

# Health Care Indicators

by Carolyn S. Donham and Anne E. T. Vanek

*With this issue, a new regular feature of the Health Care Financing Review is being introduced. In each issue, "Health Care Indicators" will contain a section on each of the following four topics: community hospital statistics; employment, hours, and earnings in the private health sector; health care prices; and national economic indicators.*

*This new feature has been developed for two reasons. The first was to provide a service to readers in pulling together current data on health care from a variety of sources that are probably more readily available to our Agency than to the public at large. The brief digests of the data sections should provide useful information and point out trends. The second was to provide a place for the regularly scheduled release of provider input price index data from our Agency. Previously, this information was released infrequently and on a somewhat ad hoc basis in Federal Register notices.*

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## Community hospital statistics

Community hospital operating experience during the third quarter of 1988 reflected a continued shift of demand and resources toward outpatient care.

While measures of inpatient use dropped, those of outpatient use increased. The number of admissions dropped 0.9 percent between the third quarter of 1987 and that of 1988, and the number of inpatient days fell 0.9 percent. On the other hand, although hospital capacity (measured by the number of beds available) decreased 1.3 percent, the adult occupancy rate was 63.1 percent in the quarter ending September, up slightly from the rate 1 year ago. In another upward trend, the number of surgical operations (both inpatient and outpatient) increased 0.8 percent during the period. Despite inpatient retrenchment, or perhaps because of it, outpatient visits continued to exhibit strong growth, increasing 5.6 percent from the third quarter of 1987.

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**Table 1**  
**Selected community hospital statistics: 1985-88**

Item	Calendar year			1985	1986	1987	1987	1988	1988	1988
	1985	1986	1987	Q3	Q3	Q3	Q4	Q1	Q2	Q3
<b>Operating expenses</b>										
Total in millions	\$134,043	\$146,032	\$161,322	\$33,873	\$36,648	\$40,978	\$41,792	\$43,141	\$43,791	\$45,011
Labor in millions	74,715	80,169	87,533	18,929	20,176	22,323	22,656	23,277	23,622	24,511
Nonlabor in millions	59,328	65,862	73,790	14,945	16,473	18,654	19,136	19,864	20,169	20,500
Inpatient expense in millions	111,416	119,286	129,824	27,995	29,760	32,738	33,519	34,572	34,544	35,318
Amount per patient day	492.71	535.15	581.02	503.83	544.30	593.67	605.52	593.03	628.67	646.42
Amount per admission	3,226.16	3,526.59	3,859.87	3,238.74	3,533.13	3,896.25	4,054.20	3,988.83	4,138.92	4,242.69
<b>Utilization</b>										
Admissions in thousands	34,535	33,825	33,634	8,644	8,423	8,403	8,268	8,667	8,346	8,324
Inpatient days in thousands	226,129	222,904	223,441	55,565	54,675	55,145	55,357	58,297	54,947	54,635
Adult length of stay in days	6.5	6.6	6.6	6.4	6.5	6.6	6.7	6.7	6.6	6.6
Surgical operations in thousands	20,009	20,443	21,038	5,072	5,161	5,318	5,198	5,310	5,415	5,359
Outpatient visits in thousands	243,381	263,631	278,917	63,079	68,032	71,805	70,264	72,353	74,963	75,830
Beds in thousands	975	963	954	973	960	954	948	946	946	942
Adult occupancy rate <sup>1</sup>	63.6	63.4	64.1	62.1	61.9	62.9	63.5	67.7	63.9	63.1
<b>Full-time equivalent (FTE) personnel</b>										
Total in thousands	3,044	3,055	3,077	3,044	3,053	3,081	3,083	3,094	3,105	3,119
Number per bed	3.1	3.2	3.2	3.1	3.2	3.2	3.3	3.3	3.3	3.3
Adjusted patients days per FTE <sup>2</sup>	89	89	90	22	22	22	22	24	22	22
Adjusted patients days in thousands	272,052	272,881	277,654	67,231	67,331	69,024	69,019	72,747	69,656	69,632

<sup>1</sup>Adult occupancy rate is the ratio of average daily census to the average number of beds maintained during the reporting period.

<sup>2</sup>Adjusted patient days is an aggregate figure reflecting the number of days of inpatient care, plus an estimate of the volume of outpatient services, expressed in units equivalent to an inpatient day in terms of level of effort. It is derived by multiplying the number of outpatient days by the ratio of outpatient revenue per outpatient visit to inpatient revenue per inpatient day, and adding the product to the number of inpatient days.

NOTES: Q designates quarter of year. Quarterly data are not seasonally adjusted.

SOURCE: American Hospital Association: *National Hospital Panel Survey Reports*. Chicago. Monthly reports for Jan. 1985-Sept. 1988.

**Table 2**  
**Percent change in selected community hospital statistics: 1985-88**

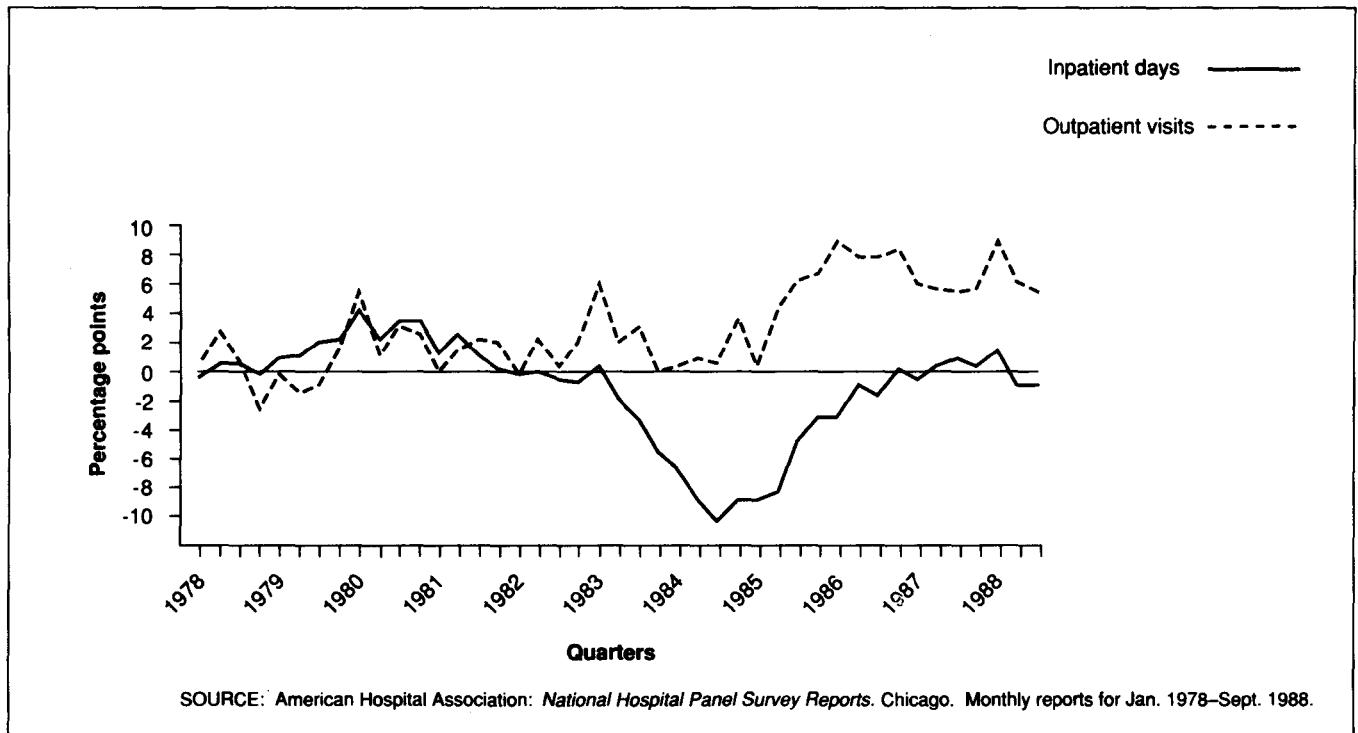
Item	Calendar year			1985 Q3	1986 Q3	1987 Q3	1987 Q4	1988 Q1	1988 Q2	1988 Q3
	1985	1986	1987							
	Annual percent change			Percent change from the same period of previous year						
<b>Operating expenses</b>										
Total in millions	6.4	8.9	10.5	7.1	8.2	11.8	10.5	11.7	9.6	9.8
Labor in millions	4.7	7.3	9.2	5.5	6.6	10.6	9.3	11.2	9.3	9.8
Nonlabor in millions	8.6	11.0	12.0	9.2	10.2	13.2	11.9	12.4	10.1	9.9
Inpatient expense in millions	4.1	7.1	8.8	4.6	6.3	10.0	8.9	9.8	7.7	7.9
Amount per patient day	11.3	8.6	8.6	10.0	8.0	9.1	8.6	8.2	8.8	8.9
Amount per admission	9.5	9.3	9.5	8.8	9.1	10.3	8.9	8.3	8.6	8.9
<b>Utilization</b>										
Admissions in thousands	-4.9	-2.1	-0.6	-3.8	-2.6	-0.2	0.0	1.4	-0.8	-0.9
Inpatient days in thousands	-6.5	-1.4	0.2	-4.9	-1.6	0.9	0.3	1.5	-1.0	-0.9
Adult length of stay in days	-1.7	0.6	0.8	-1.1	1.0	1.1	0.3	0.1	-0.2	0.0
Surgical operations in thousands	0.4	2.2	2.9	2.0	1.7	3.0	2.4	2.7	1.2	0.8
Outpatient visits in thousands	4.5	8.3	5.8	6.3	7.9	5.5	5.8	9.1	6.3	5.6
Beds in thousands	-1.8	-1.2	-0.9	-1.8	-1.3	-0.7	-1.3	-1.4	-1.2	-1.3
Adult occupancy rate <sup>1</sup>	-3.0	-0.2	0.7	-2.0	-0.3	1.0	1.0	1.2	0.1	0.2
<b>Full-time equivalent (FTE) personnel</b>										
Total in thousands	-2.3	0.3	0.7	-2.0	0.3	0.9	0.7	0.9	1.0	1.2
Number per bed	-0.5	1.5	1.6	-0.2	1.6	1.6	2.1	2.3	2.2	2.5
Adjusted patient days per FTE	-2.3	-0.0	1.0	-0.7	-0.2	1.6	1.0	2.4	-0.2	-0.4
Adjusted patient days in thousands	-4.5	0.3	1.7	-2.7	0.1	2.5	1.8	3.3	0.8	0.9

<sup>1</sup>Change in rate, rather than percent change.

NOTE: Q designates quarter of year.

SOURCE: American Hospital Association: *National Hospital Panel Survey Reports*. Chicago. Monthly reports for Jan. 1985-Sept. 1988.

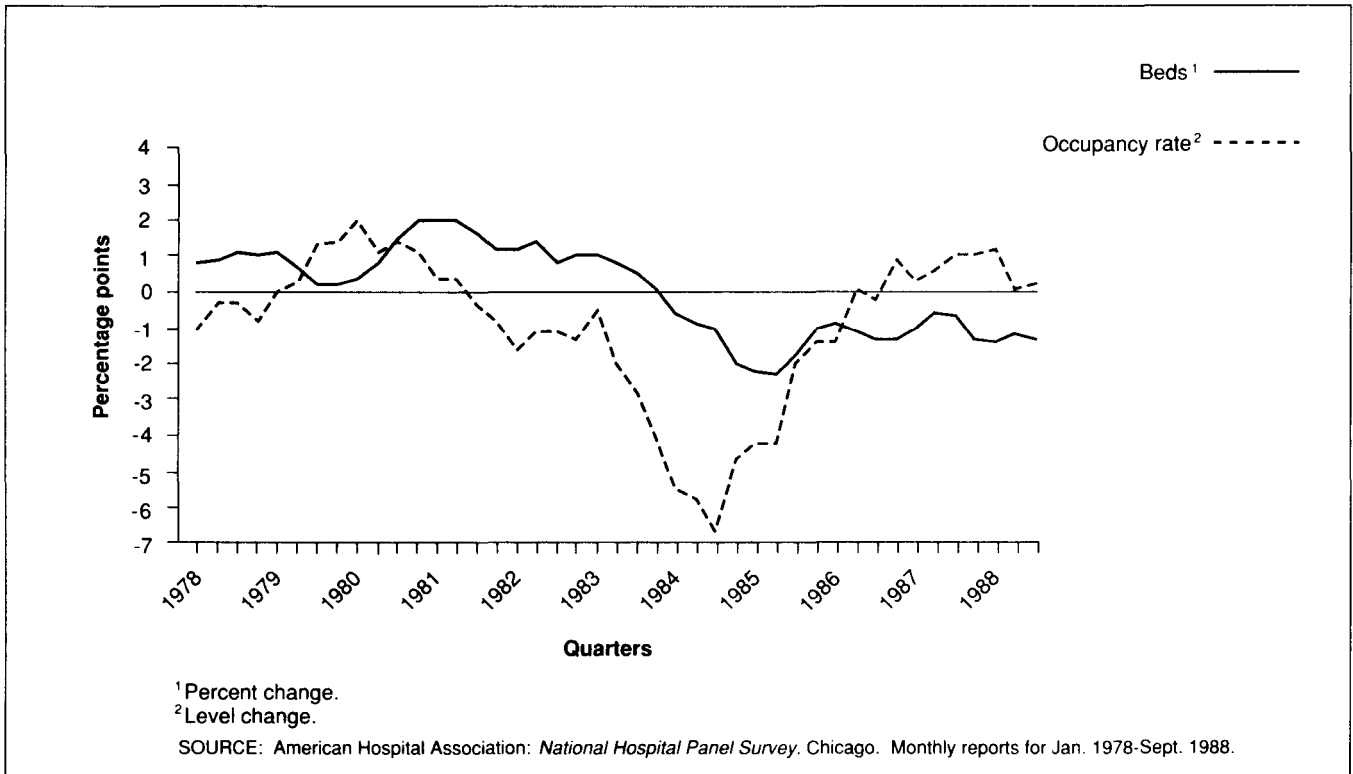
**Figure 1**  
**Percent change in inpatient days and outpatient visits from the same period of previous year: 1978-88**



SOURCE: American Hospital Association: *National Hospital Panel Survey Reports*. Chicago. Monthly reports for Jan. 1978-Sept. 1988.

