

A half-year pause in inflation: its antecedents and structure

The Consumer Price Index was almost unchanged during the first half, suggesting that 1986 will show the lowest inflation rate in 20 years; plunging energy prices offset strong increases for some services

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Inflation as measured by the Consumer Price Index for all Urban Consumers (CPI-U) declined at a seasonally adjusted annual rate of 0.2 percent during the first 6 months of 1986. While a continuation of this pattern is unlikely throughout the remainder of the year, the resulting change for 1986 will probably be the smallest annual increase since the first half of the 1960's.¹

The first-half decline reflected the sharp drop in crude oil prices, as the index for energy commodities—fuel oil, coal, bottled gas, and motor fuels fell at an annual rate of 40.2 percent in the first half of 1986. Prices for used cars and grocery store foods also declined in the first half. On the other hand, shelter costs continued to advance at an annual rate of about 5 percent. The index for all items excluding food, shelter, energy, and used cars increased at an annual rate of 4 percent during the first 6 months. Within this group, however, price movements for commodities and for services continued to diverge. Price increases in the goods sector moderated further, but prices for services, in particular medical care, accelerated. (See table 1.)

Background 1960 to 1981

The early 1960's were characterized by rapid economic expansion, with prices increasing at an annual rate of 1.3 percent for the 5-year period which ended in December

1965. (See chart 1.) Price pressures developed in the late 1960's, however, as expenditures for the Vietnam War stimulated an economy already at nearly full employment. The rate of inflation in consumer prices rose from less than 2 percent in 1965 to more than 6 percent in 1969.

From chart 2, one can identify the general composition of price change in each of these periods. The top line displays the average annual rate of change for the all-items CPI-U during the periods identified on the horizontal axis. This seasonally adjusted overall inflation rate can be constructed as the sum of the individual contributions of four major classes of consumer expenditures—energy, food, shelter, and all other—as follows:

Period	All items	Effect on all items			
		Energy	Food	Shelter	Other
Dec. 1960–					
Dec. 1965	1.3	.023	.406	.245	.626
Dec. 1965–					
Dec. 1969	4.3	.133	.937	1.115	2.115
Dec. 1969–					
Aug. 1971	4.8	.251	.707	1.274	2.568
Aug. 1971–					
July 1973	4.4	.280	1.975	.879	1.266
July 1973–					
Dec. 1974	12.0	1.517	3.694	2.470	4.319
Dec. 1974–					
Dec. 1976	5.9	.642	.869	1.237	3.152
Dec. 1976–					
Dec. 1978	7.9	.581	1.885	2.215	3.219
Dec. 1978–					
Sept. 1981	12.2	1.990	1.633	4.664	3.913
Sept. 1981–					
June 1986	3.4	-.195	.502	1.027	2.065

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From the chart, one can see that the acceleration in prices from the first half to the second half of the 1960's was widespread, except that energy prices had very little impact.

The recession which began late in 1969 caused the rate of price increase to subside only partially, and much of that reduction was due to the effect of declining mortgage interest rates on the shelter component of the CPI. In reaction to the failure of inflation to abate swiftly and fully, President Nixon announced a wage and price freeze on August 15, 1971. The initial price freeze and subsequent Phase II economic controls were accompanied by a lower rate of inflation during the final months of 1971 and throughout 1972. Prices, however, started to rise more quickly in 1973, and further inflation followed with the relaxation of controls in August and the oil embargo in October. Although the direct effects of the oil embargo on inflation were substantial, they were far from unique. Sharply higher mortgage interest rates and house prices drove up shelter costs; food prices, influenced in part by worldwide commodity inflation, rose rapidly; and prices for most other goods and services began to accelerate.

Inflation climbed to double-digit rates during 1974 and registered what was then the largest calendar year change in the history of the CPI, except for the inflationary periods directly associated with the two World Wars. With the steep

Table 1. Annual percent changes for selected groupings of consumer prices, 1982-86

Item	12 months ended December—				6 months ended June—
	1982	1983	1984	1985	1986 ¹
All items	3.9	3.8	4.0	3.8	-0.2
Food	3.1	2.6	3.8	2.7	1.0
Food at home	2.2	1.9	3.6	2.1	-0.5
Food away from home	5.0	4.1	4.2	3.8	4.1
Energy	1.3	-0.5	0.2	1.8	-24.1
Energy commodities	-5.0	-3.2	-1.9	3.4	-40.2
Energy services	14.1	4.1	3.4	-0.5	3.5
Shelter	2.4	4.7	5.2	6.0	5.1
Used cars	10.9	14.4	7.0	-1.9	-7.1
All other items	5.6	4.1	4.1	4.2	4.0
Other commodities	4.1	3.3	2.3	3.0	1.6
Other services	7.3	4.9	6.0	5.4	6.3

