.8	-0.7	0.1	0.1	-0.1											23,530	
5-92	-1.2	-1.4	-1.3	-1.1	-0.5	-0.4	0.3	0.4	0.4	0.9										23,548	
6-92	-1.5	-1.6	-1.6	-1.5	-1.0	-1.0	-0.6	-0.7	-1.0	-1.5	-3.9									23,470	
7-92	-1.4	-1.5	-1.5	-1.4	-1.0	-0.9	-0.6	-0.7	-0.9	-1.2	-2.2	-0.6								23,459	
8-92	-1.7	-1.8	-1.8	-1.7	-1.4	-1.4	-1.2	-1.4	-1.7	-2.1	-3.1	-2.7	-4.9							23,362	
9-92	-1.8	-1.9	-1.9	-1.9	-1.6	-1.6	-1.5	-1.7	-2.0	-2.4	-3.2	-2.9	-4.1	-3.3						23,296	
10-92	-1.8	-1.9	-1.9	-1.8	-1.6	-1.6	-1.5	-1.6	-1.9	-2.2	-2.8	-2.5	-3.2	-2.3	-1.3					23,270	
11-92	-1.6	-1.7	-1.7	-1.7	-1.4	-1.4	-1.3	-1.4	-1.6	-1.8	-2.3	-1.9	-2.3	-1.4	-0.4	0.5				23,280	
12-92	-1.6	-1.7	-1.7	-1.6	-1.4	-1.4	-1.2	-1.3	-1.5	-1.7	-2.1	-1.8	-2.0	-1.3	-0.6	-0.2	-0.9			23,263	
1-93	-1.5	-1.6	-1.5	-1.5	-1.3	-1.2	-1.1	-1.2	-1.4	-1.5	-1.8	-1.5	-1.6	-1.0	-0.4	-0.1	-0.4	0.2		23,266	
2-93	-1.2	-1.2	-1.2	-1.1	-0.9	-0.8	-0.7	-0.7	-0.8	-0.9	-1.1	-0.7	-0.7	0.0	0.7	1.2	1.4	2.5	5.0	23,360	
	7-91	8-91	9-91	10-91	11-91	12-91	1-92	2-92	3-92	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92	1-93		

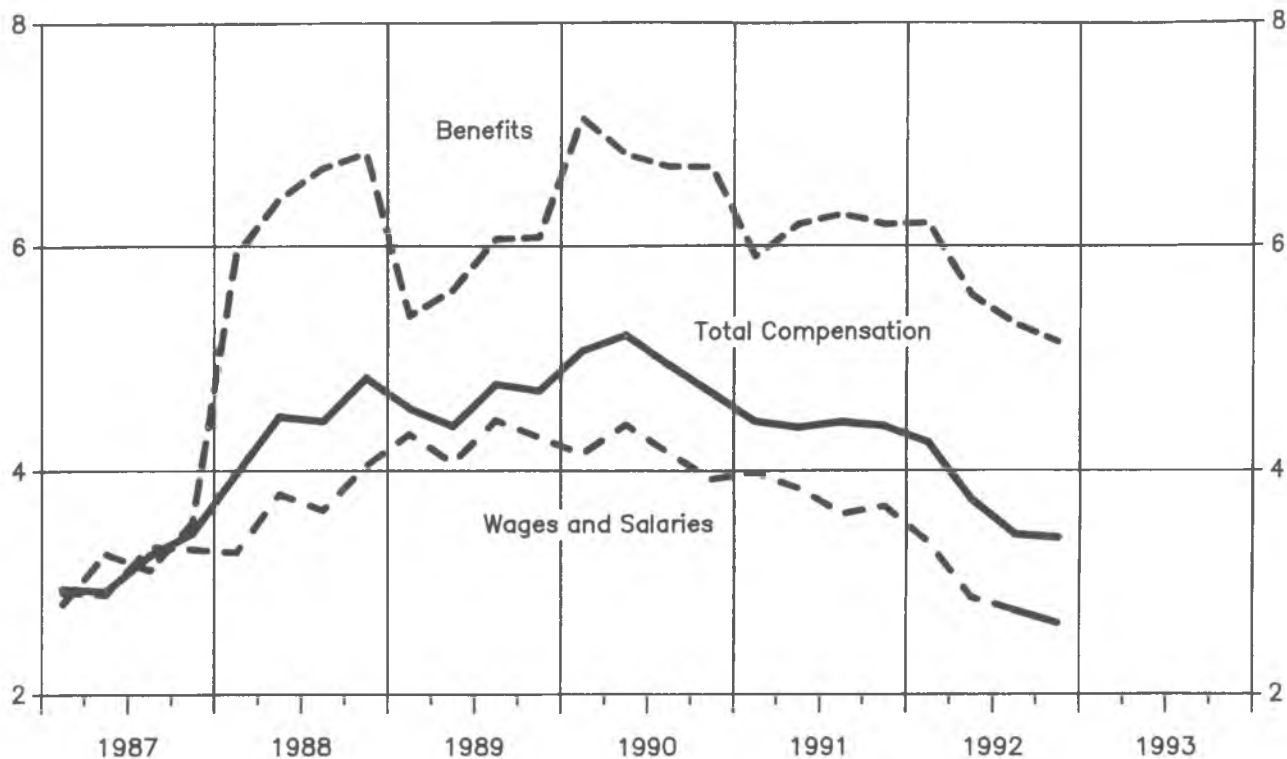
Prepared by Federal Reserve Bank of St. Louis
March 5, 1993

Change in the Employment Cost Index and Its Components

Percent

Percent Change From Previous Year
Seasonally Adjusted

Percent



Total compensation is the sum of benefits and wages and salaries for private industry workers.

Prepared by Federal Reserve Bank of St. Louis

Employment Cost Index - Total Compensation.

(Compounded Annual Rates of Change)

Terminal Quarter	Initial Quarter																			June 1989 = 100
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92	
2-88	5.2																			95.7
3-88	4.5	3.8																		96.6
4-88	4.7	4.4	5.1																	97.8
1-89	4.6	4.3	4.6	4.2																98.8
2-89	4.5	4.4	4.6	4.3	4.5															99.9
3-89	4.7	4.6	4.8	4.7	4.9	5.3														101.2
4-89	4.7	4.6	4.8	4.7	4.9	5.1	4.8													102.4
1-90	4.8	4.8	4.9	4.9	5.1	5.2	5.2	5.6												103.8
2-90	4.8	4.8	4.9	4.9	5.1	5.2	5.2	5.3	5.1											105.1
3-90	4.8	4.7	4.9	4.8	4.9	5.0	4.9	5.0	4.7	4.3										106.2
4-90	4.7	4.6	4.7	4.7	4.8	4.8	4.7	4.7	4.4	4.0	3.8									107.2
1-91	4.7	4.6	4.7	4.7	4.7	4.8	4.7	4.7	4.4	4.2	4.2	4.6								108.4
2-91	4.7	4.7	4.7	4.7	4.8	4.8	4.7	4.7	4.5	4.4	4.4	4.7	4.9							109.7
3-91	4.7	4.6	4.7	4.7	4.7	4.8	4.7	4.7	4.5	4.4	4.4	4.6	4.7	4.4						110.9
4-91	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.5	4.4	4.3	4.3	4.4	4.3	4.1	3.7					111.9
1-92	4.6	4.5	4.6	4.5	4.6	4.6	4.5	4.5	4.3	4.2	4.2	4.3	4.2	4.0	3.8	4.0				113.0
2-92	4.5	4.4	4.5	4.4	4.4	4.4	4.4	4.3	4.2	4.1	4.0	4.1	4.0	3.7	3.5	3.4	2.9			113.8
3-92	4.4	4.4	4.4	4.3	4.4	4.3	4.3	4.2	4.1	4.0	3.9	3.9	3.8	3.6	3.4	3.4	3.0	3.2		114.7
4-92	4.4	4.3	4.3	4.3	4.3	4.3	4.2	4.2	4.0	3.9	3.9	3.9	3.8	3.6	3.4	3.4	3.2	3.4	3.5	115.7

1-88 2-88 3-88 4-88 1-89 2-89 3-89 4-89 1-90 2-90 3-90 4-90 1-91 2-91 3-91 4-91 1-92 2-92 3-92

Data are for the last month of quarter.

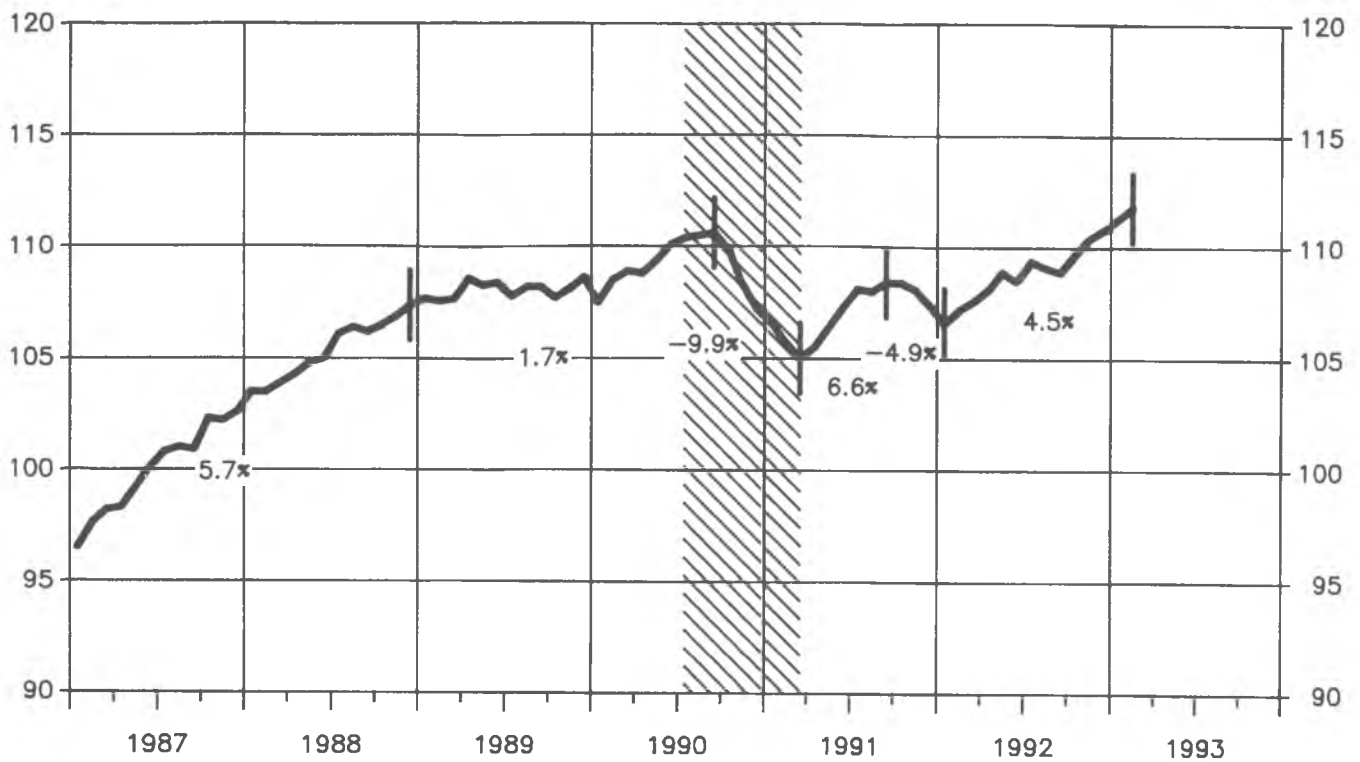
Prepared by Federal Reserve Bank of St. Louis
January 26, 1993

Industrial Production

Seasonally Adjusted

1987=100

1987=100



Prepared by Federal Reserve Bank of St. Louis

Industrial Production

(Compounded Annual Rates of Change)