Figure 2

Change in beds and occupancy rate from the same period of previous year: 1978-88



Operating expenses of community hospitals reached \$45 billion for the third calendar quarter of 1988 (Table 1). This figure was 9.8 percent higher than during the same quarter of 1987 (Table 2). Inpatient expenses, which exclude the costs of operating outpatient facilities, were 7.9 percent higher in the third quarter 1988 than they had been 1 year earlier. Both expenses per patient day and expenses per admission rose 8.9 percent.

Despite the decline in inpatient volume, average full-time equivalent (FTE) employment in community hospitals increased 1.2 percent between the third quarter of 1987 and the third quarter of 1988. FTE employees per bed grew 2.5 percent over the same period, perhaps reflecting increased employment in outpatient departments.

The change in inpatient days and outpatient visits for 1978-88 is shown in Figure 1. The change in beds and occupancy rate for the same period is shown in Figure 2.

### Private health sector: Employment, hours, and earnings

Bolstered by hospitals and offices of physicians, employment, payroll, and work hours in the health sector outpaced those in the economy at large.

Total employment in the health sector (defined by 1972 Standard Industrial Classification 80) was 5.2 percent higher in the third calendar quarter of 1988 than it had been 1 year earlier (Table 4). Most of this

growth was concentrated in hospitals and physician offices; dentist offices and nursing homes reported growth rates less than 3 percent, well below the economy-wide average of 4.4 percent.

Although employment growth in the health industry exceeded the national average, the average workweek declined (Table 3). Again, experience within the industry was not uniform: the decline was posted only in institutional settings—hospitals and nursing homes. The workweek in offices of physicians was longer during the third quarter of 1988 than it had been last year, but the workweek in offices of dentists, as in the rest of the private economy, was unchanged over the period.

Average hourly earnings of the 6.4 million full- and part-time nonsupervisory workers in the private health industry increased 6.3 percent in the third calendar quarter, compared with an increase of 3.7 percent in all industries. Every major type of health establishment posted higher growth in wages than was reported for the economy as a whole, reflecting the differential nature of demand for health workers.

Reflecting the patterns of employment, total work hours in the private health industry increased 4.9 percent in the third quarter, one-half percentage point faster than in the total private economy, and payrolls increased 11.6 percent, 3.6 percentage points faster than in the total private economy (Table 5). As had been the case for employment, growth both of payroll and of work hours was stronger for hospitals and offices of physicians than for the economy as a whole and weaker for nursing homes and offices of dentists.

Table 3

**Employment, hours, and earnings in private health service establishments, by selected type of establishment: 1985-88**

Type of establishment and measure	Calendar year			1985 Q3	1986 Q3	1987 Q3	1987 Q4	1988 Q1	1988 Q2	1988 Q3
	1985	1986	1987							
<b>Health services (SIC 80)</b>										
Total employment in thousands	6,298.7	6,550.5	6,879.4	6,332.5	6,611.4	6,940.7	7,017.0	7,087.7	7,163.4	7,299.3
Nonsupervisory workers:										
Employment in thousands	5,607.0	5,822.6	6,111.7	5,636.0	5,876.1	6,166.4	6,227.9	6,290.5	6,365.2	6,489.2
Average weekly hours	32.5	32.4	32.4	32.6	32.5	32.6	32.4	32.4	32.3	32.5
Average hourly earnings	\$8.06	\$8.35	\$8.70	\$8.09	\$8.38	\$8.74	\$8.88	\$9.02	\$9.14	\$9.29
<b>Offices of physicians and surgeons (SIC 801)</b>										
Total employment in thousands	945.7	995.4	1,074.5	953.1	1,007.1	1,089.1	1,110.2	1,125.0	1,126.0	1,151.5
Nonsupervisory workers:										
Employment in thousands	784.2	823.1	883.5	790.0	832.5	894.0	910.2	919.8	923.8	944.6
Average weekly hours	30.6	30.9	30.9	30.6	30.9	31.0	31.0	31.2	31.1	31.2
Average hourly earnings	\$7.86	\$8.18	\$8.40	\$7.85	\$8.17	\$8.43	\$8.53	\$8.66	\$8.75	\$8.83
<b>Offices of dentists (SIC 802)</b>										
Total employment in thousands	439.2	460.0	479.7	442.1	464.3	483.5	487.1	488.7	488.1	495.7
Nonsupervisory workers:										
Employment in thousands	391.2	406.0	423.3	393.3	409.2	426.5	430.1	430.3	429.2	435.0
Average weekly hours	28.6	28.0	28.3	28.5	27.9	28.3	28.5	28.5	28.3	28.3
Average hourly earnings	\$7.88	\$8.26	\$8.49	\$7.95	\$8.27	\$8.48	\$8.59	\$8.74	\$8.86	\$8.93
<b>Nursing and personal care facilities (SIC 805)</b>										
Total employment in thousands	1,198.9	1,249.8	1,296.6	1,210.1	1,266.0	1,306.2	1,307.2	1,310.5	1,317.7	1,338.5
Nonsupervisory workers:										
Employment in thousands	1,084.7	1,129.0	1,171.2	1,095.6	1,144.4	1,181.0	1,179.8	1,182.2	1,189.4	1,209.8
Average weekly hours	31.2	31.4	31.6	31.6	31.6	32.0	31.6	31.5	31.5	31.8
Average hourly earnings	\$5.61	\$5.80	\$5.99	\$5.64	\$5.80	\$6.03	\$6.10	\$6.19	\$6.25	\$6.40
<b>Private hospitals (SIC 806)</b>										
Total employment in thousands	2,997.3	3,038.2	3,151.9	2,999.6	3,053.6	3,178.3	3,211.7	3,255.3	3,311.8	3,366.7
Nonsupervisory workers:										
Employment in thousands	2,732.2	2,768.5	2,874.9	2,733.2	2,782.6	2,900.0	2,929.1	2,971.8	3,025.4	3,078.9
Average weekly hours	34.3	34.2	34.1	34.5	34.3	34.4	34.1	34.1	33.9	34.1
Average hourly earnings	\$9.00	\$9.36	\$9.85	\$9.05	\$9.42	\$9.91	\$10.10	\$10.25	\$10.40	\$10.59
<b>All private nonagricultural establishments</b>										
Total employment in thousands	81,125	82,900	85,049	82,039	83,874	86,013	86,601	85,674	88,417	89,830
Nonsupervisory workers:										
Employment in thousands	65,586	67,061	68,783	66,381	67,929	69,627	70,110	69,085	71,514	72,721
Average weekly hours	34.9	34.8	34.8	35.1	34.9	35.0	34.9	34.4	34.7	35.0
Average hourly earnings	\$8.57	\$8.76	\$8.98	\$8.57	\$8.74	\$8.97	\$9.12	\$9.18	\$9.24	\$9.30
<b>Employment in thousands</b>										
All hospitals	4,301.8	4,332.1	4,476.3	4,306.3	4,351.6	4,512.3	4,549.6	4,595.0	4,638.0	4,701.8
Private hospitals (SIC 806)	2,997.3	3,038.2	3,151.9	2,999.6	3,053.6	3,178.3	3,211.7	3,255.3	3,311.8	3,366.7
Federal hospitals	248.1	246.9	251.3	251.1	246.5	254.9	252.8	252.7	248.4	248.4
State hospitals	448.5	441.6	449.9	447.5	443.2	452.0	452.6	451.5	445.0	446.8
Local hospitals	607.9	605.5	623.2	608.1	608.3	627.1	632.5	635.5	632.8	639.9

NOTES: Standard Industrial Classification (SIC) codes for 1972 are used. Q designates quarter of year. Quarterly data are not seasonally adjusted.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics: *Employment and Earnings*. Washington. U.S. Government Printing Office. Monthly reports for Jan. 1985-Sept. 1988.

The change in total employment for 1978-88 is shown in Figure 3. The change in nonsupervisory average hourly earnings for the same period is shown in Figure 4.

## Health care prices

### Medical care consumers

Prices paid by consumers of medical care in the third calendar quarter of 1988, as measured by the Consumer Price Index for all urban consumers (CPI), were 6.6 percent higher than in the previous year's

third quarter (Tables 6 and 7). The medical care component of the CPI grew half again as fast as did the Index for all items.

Within the medical care component of the CPI, inflation was higher for hospital and drug prices than it was for professional services. Hospital-related prices rose 9.8 percent between the third quarter of 1987 and the third quarter of 1988, while prescription drug prices climbed 7.9 percent. Physician fees were 7.3 percent above the level for the third quarter of 1987, and nonprescription drug prices rose 5.4 percent. The change in measures of price inflation is shown in Figure 5.

Table 4

**Percent change in employment, hours, and earnings in private health service establishments, by selected type of establishment: 1985-88**