¹ Seasonally adjusted annual rate of change.

recession of 1973-75, inflation moderated substantially so that, by the end of 1976, consumer prices were rising at an annual rate of less than 5 percent. With the economic expansion in 1977, prices began to accelerate. Then sharp increases in energy prices were fueled by events associated with the Iranian crisis, and rapid price rises for food and shelter costs followed, pushing consumer price rises to unprecedented peacetime rates during 1979, 1980, and, indeed, for most of 1981.

Chart 1. Consumer Price Index for All Urban Consumers, 12-month percent changes, 1960-1986

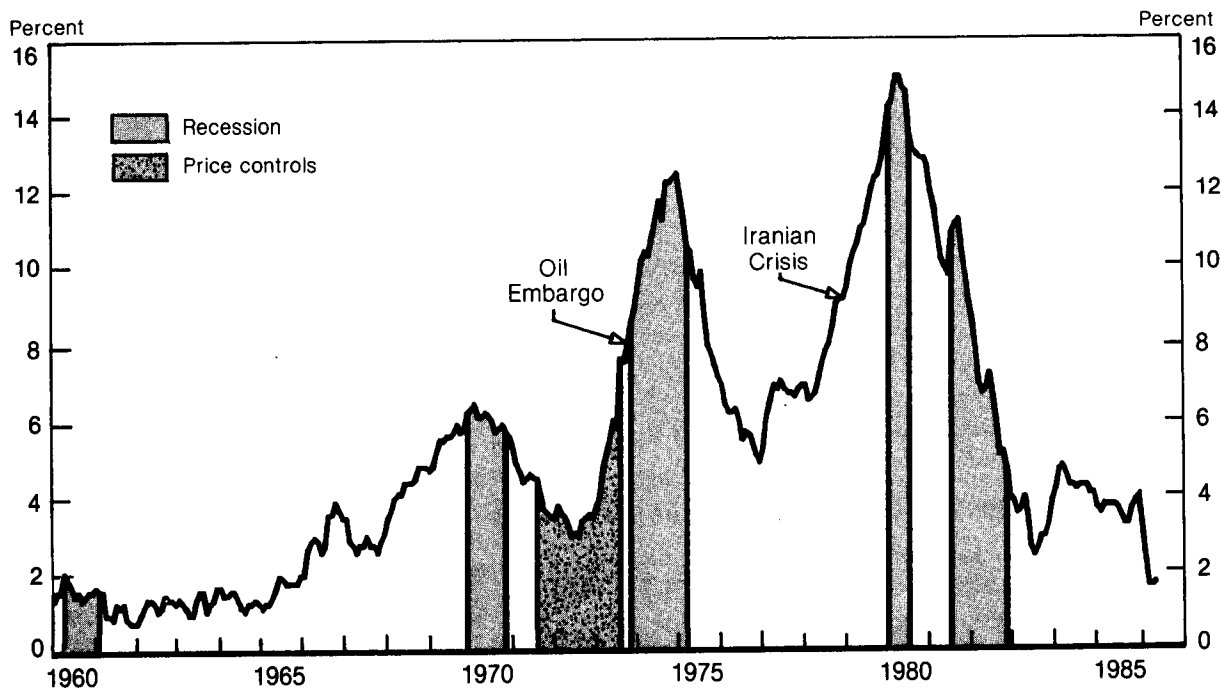
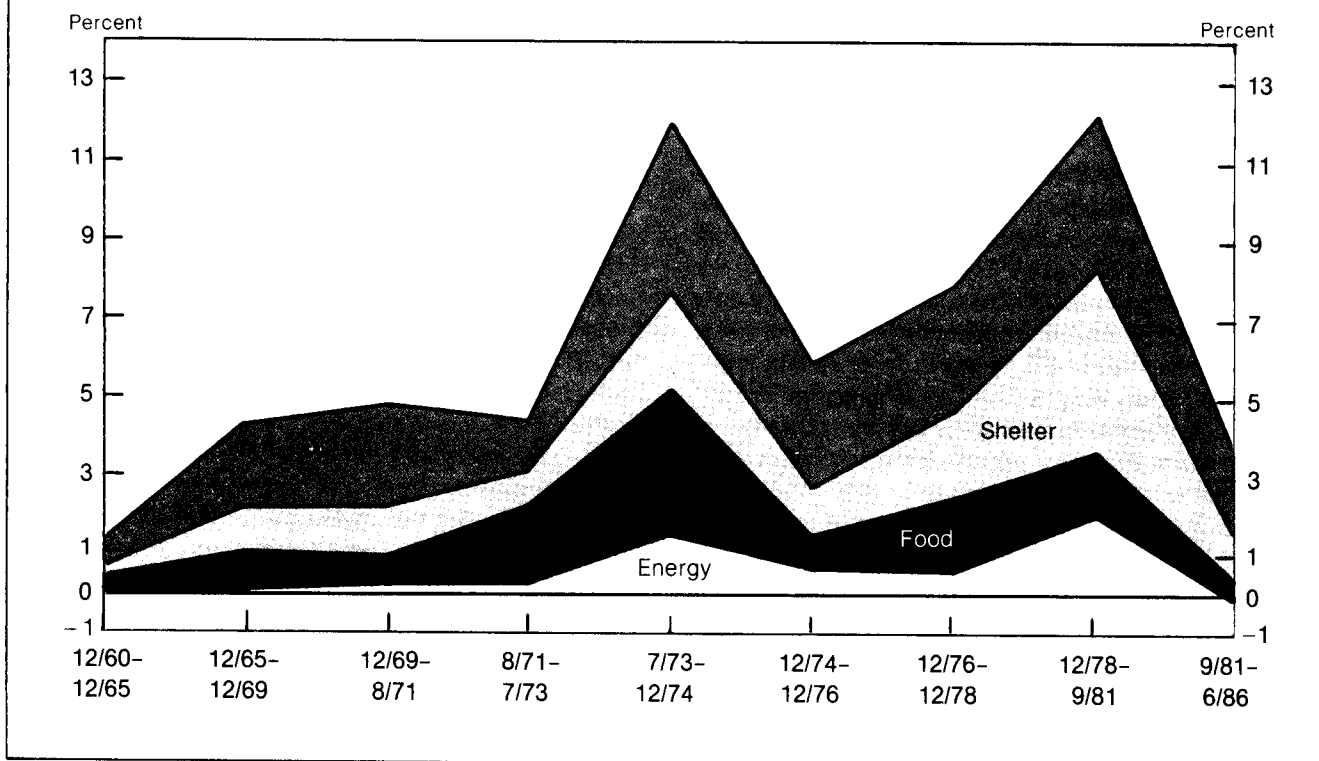