Terminal Month	Initial Month																			1987 = 100
	7-91	8-91	9-91	10-91	11-91	12-91	1-92	2-92	3-92	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92	1-93	
8-91	-1.1																			108.0
9-91	1.7	4.5																		108.4
10-91	1.1	2.2	0.0																	108.4
11-91	0.0	0.4	-1.6	-3.3																108.1
12-91	-1.5	-1.7	-3.6	-5.4	-7.5															107.4
1-92	-2.8	-3.1	-4.9	-6.5	-8.0	-8.6														106.6
2-92	-1.4	-1.5	-2.6	-3.3	-3.3	-1.1	7.0													107.2
3-92	-0.7	-0.6	-1.5	-1.8	-1.4	0.7	5.8	4.6												107.6
4-92	0.0	0.1	-0.5	-0.6	0.0	2.0	5.7	5.1	5.7											108.1
5-92	0.9	1.1	0.7	0.8	1.5	3.4	6.6	6.5	7.5	9.3										108.9
6-92	0.4	0.6	0.1	0.1	0.6	2.1	4.3	3.7	3.4	2.2	-4.3									108.5
7-92	1.2	1.4	1.1	1.2	1.8	3.2	5.3	5.0	5.1	4.9	2.8	10.4								109.4
8-92	0.9	1.0	0.7	0.8	1.2	2.4	4.1	3.6	3.4	2.8	0.7	3.4	-3.2							109.1
9-92	0.6	0.8	0.5	0.5	0.9	1.9	3.3	2.7	2.4	1.8	0.0	1.5	-2.7	-2.2						108.9
10-92	1.2	1.3	1.1	1.2	1.6	2.6	3.9	3.5	3.4	3.0	1.8	3.4	1.1	3.3	9.2					109.7
11-92	1.6	1.8	1.6	1.7	2.1	3.1	4.3	4.0	3.9	3.7	2.8	4.3	2.8	4.9	8.6	7.9				110.4
12-92	1.8	1.9	1.8	1.9	2.3	3.2	4.3	4.0	4.0	3.8	3.0	4.3	3.1	4.7	7.2	6.2	4.4			110.8
1-93	2.0	2.1	2.0	2.1	2.5	3.3	4.4	4.2	4.1	4.0	3.3	4.5	3.5	4.9	6.8	6.0	5.0	5.6		111.3
2-93	2.1	2.3	2.2	2.3	2.7	3.5	4.5	4.3	4.3	4.1	3.6	4.6	3.8	5.0	6.5	5.9	5.2	5.5	5.5	111.8
	7-91	8-91	9-91	10-91	11-91	12-91	1-92	2-92	3-92	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92	1-93	

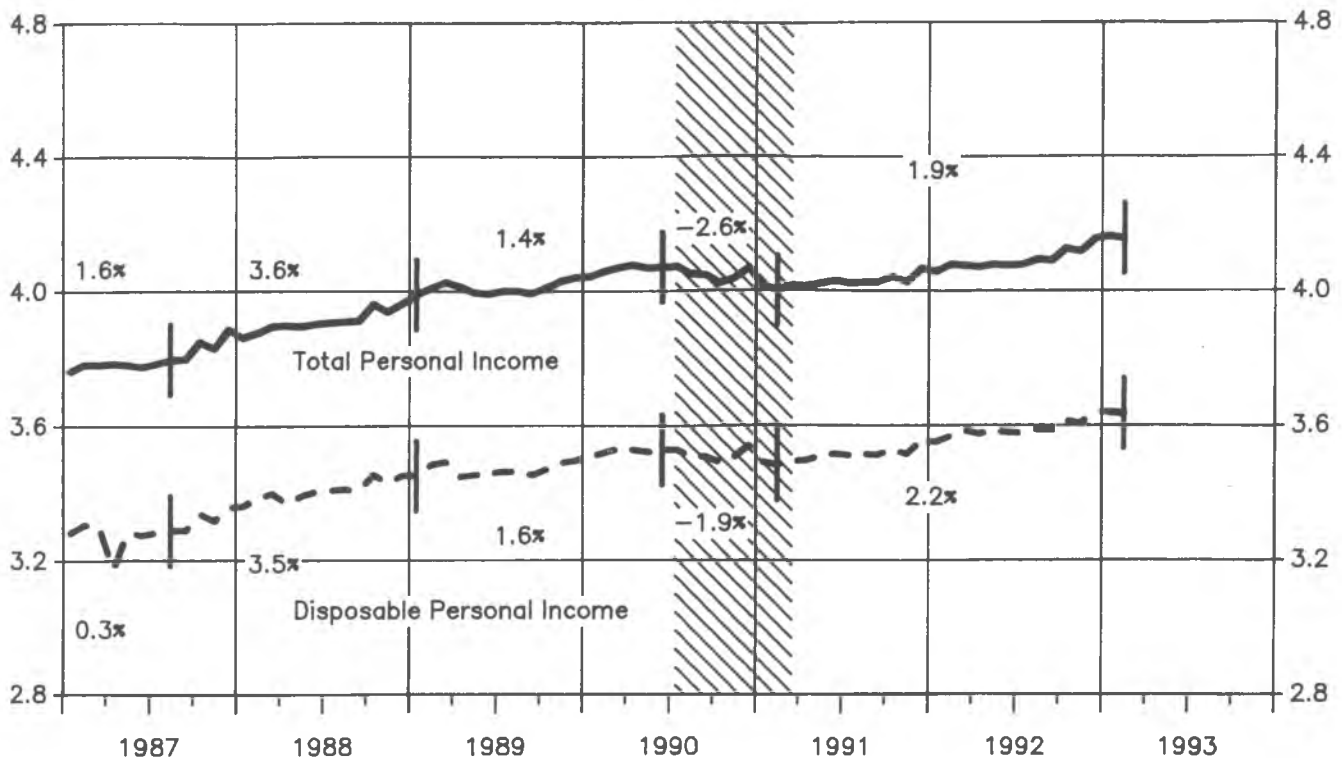
Prepared by Federal Reserve Bank of St. Louis
March 17, 1993

Personal Income in 1987 Dollars

Seasonally Adjusted

Trillions of Dollars

Trillions of Dollars



The personal consumption expenditures deflator is used to calculate real personal income

Shaded area represents a period of business recession.

Percentages are annual rates of change for periods indicated.

Prepared by Federal Reserve Bank of St. Louis

Disposable Personal Income in 1987 Dollars

(Compounded Annual Rates of Change)

Terminal Month	Initial Month																		Billions of Dollars	
	7-91	8-91	9-91	10-91	11-91	12-91	1-92	2-92	3-92	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92	1-93	Annual Rates
8-91	0.8																			3,512.7
9-91	0.2	-0.5																		3,511.3
10-91	1.8	2.4	5.3																	3,526.4
11-91	0.3	0.1	0.4	-4.3																3,513.4
12-91	2.9	3.4	4.8	4.5	14.2															3,552.5
1-92	2.2	2.5	3.3	2.6	6.3	-1.1														3,549.3
2-92	2.7	3.1	3.8	3.4	6.1	2.3	5.8													3,565.9
3-92	3.1	3.4	4.1	3.8	6.0	3.4	5.6	5.5												3,581.9
4-92	2.4	2.6	3.0	2.7	4.1	1.8	2.7	1.3	-2.8											3,573.3
5-92	2.3	2.5	2.9	2.6	3.7	1.8	2.5	1.4	-0.6	1.8										3,578.6
6-92	2.0	2.2	2.5	2.1	3.1	1.3	1.8	0.9	-0.6	0.5	-0.8									3,576.1
7-92	1.8	1.9	2.2	1.8	2.6	1.1	1.4	0.6	-0.6	0.1	-0.7	-0.6								3,574.4
8-92	2.0	2.1	2.3	2.0	2.7	1.4	1.8	1.1	0.2	1.0	0.8	1.6	3.8							3,585.5
9-92	1.7	1.8	2.0	1.7	2.3	1.1	1.4	0.8	0.0	0.6	0.3	0.6	1.2	-1.3						3,581.7
10-92	2.3	2.5	2.7	2.5	3.1	2.1	2.4	2.0	1.5	2.3	2.3	3.2	4.4	4.8	11.2					3,613.4
11-92	2.0	2.1	2.3	2.0	2.6	1.6	1.9	1.4	0.9	1.5	1.4	1.9	2.5	2.1	3.8	-3.1				3,604.0
12-92	2.5	2.6	2.9	2.7	3.2	2.4	2.7	2.4	2.1	2.7	2.8	3.4	4.3	4.4	6.3	4.0	11.6			3,637.1
1-93	2.4	2.5	2.7	2.5	3.0	2.2	2.5	2.2	1.9	2.4	2.5	3.0	3.6	3.6	4.8	2.8	5.8	0.4		3,638.2
2-93	2.2	2.3	2.5	2.3	2.8	2.0	2.2	1.9	1.6	2.1	2.1	2.5	2.9	2.8	3.6	1.8	3.5	-0.4	-1.1	3,634.8
	7-91	8-91	9-91	10-91	11-91	12-91	1-92	2-92	3-92	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92	1-93	

7-91 8-91 9-91 10-91 11-91 12-91 1-92 2-92 3-92 4-92 5-92 6-92 7-92 8-92 9-92 10-92 11-92 12-92 1-93

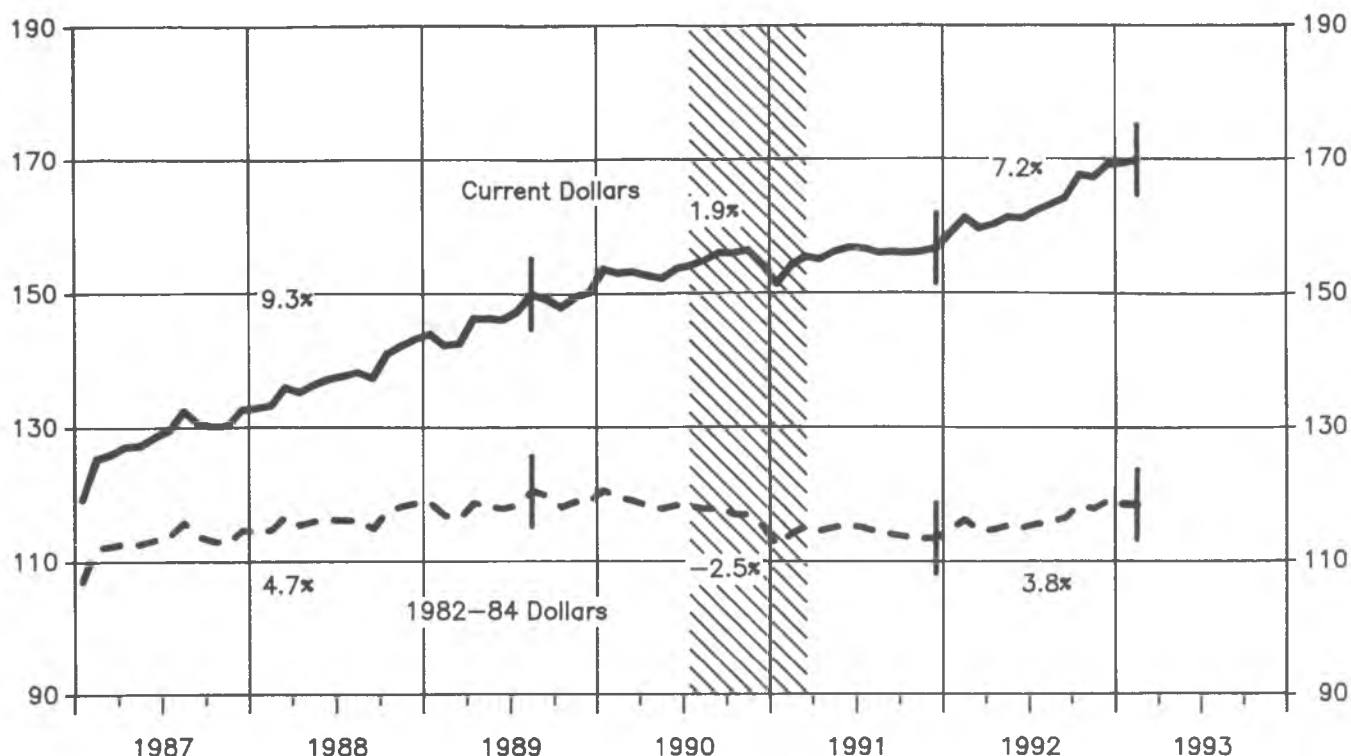
Prepared by Federal Reserve Bank of St. Louis
March 29, 1993

Retail Sales

Seasonally Adjusted

Billions of Dollars

Billions of Dollars



Shaded area represents a period of business recession.

The CPI is used to deflate retail sales data.

Percentages are annual rates of change for periods indicated.