Type of establishment and measure	Calendar year			1985 Q3	1986 Q3	1987 Q3	1987 Q4	1988 Q1	1988 Q2	1988 Q3
	1985	1986	1987							
	Annual percent change			Percent change from same period of previous year						
<b>Health services (SIC 80)</b>										
Total employment in thousands	2.9	4.0	5.0	3.1	4.4	5.0	5.4	5.3	4.9	5.2
Nonsupervisory workers:										
Employment in thousands	2.6	3.8	5.0	2.8	4.3	4.9	5.2	5.1	4.9	5.2
Average weekly hours	0.0	-0.3	-0.1	0.0	-0.3	0.3	0.3	0.6	0.0	-0.3
Average hourly earnings	4.5	3.6	4.2	4.4	3.6	4.3	5.1	5.4	6.2	6.3
<b>Offices of physicians and surgeons (SIC 801)</b>										
Total employment in thousands	4.6	5.3	7.9	4.3	5.7	8.1	9.2	8.4	6.2	5.7
Nonsupervisory workers:										
Employment in thousands	3.9	5.0	7.3	3.5	5.4	7.4	8.3	7.6	5.6	5.7
Average weekly hours	-0.3	1.0	-0.1	0	1.0	0.3	0.3	1.3	1.0	0.6
Average hourly earnings	4.5	4.0	2.6	3.8	4.1	3.2	3.4	4.0	5.5	4.7
<b>Offices of dentists (SIC 802)</b>										
Total employment in thousands	3.3	4.7	4.3	3.3	5.0	4.1	4.1	3.8	2.3	2.5
Nonsupervisory workers:										
Employment in thousands	3.7	3.8	4.2	2.8	4.0	4.2	4.0	3.4	2.1	2.0
Average weekly hours	-0.7	-1.9	0.9	-1.7	-2.1	1.4	2.2	1.4	0.7	0.0
Average hourly earnings	6.2	4.9	2.7	7.0	4.0	2.5	3.5	3.7	4.7	5.3
<b>Nursing and personal care facilities (SIC 805)</b>										
Total employment in thousands	4.4	4.2	3.7	4.8	4.6	3.2	2.7	2.3	2.0	2.5
Nonsupervisory workers:										
Employment in thousands	4.5	4.1	3.7	4.8	4.5	3.2	2.7	2.2	1.9	2.4
Average weekly hours	0.2	0.7	0.6	0.3	0.0	1.3	0.6	0.6	0.3	-0.6
Average hourly earnings	3.4	3.3	3.4	3.9	2.8	4.0	4.6	4.9	5.2	6.1
<b>Private hospitals (SIC 806)</b>										
Total employment in thousands	-0.2	1.4	3.7	0.2	1.8	4.1	4.7	5.3	5.9	5.9
Nonsupervisory workers:										
Employment in thousands	-0.4	1.3	3.8	-0.0	1.8	4.2	4.8	5.4	6.1	6.2
Average weekly hours	0.5	-0.3	-0.3	0.6	-0.6	0.3	0.0	0.0	-0.3	-0.9
Average hourly earnings	5.2	4.0	5.3	5.1	4.1	5.2	6.1	6.2	6.8	6.9
<b>All private nonagricultural establishments</b>										
Total employment in thousands	3.4	2.2	2.6	3.0	2.2	2.6	3.1	3.5	4.3	4.4
Nonsupervisory workers:										
Employment in thousands	3.4	2.2	2.6	3.1	2.3	2.5	3.0	3.5	4.2	4.4
Average weekly hours	-0.8	-0.4	0.1	-0.8	-0.6	0.3	0.6	-0.3	-0.3	0.0
Average hourly earnings	3.0	2.3	2.5	2.9	2.0	2.6	3.1	3.0	3.6	3.7
<b>Employment in thousands</b>										
All hospitals	-0.6	0.7	3.3	-0.2	1.1	3.7	4.2	4.5	4.3	4.2
Private hospitals (SIC 806)	-0.2	1.4	3.7	0.2	1.8	4.1	4.7	5.3	5.9	5.9
Federal hospitals	3.0	-0.5	1.8	3.7	-1.8	3.4	3.5	2.8	-1.4	-2.6
State hospitals	-2.2	-1.5	1.9	-2.2	-1.0	2.0	2.1	1.3	-0.9	-1.2
Local hospitals	-2.4	-0.4	2.9	-2.0	0.0	3.1	3.5	3.4	2.3	2.0

NOTES: Standard Industrial Classification (SIC) codes for 1972 are used. Q designates quarter of year.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics: *Employment and Earnings*. Washington. U.S. Government Printing Office. Monthly reports for Jan. 1985-Sept. 1988.

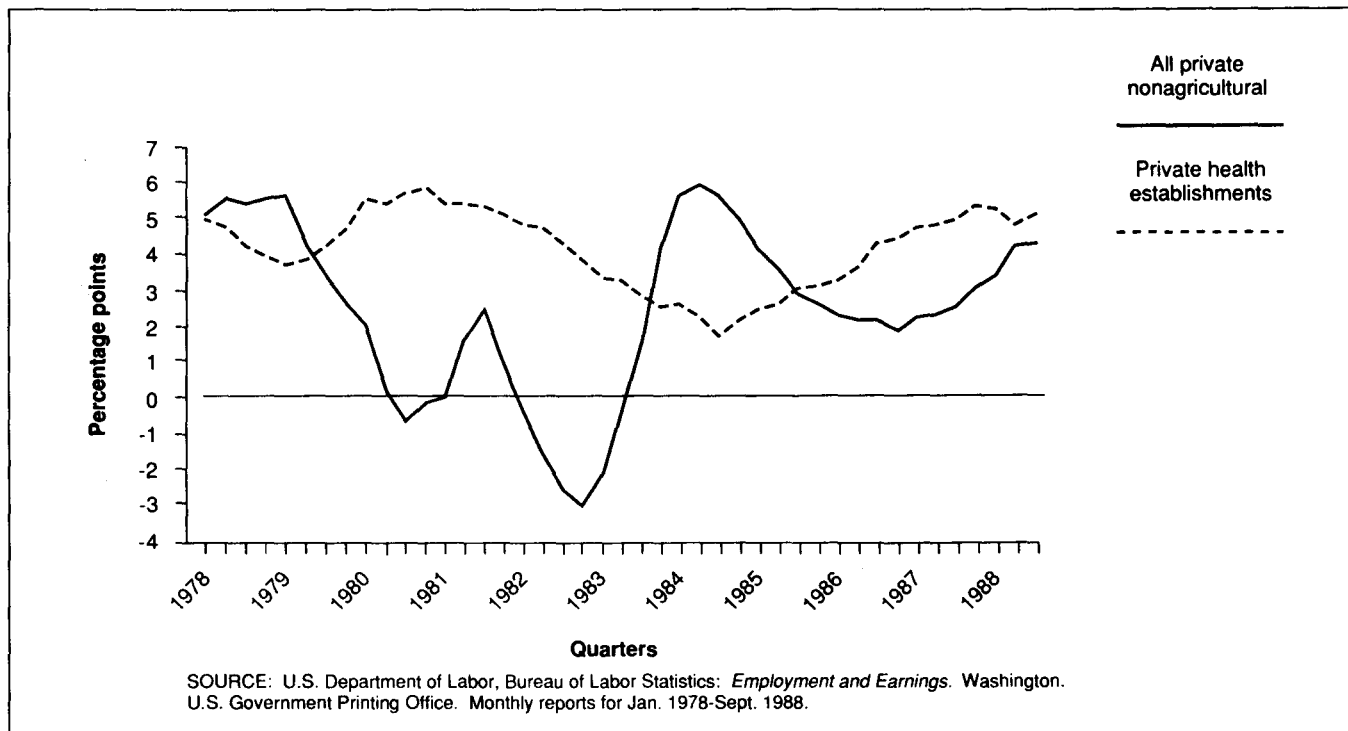
**Table 5**  
**Percent change in implied nonsupervisory payrolls and work hours in private health service establishments, by selected type of establishment: 1985-88**

Type of establishment	Calendar year			1985 Q3	1986 Q3	1987 Q3	1987 Q4	1988 Q1	1988 Q2	1988 Q3
	1985	1986	1987							
	Annual percent change			Percent change from same period of previous year						
<b>Private health service establishments (SIC 80)</b>										
Payrolls	7.2	7.3	9.3	7.4	7.4	9.8	11.0	11.3	11.5	11.6
Work hours	2.6	3.6	4.9	2.8	3.9	5.3	5.5	5.8	4.9	4.9
<b>Offices of physicians and surgeons (SIC 801)</b>										
Payrolls	8.2	10.3	10.1	7.7	10.8	10.8	12.4	13.4	12.7	11.4
Work hours	3.5	6.0	7.3	3.5	6.4	7.7	8.6	9.0	6.7	6.3
<b>Offices of dentists (SIC 802)</b>										
Payrolls	9.4	6.8	8.0	8.2	5.8	8.7	10.1	8.7	7.5	7.2
Work hours	3.0	1.8	5.1	1.0	1.9	5.7	6.3	4.9	2.8	2.0
<b>Nursing and personal care facilities (SIC 805)</b>										
Payrolls	8.2	8.3	7.9	8.9	7.6	8.7	8.2	8.0	7.7	7.8
Work hours	4.6	4.8	4.3	5.1	4.5	4.5	3.3	2.8	2.3	1.8
<b>Private hospitals (SIC 806)</b>										
Payrolls	5.4	5.1	9.0	5.9	5.4	9.7	11.2	12.1	12.8	12.6
Work hours	0.1	1.1	3.5	0.6	1.2	4.5	4.8	5.4	5.8	5.2
<b>All private nonagricultural establishments</b>										
Payrolls	5.7	4.1	5.2	5.1	3.8	5.5	6.5	6.4	7.7	8.0
Work hours	2.6	1.8	2.7	2.2	1.7	2.8	3.6	3.2	3.9	4.4

NOTES: Standard Industrial Classification (SIC) codes for 1972 are given. Q designates quarter of year.

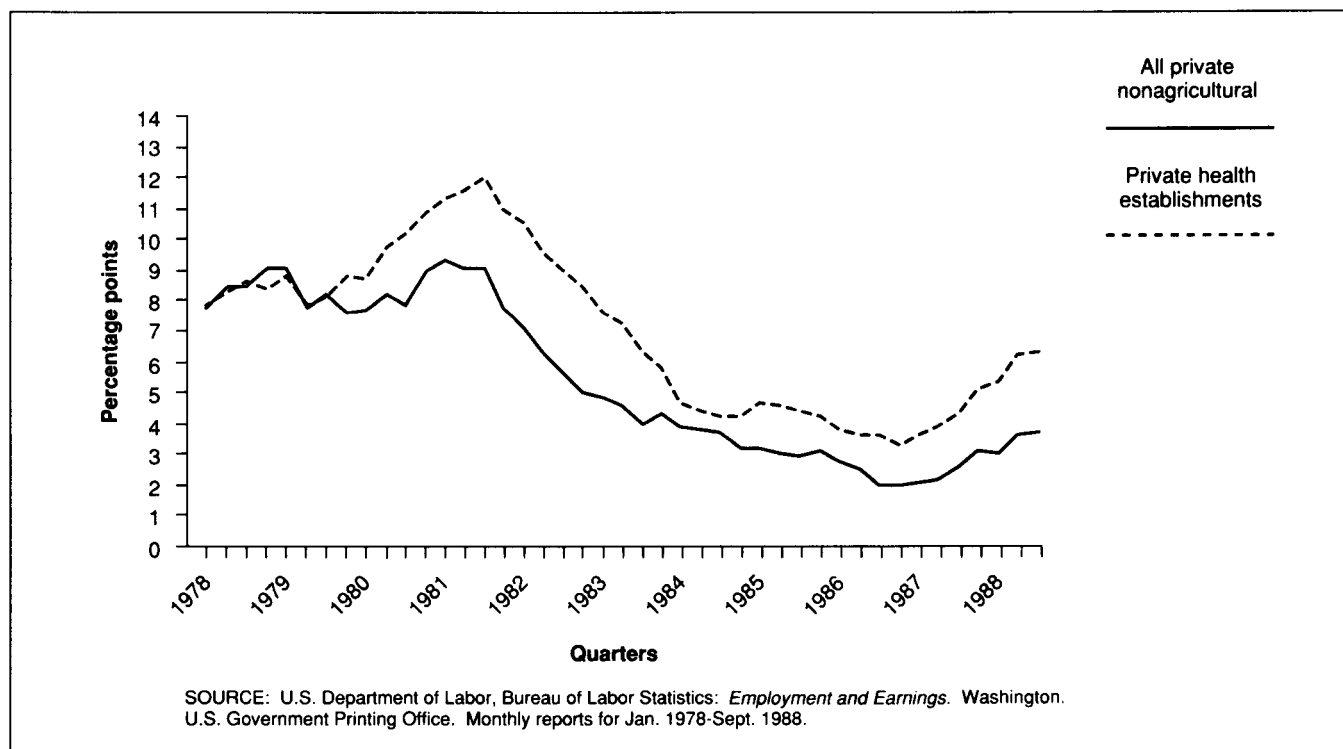
SOURCE: U.S. Department of Labor, Bureau of Labor Statistics: *Employment and Earnings*. Washington. U.S. Government Printing Office. Monthly reports for Jan. 1985-Sept. 1988.