Chart 2. CPI average annual rate of change for selected periods by the effects of major components, December 1960 to June 1986



Deceleration since 1981

Two back-to-back recessions (1980 and 1981-82), a tight monetary policy, and lessened control by OPEC of world petroleum supplies all contributed to a rapid reduction in the rate of inflation beginning in the fourth quarter of 1981. This moderation in prices brought an end to the "ratchet phenomenon" that had characterized inflation since 1960. Before 1981, each succeeding low point in inflation was higher than the preceding low, and each high point was also higher than the preceding high. (See chart 1.) The 3.9-percent price increase for 1982 was the smallest annual increase in 10 years.

The price deceleration that occurred in the 57 months through June 1986 was particularly apparent in the energy, shelter, and food components of the CPI. (See charts 2 and 3.) Advances in these items had, of course, been responsible for much of the increase in the CPI in the past decade. Unlike earlier episodes, however, the index excluding the energy, shelter, and food components also moderated substantially, rising at a 4.8-percent seasonally adjusted annual rate during the 57 months through June 1986, compared with a 9.6-percent increase for the 12 months ended in September 1981. Chart 3 provides more detail than chart 2 on the post-1981 period. The data are as follows:

Period	All items	Effect on all items				
		Energy	Food	Shelter	Other commodities	Other services
Sept. 1981-						
Dec. 1982..	4.0	.372	.488	.724	1.057	1.359
Dec. 1982-						
Dec. 1984..	3.9	-.015	.606	1.071	1.059	1.179
Dec. 1984-						
Sept. 1985..	3.2	.143	.296	1.284	.464	1.013
Sept. 1985-						
Dec. 1985..	5.3	.402	1.022	1.405	1.103	1.368
Dec. 1985-						
June 1986..	-.2	-2.580	.169	.971	.019	1.221

The slowdown in food prices preceded the deceleration in the overall CPI. For the 12-month period ended in September 1981, grocery store food prices had increased 5.5 percent, a rate half that of the overall index. Increases in each of the following 4 years were also less than those for the overall index. For the September 1981 to June 1986 period, grocery store food prices advanced at an average annual rate of 2.1 percent and the overall food component at a 2.8-percent rate.