Prepared by Federal Reserve Bank of St. Louis

Retail Sales in 1982-84 Dollars

(Compounded Annual Rates of Change)

Terminal Month	Initial Month																Millions of Dollars
	7-91	8-91	9-91	10-91	11-91	12-91	1-92	2-92	3-92	4-92	5-92	6-92	7-92	8-92	9-92	10-92	
8-91	-7.2																114,160
9-91	-5.0	-2.7															113,903
10-91	-4.5	-3.1	-3.5														113,570
11-91	-4.0	-3.0	-3.1	-2.7													113,308
12-91	-3.0	-2.0	-1.8	-0.9	1.0												113,400
1-92	-0.2	1.3	2.3	4.3	8.0	15.6											114,776
2-92	1.9	3.5	4.8	6.9	10.4	15.4	15.2										116,138
3-92	-0.4	0.6	1.2	2.2	3.4	4.2	-1.0	-14.9									114,586
4-92	-0.2	0.7	1.1	1.9	2.9	3.4	-0.4	-7.4	0.8								114,658
5-92	0.4	1.3	1.8	2.6	3.5	4.0	1.3	-2.9	3.7	6.8							115,284
6-92	0.1	0.8	1.2	1.8	2.5	2.7	0.3	-3.1	1.2	1.4	-3.6						114,931
7-92	0.5	1.2	1.6	2.2	2.8	3.1	1.2	-1.4	2.3	2.8	0.8	5.5					115,445
8-92	0.8	1.5	1.9	2.4	3.0	3.3	1.6	-0.5	2.7	3.1	2.0	4.9	4.2				115,844
9-92	1.1	1.8	2.2	2.7	3.3	3.5	2.1	0.4	3.2	3.6	2.9	5.1	5.0	5.7			116,379
10-92	2.4	3.1	3.5	4.1	4.8	5.2	4.1	2.8	5.6	6.4	6.4	9.0	10.2	13.3	21.5		118,280
11-92	1.9	2.6	2.9	3.4	4.0	4.3	3.2	1.9	4.3	4.8	4.4	6.1	6.3	7.0	7.6	-4.7	117,811
12-92	2.5	3.1	3.5	4.1	4.6	4.9	4.0	2.9	5.1	5.7	5.5	7.1	7.5	8.3	9.2	3.5	118,956
1-93	2.1	2.7	3.0	3.5	3.9	4.2	3.3	2.2	4.1	4.5	4.2	5.4	5.4	5.6	5.6	0.8	118,510
2-93	1.9	2.5	2.8	3.2	3.6	3.8	2.9	2.0	3.7	4.0	3.6	4.6	4.5	4.5	4.3	0.4	118,423

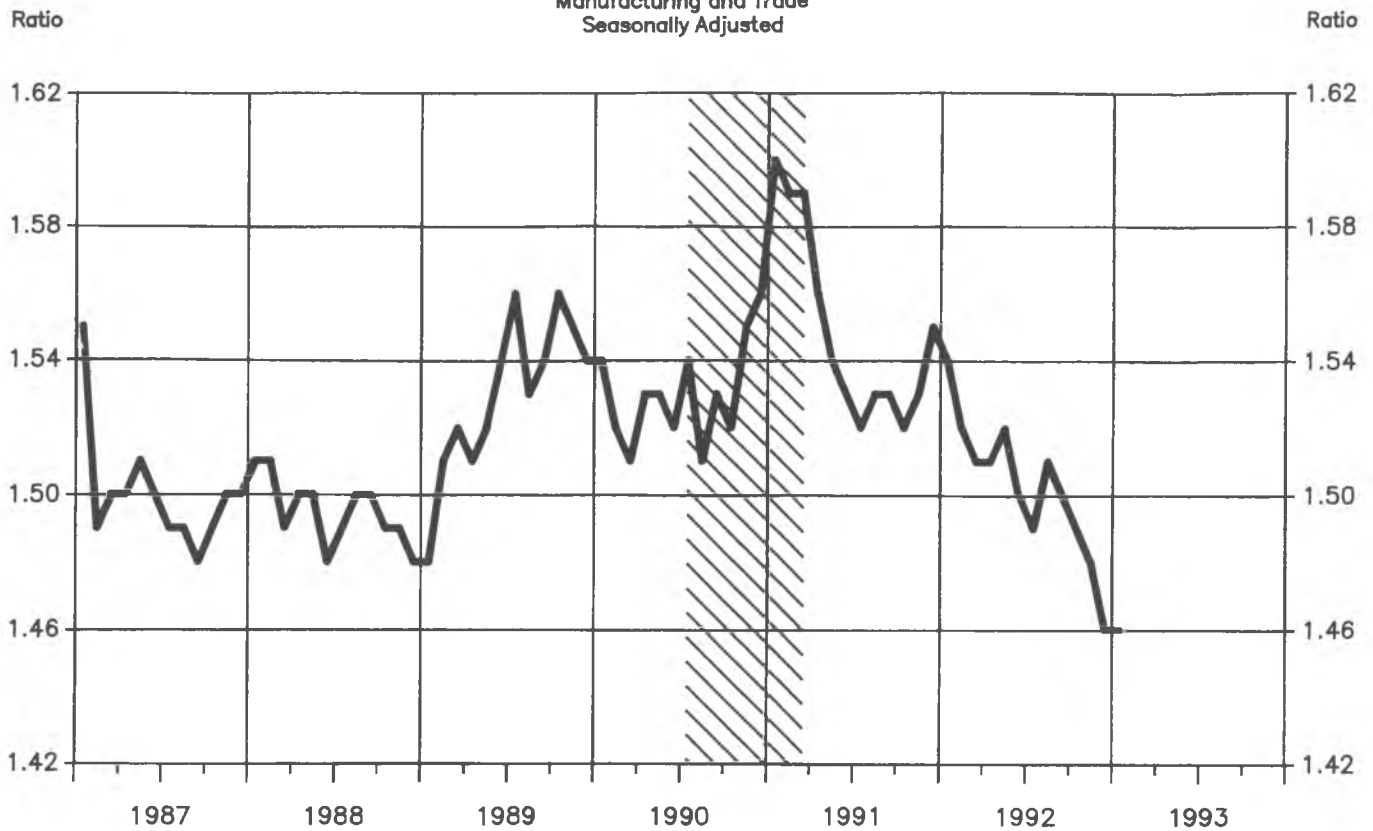
7-91 8-91 9-91 10-91 11-91 12-91 1-92 2-92 3-92 4-92 5-92 6-92 7-92 8-92 9-92 10-92 11-92 12-92 1-93

Retail sales data deflated by CPI-U (1982-84=100). Revised from 1987.

Prepared by Federal Reserve Bank of St. Louis
March 11, 1993

Inventories Compared With Monthly Sales

Manufacturing and Trade
Seasonally Adjusted



Shaded area represents a period of business recession.

Prepared by Federal Reserve Bank of St. Louis

Manufacturing and Trade Inventories

(Compounded Annual Rates of Change)

Terminal Month	Initial Month																			Millions of Dollars
	6-91	7-91	8-91	9-91	10-91	11-91	12-91	1-92	2-92	3-92	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92	
7-91	-1.1																			819,898
8-91	-0.7	-0.3																		819,684
9-91	0.9	1.9	4.1																	822,418
10-91	1.3	2.2	3.5	2.8																824,342
11-91	1.0	1.6	2.2	1.3	-0.1															824,239
12-91	1.6	2.2	2.8	2.4	2.1	4.5														827,246
1-92	0.6	0.9	1.1	0.4	-0.4	-0.6	-5.4													823,433
2-92	0.7	1.0	1.2	0.6	0.1	0.2	-1.9	1.7												824,609
3-92	0.9	1.2	1.4	0.9	0.5	0.7	-0.5	2.0	2.3											826,204
4-92	1.2	1.4	1.6	1.3	1.0	1.3	0.5	2.5	3.0	3.6										828,630
5-92	1.0	1.2	1.4	1.0	0.8	0.9	0.2	1.7	1.7	1.3	-0.9									828,032
6-92	1.4	1.6	1.8	1.5	1.4	1.6	1.1	2.5	2.7	2.8	2.4	5.7								831,872
7-92	1.7	1.9	2.1	1.9	1.8	2.0	1.7	2.9	3.2	3.4	3.3	5.4	5.2							835,373
8-92	1.7	1.9	2.1	1.9	1.8	2.1	1.8	2.8	3.0	3.2	3.1	4.4	3.7	2.3						836,972
9-92	1.4	1.6	1.5	1.6	1.5	1.6	1.3	2.2	2.3	2.3	2.0	2.7	1.7	0.1	-2.2					835,457
10-92	1.5	1.6	1.8	1.6	1.5	1.7	1.4	2.2	2.2	2.2	2.0	2.6	1.8	0.7	-0.1	1.9				836,788
11-92	1.5	1.7	1.8	1.6	1.5	1.7	1.4	2.2	2.2	2.2	2.0	2.5	1.8	1.0	0.6	2.0	2.0			838,164
12-92	1.6	1.8	1.9	1.8	1.7	1.8	1.6	2.3	2.3	2.3	2.2	2.6	2.1	1.5	1.3	2.5	2.8	3.7		840,688
1-93	1.5	1.7	1.8	1.6	1.6	1.7	1.5	2.1	2.1	2.1	1.9	2.2	1.8	1.2	1.0	1.8	1.7	1.6	-0.5	840,367
	6-91	7-91	8-91	9-91	10-91	11-91	12-91	1-92	2-92	3-92	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92	

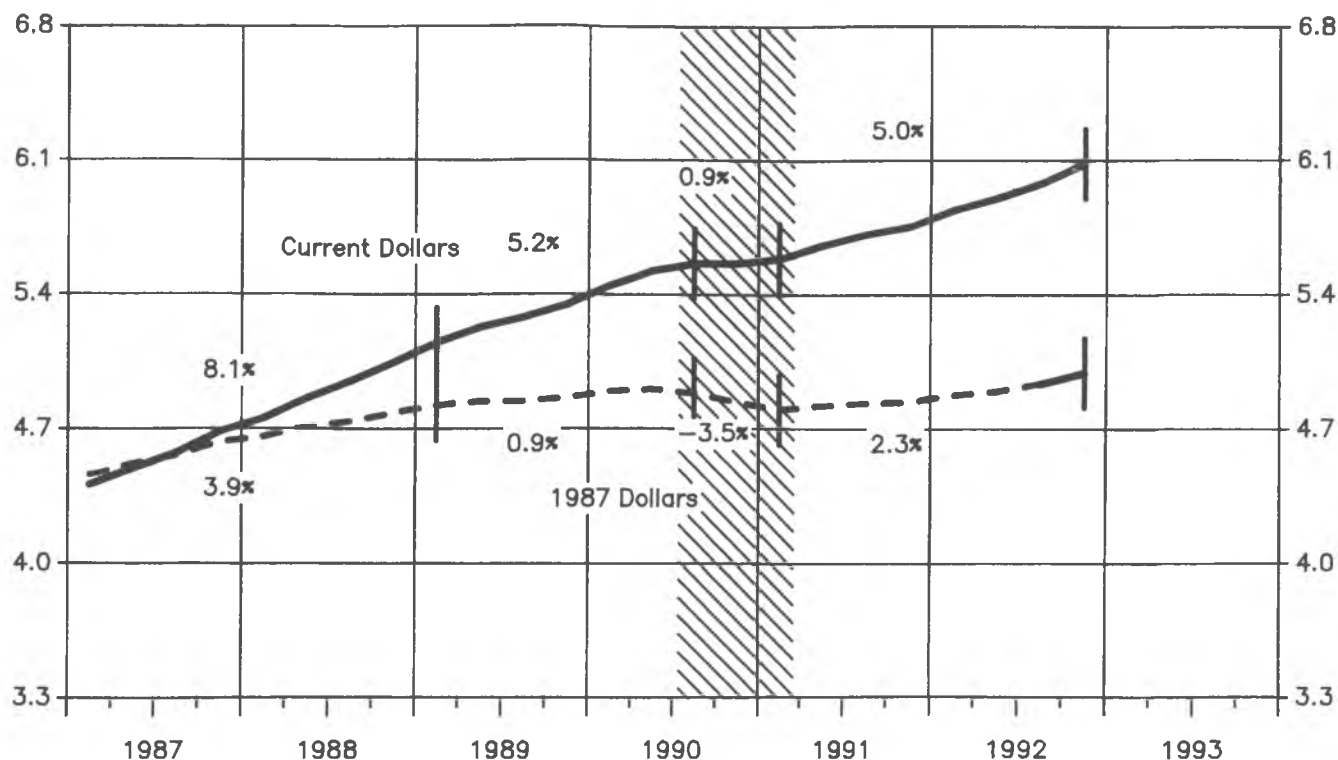
Prepared by Federal Reserve Bank of St. Louis
March 12, 1993

Gross Domestic Product

Seasonally Adjusted

Trillions of Dollars

Trillions of Dollars



Shaded area represents a period of business recession.