**Figure 3**  
**Percent change for total employment from the same period of previous year: 1978-88**



**Figure 4**

**Percent change for nonsupervisory average hourly earnings from the same period of previous year: 1978-88**



**Table 6**

**Selected items of the Consumer Price Index for all urban consumers: 1985-88**

Item	Calendar year			1985 Q3	1986 Q3	1987 Q3	1987 Q4	1988 Q1	1988 Q2	1988 Q3
	1985	1986	1987							
All items	107.6	109.6	113.6	108.0	109.8	114.4	115.4	116.1	117.5	119.1
All items less medical care	107.2	108.9	112.6	107.6	109.0	113.3	114.3	114.9	116.3	117.9
Apparel and upkeep	105.1	105.9	110.6	105.0	105.7	110.0	114.5	111.6	116.0	114.4
Energy	101.7	88.2	88.6	103.6	86.2	92.0	89.0	87.0	89.0	91.9
Food and beverages	105.6	109.1	113.5	105.6	109.8	113.9	114.5	115.8	117.1	119.4
Housing: shelter	109.8	115.9	121.2	110.8	116.6	122.0	123.4	125.1	126.2	128.0
Medical care	113.5	122.0	130.2	114.4	123.1	131.2	132.7	135.4	137.5	139.9
Medical care services <sup>1</sup>	113.2	121.9	130.0	114.0	123.0	131.0	132.4	135.2	137.2	139.6
Professional services	113.6	120.8	128.9	114.4	121.7	130.1	131.5	134.4	136.6	138.8
Physicians' services	113.3	121.5	130.4	114.2	122.4	131.7	133.1	136.3	138.7	141.3
Dental services	114.3	120.6	128.8	115.0	121.5	130.1	131.7	134.5	136.6	138.6
Hospital and related services	116.2	123.1	131.6	116.8	123.9	132.7	135.1	138.9	141.5	145.7
Hospital room	115.4	122.3	131.2	115.9	122.8	132.2	134.5	138.1	141.1	145.4
Other inpatient services <sup>2</sup>	NA	NA	103.9	NA	NA	104.9	106.6	109.6	111.7	115.2
Outpatient services <sup>2</sup>	NA	NA	103.3	NA	NA	104.0	106.3	109.3	110.9	113.5
Medical care commodities	115.2	122.8	131.0	116.2	123.8	132.2	134.2	136.2	138.8	141.2
Prescription drugs	120.1	130.4	140.9	121.5	132.0	142.2	144.9	147.7	150.7	153.4
Nonprescription drugs and medical supplies <sup>2</sup>	NA	NA	103.1	NA	NA	104.1	104.9	105.6	107.5	109.1
Internal and respiratory over-the-counter drugs	112.2	117.7	123.9	113.2	118.4	125.2	126.5	127.6	129.8	131.9
Nonprescription medical equipment and supplies	109.7	115.0	119.6	110.2	115.7	120.6	120.8	121.0	123.4	124.9

<sup>1</sup>December 1986 = 100.

<sup>2</sup>Includes private health insurance (not shown separately).

NOTES: 1982-84 = 100.0, unless noted. Q designates quarter of year. Quarterly data are not seasonally adjusted. NA designates not available.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics: *CPI Detailed Report*. Washington. U.S. Government Printing Office. Monthly reports for Jan. 1985-Sept. 1988.

Table 7

## Percent change in selected items of the Consumer Price Index for all urban consumers: 1985-88

Item	Calendar year			1985 Q3	1986 Q3	1987 Q3	1987 Q4	1988 Q1	1988 Q2	1988 Q3
	1985	1986	1987							
	Annual percent change			Percent change from the same period of previous year						
All items	3.6	1.9	3.7	3.3	1.7	4.2	4.5	4.0	3.9	4.1
All items less medical care	3.4	1.6	3.4	3.2	1.3	3.9	4.4	3.8	3.7	4.1
Apparel and upkeep	2.9	0.8	4.4	2.8	0.7	4.1	5.7	4.1	4.8	4.0
Energy	0.7	-13.2	0.4	1.6	-16.8	6.7	8.5	2.2	0.9	-0.1
Food and beverages	2.3	3.3	4.1	1.9	4.0	3.7	3.4	3.0	3.4	4.8
Housing: shelter	5.6	5.5	4.6	5.7	5.2	4.6	4.7	5.1	4.7	4.9
Medical care	6.2	7.5	6.7	6.4	7.6	6.6	6.0	6.3	6.3	6.6
Medical care services	6.0	7.8	6.6	6.2	7.9	6.5	5.8	6.2	6.3	6.6
Professional services	6.1	6.4	6.6	6.2	6.4	6.9	6.5	6.9	6.6	6.7
Physicians' services	5.8	7.2	7.3	5.9	7.2	7.6	6.7	7.1	7.1	7.3
Dental services	6.3	5.6	6.7	6.2	5.7	7.1	7.1	7.4	6.7	6.5
Hospital and related services	6.4	6.0	6.9	6.2	6.1	7.1	7.0	8.1	8.8	9.8
Hospital room	5.9	6.0	7.2	5.5	6.0	7.7	7.1	7.7	8.8	10.0
Other inpatient services <sup>1</sup>	NA	NA	NA	NA	NA	NA	NA	8.3	8.7	9.8
Outpatient services <sup>1</sup>	NA	NA	NA	NA	NA	NA	NA	8.1	8.8	9.1
Medical care commodities	7.1	6.6	6.7	7.2	6.5	6.8	7.3	6.8	6.9	6.8
Prescription drugs	9.5	8.6	8.0	9.8	8.6	7.7	8.2	8.0	8.0	7.9
Nonprescription drugs and medical supplies <sup>1</sup>	NA	NA	NA	NA	NA	NA	NA	4.6	4.9	4.8
Internal and respiratory over-the-counter drugs	5.4	4.9	5.3	5.5	4.6	5.7	6.4	5.4	5.6	5.4
Nonprescription medical equipment and supplies	4.4	4.9	4.0	4.6	5.0	4.2	3.9	3.0	3.4	3.6

<sup>1</sup>Includes private health insurance (not shown separately).

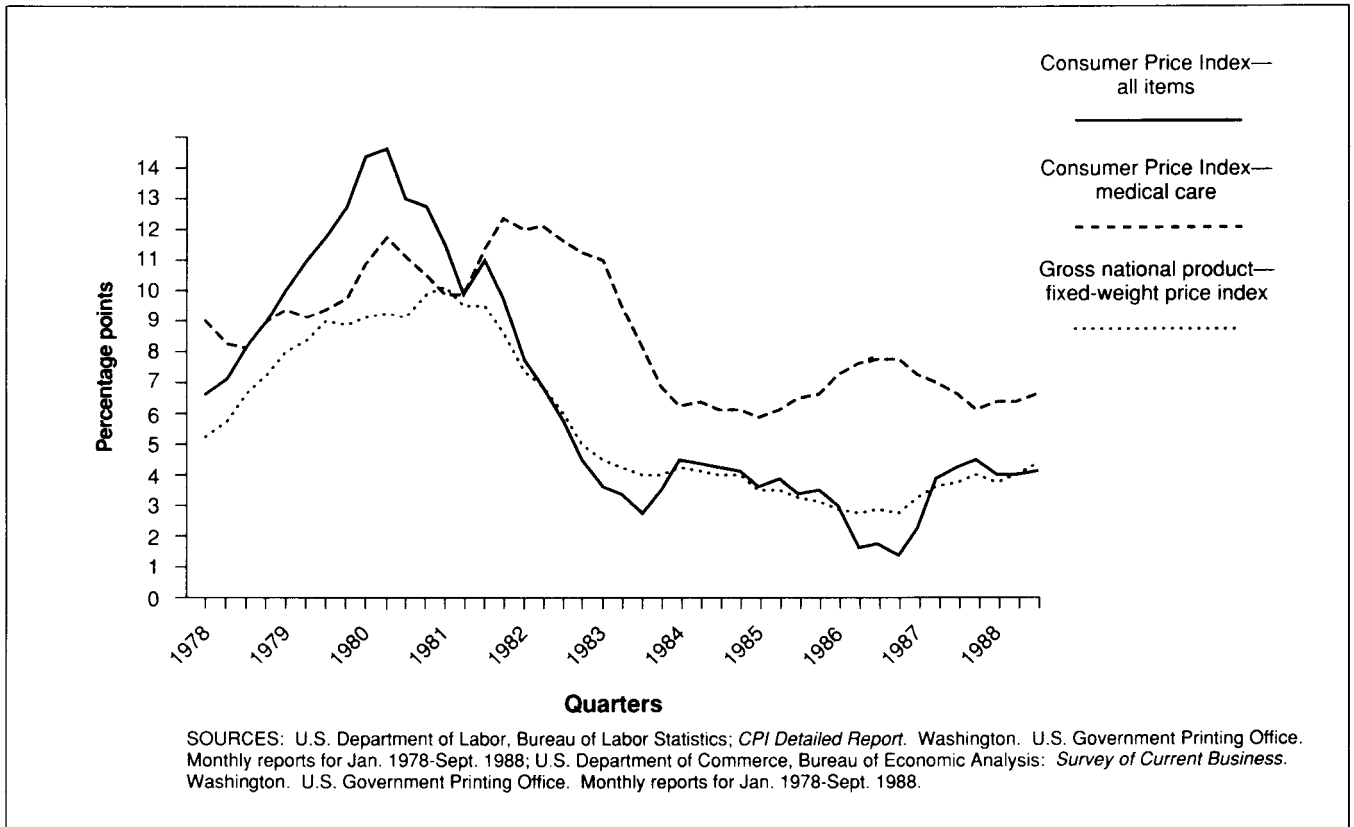
NOTES: Q designates quarter of year. NA designates not available.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics: *CPI Detailed Report*. Washington, U.S. Government Printing Office. Monthly reports for Jan. 1985-Sept. 1988.



Figure 5

Percent change in measures of price inflation from the same period of previous year: 1978-88



## Health care providers

### Background on input price indexes

In 1979, the Health Care Financing Administration (HCFA) developed the hospital input price index in order to assess the role of input price increases in the rapid rise of expenditures for hospital services. The nursing home and home health agency input price indexes were developed in the early 1980's. These indexes are often referred to as "market baskets" because they price a consistent set of goods and services over time. Since their creation, they have played an important role in setting payment levels and understanding the contribution of provider input price increases to growing health expenditures.

The input price indexes or "market baskets," are Laspeyres or fixed-weight indexes constructed in two steps. First, a base period is selected. For example, for the prospective payment system (PPS) hospital market basket, the base period is 1982. Next, a set of cost categories such as food, fuel, and labor are identified and their 1982 expenditure level determined. The proportion or share of total expenditures accounted for by specific spending categories is calculated. These proportions are called cost or expenditure weights. There are 28 expenditure categories in the 1982-based hospital regulation market basket. In the next step, a price proxy is

selected to match each expenditure category. The price proxy index for each spending category is multiplied by the expenditure weight for that category. The sum of these products (weights multiplied by the price index) over all cost categories yields the input price index for any given time period, usually a quarter or a year. The percentage change in the market basket is an estimate of price change over time for a fixed quantity of goods and services purchased by a provider.

The market baskets are estimated on a historical basis and forecasted out several years. The forecasted price proxies are based on work done under contract with Data Resources, Inc. (DRI). Each quarter, 1 month after the end of a calendar quarter, DRI updates their macroeconomic forecasts of wages and prices. DRI bases the new forecasts on updated historical information and revised forecast assumptions; the data is forecasted in February, May, August, and November. Most of the data in Tables 8 through 13 are forecasted and all are expected to change as more recent historical data become available and subsequent quarterly forecasts are received.

The methodology and price proxy definitions used in the development of the market basket are referenced in the *Federal Register* notices that accompany the annual revisions of the PPS and the home health agency (HHA) and skilled nursing

**Table 8**  
**Quarterly percent change in the prospective payment system hospital input price index, by**  
**expense category: 1988-91**

Expense category <sup>1</sup>	Base-year	1988	1988	1988	1988	1989	1989	1989	1989
	weights 1982 <sup>2</sup>	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Total	100.000	4.2	4.5	4.7	4.9	5.1	5.3	5.4	5.5
Wages and salaries	55.774	4.3	4.6	4.8	5.0	5.2	5.3	5.4	5.6
Employee benefits	9.785	2.0	2.4	2.8	3.4	3.7	4.1	4.6	5.2
Other professional fees	0.759	4.2	4.5	4.6	4.8	5.3	5.5	5.8	6.0
Energy and utilities	3.159	3.0	3.1	0.8	0.3	2.9	5.6	7.9	8.6
Fuel oil, coal, and other fuel	1.150	15.7	13.1	4.2	-2.2	0.7	3.6	8.1	11.9
Electricity	1.084	-1.5	-1.1	-0.8	1.6	4.2	6.7	8.0	7.3
Natural gas	0.473	-7.6	-3.9	-2.8	-0.4	1.9	4.4	5.9	6.2
Motor gasoline	0.417	14.8	12.5	5.0	0.4	3.6	6.8	9.8	10.9
Water and sewerage maintenance	0.035	5.4	5.2	5.0	5.3	5.7	6.5	7.1	7.3
Malpractice insurance	0.657	16.7	16.1	16.5	17.9	18.8	19.3	19.2	18.7
All other	29.866	4.2	4.5	4.7	4.9	5.0	4.8	4.7	4.7
Other products	21.133	4.6	4.8	5.2	5.3	5.3	5.1	4.8	4.7
Pharmaceuticals	4.096	8.8	8.4	8.1	7.5	6.8	5.9	5.5	5.6
Food	3.558	3.1	3.0	3.6	4.5	5.6	6.5	6.9	7.0
Direct purchase	2.265	2.6	2.4	3.3	4.5	5.9	7.1	7.5	7.5
Contract service	1.294	3.8	3.8	4.0	4.4	5.0	5.6	6.0	6.2
Chemicals and cleaning products	3.127	7.1	7.9	8.5	8.2	7.6	6.1	4.5	3.4
Surgical and medical instruments	2.372	1.7	1.5	1.4	1.3	1.4	1.7	2.0	2.2
Photographic supplies	2.265	1.7	1.8	1.6	1.6	1.7	2.2	2.7	3.1
Rubber and plastics	2.157	2.5	4.2	5.6	6.2	6.2	5.7	5.0	4.5
Paper products	1.186	4.4	5.8	7.2	8.1	8.2	7.3	6.0	4.9
Apparel	1.078	1.1	1.7	2.5	3.3	3.4	3.1	2.9	3.0
Minor machinery and equipment	0.755	1.6	1.9	2.3	2.8	3.2	3.5	3.8	4.0
Miscellaneous products	0.539	2.5	2.4	2.3	2.7	3.7	4.6	5.3	5.6
Other services	8.733	3.4	3.7	3.8	3.9	4.1	4.2	4.4	4.7
Business services	3.019	4.2	4.8	4.9	4.7	4.4	4.2	4.2	4.5
Computer and data processing	1.401	4.8	5.1	5.4	5.2	5.7	5.8	5.9	6.3
Transportation and shipping	1.078	4.6	4.6	3.8	2.9	3.0	3.6	4.4	5.2
Telephone	0.755	-0.9	-0.7	-0.4	-0.1	0.4	0.9	1.9	2.9
Blood services	0.539	0.6	-2.1	-3.7	-2.1	-0.5	1.5	3.6	4.8
Postage	0.324	0.0	3.3	6.6	9.9	13.1	9.5	6.2	3.0
Other—labor intensive	0.970	3.0	3.2	3.6	4.0	4.2	4.2	4.2	4.3
Other—nonlabor intensive	0.647	4.1	4.1	4.1	4.0	4.1	4.3	4.6	4.9