The shelter component registered steep advances throughout most of the period from 1978 through September 1981. The rate of increase fell off sharply beginning in the fourth quarter of 1981, principally due to the behavior of house prices and mortgage interest rates, and advanced at an annual rate of 2.2 percent from September 1981 through

December 1982. Until January 1983, the CPI used an asset approach to measure shelter costs of homeowners. The asset treatment covered house prices, mortgage interest rates, property insurance, property taxes, and maintenance and repair costs. In January 1983, BLS introduced an improved measure of shelter costs for homeowners in the CPI-U, using a rental equivalence approach. During the first 3½ years of the new measure, shelter costs rose at an annual rate of 5.3 percent.

Energy costs declined at an annual rate of 2.1 percent for the 57-month period through June 1986, compared with an increase at a 22.9-percent rate in the 33-month period from December 1978 to September 1981. Although charges for gas and electricity continued to increase at double-digit rates through 1982, they slowed considerably beginning in 1983, rising at an annual rate of 2.6 percent in the 42 months ended in June 1986. Prices for petroleum products peaked in early 1981 and then generally declined, with the exception of temporary spurts associated with short-term shortages and a 5-cent-a-gallon gasoline tax increase in April 1983. The sharpest drop occurred during the first 6 months of 1986. As of June 1986, fuel oil prices were 35.2 percent lower and gasoline prices 31.2 percent below their 1981 peak levels.

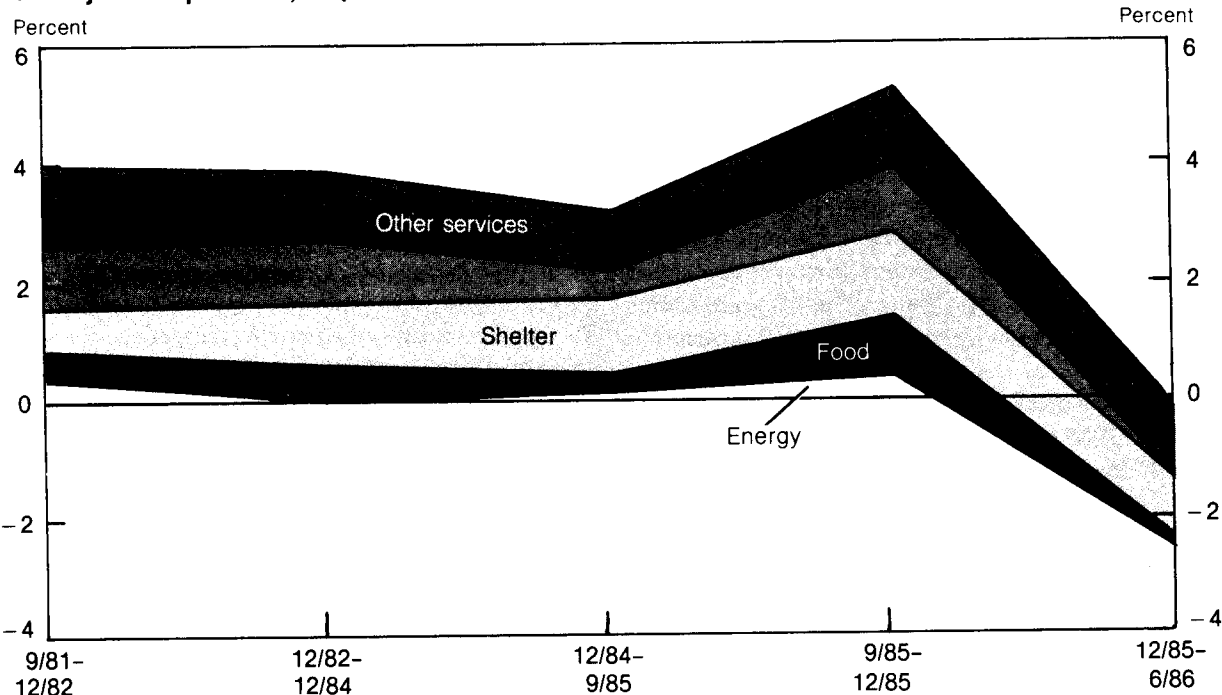
The index for items other than food, shelter, and energy slowed more gradually than the excluded components. The price moderation in this group has been steady since 1981,

when these prices rose, on average, by 9.4 percent. They increased less each year than in the preceding one, and by the end of 1985 the annual change was 3.7 percent. Within the group, however, price movements for commodities and services have diverged. Initially, both groups slowed from their peak rates; further deceleration has occurred primarily in the goods sector, however, with service prices continuing to advance at a rate of more than 5 percent.