Percentages are annual rates of change for periods indicated.

Prepared by Federal Reserve Bank of St. Louis

Gross Domestic Product in 1987 Dollars

(Compounded Annual Rates of Change)

Terminal Quarter	Initial Quarter																Billions of Dollars				Annual Rates
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92		
2-88	4.3																			4,704.8	
3-88	3.4	2.5																		4,734.5	
4-88	3.6	3.2	3.9																	4,779.7	
1-89	3.5	3.2	3.5	3.2																4,817.6	
2-89	3.1	2.9	3.0	2.5	1.8															4,839.0	
3-89	2.6	2.3	2.2	1.7	0.9	0.0														4,839.0	
4-89	2.4	2.1	2.1	1.6	1.1	0.7	1.5													4,856.7	
1-90	2.5	2.2	2.2	1.9	1.5	1.4	2.2	2.8												4,890.8	
2-90	2.3	2.1	2.0	1.7	1.4	1.3	1.8	1.9	1.0											4,902.7	
3-90	1.9	1.7	1.6	1.2	0.9	0.7	0.9	0.7	-0.3	-1.6										4,882.6	
4-90	1.4	1.1	0.9	0.6	0.2	-0.1	-0.1	-0.5	-1.6	-2.8	-3.9									4,833.8	
1-91	1.0	0.7	0.5	0.2	-0.2	-0.5	-0.6	-1.0	-1.9	-2.9	-3.5	-3.0								4,796.7	
2-91	1.1	0.8	0.6	0.3	0.0	-0.2	-0.3	-0.5	-1.2	-1.7	-1.8	-0.7	1.7							4,817.1	
3-91	1.1	0.8	0.7	0.4	0.1	-0.1	-0.1	-0.3	-0.8	-1.2	-1.0	-0.1	1.5	1.2						4,831.8	
4-91	1.0	0.8	0.7	0.4	0.2	0.0	0.0	-0.2	-0.6	-0.9	-0.7	0.1	1.2	0.9	0.6					4,838.5	
1-92	1.2	0.9	0.8	0.6	0.4	0.3	0.3	0.2	-0.2	-0.3	-0.1	0.7	1.6	1.6	1.7	2.9				4,873.7	
2-92	1.2	1.0	0.9	0.7	0.5	0.4	0.4	0.3	0.0	-0.1	0.1	0.8	1.6	1.6	1.7	2.2	1.5			4,892.4	
3-92	1.3	1.1	1.0	0.8	0.7	0.6	0.6	0.6	0.3	0.3	0.5	1.2	1.9	1.9	2.1	2.6	2.5	3.4		4,933.7	
4-92	1.5	1.3	1.2	1.1	0.9	0.9	1.0	0.9	0.7	0.7	1.0	1.6	2.3	2.4	2.6	3.1	3.2	4.1	4.7	4,990.8	
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92		

Fourth quarter 1992 data are final estimates.

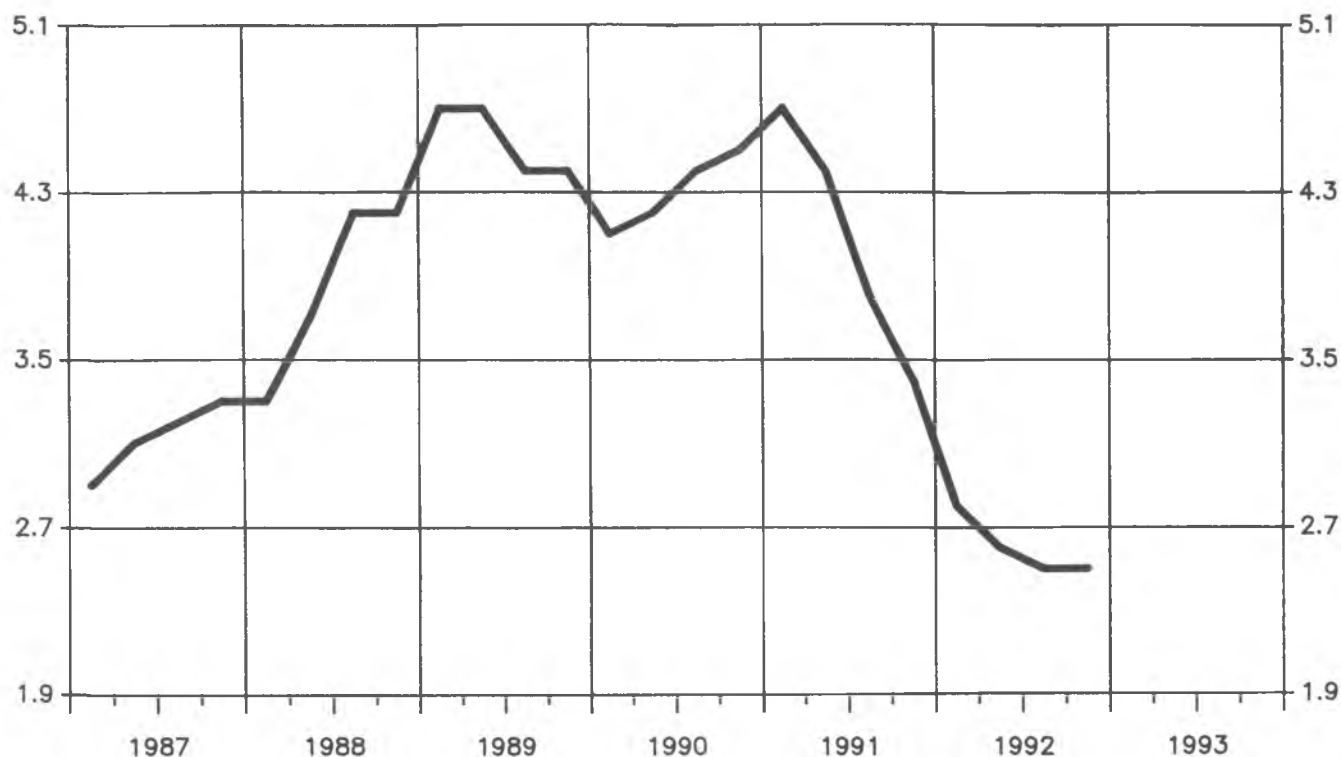
Prepared by Federal Reserve Bank of St. Louis
March 26, 1993

Implicit Price Deflator for GDP

Percent Change From Previous Year
Seasonally Adjusted

Percent

Percent



Prepared by Federal Reserve Bank of St. Louis

Implicit Price Deflator

(Compounded Annual Rates of Change)

Terminal Quarter	Initial Quarter																		1987 = 100	
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92	
2-88	4.4																			103.2
3-88	4.8	5.1																		104.5
4-88	4.5	4.5	3.9																	105.5
1-89	4.7	4.8	4.6	5.4																106.9
2-89	4.7	4.7	4.6	5.0	4.6															108.1
3-89	4.5	4.5	4.4	4.6	4.2	3.8														109.1
4-89	4.4	4.4	4.3	4.4	4.0	3.7	3.7													110.1
1-90	4.4	4.4	4.3	4.4	4.1	4.0	4.1	4.4												111.3
2-90	4.4	4.5	4.4	4.4	4.2	4.2	4.3	4.6	4.8											112.6
3-90	4.5	4.5	4.4	4.5	4.3	4.3	4.4	4.6	4.7	4.7										113.9
4-90	4.4	4.4	4.3	4.4	4.3	4.2	4.3	4.5	4.5	4.3	3.9									115.0
1-91	4.5	4.5	4.4	4.5	4.4	4.4	4.5	4.6	4.7	4.6	4.6	5.3								116.5
2-91	4.4	4.4	4.4	4.4	4.3	4.3	4.3	4.4	4.4	4.4	4.2	4.4	3.5							117.5
3-91	4.3	4.3	4.2	4.2	4.1	4.0	4.1	4.1	4.1	4.0	3.8	3.7	2.9	2.4						118.2
4-91	4.1	4.1	4.1	4.1	3.9	3.9	3.9	3.9	3.8	3.7	3.5	3.4	2.8	2.4	2.4					118.9
1-92	4.1	4.1	4.0	4.0	3.9	3.8	3.8	3.8	3.7	3.6	3.4	3.3	2.8	2.6	2.7	3.1				119.8
2-92	4.0	4.0	3.9	3.9	3.8	3.7	3.7	3.7	3.6	3.5	3.3	3.2	2.8	2.6	2.7	2.9	2.7			120.6
3-92	3.9	3.9	3.8	3.8	3.7	3.6	3.6	3.6	3.5	3.3	3.2	3.0	2.7	2.5	2.5	2.6	2.4	2.0		121.2
4-92	3.8	3.8	3.7	3.7	3.6	3.5	3.5	3.5	3.4	3.2	3.1	3.0	2.6	2.5	2.5	2.5	2.3	2.2	2.3	121.9
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92	

1-88 2-88 3-88 4-88 1-89 2-89 3-89 4-89 1-90 2-90 3-90 4-90 1-91 2-91 3-91 4-91 1-92 2-92 3-92

Fourth quarter 1992 data are final estimates.

Prepared by Federal Reserve Bank of St. Louis
March 26, 1993

Final Sales in 1987 Dollars

(Compounded Annual Rates of Change)

Terminal Quarter	Initial Quarter																Billions of Dollars			
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92	Annual Rates
2-88	4.6																			4,688.7
3-88	3.2	1.9																		4,710.9
4-88	3.5	3.0	4.1																	4,758.7
1-89	3.0	2.5	2.8	1.5																4,776.3
2-89	2.9	2.4	2.6	1.8	2.2															4,802.0
3-89	2.7	2.3	2.4	1.8	2.0	1.8														4,823.0
4-89	2.4	2.0	2.0	1.5	1.6	1.2	0.7													4,831.8
1-90	2.6	2.4	2.4	2.1	2.2	2.3	2.5	4.3												4,883.3
2-90	2.2	1.9	1.9	1.6	1.6	1.4	1.3	1.6	-1.1											4,870.0
3-90	2.0	1.7	1.7	1.3	1.3	1.2	1.0	1.1	-0.5	0.1										4,871.4
4-90	1.7	1.5	1.4	1.1	1.0	0.8	0.6	0.6	-0.6	-0.4	-0.9									4,860.6
1-91	1.3	1.0	0.9	0.6	0.5	0.2	0.0	-0.2	-1.3	-1.3	-2.0	-3.2								4,821.8
2-91	1.3	1.0	1.0	0.7	0.6	0.4	0.2	0.1	-0.8	-0.7	-0.9	-1.0	1.3							4,837.4
3-91	1.2	0.9	0.8	0.6	0.5	0.3	0.1	0.0	-0.7	-0.6	-0.8	-0.8	0.4	-0.5						4,831.2
4-91	1.1	0.9	0.8	0.5	0.4	0.2	0.1	0.0	-0.6	-0.5	-0.7	-0.6	0.3	-0.3	0.0					4,830.9
1-92	1.3	1.1	1.0	0.8	0.8	0.6	0.5	0.5	0.0	0.2	0.2	0.4	1.3	1.4	2.3	4.7				4,886.3
2-92	1.2	1.0	1.0	0.7	0.7	0.6	0.5	0.4	0.0	0.1	0.2	0.3	1.0	1.0	1.5	2.2	-0.1			4,884.6
3-92	1.3	1.1	1.1	0.9	0.8	0.7	0.7	0.7	0.3	0.4	0.5	0.7	1.3	1.3	1.8	2.4	1.3	2.8		4,918.7
4-92	1.5	1.4	1.3	1.1	1.1	1.1	1.0	1.0	0.7	0.9	1.0	1.2	1.9	2.0	2.5	3.1	2.6	4.0	5.2	4,981.0
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92	

Prepared by Federal Reserve Bank of St. Louis
March 26, 1993

Personal Consumption Expenditures in 1987 Dollars

(Compounded Annual Rates of Change)

Terminal Quarter	Initial Quarter																Billions of Dollars Annual Rates			
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92	
2-88	2.5																			3,147.8
3-88	2.7	2.9																		3,170.6
4-88	3.2	3.5	4.1																	3,202.9
1-89	2.4	2.4	2.1	0.1																3,203.6
2-89	2.1	2.0	1.8	0.6	1.1															3,212.2
3-89	2.3	2.2	2.0	1.4	2.0	2.9														3,235.3
4-89	2.1	2.0	1.8	1.2	1.6	1.9	0.8													3,242.0
1-90	2.1	2.0	1.9	1.4	1.7	2.0	1.5	2.2												3,259.5
2-90	1.9	1.8	1.6	1.2	1.4	1.5	1.0	1.1	0.1											3,260.1
3-90	1.8	1.8	1.6	1.3	1.5	1.5	1.2	1.3	0.9	1.7										3,273.9
4-90	1.4	1.3	1.1	0.7	0.8	0.7	0.3	0.2	-0.5	-0.7	-3.1									3,248.0
1-91	1.0	0.9	0.7	0.3	0.3	0.2	-0.2	-0.5	-1.1	-1.5	-3.1	-3.0								3,223.5
2-91	1.1	1.0	0.8	0.5	0.5	0.4	0.1	-0.1	-0.5	-0.6	-1.4	-0.5	2.0							3,239.3
3-91	1.1	1.0	0.8	0.5	0.6	0.5	0.2	0.2	-0.2	-0.2	-0.7	0.1	1.7	1.5						3,251.2
4-91	1.0	0.9	0.8	0.5	0.5	0.5	0.2	0.1	-0.2	-0.2	-0.6	0.0	1.1	0.6	-0.3					3,249.0
1-92	1.3	1.2	1.1	0.8	0.9	0.9	0.7	0.6	0.5	0.5	0.3	1.0	2.0	2.1	2.4	5.1				3,289.3
2-92	1.2	1.1	1.0	0.8	0.8	0.8	0.6	0.6	0.4	0.4	0.3	0.8	1.6	1.5	1.5	2.4	-0.1			3,288.5
3-92	1.3	1.2	1.1	0.9	1.0	1.0	0.8	0.9	0.7	0.8	0.7	1.2	2.0	1.9	2.1	2.9	1.8	3.7		3,318.4
4-92	1.5	1.5	1.4	1.2	1.3	1.3	1.2	1.2	1.1	1.2	1.2	1.7	2.4	2.5	2.7	3.4	2.9	4.4	5.1	3,359.9
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92	

Fourth quarter 1992 data are final estimates.