See footnotes at end of table.

facility (SNF) cost limits. A description of the current PPS input price index was published September 3, 1986 (*Federal Register*, 1986). For fiscal year 1989, in the September 30, 1988, issue of the *Federal Register*, the "Final Rule" prospective payment system hospital market basket increase was published as 5.4 percent, based on a DRI forecast as of August 1988, the third quarter (Table 8). The latest HHA regulatory market basket was published July 7, 1987 (*Federal Register*, 1987a) and the latest SNF market basket was published October 2, 1987 (*Federal Register*, 1987b).

#### Current data

The data are shown in all tables by quarter for the years 1988 through 1991. Each market basket is presented in two tables: the first is a percent-change table, and the second provides the actual index numbers from which the percentages were computed. The hospital market basket for PPS is in Tables 8 and 9. The SNF market basket is in Tables 10 and 11. The HHA market basket is in Tables 12 and 13.

**Table 8—Continued**

**Quarterly percent change in the prospective payment system hospital input price index, by expense category: 1988-91**

Expense category <sup>1</sup>	Base-year weights 1982 <sup>2</sup>	1990 Q1	1990 Q2	1990 Q3	1990 Q4	1991 Q1	1991 Q2	1991 Q3	1991 Q4
Total	100.000	5.7	5.9	5.9	6.0	5.9	5.9	5.8	5.8
Wages and salaries	55.774	5.7	5.8	5.9	6.0	6.0	5.9	5.9	5.9
Employee benefits	9.785	5.9	6.5	6.9	7.1	6.9	6.6	6.1	5.7
Other professional fees	0.759	6.1	6.2	6.2	6.3	6.3	6.1	6.1	6.1
Energy and utilities	3.159	7.7	6.9	6.5	6.3	6.2	6.2	6.2	6.2
Fuel oil, coal, and other fuel	1.150	11.4	11.6	11.2	10.6	9.9	9.1	8.5	7.8
Electricity	1.084	5.8	4.3	3.8	3.6	3.5	3.6	3.7	3.8
Natural gas	0.473	6.0	5.5	5.9	6.3	7.0	8.2	9.1	10.0
Motor gasoline	0.417	9.7	8.9	8.3	7.9	7.7	7.4	7.4	7.4
Water and sewerage maintenance	0.035	7.4	7.3	7.3	7.4	7.6	7.8	7.9	7.9
Malpractice insurance	0.657	18.2	17.8	17.3	16.9	16.7	16.5	16.6	16.7
All other	29.866	4.8	5.0	5.1	5.0	4.9	4.8	4.8	4.9
Other products	21.133	4.7	4.9	4.9	4.8	4.6	4.4	4.3	4.4
Pharmaceuticals	4.096	6.3	7.2	7.2	6.6	6.0	5.5	5.4	5.6
Food	3.558	6.3	5.7	5.0	4.4	4.1	3.9	3.8	3.9
Direct purchase	2.265	6.5	5.5	4.6	3.8	3.5	3.4	3.4	3.6
Contract service	1.294	6.1	5.9	5.7	5.4	5.1	4.7	4.4	4.3
Chemicals and cleaning products	3.127	3.0	3.5	3.9	4.4	4.4	4.1	3.9	3.8
Surgical and medical instruments	2.372	2.4	2.6	2.8	3.1	3.3	3.4	3.4	3.5
Photographic supplies	2.265	3.2	3.3	3.4	3.3	3.2	3.1	3.2	3.3
Rubber and plastics	2.157	4.3	4.1	4.1	4.1	4.0	3.9	3.7	3.6
Paper products	1.186	4.2	4.0	4.2	4.6	5.0	5.2	5.4	5.5
Apparel	1.078	3.2	3.8	4.3	4.6	4.7	4.7	4.5	4.2
Minor machinery and equipment	0.755	4.2	4.3	4.5	4.6	4.5	4.4	4.3	4.3
Miscellaneous products	0.539	5.5	5.3	5.1	4.9	4.8	4.7	4.7	4.6
Other services	8.733	5.0	5.2	5.4	5.5	5.6	5.7	5.9	6.1
Business services	3.019	4.8	5.0	5.2	5.3	5.4	5.4	5.5	5.5
Computer and data processing	1.401	6.4	6.7	7.1	7.3	7.5	7.5	7.6	7.7
Transportation and shipping	1.078	5.8	6.0	6.2	6.1	6.1	6.1	6.3	6.6
Telephone	0.755	3.5	4.0	4.0	3.9	4.0	4.1	4.4	4.8
Blood services	0.539	6.1	6.6	6.4	6.2	6.0	6.1	6.2	6.5
Postage	0.324	0.0	0.0	0.0	0.0	0.9	4.0	7.2	10.3
Other—labor intensive	0.970	4.5	4.7	5.0	5.3	5.5	5.4	5.2	5.0
Other—nonlabor intensive	0.647	5.0	5.1	5.1	5.1	5.0	5.0	4.9	4.8

<sup>1</sup>For the data sources used to estimate the market basket relative weights and choice of price proxies, see *Federal Register*, Vol. 51, No. 170, 31582-31587, Sept. 3, 1986.

<sup>2</sup>Category weights may not sum to total due to rounding.

NOTES: Data for 1988 are estimated. Data for 1989, 1990, and 1991 are forecasted. Q designates quarter of year. Quarterly data shown are four-quarter moving averages.

SOURCE: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Cost Estimates, Division of Statistical Analysis.

**Table 9**

**Quarterly index levels of the prospective payment system hospital input price index, by expense category: 1988-91**

Expense category <sup>1</sup>	Base-year weights 1982 <sup>2</sup>	1988 Q1	1988 Q2	1988 Q3	1988 Q4	1989 Q1	1989 Q2	1989 Q3	1989 Q4
<b>Total</b>	100.000	125.9	127.5	129.2	130.5	132.7	134.3	136.4	138.0
Wages and salaries	55.774	130.3	131.6	133.5	134.9	137.4	138.8	141.1	142.7
Employee benefits	9.785	121.6	122.2	122.9	124.1	126.5	128.2	129.8	131.6
Other professional fees	0.759	130.5	131.9	134.1	135.9	138.2	139.6	142.4	144.3
Energy and utilities	3.159	76.9	79.4	82.3	83.2	84.8	87.0	88.7	89.1
Fuel oil, coal, and other fuel	1.150	52.9	55.4	56.7	57.4	59.7	61.1	63.6	64.4
Electricity	1.084	108.9	111.3	116.5	117.9	119.6	121.9	123.2	122.9
Natural gas	0.473	77.9	78.3	79.7	80.8	82.5	84.2	84.2	85.5
Motor gasoline	0.417	53.7	58.5	61.8	62.0	60.8	65.4	68.1	67.6
Water and sewerage maintenance	0.035	139.6	141.4	144.2	146.6	149.3	152.4	155.0	157.2
Malpractice insurance	0.657	276.2	289.8	303.8	317.2	330.0	344.9	360.1	374.2
All other	29.866	120.8	122.9	124.2	125.1	126.7	128.2	129.9	131.3
Other products	21.133	119.7	122.0	123.3	124.2	125.7	127.2	128.9	130.3
Pharmaceuticals	4.096	163.8	168.3	170.3	171.0	172.5	175.4	180.1	183.3
Food	3.558	115.1	117.1	119.5	120.9	123.8	125.7	127.6	128.4
Direct purchase	2.265	109.4	111.9	114.5	115.5	118.8	120.6	122.6	122.8
Contract service	1.294	125.0	126.3	128.3	130.5	132.5	134.4	136.4	138.3
Chemicals and cleaning products	3.127	100.1	103.8	104.7	104.8	105.5	106.7	107.4	107.9
Surgical and medical instruments	2.372	109.2	109.2	109.3	110.0	111.1	111.7	111.9	112.6
Photographic supplies	2.265	111.5	112.3	112.2	113.3	114.5	115.7	115.6	117.2
Rubber and plastics	2.157	106.8	108.6	110.5	111.4	112.3	113.7	115.0	115.9
Paper products	1.186	118.6	121.5	123.5	125.1	126.7	127.8	128.6	129.6
Apparel	1.078	103.4	105.1	105.2	105.4	106.7	107.2	108.3	109.3
Minor machinery and equipment	0.755	112.1	112.9	114.0	114.9	116.2	117.4	118.6	119.8
Miscellaneous products	0.539	106.2	107.4	109.0	110.4	112.3	113.7	115.0	116.5
Other services	8.733	123.7	125.1	126.2	127.2	129.2	130.6	132.2	133.7
Business services	3.019	126.2	126.8	127.7	128.6	131.4	132.3	133.4	135.0
Computer and data processing	1.401	139.5	141.5	144.2	145.9	148.3	150.0	153.1	155.5
Transportation and shipping	1.078	110.1	111.1	112.3	113.8	114.7	116.9	118.6	120.5
Telephone	0.755	124.6	124.8	124.8	125.3	126.5	127.5	129.3	130.6
Blood services	0.539	103.9	104.0	102.8	104.0	105.7	108.0	109.8	111.1
Postage	0.324	110.2	124.7	124.7	124.7	124.7	124.7	124.7	124.7
Other—labor intensive	0.970	125.0	126.2	127.1	127.6	130.2	131.4	132.4	133.3
Other—nonlabor intensive	0.647	120.3	121.8	123.3	124.3	125.7	127.7	129.6	130.7

See footnotes at end of table.

**Table 9—Continued**

**Quarterly index levels of the prospective payment system hospital input price index, by expense category: 1988-91**

Expense category <sup>1</sup>	Base-year weights 1982 <sup>2</sup>	1990 Q1	1990 Q2	1990 Q3	1990 Q4	1991 Q1	1991 Q2	1991 Q3	1991 Q4
Total	100.000	140.7	142.4	144.5	146.2	149.0	150.5	152.7	154.6
Wages and salaries	55.774	145.5	147.0	149.5	151.3	154.3	155.5	58.1	160.2
Employee benefits	9.785	135.6	137.2	139.1	140.8	144.1	145.3	146.6	147.9
Other professional fees	0.759	146.8	148.4	151.3	153.4	155.8	157.1	160.7	163.0
Energy and utilities	3.159	90.2	92.5	94.3	94.6	95.6	98.3	100.3	100.5
Fuel oil, coal, and other fuel	1.150	66.4	68.0	70.1	70.7	72.0	73.4	75.4	75.8
Electricity	1.084	124.1	126.3	127.5	127.2	128.6	131.1	132.4	132.2
Natural gas	0.473	86.8	88.8	90.3	91.7	93.8	97.8	100.0	101.6
Motor gasoline	0.417	65.7	70.9	73.3	72.6	70.5	75.9	79.0	78.0
Water and sewerage maintenance	0.035	160.1	163.3	166.6	169.6	172.7	176.1	179.7	182.9
Malpractice insurance	0.657	387.9	404.1	420.4	435.1	451.7	471.4	491.1	509.0
All other	29.866	133.3	134.9	136.2	137.4	139.8	141.4	142.8	144.3
Other products	21.133	132.1	133.7	134.8	135.9	137.9	139.4	140.6	142.0
Pharmaceuticals	4.096	186.4	188.8	190.6	192.6	196.9	199.2	201.1	203.5
Food	3.558	130.2	131.4	132.9	133.4	135.2	136.4	138.0	138.7
Direct purchase	2.265	124.5	125.3	126.8	126.8	128.7	129.7	131.3	131.6
Contract service	1.294	140.2	142.1	143.6	145.0	146.5	148.1	149.6	151.3
Chemicals and cleaning products	3.127	109.5	111.4	112.4	112.9	113.9	115.1	116.4	118.0
Surgical and medical instruments	2.372	114.1	115.1	115.5	116.4	118.0	119.0	119.5	120.5
Photographic supplies	2.265	118.5	119.7	119.4	120.7	122.2	123.5	123.4	125.0
Rubber and plastics	2.157	117.0	118.5	119.8	120.4	121.4	122.8	124.0	124.7
Paper products	1.186	131.7	133.4	134.8	136.6	138.5	140.7	142.5	144.1
Apparel	1.078	111.1	112.1	113.5	114.6	116.3	117.0	118.2	118.9
Minor machinery and equipment	0.755	121.3	122.8	124.1	125.2	126.6	128.1	129.3	130.5
Miscellaneous products	0.539	118.1	119.4	120.6	122.0	123.6	124.9	126.1	127.6
Other services	8.733	136.3	137.8	139.5	141.1	144.2	146.3	148.2	149.9
Business services	3.019	138.3	139.3	140.5	142.3	145.9	147.1	148.5	150.0
Computer and data processing	1.401	158.6	161.0	164.5	167.1	170.6	173.4	177.3	180.1
Transportation and shipping	1.078	121.8	124.4	126.0	127.1	129.5	132.2	134.6	136.0
Telephone	0.755	131.7	132.7	134.1	135.6	137.3	138.8	140.8	142.8
Blood services	0.539	112.9	114.6	116.3	117.7	119.9	121.9	123.8	125.9
Postage	0.324	124.7	124.7	124.7	124.7	129.2	140.3	140.3	140.3
Other—labor intensive	0.970	136.9	138.3	139.6	140.7	144.8	145.2	146.0	147.4
Other—nonlabor intensive	0.647	132.1	134.2	136.1	137.2	138.6	140.7	142.6	143.8

<sup>1</sup>For the data sources used to estimate the market basket relative weights and choice of price proxies, see *Federal Register*, Vol. 51, No. 170, 31582-31587, Sept. 3, 1986.

<sup>2</sup>Category weights may not sum to total due to rounding.

NOTES: Data for 1988 are estimated. Data for 1989, 1990, and 1991 are forecasted. Q designates quarter of year. Quarterly data shown are four-quarter moving averages.

SOURCE: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Cost Estimates, Division of Statistical Analysis.

**Table 10**

**Quarterly percent change in the skilled nursing facility input price index, by expense category: 1988-91**

Expense category <sup>1</sup>	Base-year weights 1977 <sup>2</sup>	1988 Q1	1988 Q2	1988 Q3	1988 Q4	1989 Q1	1989 Q2	1989 Q3	1989 Q4
	Total	100.00	3.9	4.2	4.2	4.2	4.3	4.5	4.7
Wages and salaries	63.02	4.0	4.4	4.5	4.3	4.3	4.3	4.5	4.7
Employee benefits	7.60	2.0	2.4	2.8	3.4	3.7	4.1	4.6	5.2
Food	9.74	3.2	2.9	3.2	3.9	4.8	5.7	6.3	6.5
Direct purchase	4.93	2.7	2.3	3.0	4.1	5.2	6.3	7.0	7.0
Contract service	4.81	3.8	3.4	3.5	3.8	4.5	5.2	5.7	6.1
Fuel and other energy	4.27	2.0	2.7	2.5	2.3	2.9	3.4	4.1	4.6
Electricity	1.21	0.5	0.9	1.3	1.6	2.4	3.5	4.2	4.3
Natural gas	0.91	-3.8	-3.0	-1.7	-0.2	1.4	3.2	4.3	4.6
Fuel oil and coal	1.66	6.3	7.6	5.5	3.5	3.3	2.4	2.9	3.8
Water and sewerage maintenance	0.49	5.4	5.2	5.0	5.3	5.7	6.5	7.1	7.3
All other	15.37	4.9	4.9	4.9	4.9	5.0	5.1	5.2	5.3
Drugs	1.50	8.8	8.4	8.1	7.5	6.8	5.9	5.5	5.6
Supplies	3.28	4.1	4.1	4.1	4.1	4.3	4.6	4.8	5.0
Health services	1.21	7.2	7.1	6.9	7.0	6.9	6.9	7.0	7.1
Other business services	4.59	4.2	4.3	4.5	4.7	4.8	5.0	5.1	5.2
Miscellaneous	4.79	4.1	4.1	4.1	4.1	4.3	4.6	4.8	5.0

Expense category <sup>1</sup>	Base-year weights 1977 <sup>2</sup>	1990 Q1	1990 Q2	1990 Q3	1990 Q4	1991 Q1	1991 Q2	1991 Q3	1991 Q4
	Total	100.00	5.1	5.3	5.4	5.4	5.4	5.4	5.4
Wages and salaries	63.02	4.8	5.0	5.2	5.3	5.3	5.4	5.5	5.6
Employee benefits	7.60	5.9	6.5	6.9	7.1	6.9	6.6	6.1	5.7
Food	9.74	6.2	5.7	5.1	4.6	4.3	4.1	4.0	4.0
Direct purchase	4.93	6.4	5.5	4.6	3.9	3.6	3.5	3.5	3.6
Contract service	4.81	6.0	5.8	5.5	5.2	4.9	4.7	4.5	4.4
Fuel and other energy	4.27	5.0	5.5	5.8	6.0	6.0	5.9	5.9	5.8
Electricity	1.21	4.0	3.6	3.4	3.4	3.3	3.2	3.1	2.9
Natural gas	0.91	4.7	4.4	4.3	4.2	4.3	4.7	5.4	6.1
Fuel oil and coal	1.66	5.1	7.1	8.3	8.8	8.6	8.1	7.6	7.0
Water and sewerage maintenance	0.49	7.4	7.3	7.3	7.4	7.6	7.8	7.9	7.9
All other	15.37	5.5	5.6	5.6	5.5	5.4	5.3	5.3	5.2
Drugs	1.50	6.3	7.2	7.2	6.6	6.0	5.5	5.4	5.6
Supplies	3.28	5.0	5.1	5.1	5.1	5.0	5.0	4.9	4.8
Health services	1.21	7.2	7.3	7.1	6.9	6.7	6.6	6.8	7.1
Other business services	4.59	5.3	5.3	5.3	5.4	5.4	5.4	5.3	5.2
Miscellaneous	4.79	5.0	5.1	5.1	5.1	5.0	5.0	4.9	4.8

<sup>1</sup>For the data sources used to estimate the market basket relative weights and choice of price proxies, see *Federal Register*, Vol. 52, No. 191, 37109, Oct. 2, 1987.

<sup>2</sup>Category weights may not sum to total due to rounding.

NOTES: Data for 1988 are estimated. Data for 1989, 1990, and 1991 are forecasted. Q designates quarter of year. Quarterly data shown are four-quarter moving averages.

SOURCE: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Cost Estimates, Division of Statistical Analysis.

**Table 11**  
**Quarterly index levels of the skilled nursing facility input price index, by expense category: 1988-91**

Expense category <sup>1</sup>	Base-year weights	1988	1988	1988	1988	1989	1989	1989	1989
	1977 <sup>2</sup>	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Total	100.00	190.7	192.1	193.9	195.8	200.1	201.3	203.6	205.9
Wages and salaries	63.02	189.5	190.4	192.0	193.7	198.6	199.0	201.0	203.0
Employee benefits	7.60	196.8	197.8	199.0	200.8	204.8	207.5	210.0	213.0
Food	9.74	161.8	164.1	166.5	168.9	172.4	175.0	177.4	179.4
Direct purchase	4.93	148.2	150.6	152.9	155.4	159.2	161.6	163.7	165.2
Contract service	4.81	175.7	177.9	180.3	182.7	186.0	188.7	191.4	193.9
Fuel and other energy	4.27	196.2	198.7	200.2	201.7	204.4	206.7	209.7	212.5
Electricity	1.21	193.6	194.5	197.5	200.3	202.3	204.1	205.7	207.5
Natural gas	0.91	217.6	217.3	220.5	223.4	226.1	228.7	231.1	233.5
Fuel oil and coal	1.66	180.2	185.1	183.8	183.0	185.8	187.5	191.5	195.2
Water and sewerage maintenance	0.49	217.4	220.2	224.4	228.3	232.4	237.2	241.3	244.8
All other	15.37	209.3	212.2	214.7	217.2	220.1	223.1	226.3	229.3
Drugs	1.50	249.2	256.0	259.1	260.2	262.4	266.8	274.1	278.9
Supplies	3.28	191.8	194.0	196.2	198.5	201.1	203.6	206.1	208.6
Health services	1.21	232.9	236.9	240.3	243.7	248.9	253.5	257.6	261.4
Other business services	4.59	220.8	223.2	226.1	228.9	231.9	234.9	237.9	241.0
Miscellaneous	4.79	191.8	194.0	196.2	198.5	201.1	203.6	206.1	208.6

Expense category <sup>1</sup>	Base-year weights	1990	1990	1990	1990	1991	1991	1991	1991
	1977 <sup>2</sup>	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Total	100.00	211.2	212.4	214.6	216.8	222.7	223.9	226.3	228.7
Wages and salaries	63.02	209.2	209.6	211.5	213.6	220.8	221.3	223.6	225.8
Employee benefits	7.60	219.5	222.1	225.1	227.9	233.3	235.3	237.3	239.3
Food	9.74	181.5	183.2	185.0	186.7	188.8	190.6	192.4	194.3
Direct purchase	4.93	166.8	168.0	169.4	170.8	172.6	174.0	175.6	177.3
Contract service	4.81	196.6	198.7	200.9	203.0	205.4	207.5	209.6	211.8
Fuel and other energy	4.27	216.3	219.4	222.4	225.5	228.8	232.1	235.3	238.5
Electricity	1.21	209.2	211.0	212.7	214.5	215.9	217.4	218.7	220.1
Natural gas	0.91	235.9	238.2	240.6	243.3	247.5	251.8	256.2	260.6
Fuel oil and coal	1.66	200.9	204.9	208.6	212.4	216.2	219.6	222.9	226.0
Water and sewerage maintenance	0.49	249.2	254.2	259.4	264.0	268.9	274.2	279.7	284.8
All other	15.37	232.6	235.7	238.5	241.4	244.9	248.0	251.0	254.1
Drugs	1.50	283.5	287.2	290.0	293.0	299.6	303.0	306.0	309.6
Supplies	3.28	211.3	213.9	216.5	219.1	221.7	224.3	227.0	229.6
Health services	1.21	267.2	272.0	274.7	278.2	284.8	290.1	295.1	299.6
Other business services	4.59	244.2	247.5	250.8	254.2	257.2	260.4	263.7	267.0
Miscellaneous	4.79	211.3	213.9	216.5	219.1	221.7	224.3	227.0	229.6

<sup>1</sup>For the data sources used to estimate the market basket relative weights and choice of price proxies, see *Federal Register*, Vol. 52, No. 191, 37109, Oct. 2, 1987.

<sup>2</sup>Category weights may not sum to total due to rounding.

NOTES: Data for 1988 are estimated. Data for 1989, 1990, and 1991 are forecasted. Q designates quarter of year. Quarterly data shown are four-quarter moving averages.

SOURCE: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Cost Estimates, Division of Statistical Analysis.