Prepared by Federal Reserve Bank of St. Louis
March 26, 1993

Residential Fixed Investment in 1987 Dollars

(Compounded Annual Rates of Change)

Terminal Quarter	Initial Quarter																Billions of Dollars Annual Rates		
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92
2-88	3.7																		222.0
3-88	3.2	2.7																	223.5
4-88	3.2	3.0	3.3																225.3
1-89	1.0	0.1	-1.2	-5.4															222.2
2-89	-1.7	-3.0	-4.8	-8.6	-11.7														215.4
3-89	-2.7	-3.9	-5.5	-8.3	-9.7	-7.6													211.2
4-89	-3.2	-4.2	-5.6	-7.7	-8.4	-6.8	-5.9												208.0
1-90	-2.1	-2.9	-3.9	-5.2	-5.2	-2.9	-0.5	5.3											210.7
2-90	-3.8	-4.7	-5.7	-7.1	-7.4	-6.3	-5.9	-5.9	-15.9										201.8
3-90	-5.9	-6.9	-8.0	-9.5	-10.2	-9.9	-10.5	-11.9	-19.5	-22.9									189.1
4-90	-7.5	-8.6	-9.7	-11.2	-12.0	-12.1	-13.0	-14.7	-20.4	-22.6	-22.4								177.5
1-91	-9.3	-10.4	-11.6	-13.1	-14.1	-14.4	-15.5	-17.3	-22.1	-24.1	-24.7	-26.9							164.1
2-91	-8.1	-9.1	-10.1	-11.3	-11.9	-12.0	-12.6	-13.7	-17.0	-17.3	-15.3	-11.6	7.0						166.9
3-91	-6.7	-7.5	-8.3	-9.2	-9.6	-9.4	-9.6	-10.1	-12.5	-11.8	-8.7	-3.7	10.6	14.4					172.6
4-91	-5.6	-6.2	-6.9	-7.7	-7.9	-7.5	-7.5	-7.7	-9.4	-8.3	-5.0	-0.1	10.9	12.9	11.3				177.3
1-92	-4.2	-4.7	-5.2	-5.8	-5.8	-5.3	-5.0	-4.9	-6.1	-4.7	-1.2	3.6	13.1	15.2	15.6	20.1			185.6
2-92	-3.2	-3.7	-4.1	-4.6	-4.5	-3.9	-3.6	-3.3	-4.2	-2.7	0.6	5.1	13.0	14.6	14.6	16.3	12.6		191.2
3-92	-3.1	-3.4	-3.8	-4.3	-4.2	-3.6	-3.2	-3.0	-3.8	-2.3	0.6	4.4	10.8	11.5	10.8	10.7	6.2	0.2	191.3
4-92	-1.8	-2.0	-2.3	-2.7	-2.5	-1.8	-1.3	-0.9	-1.5	0.1	3.0	6.8	12.7	13.7	13.5	14.1	12.2	11.9	202.3
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92

Prepared by Federal Reserve Bank of St. Louis
March 26, 1993

Nonresidential Fixed Investment in 1987 Dollars

(Compounded Annual Rates of Change)

Terminal Quarter	Initial Quarter																Billions of Dollars Annual Rates		
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92
2-88	11.0																		531.4
3-88	6.9	2.9																	535.2
4-88	5.5	2.8	2.7																538.8
1-89	4.2	2.0	1.6	0.5															539.5
2-89	3.8	2.0	1.7	1.3	2.0														542.2
3-89	3.1	1.6	1.2	0.7	0.9	-0.3													541.8
4-89	2.1	0.7	0.2	-0.4	-0.7	-2.0	-3.7												536.7
1-90	2.6	1.4	1.2	0.9	1.0	0.6	1.1	6.2											544.8
2-90	1.5	0.4	0.0	-0.4	-0.6	-1.2	-1.5	-0.4	-6.6										535.6
3-90	1.9	1.0	0.7	0.4	0.4	0.1	0.2	1.5	-0.7	5.6									542.9
4-90	0.8	-0.2	-0.5	-0.9	-1.1	-1.6	-1.8	-1.4	-3.8	-2.3	-9.6								529.3
1-91	-0.7	-1.7	-2.1	-2.7	-3.1	-3.8	-4.3	-4.5	-6.9	-7.1	-12.8	-15.8							507.0
2-91	-0.9	-1.8	-2.2	-2.7	-3.1	-3.7	-4.2	-4.2	-6.2	-6.1	-9.7	-9.7	-3.1						503.0
3-91	-1.1	-1.9	-2.3	-2.8	-3.1	-3.6	-4.1	-4.1	-5.7	-5.6	-8.1	-7.6	-3.2	-3.4					498.7
4-91	-1.3	-2.2	-2.6	-3.0	-3.3	-3.8	-4.2	-4.2	-5.6	-5.5	-7.6	-7.0	-3.9	-4.3	-5.2				492.1
1-92	-1.1	-1.8	-2.2	-2.5	-2.8	-3.2	-3.5	-3.5	-4.6	-4.3	-5.9	-5.1	-2.2	-1.9	-1.2	3.0			495.8
2-92	-0.1	-0.8	-1.0	-1.3	-1.4	-1.7	-1.8	-1.7	-2.5	-2.0	-3.0	-1.8	1.2	2.3	4.3	9.4	16.1		514.7
3-92	0.0	-0.6	-0.8	-1.0	-1.1	-1.4	-1.4	-1.2	-1.9	-1.4	-2.3	-1.1	1.5	2.5	4.0	7.3	9.5	3.1	518.7
4-92	0.5	0.0	-0.2	-0.4	-0.4	-0.6	-0.6	-0.4	-0.9	-0.4	-1.0	0.2	2.7	3.7	5.1	7.9	9.5	6.4	530.9
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92

Fourth quarter 1992 data are final estimates.

Prepared by Federal Reserve Bank of St. Louis
March 26, 1993

Exports in 1987 Dollars

(Compounded Annual Rates of Change)

Terminal Quarter	Initial Quarter																Billions of Dollars Annual Rates		
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92
2-88	10.3																		417.2
3-88	8.5	6.8																	424.1
4-88	10.3	10.3	14.0																438.2
1-89	11.6	12.1	14.9	15.7															454.5
2-89	12.6	13.1	15.3	16.0	16.3														472.0
3-89	10.5	10.5	11.5	10.7	8.3	0.8													472.9
4-89	10.9	11.0	11.8	11.3	9.9	6.8	13.1												487.7
1-90	10.8	10.9	11.6	11.2	10.1	8.0	11.9	10.7											500.2
2-90	10.4	10.4	11.0	10.5	9.4	7.8	10.2	8.8	7.0										508.7
3-90	9.3	9.2	9.5	8.9	7.8	6.1	7.5	5.7	3.3	-0.2									508.4
4-90	9.5	9.4	9.7	9.2	8.3	7.0	8.3	7.2	6.0	5.5	11.6								522.6
1-91	8.2	8.0	8.2	7.5	6.5	5.2	6.0	4.6	3.1	1.9	3.0	-5.0							515.9
2-91	8.8	8.7	8.9	8.4	7.6	6.6	7.4	6.5	5.7	5.4	7.3	5.2	16.6						536.1
3-91	8.6	8.5	8.7	8.2	7.5	6.5	7.3	6.5	5.8	5.5	7.0	5.5	11.3	6.2					544.2
4-91	8.9	8.9	9.0	8.6	8.0	7.2	7.9	7.3	6.8	6.8	8.3	7.4	11.9	9.7	13.3				561.4
1-92	8.6	8.4	8.6	8.2	7.5	6.8	7.4	6.8	6.3	6.2	7.3	6.5	9.6	7.4	7.9	2.9			565.4
2-92	7.9	7.8	7.9	7.4	6.8	6.1	6.6	5.9	5.4	5.2	6.0	5.1	7.3	5.1	4.7	0.7	-1.4		563.4
3-92	8.0	7.9	7.9	7.6	7.0	6.3	6.8	6.2	5.8	5.7	6.4	5.7	7.6	5.9	5.8	3.5	3.7	9.2	575.9
4-92	8.1	7.9	8.0	7.6	7.1	6.5	6.9	6.5	6.1	6.0	6.7	6.1	7.8	6.4	6.4	4.8	5.4	9.0	588.3
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92

Prepared by Federal Reserve Bank of St. Louis
March 26, 1993

Imports in 1987 Dollars

(Compounded Annual Rates of Change)

Terminal Quarter	Initial Quarter																Billions of Dollars			
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92	Annual Rates
2-88	-4.0																			515.2
3-88	2.2	8.7																		526.1
4-88	5.3	10.2	11.7																	540.9
1-89	2.7	5.0	3.1	-4.8																534.3
2-89	3.3	5.2	4.0	0.4	5.8															541.9
3-89	3.8	5.4	4.6	2.4	6.2	6.5														550.5
4-89	3.7	5.1	4.4	2.6	5.2	4.9	3.3													555.0
1-90	3.6	4.7	4.1	2.6	4.5	4.1	3.0	2.6												558.6
2-90	3.8	4.8	4.2	3.0	4.7	4.4	3.7	3.9	5.1											565.6
3-90	3.5	4.4	3.9	2.8	4.1	3.8	3.1	3.1	3.3	1.5										567.7
4-90	2.4	3.0	2.4	1.3	2.2	1.6	0.7	0.1	-0.8	-3.6	-8.5									555.3
1-91	0.8	1.3	0.6	-0.6	0.0	-0.9	-2.0	-3.1	-4.4	-7.4	-11.6	-14.6								533.8
2-91	1.9	2.4	1.9	0.9	1.6	1.1	0.3	-0.2	-0.7	-2.1	-3.3	-0.6	15.6							553.5
3-91	2.9	3.5	3.1	2.3	3.0	2.7	2.3	2.1	2.0	1.4	1.4	5.0	16.4	17.1						575.8
4-91	3.0	3.5	3.1	2.5	3.1	2.9	2.5	2.4	2.4	1.9	2.0	4.8	12.2	10.5	4.2					581.8
1-92	3.0	3.5	3.2	2.5	3.2	2.9	2.6	2.5	2.5	2.1	2.2	4.5	9.9	8.1	3.9	3.5				586.8
2-92	3.7	4.2	3.9	3.4	4.0	3.9	3.6	3.7	3.8	3.6	3.9	6.1	10.9	9.7	7.4	9.0	14.7			607.3
3-92	4.3	4.8	4.6	4.1	4.8	4.7	4.5	4.6	4.8	4.8	5.2	7.3	11.5	10.7	9.2	10.9	14.8	14.8		628.6
4-92	4.4	4.8	4.6	4.2	4.8	4.7	4.6	4.7	4.9	4.9	5.3	7.1	10.7	9.9	8.5	9.5	11.6	10.1	5.7	637.3
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92	

Fourth quarter 1992 data are final estimates.