**Table 12**  
**Quarterly percent change in the home health agency input price index, by expense category: 1988-91**

Expense category <sup>1</sup>	Base-year weights	1988	1988	1988	1988	1989	1989	1989	1989
	1976 <sup>2</sup>	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Total	100.00	4.9	5.2	5.5	5.5	5.6	5.7	5.9	6.1
Wages and salaries	65.14	5.5	5.9	6.3	6.3	6.3	6.3	6.3	6.5
Employee benefits	7.90	2.0	2.4	2.8	3.4	3.7	4.1	4.6	5.2
Transportation	4.87	4.6	4.6	3.8	2.9	3.0	3.6	4.4	5.2
Office costs	2.79	4.2	4.3	4.5	4.7	4.8	5.0	5.1	5.2
Rent	1.35	3.8	3.9	3.9	4.1	4.3	4.4	4.4	4.2
Nonrental space occupancy	1.17	2.1	2.8	2.5	2.4	2.9	3.4	4.1	4.6
Medical and nursing supplies and equipment	2.81	3.7	3.7	3.4	3.6	4.4	5.1	5.9	6.3
Contract services	6.87	4.9	5.2	5.5	5.5	5.6	5.7	5.9	6.1
Miscellaneous	7.10	4.1	4.1	4.1	4.1	4.3	4.6	4.8	5.0

Expense category <sup>1</sup>	Base-year weights	1990	1990	1990	1990	1991	1991	1991	1991
	1976 <sup>2</sup>	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Total	100.00	6.2	6.3	6.4	6.4	6.4	6.3	6.3	6.3
Wages and salaries	65.14	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Employee benefits	7.90	5.9	6.5	6.9	7.1	6.9	6.6	6.1	5.7
Transportation	4.87	5.8	6.0	6.2	6.1	6.1	6.1	6.3	6.6
Office costs	2.79	5.3	5.3	5.3	5.4	5.4	5.4	5.3	5.2
Rent	1.35	4.1	4.0	4.2	4.6	5.0	5.3	5.4	5.3
Nonrental space occupancy	1.17	5.1	5.6	5.9	6.1	6.1	6.0	6.0	5.9
Medical and nursing supplies and equipment	2.81	6.4	6.6	6.7	6.8	6.8	6.7	6.7	6.6
Contract services	6.87	6.2	6.3	6.4	6.4	6.4	6.3	6.3	6.3
Miscellaneous	7.10	5.0	5.1	5.1	5.1	5.0	5.0	4.9	4.8

<sup>1</sup>For the data sources used to estimate the market basket relative weights and choice of price proxies, see *Federal Register*, Vol. 52, No. 129, 25562-25566, July 7, 1987.

<sup>2</sup>Category weights may not sum to total due to rounding.

NOTES: Data for 1988 are estimated. Data for 1989, 1990, and 1991 are forecasted. Q designates quarter of year. Quarterly data shown are four-quarter moving averages.

SOURCE: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Cost Estimates, Division of Statistical Analysis.



**Table 13**  
**Quarterly index levels for the home health agency input price index, by expense category:**  
**1988-91**

Expense category <sup>1</sup>	Base-year	1988	1988	1988	1988	1989	1989	1989	1989
	weights	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	1976 <sup>2</sup>								
Total	100.00	227.9	230.3	233.9	237.1	241.3	244.1	248.4	252.3
Wages and salaries	65.14	235.6	238.0	242.3	245.9	250.5	253.2	258.1	262.3
Employee benefits	7.90	218.5	219.7	221.0	223.0	227.4	230.4	233.2	236.5
Transportation	4.87	193.9	195.6	197.8	200.3	201.9	205.9	208.9	212.2
Office costs	2.79	237.8	240.4	243.4	246.5	249.7	252.9	256.2	259.5
Rent	1.35	206.5	208.0	210.7	213.7	215.7	217.7	219.3	221.5
Nonrental space occupancy	1.17	220.8	223.6	225.2	227.0	230.0	232.6	236.1	239.3
Medical and nursing supplies and equipment	2.81	199.9	203.9	206.0	209.1	212.4	216.5	219.1	222.7
Contract services	6.87	227.9	230.3	233.9	237.1	241.3	244.1	248.4	252.3
Miscellaneous	7.10	204.2	206.6	208.9	211.4	214.2	216.8	219.5	222.2

	Base-year	1990	1990	1990	1990	1991	1991	1991	1991
	weights	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	1976 <sup>2</sup>								
Total	100.00	256.7	259.6	264.3	268.3	273.0	275.9	280.8	285.0
Wages and salaries	65.14	266.9	269.5	274.9	279.4	284.2	287.0	292.7	297.5
Employee benefits	7.90	243.7	246.6	250.0	253.0	259.1	261.2	263.5	265.8
Transportation	4.87	214.5	219.0	221.8	223.9	228.1	232.8	237.0	239.5
Office costs	2.79	262.9	266.4	270.0	273.7	277.0	280.4	283.9	287.5
Rent	1.35	224.1	227.0	230.0	233.1	236.3	239.4	242.3	245.1
Nonrental space occupancy	1.17	243.6	247.1	250.6	254.1	257.9	261.7	265.4	269.0
Medical and nursing supplies and equipment	2.81	226.4	231.3	234.2	237.7	241.6	246.6	249.5	253.3
Contract services	6.87	256.7	259.6	264.3	268.3	273.0	275.9	280.8	285.0
Miscellaneous	7.10	225.0	227.8	230.6	233.3	236.1	238.9	241.7	244.5

<sup>1</sup>For the data sources used to estimate the market basket relative weights and choice of price proxies, see *Federal Register*, Vol. 52, No. 129, 25562-25566, July 7, 1987.

<sup>2</sup>Category weights may not sum to total due to rounding.

NOTES: Data for 1988 are estimated. Data for 1989, 1990, and 1991 are forecasted. Q designates quarter of year. Quarterly data shown are four-quarter moving averages.

SOURCE: Health Care Financing Administration, Office of the Actuary; Data from the Office of National Cost Estimates, Division of Statistical Analysis.

### Highlights

The August forecast of the PPS market basket for fiscal year 1989 increased .42 over May, from 4.98 to 5.40. This was caused by across-the-board increases in the price of inputs. The DRI fiscal year 1989 forecast of economy-wide inflation (gross national product deflator) was also raised .4 percent in August.

There are a number of reasons for the forecast of increases in the general level of inflation. Relatively low unemployment levels have created labor-market shortages that are creating upward pressure on wages. Manufacturing plant capacity is approaching the level historically associated with increased inflation pressure. The drought is expected to cause increases in food prices. These general upward pressures on prices, particularly for labor, affect hospitals.

Hospitals are labor-intensive producers, and when wages are expected to increase, their costs of doing business are forecasted to go up correspondingly. The wage component of the market basket is a blend of average hourly earnings (AHE) of hospital workers and the Employment Cost Index (ECI). Based on second quarter data, fiscal year 1989 average hourly earnings for hospital workers are forecasted to increase 0.5 percent and the ECI 0.2 percent above previous levels. The apparent shortage of nurses, a critical hospital labor input, is an important element

in the forecasted increase in fiscal year 1989 wages.

Other nonlabor sources of increase in the fiscal year 1989 market basket forecast are for food, utilities, and malpractice costs. Hospital food costs are forecasted to be 2.4 percent higher, utilities 2.4 percent higher, and malpractice costs 3.0 percent higher than previous forecasts.

The drought has given food processors and distributors a reason to increase prices beyond what actual commodities prices would dictate. However, these prices are forecasted to stay at higher levels because prices in imperfectly competitive markets do not easily move downward following a rise.

Energy prices and other commodity prices are also accelerating. Because of the unusually hot summer, utility companies were forced to purchase more expensive power from outside sources, namely Canada. Energy prices are forecasted to remain up as utilities reevaluate the need for additional power-generation capacity.

Professional liability insurance premium rates increased substantially with the availability of more recent historical data to base them on. Actual numbers for the first quarter of 1988 came in much higher than expected.

A breakdown of the .4 increase in the regulation market basket is shown in Table 14.

**Table 14**  
**Breakdown of regulation market basket increase from May 1988 to August 1988**

Item	May forecast			August forecast			Relative contribution difference <sup>3</sup>
	Fiscal year 1988 relative importance <sup>1</sup>	Fiscal year 1989 price change	Fiscal year 1989 relative contribution <sup>2</sup>	Fiscal year 1988 relative importance <sup>1</sup>	Fiscal year 1989 price change	Fiscal year 1989 relative contribution <sup>2</sup>	
Total	100.0000	4.9420	4.9420	100.0000	5.3850	5.3850	0.4425
Wages and salaries	57.6428	5.1330	2.9588	57.6545	5.4270	3.1289	0.1701
Employee benefits	9.4325	4.5010	0.4246	9.3880	4.6100	0.4328	0.0082
Other professional fees	0.7883	5.5090	0.0434	0.7873	5.8150	0.0458	0.0024
Energy and utilities	1.9635	5.4600	0.1072	1.9863	7.9010	0.1569	0.0497
Fuel oil, coal, and other fuel	0.4990	7.8290	0.0391	0.5075	8.1420	0.0413	0.0023
Electricity	0.9468	3.6320	0.0344	0.9552	8.0320	0.0767	0.0423
Natural gas	0.2920	5.3480	0.0156	0.2928	5.9360	0.0174	0.0018
Motor gasoline	0.1863	8.3280	0.0155	0.1918	9.7680	0.0187	0.0032
Water and sewerage maintenance	0.0390	6.6740	0.0026	0.0390	7.1050	0.0028	0.0002
Malpractice insurance	1.4490	16.1740	0.2344	1.4705	19.2220	0.2827	0.0483
All other	28.7248	4.0870	1.1740	28.7133	4.6590	1.3378	0.1638
Other products	20.1348	3.8690	0.7790	20.1410	4.7660	0.9599	0.1809
Pharmaceuticals	5.3428	4.8960	0.2616	5.3583	5.4530	0.2922	0.0306
Food	3.2608	4.5120	0.1471	3.2695	6.9480	0.2272	0.0800
Direct purchase	1.9720	3.9760	0.0784	1.9843	7.5410	0.1496	0.0712
Contract service	1.2888	5.3320	0.0687	1.2853	6.0340	0.0776	0.0088
Chemicals and cleaning products	2.4993	2.7900	0.0697	2.5052	4.5050	0.1129	0.0431
Surgical and medical instruments	2.0678	2.4220	0.0501	2.0423	1.9680	0.0402	-0.0099
Photographic supplies	2.0060	2.3210	0.0466	1.9995	2.6620	0.0532	0.0067
Rubber and plastics	1.8300	4.3910	0.0804	1.8338	4.9940	0.0916	0.0112
Paper products	1.1128	4.4340	0.0493	1.1213	6.0310	0.0676	0.0183
Apparel	0.8890	3.3190	0.0295	0.8838	2.9210	0.0258	-0.0037
Minor machinery and equipment	0.6718	3.8800	0.0261	0.6710	3.7660	0.0253	-0.0008
Miscellaneous products	0.4548	4.1120	0.0187	0.4565	5.2570	0.0240	0.0053
Other services	8.5903	4.5980	0.3950	8.5720	4.4060	0.3777	-0.0173
Business services	2.9980	4.0850	0.1225	3.0055	4.2120	0.1266	0.0041
Computer and data processing	1.5668	5.9420	0.0931	1.5600	5.9010	0.0921	-0.0010
Transportation and shipping	0.9532	4.8450	0.0462	0.9453	4.4190	0.0418	-0.0044
Telephone	0.7475	2.3200	0.0173	0.7443	1.8650	0.0139	-0.0035
Blood services	0.4475	6.8740	0.0308	0.4393	3.6270	0.0159	-0.0148
Postage	0.3010	6.3720	0.0192	0.2998	6.1680	0.0185	-0.0007
Other—labor intensive	0.9555	4.1370	0.0395	0.9582	4.2180	0.0404	0.0009
Other—nonlabor intensive	0.6198	4.2500	0.0263	0.6193	4.6060	0.0285	0.0022

<sup>1</sup>The share of the total attributed to each of the input price categories. Category shares may not sum to total due to rounding.

<sup>2</sup>The amount of the total percent change attributed to each of the input price categories.

<sup>3</sup>The change in the relative contribution of each input price category between the two quarterly updates shown.

SOURCE: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Cost Estimates, Division of Statistical Analysis.

## National economic indicators

In this section, we discuss national indicators of output, employment, and inflation to put health-related economic trends into perspective. The change in national economic indicators for 1978-88 is shown in Figure 6.