Prepared by Federal Reserve Bank of St. Louis
March 26, 1993

Government Purchases of Goods and Services in 1987 Dollars

(Compounded Annual Rates of Change)

Terminal Quarter	Initial Quarter																		Billions of Dollars		Annual Rates
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92		
2-88	0.9																			885.6	
3-88	0.0	-0.9																		883.7	
4-88	1.6	2.0	5.0																	894.5	
1-89	0.8	0.8	1.6	-1.6																890.8	
2-89	1.7	1.9	2.8	1.8	5.3															902.3	
3-89	2.1	2.4	3.2	2.6	4.9	4.5														912.2	
4-89	1.9	2.0	2.6	2.0	3.3	2.3	0.2													912.6	
1-90	2.4	2.6	3.2	2.9	4.0	3.6	3.2	6.4												926.8	
2-90	2.3	2.4	2.9	2.6	3.5	3.0	2.5	3.7	1.1											929.4	
3-90	1.8	1.9	2.3	1.9	2.5	2.0	1.4	1.8	-0.4	-2.0										924.8	
4-90	2.2	2.3	2.7	2.4	3.0	2.7	2.3	2.8	1.7	2.0	6.1									938.5	
1-91	2.3	2.4	2.7	2.5	3.0	2.7	2.4	2.8	2.0	2.3	4.4	2.8								945.1	
2-91	2.1	2.2	2.5	2.2	2.7	2.4	2.1	2.4	1.6	1.7	3.0	1.5	0.2							945.6	
3-91	1.8	1.9	2.1	1.8	2.2	1.8	1.5	1.7	1.0	0.9	1.7	0.2	-1.0	-2.3						940.2	
4-91	1.5	1.5	1.7	1.4	1.7	1.4	1.0	1.1	0.4	0.3	0.7	-0.6	-1.7	-2.6	-3.0					933.1	
1-92	1.5	1.5	1.7	1.4	1.7	1.4	1.1	1.2	0.5	0.5	0.9	-0.1	-0.9	-1.2	-0.7	1.7				937.0	
2-92	1.3	1.3	1.5	1.2	1.5	1.2	0.9	0.9	0.4	0.3	0.6	-0.3	-0.9	-1.2	-0.8	0.2	-1.2			934.2	
3-92	1.5	1.5	1.6	1.4	1.6	1.4	1.1	1.2	0.7	0.6	1.0	0.3	-0.1	-0.2	0.3	1.4	1.3	3.8		943.0	
4-92	1.2	1.3	1.4	1.2	1.4	1.1	0.8	0.9	0.4	0.3	0.6	-0.1	-0.5	-0.6	-0.3	0.4	0.0	0.6	-2.6	936.8	
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92		

Fourth quarter 1992 data are final estimates.

Prepared by Federal Reserve Bank of St. Louis
March 26, 1992

Corporate Profits

(Compounded Annual Rates of Change)

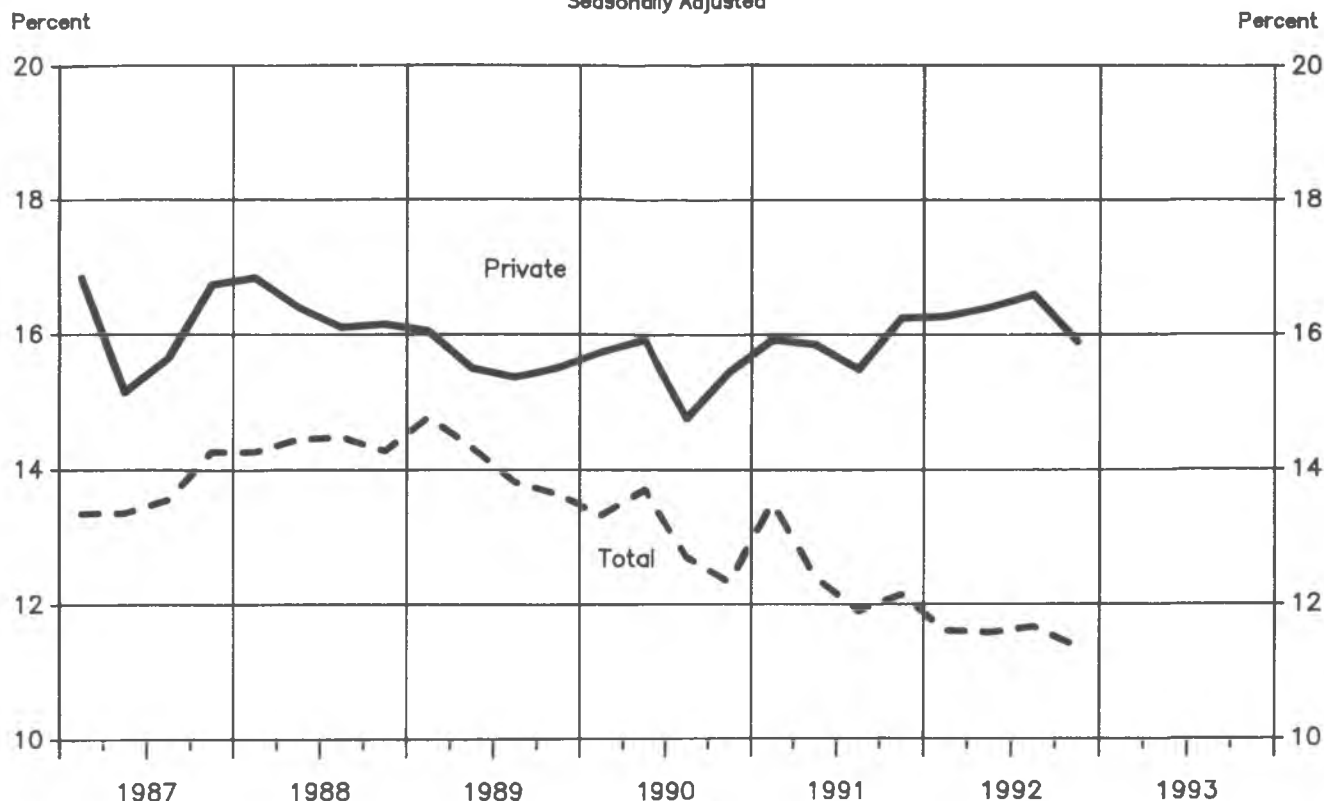
Terminal Quarter	Initial Quarter																Billions of Dollars				Annual Rates
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92		
2-88	14.5																			364.2	
3-88	7.6	1.2																		365.3	
4-88	10.0	7.9	15.0																	378.3	
1-89	4.9	1.9	2.3	-9.1																369.4	
2-89	4.0	1.6	1.7	-4.4	0.5															369.9	
3-89	1.0	-1.5	-2.2	-7.3	-6.4	-12.9														357.3	
4-89	0.4	-1.8	-2.4	-6.3	-5.3	-8.2	-3.1													354.5	
1-90	2.2	0.5	0.4	-2.3	-0.5	-0.8	5.8	15.6												367.6	
2-90	3.9	2.7	2.9	1.0	3.1	3.8	10.1	17.3	19.1											384.0	
3-90	-0.1	-1.6	-1.9	-4.1	-3.3	-4.0	-1.7	-1.2	-8.6	-29.9										351.4	
4-90	-0.8	-2.3	-2.6	-4.6	-4.0	-4.7	-3.0	-3.0	-8.5	-19.7	-8.2									344.0	
1-91	-0.2	-1.5	-1.7	-3.4	-2.7	-3.2	-1.4	-1.1	-4.9	-11.8	-1.0	6.7								349.6	
2-91	-0.4	-1.6	-1.8	-3.4	-2.7	-3.1	-1.6	-1.4	-4.4	-9.6	-1.6	1.9	-2.6							347.3	
3-91	-0.9	-2.0	-2.2	-3.7	-3.1	-3.5	-2.3	-2.2	-4.8	-9.0	-2.9	-1.1	-4.7	-6.8						341.2	
4-91	-0.4	-1.4	-1.6	-2.8	-2.2	-2.5	-1.3	-1.0	-3.2	-6.5	-1.0	0.9	-1.0	-0.1	7.1					347.1	
1-92	2.2	1.4	1.4	0.5	1.3	1.4	2.9	3.6	2.2	0.0	6.1	9.2	9.8	14.3	26.7	49.8				384.0	
2-92	2.3	1.6	1.6	0.8	1.6	1.6	3.1	3.7	2.5	0.6	5.9	8.4	8.8	11.8	18.9	25.2	4.7			388.4	
3-92	1.4	0.6	0.6	-0.3	0.4	0.3	1.5	2.0	0.7	-1.2	3.2	4.9	4.6	6.1	9.6	10.5	-5.1	-13.9		374.1	
4-92	4.4	3.8	4.0	3.3	4.2	4.5	6.0	6.8	6.0	4.8	9.5	12.0	12.8	15.5	20.6	24.3	16.8	23.3	76.7	431.3	
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92		

Corporate profits with capital consumption and inventory valuation adjustments. Fourth quarter data are preliminary estimates.

Prepared by Federal Reserve Bank of St. Louis
March 26, 1993

Gross Saving as a Percent of GDP

Seasonally Adjusted



Total saving equals private saving (personal saving plus business saving) plus government surplus or deficit.

Prepared by Federal Reserve Bank of St. Louis

Gross Private Saving

(Compounded Annual Rates of Change)

Terminal Quarter	Initial Quarter																Billions of Dollars Annual Rates			
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92	
2-88	-1.7																		797.0	
3-88	-0.8	0.0																	797.0	
4-88	2.4	4.5	9.2																814.8	
1-89	3.3	5.0	7.6	6.0															826.7	
2-89	1.1	1.8	2.3	-0.9	-7.4														811.0	
3-89	0.9	1.4	1.8	-0.6	-3.7	0.1													811.2	
4-89	2.0	2.6	3.2	1.7	0.3	4.4	8.9												828.6	
1-90	3.5	4.2	4.9	4.1	3.7	7.6	11.6	14.4											856.9	
2-90	4.3	5.0	5.8	5.2	5.1	8.4	11.4	12.7	11.0										879.5	
3-90	1.0	1.3	1.5	0.4	-0.5	1.0	1.2	-1.2	-8.2	-24.1									820.9	
4-90	2.6	3.1	3.4	2.7	2.2	3.9	4.7	3.7	0.4	-4.5	20.1								859.3	
1-91	3.6	4.1	4.5	4.0	3.7	5.4	6.3	5.8	3.8	1.5	17.4	14.8							889.4	
2-91	3.6	4.0	4.4	3.9	3.7	5.2	5.9	5.4	3.7	2.0	12.5	8.9	3.4						896.9	
3-91	2.9	3.3	3.5	3.0	2.8	4.0	4.4	3.8	2.2	0.5	7.8	4.0	-1.0	-5.2					884.9	
4-91	4.2	4.7	5.0	4.7	4.6	5.8	6.5	6.2	5.1	4.1	11.0	8.8	6.9	8.6	24.5				934.8	
1-92	4.4	4.8	5.1	4.8	4.7	5.9	6.5	6.3	5.3	4.5	10.2	8.4	6.8	8.0	15.3	6.7			950.1	
2-92	4.6	5.0	5.3	5.0	5.0	6.1	6.6	6.4	5.6	4.9	9.9	8.3	7.0	7.9	12.7	7.3	7.8		968.1	
3-92	4.9	5.3	5.6	5.4	5.3	6.4	6.9	6.8	6.0	5.5	9.9	8.6	7.6	8.4	12.1	8.3	9.0	10.3	992.1	
4-92	4.1	4.4	4.6	4.4	4.3	5.1	5.5	5.3	4.5	3.8	7.5	6.1	4.9	5.1	7.3	3.4	2.3	-0.3	-9.9	966.6
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92	

1-88 2-88 3-88 4-88 1-89 2-89 3-89 4-89 1-90 2-90 3-90 4-90 1-91 2-91 3-91 4-91 1-92 2-92 3-92

Fourth quarter 1992 data are preliminary estimates.

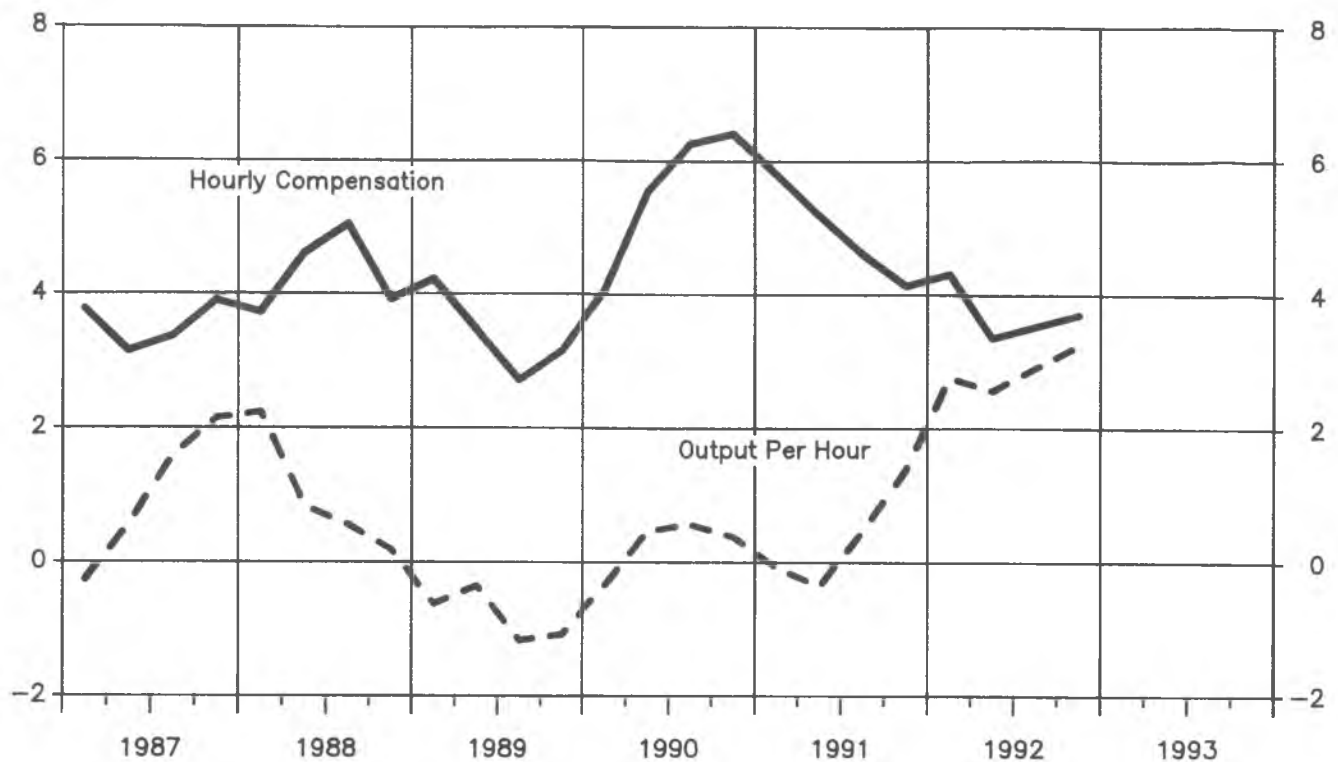
Prepared by Federal Reserve Bank of St. Louis
March 26, 1993

Business Productivity and Compensation

Percent

Percent Change From Previous Year
Seasonally Adjusted

Percent



Prepared by Federal Reserve Bank of St. Louis

Business Sector Output per Hour

(Compounded Annual Rates of Change)

Terminal Quarter	Initial Quarter																			1982 = 100
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92	
2-88	-1.4																			110.1
3-88	0.0	1.5																		110.5
4-88	0.0	0.7	0.0																	110.5
1-89	-0.6	-0.4	-1.3	-2.5																109.8
2-89	-0.6	-0.4	-1.0	-1.4	-0.4															109.7
3-89	-0.8	-0.7	-1.2	-1.6	-1.1	-1.8														109.2
4-89	-0.6	-0.5	-0.9	-1.1	-0.6	-0.7	0.4													109.3
1-90	-0.5	-0.4	-0.7	-0.8	-0.4	-0.4	0.4	0.4												109.4
2-90	-0.1	0.0	-0.2	-0.2	0.3	0.5	1.2	1.7	3.0											110.2
3-90	-0.3	-0.1	-0.3	-0.4	0.0	0.1	0.5	0.6	0.7	-1.4										109.8
4-90	-0.3	-0.1	-0.3	-0.4	-0.1	0.0	0.4	0.4	0.4	-0.9	-0.4									109.7
1-91	-0.4	-0.3	-0.4	-0.5	-0.2	-0.2	0.1	0.0	-0.1	-1.1	-0.9	-1.5								109.3
2-91	-0.2	-0.1	-0.2	-0.3	0.0	0.0	0.3	0.3	0.3	-0.4	0.0	0.2	1.8							109.8
3-91	-0.1	0.1	-0.1	-0.1	0.2	0.2	0.5	0.5	0.5	0.1	0.5	0.7	1.8	1.8						110.3
4-91	0.2	0.3	0.2	0.2	0.5	0.5	0.8	0.9	0.9	0.6	1.0	1.4	2.3	2.6	3.3					111.2
1-92	0.4	0.5	0.5	0.5	0.8	0.9	1.1	1.2	1.3	1.1	1.5	1.9	2.7	3.0	3.7	4.0				112.3
2-92	0.4	0.6	0.5	0.5	0.8	0.9	1.1	1.2	1.3	1.1	1.4	1.8	2.4	2.6	2.8	2.5	1.1			112.6
3-92	0.6	0.7	0.7	0.7	1.0	1.1	1.3	1.4	1.5	1.3	1.7	2.0	2.5	2.7	2.9	2.8	2.1	3.2		113.5
4-92	0.8	0.9	0.9	1.0	1.2	1.3	1.6	1.6	1.8	1.6	2.0	2.3	2.8	3.0	3.3	3.2	3.0	3.9	4.7	114.8

1-88 2-88 3-88 4-88 1-89 2-89 3-89 4-89 1-90 2-90 3-90 4-90 1-91 2-91 3-91 4-91 1-92 2-92 3-92

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March 9, 1993

Net Federal Debt

(Compounded Annual Rates of Change)

Terminal Quarter	Initial Quarter																		Billions of Dollars	
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92		3-92
2-88	6.8																			2,021.6
3-88	7.6	8.3																		2,062.4
4-88	6.6	6.4	4.6																	2,085.7
1-89	6.7	6.7	5.9	7.2																2,122.1
2-89	6.6	6.5	5.9	6.5	5.9															2,152.7
3-89	6.7	6.7	6.3	6.8	6.6	7.4														2,191.4
4-89	6.9	6.9	6.7	7.2	7.2	7.9	8.3													2,235.7
1-90	7.9	8.1	8.0	8.7	9.1	10.2	11.6	15.0												2,315.4
2-90	8.4	8.6	8.6	9.3	9.7	10.7	11.8	13.5	12.0											2,382.2
3-90	8.7	8.9	9.0	9.6	10.0	10.9	11.8	12.9	11.9	11.7										2,449.1
4-90	9.1	9.3	9.4	10.0	10.5	11.2	12.0	13.0	12.3	12.4	13.1									2,525.8
1-91	9.1	9.3	9.4	10.0	10.3	10.9	11.6	12.2	11.5	11.3	11.1	9.2								2,582.0
2-91	9.4	9.6	9.7	10.2	10.5	11.1	11.7	12.3	11.7	11.6	11.6	10.8	12.5							2,658.9
3-91	9.8	10.0	10.2	10.7	11.1	11.6	12.2	12.8	12.4	12.4	12.6	12.5	14.1	15.8						2,758.3
4-91	9.8	10.0	10.1	10.6	10.9	11.4	11.9	12.3	11.9	11.9	12.0	11.7	12.5	12.5	9.4					2,820.8
1-92	9.9	10.1	10.2	10.6	10.9	11.4	11.8	12.2	11.9	11.8	11.9	11.6	12.2	12.1	10.3	11.3				2,897.3
2-92	10.1	10.3	10.5	10.9	11.2	11.6	12.0	12.4	12.1	12.1	12.2	12.0	12.6	12.6	11.6	12.7	14.2			2,994.8
3-92	10.1	10.3	10.4	10.8	11.1	11.5	11.8	12.1	11.9	11.8	11.8	11.7	12.1	12.0	11.1	11.6	11.8	9.5		3,063.6
4-92	9.9	10.1	10.2	10.6	10.8	11.2	11.4	11.7	11.4	11.4	11.3	11.1	11.4	11.2	10.3	10.5	10.2	8.3	7.1	3,116.8

1-88 2-88 3-88 4-88 1-89 2-89 3-89 4-89 1-90 2-90 3-90 4-90 1-91 2-91 3-91 4-91 1-92 2-92 3-92

Prepared by Federal Reserve Bank of St. Louis
March 26, 1993

FEDERAL GOVERNMENT DEBT

(billions of dollars)

Seasonally Adjusted End of Month Totals

	Gross federal debt	Federal debt held by agencies and trusts	Net federal debt	Federal debt held by Federal Reserve Banks	Federal debt held by private investors	Federal debt held by foreign investors
1988 March	2487.5	498.9	1988.4	220.8	1765.2	330.9
June	2548.8	528.3	2021.6	227.1	1796.9	343.5
September	2614.3	552.1	2062.4	232.7	1830.8	348.6
December	2672.8	584.8	2085.7	231.6	1853.8	362.7
1989 March	2738.1	617.3	2122.1	232.5	1887.1	374.8
June	2801.9	650.3	2152.7	231.2	1921.0	367.7
September	2870.1	678.7	2191.4	224.4	1967.8	398.8
December	2942.1	702.9	2235.7	221.1	2011.0	391.7
1990 March	3046.9	734.0	2315.4	223.5	2096.6	383.3
June	3146.8	766.2	2382.2	230.7	2156.0	390.0
September	3247.7	798.4	2449.1	236.8	2217.6	407.8
December	3353.0	822.3	2525.8	250.9	2282.6	418.9
1991 March	3458.3	880.3	2582.0	252.3	2339.8	426.3
June	3542.0	884.9	2658.9	254.4	2414.6	437.3
September	3681.5	922.9	2758.3	269.8	2500.6	445.0
December	3788.4	961.4	2820.8	271.7	2556.6	451.4
1992 March	3873.6	978.4	2897.3	273.1	2640.2	469.8
June	3988.7	995.9	2994.8	276.3	2731.5	493.9
September	4080.9	1020.4	3063.6	302.1	2776.6	503.5
December	4164.5	1039.4	3116.8	291.4	2831.4	507.9

Columns may not add because each component is seasonally adjusted separately. Gross federal debt equals debt held by agencies and trusts plus net federal debt. Net federal debt equals debt held by Federal Reserve banks plus debt held by private investors (which includes debt held by foreign investors). Sources: Original data may be found in the *Treasury Bulletin* and also in the Federal Reserve *Bulletin*; seasonally adjusted series prepared by this Bank.

FEDERAL GOVERNMENT BUDGETS
(billions of dollars, quarterly totals seasonally adjusted at annual rates)

Quarters	Receipts		Expenditures		Surplus or deficit(—)	
	National income accounts budget	Cyclically adjusted budget	National income accounts budget	Cyclically adjusted budget	National income accounts budget	Cyclically adjusted budget
1985 1	797.8	819.3	947.7	953.0	– 149.9	– 133.7
2	758.6	780.7	964.9	964.4	– 206.3	– 183.7
3	794.3	811.8	976.3	991.3	– 182.0	– 179.5
4	803.6	822.0	990.8	1012.6	– 187.2	– 190.6
1986 1	809.4	816.4	992.7	1001.4	– 183.3	– 185.0
2	814.2	832.2	1038.0	1045.2	– 223.8	– 213.0
3	828.2	852.1	1047.9	1032.4	– 219.7	– 180.3
4	856.8	875.5	1034.3	1038.7	– 177.5	– 163.2
1987 1	858.4	875.1	1048.1	1057.4	– 189.7	– 182.3
2	928.6	938.1	1058.9	1060.4	– 130.3	– 122.3
3	924.5	927.2	1059.0	1065.6	– 134.5	– 138.4
4	943.5	930.0	1096.3	1103.0	– 152.7	– 173.0
1988 1	940.5	924.9	1098.0	1098.0	– 157.5	– 173.1
2	970.4	949.5	1105.0	1111.4	– 134.6	– 161.9
3	977.8	953.0	1097.3	1098.2	– 119.5	– 145.2
4	1000.6	971.4	1135.5	1156.1	– 134.9	– 184.7
1989 1	1050.9	1014.3	1160.8	1181.0	– 110.0	– 166.7
2	1064.5	1032.2	1174.2	1187.3	– 109.7	– 155.1
3	1053.6	1020.2	1181.5	1182.0	– 128.0	– 161.8
4	1068.3	1035.4	1209.8	1208.2	– 141.5	– 172.8
1990 1	1086.7	1061.7	1254.5	1252.2	– 167.8	– 190.5
2	1109.6	1093.4	1266.5	1275.4	– 156.9	– 182.0
3	1119.9	1116.0	1265.5	1273.6	– 145.6	– 157.6
4	1113.3	1132.1	1307.9	1311.2	– 194.6	– 179.1
1991 1	1114.6	1160.1	1264.4	1257.9	– 149.9	– 97.8
2	1117.3	1173.7	1329.4	1319.3	– 212.2	– 145.6
3	1127.7	N.A.	1348.7	N.A.	– 221.0	N.A.
4	1129.4	N.A.	1388.1	N.A.	– 258.7	N.A.
1992 1	1143.3	N.A.	1432.5	N.A.	– 289.2	N.A.
2	1149.8	N.A.	1452.7	N.A.	– 302.9	N.A.
3	1155.4	N.A.	1459.8	N.A.	– 304.4	N.A.
4	1194.0	N.A.	1488.6	N.A.	– 294.6	N.A.