### Output and income

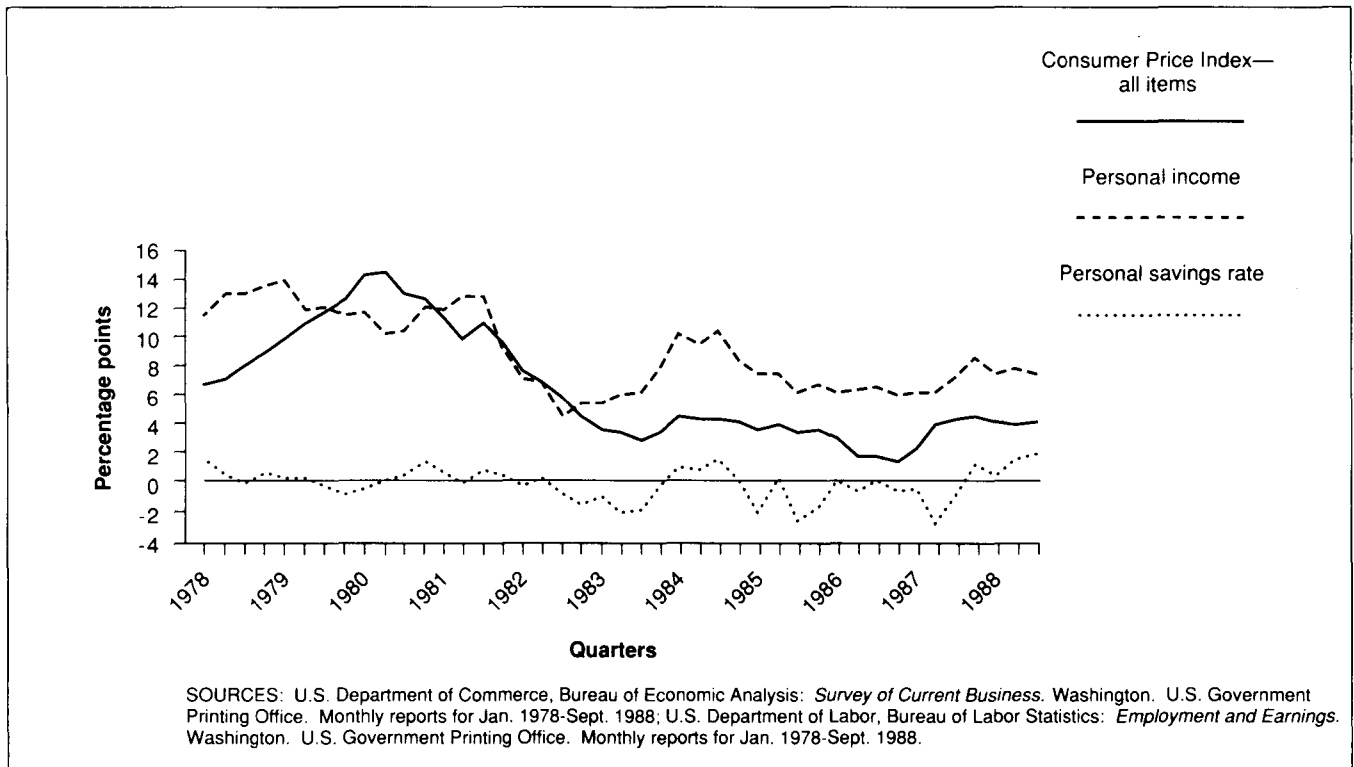
The gross national product (GNP), the most widely used measure of the Nation's output, was \$4.9 trillion during the third calendar quarter of 1988 (seasonally

adjusted at annual rates), up 7.5 percent from the same period of 1987 (Tables 15 and 16). That growth was almost evenly divided between price inflation and "real" growth (i.e., changes in the quantity and quality of production).

The portion of GNP received by individuals grew as fast or faster than the total. Personal income during the third calendar quarter of 1988 was 7.7 percent higher than in the same quarter of 1987, and disposable personal income (personal income net of taxes) rose 8.8 percent during the 12-month period. The proportion of disposable personal income that was saved rather than spent increased to 4.2 percent,

Figure 6

Percent change in indicators of national economic activity from the same period of previous year: 1978-88



1.9 percentage points higher than in the third calendar quarter of 1987.

### Employment, unemployment, and earnings

During the third calendar quarter of 1988, the unemployment rate for all workers was 5.4 percent, five-tenths of a percent lower than for the third calendar quarter of 1987. Total employment in the private nonfarm economy rose 4.4 percent, and average hourly earnings increased 3.7 percent. The average workweek dropped slightly, to 32.5 hours.

### Prices

The GNP fixed-weight price index, the most comprehensive measure of price inflation, was 4.3

percent higher in the third calendar quarter of 1988 than for the same period a year ago; the GNP implicit price deflator, which reflects changes in the composition of output as well as price inflation, rose 3.6 percent. During the third quarter of 1988 the Consumer Price Index for all items and all urban consumers showed an increase of 4.1 percent (Tables 15 and 16).

The Producer Price Index for finished consumer goods, considered to reflect some of the pressure underlying inflation of consumer commodity prices, grew 2.7 percent between the third quarter of 1987 and the third quarter of 1988.

**Table 15**  
**Selected national economic indicators: 1985-88**

Indicator	Calendar year			1985 Q3	1986 Q3	1987 Q3	1987 Q4	1988 Q1	1988 Q2	1988 Q3
	1985	1986	1987							
<b>Gross national product</b>										
Billions of dollars	\$4,015	\$4,240	\$4,527	\$4,047	\$4,268	\$4,568	\$4,663	\$4,725	\$4,824	\$4,909
Billions of 1982 dollars	\$3,619	\$3,722	\$3,847	\$3,636	\$3,721	\$3,865	\$3,923	\$3,956	\$3,985	\$4,009
Implicit price deflator (1982 = 100.0)	110.95	113.93	117.67	111.31	114.70	118.18	118.86	119.42	121.04	122.44
<b>Employment, hours, and earnings</b>										
Unemployment rate, all workers	7.2	7.0	6.2	7.1	6.8	5.9	5.6	6.2	5.4	5.4
Private nonagricultural workers:										
Total employment in thousands	81,125	82,900	85,049	82,039	83,874	86,013	86,601	85,674	88,417	89,830
Average weekly hours	34.9	34.8	34.8	35.1	34.9	35.0	34.9	34.4	34.7	35.0
Average hourly earnings	\$8.57	\$8.76	\$8.98	\$8.57	\$8.74	\$8.97	\$9.12	\$9.18	\$9.24	\$9.30
Health services workers:										
Total employment in thousands	6,298.7	6,550.5	6,879.4	6,332.5	6,611.4	6,940.7	7,017.0	7,087.7	7,163.4	7,299.3
Average weekly hours	32.5	32.4	32.4	32.6	32.5	32.6	32.4	32.4	32.3	32.5
Average hourly earnings	\$8.06	\$8.35	\$8.70	\$8.09	\$8.38	\$8.74	\$8.88	\$9.02	\$9.14	\$9.29
<b>Personal income and saving</b>										
Income in billions	\$3,325	\$3,531	\$3,780	\$3,332	\$3,547	\$3,801	\$3,907	\$3,951	\$4,022	\$4,094
Disposable income in billions	\$2,838.7	\$3,019.6	\$3,209.7	\$2,840.0	\$3,032.4	\$3,224.9	\$3,315.8	\$3,375.6	\$3,421.5	\$3,507.5
Saving in billions	\$125.4	\$121.7	\$104.2	\$93.3	\$98.8	\$72.6	\$144.0	\$149.9	\$127.8	\$145.7
Personal saving percent rate	4.4	4.0	3.2	3.3	3.3	2.3	4.3	4.4	3.7	4.2
<b>Prices<sup>1</sup></b>										
Gross national product fixed-weight price index (1982 = 100.0)										
Consumer Price Index, all items	107.6	109.6	113.6	108.0	109.8	114.4	115.4	116.1	117.5	119.1
All items less medical care	107.2	108.9	112.6	107.6	109.0	113.3	114.3	114.9	116.3	117.9
Apparel and upkeep	105.1	105.9	110.6	105.0	105.7	110.0	114.5	111.6	116.0	114.4
Energy	101.7	88.2	88.6	103.6	86.2	92.0	89.0	87.0	89.0	91.9
Food and beverages	105.6	109.1	113.5	105.6	109.8	113.9	114.5	115.8	117.1	119.4
Housing: shelter	109.8	115.9	121.2	110.8	116.6	122.0	123.4	125.1	128.2	128.0
Medical care	113.5	122.0	130.2	114.4	123.1	131.2	132.7	135.4	137.5	139.9
Producer Price Index, <sup>2</sup> finished consumer goods										
	103.9	101.4	103.6	103.5	100.6	104.3	104.3	104.3	105.6	107.1

<sup>1</sup>Base period = 1982-84, unless noted.

<sup>2</sup>Formerly called the "Wholesale Price Index."

NOTES: Q designates quarter of year. Quarterly data are not seasonally adjusted.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis: *Survey of Current Business*. Washington. U.S. Government Printing Office. Monthly reports for Jan. 1985-Sept. 1988; U.S. Department of Labor, Bureau of Labor Statistics: *Employment and Earnings*. Washington. U.S. Government Printing Office. Monthly reports for Jan. 1985-Sept. 1988.

**Table 16**  
**Percent change in selected national economic indicators: 1985-88**

Indicator	Calendar year			1985	1986	1987	1987	1988	1988	1988
	1985	1986	1987	Q3	Q3	Q3	Q4	Q1	Q2	Q3
	Annual percent change			Percent change from same period of previous year						
<b>Gross national product</b>										
Billions of dollars	6.4	5.6	6.8	6.3	5.5	7.0	8.3	7.6	7.6	7.5
Billions of 1982 dollars	3.4	2.8	3.4	3.3	2.3	3.9	5.0	4.7	4.2	3.7
Implicit price deflator (1982 = 100.0)	3.0	2.7	3.3	2.9	3.0	3.0	3.1	2.7	3.2	3.6
<b>Employment, hours, and earnings</b>										
Unemployment rate, all workers <sup>1</sup>	-0.3	-0.2	-0.8	-0.2	-0.2	-0.9	-0.9	-1.0	-0.8	-0.5
Private nonagricultural workers:										
Total employment in thousands	3.4	2.2	2.6	3.0	2.2	2.6	3.1	3.5	4.3	4.4
Average weekly hours	-0.8	-0.4	0.1	-0.8	-0.6	0.3	0.6	-0.3	-0.3	0.0
Average hourly earnings	3.0	2.3	2.5	2.9	2.0	2.6	3.1	3.0	3.6	3.7
Health services workers:										
Total employment in thousands	2.9	4.0	5.0	3.1	4.4	5.0	5.4	5.3	4.9	5.2
Average weekly hours	0.0	-0.3	-0.1	0.0	-0.3	0.3	0.3	0.6	0.0	-0.3
Average hourly earnings	4.5	3.6	4.2	4.4	3.6	4.3	5.1	5.4	6.2	6.3
<b>Personal income and saving</b>										
Income in billions	6.9	6.2	7.1	6.1	6.5	7.2	8.5	7.5	7.7	7.7
Disposable income in billions	6.3	6.4	6.3	5.4	6.8	6.3	8.2	7.4	8.5	8.8
Saving in billions	-23.6	-3.0	-14.3	-43.6	6.0	-26.5	48.8	14.7	84.0	100.6
Personal saving rate <sup>1</sup>	-1.7	-0.4	-0.8	-2.8	-0.0	-1.0	1.2	0.3	1.5	1.9
<b>Prices<sup>2</sup></b>										
Gross national product fixed-weight price index (1982 = 100.0)	3.3	2.7	3.6	3.2	2.8	3.7	4.0	3.7	4.0	4.3
Consumer Price Index, all items	3.6	1.9	3.7	3.3	1.7	4.2	4.5	4.0	3.9	4.1
All items less medical care	3.4	1.6	3.4	3.2	1.3	3.9	4.4	3.8	3.7	4.1
Apparel and upkeep	2.9	0.8	4.4	2.8	0.7	4.1	5.7	4.1	4.8	4.0
Energy	0.7	-13.2	0.4	1.6	-16.8	6.7	8.5	2.2	0.9	-0.1
Food and beverages	2.3	3.3	4.1	1.9	4.0	3.7	3.4	3.0	3.4	4.8
Housing: shelter	5.6	5.5	4.6	5.7	5.2	4.6	4.7	5.1	4.7	4.9
Medical care	6.2	7.5	6.7	6.4	7.6	6.6	6.0	6.3	6.3	6.6
Producer price index, <sup>3</sup> finished consumer goods	0.5	-2.3	2.1	0.2	-2.8	3.7	2.8	2.2	1.9	2.7

<sup>1</sup>Absolute change, rather than percent change.

<sup>2</sup>Base period = 1982-84, unless noted.

<sup>3</sup>Formerly called the "Wholesale Price Index."

NOTE: Q designates quarter of year.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis: *Survey of Current Business*. Washington. U.S. Government Printing Office. Monthly reports for Jan. 1985-Sept. 1988; U.S. Department of Labor, Bureau of Labor Statistics: *Employment and Earnings*. Washington. U.S. Government Printing Office. Monthly reports for Jan. 1985-Sept. 1988.