N.A. — Not Available

	Fiscal years								Estimates	
	Actual									
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Total budget										
Receipts	\$ 734.1	\$ 769.1	\$ 854.1	\$ 909.0	\$ 990.7	\$ 1031.3	\$ 1054.3	\$ 1091.6	\$ 1147.6	\$ 1230.3
Outlays	946.4	990.3	1003.9	1064.1	1143.2	1252.7	1323.8	1381.8	1474.9	1522.7
Surplus or deficit (–)	\$ – 212.3	\$ – 221.2	\$ – 149.8	\$ – 155.2	\$ – 152.5	\$ – 221.4	\$ – 269.5	\$ – 290.2	\$ – 327.3	\$ – 292.4
Calendar years										
National income accounts budget										
Receipts	\$ 788.6	\$ 827.2	\$ 913.8	\$ 972.3	\$ 1059.3	\$ 1107.4	\$ 1122.2	\$ 1160.6		
Expenditures	969.9	1028.2	1065.6	1109.0	1181.6	1273.6	1332.7	1458.4		
Surplus or deficit (–)	\$ – 181.4	\$ – 201.0	\$ – 151.8	\$ – 136.6	\$ – 122.3	\$ – 166.2	\$ – 210.4	\$ – 297.8		
Cyclically adjusted budget										
Receipts	\$ 808.5	\$ 844.1	\$ 917.6	\$ 949.7	\$ 1025.5	\$ 1100.8				
Expenditures	980.3	1029.4	1071.6	1115.9	1189.6	1278.1				
Surplus or deficit (–)	\$ – 171.9	\$ – 185.4	\$ – 154.0	\$ – 166.2	\$ – 164.1	\$ – 177.3				

Fiscal years refer to the budget year which runs from October 1 through September 30.

Total budget outlays include federal entities that are off-budget.

Estimates from OMB's Budget Baselines, Historical Data, and Alternatives for the Future (January 6, 1993).

Cyclically adjusted budget data are in process of revision.

Totals may not add due to rounding.

Source: Office of Management and Budget and U.S. Department of Commerce.

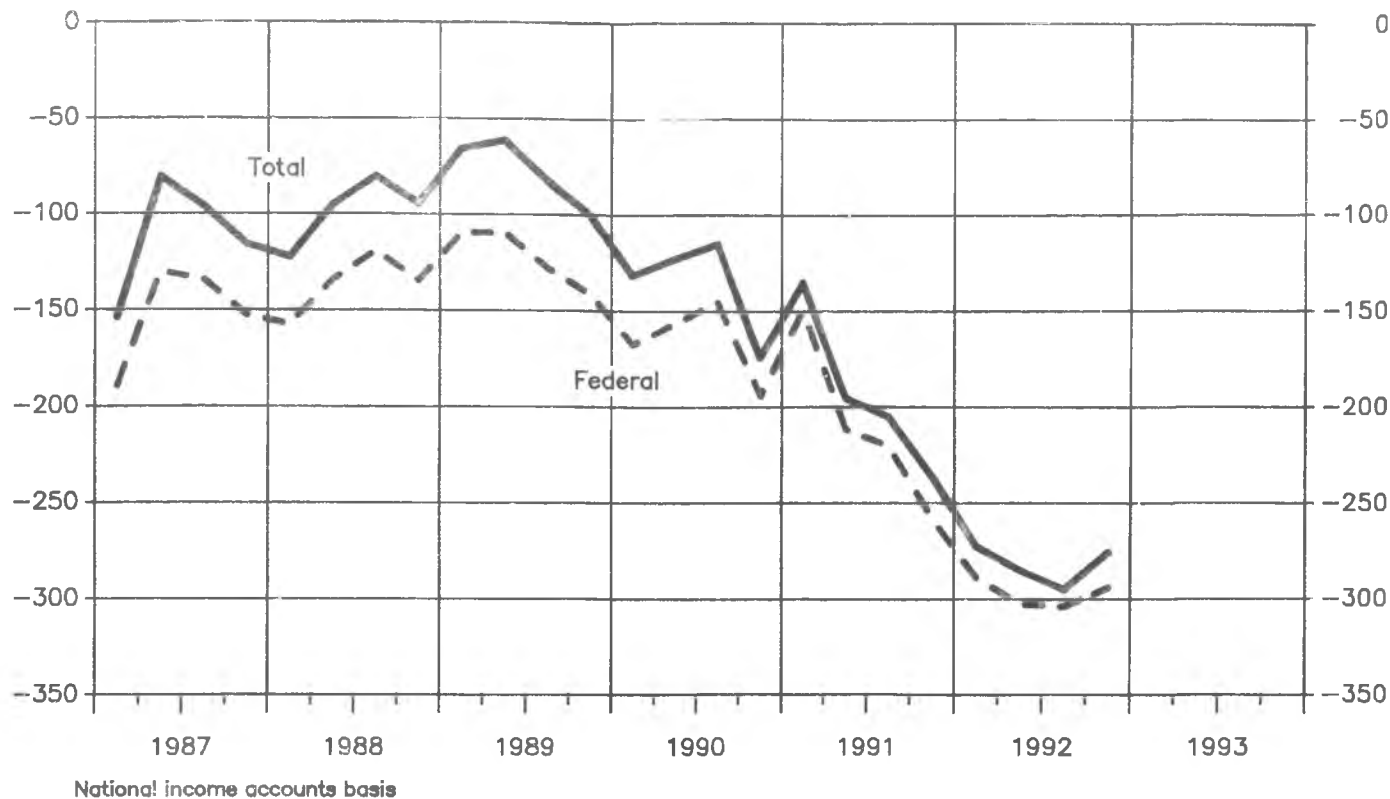
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Government Deficit(-)/Surplus(+)

Seasonally Adjusted

Billions of Dollars

Billions of Dollars



Prepared by Federal Reserve Bank of St. Louis

Federal Defense Expenditures

(Compounded Annual Rates of Change)

Terminal Quarter	Initial Quarter																Billions of Dollars Annual Rates			
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92	
2-88	-2.5																			294.8
3-88	-1.8	-1.1																		294.0
4-88	0.0	1.4	3.9																	296.8
1-89	-1.1	-0.6	-0.3	-4.4																293.5
2-89	0.4	1.2	1.9	0.9	6.6															298.2
3-89	1.9	2.8	3.8	3.8	8.2	9.9														305.3
4-89	1.1	1.7	2.3	1.9	4.1	2.9	-3.6													302.5
1-90	2.5	3.2	4.0	4.0	6.2	6.0	4.2	12.6												311.6
2-90	2.4	3.0	3.6	3.6	5.3	4.9	3.3	7.0	1.7											312.9
3-90	1.6	2.0	2.4	2.2	3.4	2.7	1.0	2.6	-2.0	-5.6										308.4
4-90	3.2	3.7	4.3	4.4	5.7	5.5	4.7	6.8	5.0	6.7	20.6									323.2
1-91	3.9	4.5	5.0	5.2	6.4	6.4	5.8	7.8	6.7	8.4	16.2	11.9								332.4
2-91	2.9	3.4	3.8	3.8	4.8	4.5	3.8	5.1	3.7	4.2	7.6	1.7	-7.6							325.9
3-91	2.4	2.7	3.1	3.0	3.8	3.5	2.7	3.6	2.2	2.3	4.4	-0.5	-6.2	-4.8						321.9
4-91	1.6	1.9	2.1	2.0	2.6	2.2	1.4	2.0	0.6	0.4	1.6	-2.6	-7.0	-6.8	-8.7					314.7
1-92	1.4	1.7	1.9	1.7	2.2	1.8	1.1	1.6	0.3	0.1	1.1	-2.4	-5.7	-5.0	-5.1	-1.4				313.6
2-92	1.2	1.4	1.6	1.4	1.9	1.5	0.8	1.2	0.0	-0.2	0.6	-2.4	-5.0	-4.4	-4.2	-1.9	-2.4			311.7
3-92	1.7	1.9	2.1	2.0	2.5	2.2	1.5	2.0	1.0	0.9	1.8	-0.6	-2.6	-1.5	-0.7	2.1	3.9	10.5		319.6
4-92	1.5	1.7	1.9	1.8	2.2	1.9	1.3	1.7	0.8	0.7	1.4	-0.8	-2.5	-1.6	-0.9	1.1	2.0	4.2	-1.7	318.2
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92	

1-88 2-88 3-88 4-88 1-89 2-89 3-89 4-89 1-90 2-90 3-90 4-90 1-91 2-91 3-91 4-91 1-92 2-92 3-92

Fourth quarter data are final estimates.

Prepared by Federal Reserve Bank of St. Louis
March 26, 1993

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Federal Nondefense Expenditures

(Compounded Annual Rates of Change)

Terminal Quarter	Initial Quarter																Billions of Dollars Annual Rates			
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92	
2-88	4.5																			810.2
3-88	0.5	-3.4																		803.3
4-88	6.3	7.2	18.8																	838.7
1-89	8.2	9.5	16.6	14.4																867.3
2-89	7.4	8.1	12.2	9.1	4.1															876.0
3-89	6.1	6.5	9.1	6.0	2.1	0.1														876.2
4-89	7.4	7.8	10.2	8.2	6.2	7.3	15.0													907.3
1-90	8.5	9.1	11.3	9.8	8.7	10.3	15.8	16.6												942.9
2-90	8.0	8.5	10.3	8.9	7.9	8.9	11.9	10.5	4.6											953.6
3-90	7.4	7.7	9.2	7.8	6.8	7.3	9.2	7.4	3.0	1.5										957.1
4-90	7.8	8.1	9.5	8.4	7.5	8.1	9.8	8.5	6.0	6.6	12.0									984.7
1-91	5.2	5.2	6.1	4.8	3.7	3.6	4.2	2.2	-1.2	-3.0	-5.2	-19.7								932.0
2-91	7.2	7.4	8.4	7.4	6.7	7.0	8.1	6.9	5.1	5.2	6.5	3.9	34.4							1,003.5
3-91	7.3	7.6	8.5	7.6	7.0	7.3	8.3	7.3	5.8	6.1	7.3	5.7	21.4	9.6						1,026.8
4-91	8.1	8.4	9.3	8.6	8.1	8.5	9.4	8.8	7.7	8.2	9.6	9.0	20.7	14.4	19.4					1,073.4
1-92	8.7	9.0	9.9	9.3	8.9	9.3	10.3	9.8	8.9	9.6	11.0	10.8	20.1	15.6	18.7	18.1				1,118.9
2-92	8.7	8.9	9.8	9.2	8.8	9.2	10.1	9.6	8.8	9.4	10.6	10.3	17.6	13.7	15.1	13.0	8.1			1,141.0
3-92	8.2	8.4	9.2	8.5	8.1	8.4	9.2	8.7	7.9	8.3	9.1	8.7	14.4	10.8	11.0	8.4	3.8	-0.3		1,140.2
4-92	8.3	8.5	9.3	8.7	8.3	8.6	9.3	8.9	8.2	8.5	9.4	9.0	13.9	10.8	11.0	9.0	6.2	5.2	11.0	1,170.4
	1-88	2-88	3-88	4-88	1-89	2-89	3-89	4-89	1-90	2-90	3-90	4-90	1-91	2-91	3-91	4-91	1-92	2-92	3-92	

Fourth quarter data are final estimates.

Prepared by Federal Reserve Bank of St. Louis
March 26, 1993