Status at midyear

Over the first 6 months of 1986, plummeting oil prices have dominated the movement of the CPI. Such dramatic influence by a single component seems less likely in the coming months, but aggregate indicators of both material and labor costs portend continued consumer price moderation. Producer prices for nonenergy commodities at the crude, intermediate, and finished stages of processing have either declined or increased very moderately over the past 12 months. Measures of labor costs also indicate a lack of current pressure on prices. The Employment Cost Index has decelerated steadily since peaking at near double-digit rates in 1980, with total compensation for private industry workers advancing by only 3.8 percent in the 12 months ended in June 1986. In addition, sluggish growth in output in the first half of 1986, with less than full utilization of resources—at midyear, capacity utilization rates were less

Chart 3. CPI average annual rate of change for recent periods by the effects of major components, September 1981 to June 1986



than 79 percent and unemployment stood just under 7 percent—would appear to preclude any immediate cost pressures.

However, policymakers have taken measures designed to stimulate growth by depreciating the dollar and lowering interest rates. These policies could contribute to an increase in the CPI inflation rate in the longer term. To date, however, there has been little evidence that the devaluation of the dollar has had much impact on consumer prices and the declines in interest rates have not yet sparked an acceleration in output.

The following discussion is a detailed sector-by-sector assessment of the status of consumer price change in mid-1986.

The plunge in energy prices

The decline in the overall CPI during the first 6 months of 1986 was attributable to the sharp drop in energy prices—down 24.1 percent at an annual rate. (See chart 3.) The CPI excluding energy, during this period, advanced at a 3.1-percent annual rate. Prices for commodities and services within energy as well as within the overall CPI, continued to diverge. Principally because of OPEC's decision in late 1985 to abandon formally production quotas, prices for energy commodities plunged downward as contracted crude oil prices fell from \$28 a barrel to less than half that at the end of June. Reflecting this drop, retail gasoline prices fell 22.3 percent and fuel oil prices, 27.6 percent, from December 1985 to June. From 1967 to the spring of 1981, prices for energy commodities rose about 80 percent faster than prices for nonenergy consumer items. As a result, the prices of energy commodities relative to the prices (on average) of nonenergy items were nearly 80 percent greater in early 1981 than in 1967, the base year for the CPI. By June of 1986, however, energy CPI commodity prices had fallen from their peaks and the prices for energy commodities stood in the same relationship to prices for nonenergy items as they had in 1967. (See chart 4.)

The index for energy services—natural gas and electricity—registered a moderate increase during the first 6 months of 1986. Charges for electricity rose at an annual rate of 4.8 percent and those for natural gas increased at a 1.6-percent annual rate. From 1967, the prices for energy services relative to those for nonenergy items rose somewhat more than half as fast as relative prices for energy commodities, peaking in mid-1983. Since then, charges for energy services have eased slightly, and by June 1986 they were in the same proportion to nonenergy prices as they had been in the spring of 1982.

Continuing rise in shelter costs

The movements in the CPI for shelter during the last 5 or 6 years are, on the surface, somewhat puzzling. As already noted, shelter costs were a major cause for the double-digit inflation during 1979, 1980, and first part of 1981. After

Table 2. Annual changes in consumer prices for shelter, 1980–86

Item	12 months ended December—						6 months ended June—
	1980	1981	1982	1983	1984	1985	1986 ¹
Official CPI for shelter	15.1	9.9	2.4	4.7	5.2	6.0	5.1
Shelter index on rental equivalence basis	9.0	8.8	6.2	4.7	5.2	6.0	5.1
Shelter index on rental equivalence basis, with estimated adjustment for vacant units	10.0	9.5	6.5	5.3	6.0	6.0	5.1

¹ Seasonally adjusted annual rate of change.

rising 15.1 percent during 1980, the CPI for shelter rose a mere 2.4 percent in 1982. During this period, the shelter index was a major factor in the slowdown of the overall CPI. But since 1982 the shelter index has seemingly moved contrary to other prices—more than doubling its rate of increase, while other portions of the CPI continued to slow. (See table 2.)

One can understand this unusual performance only through a careful review of two technical changes that have been made to the CPI shelter index. The first was the shift to an owners' equivalent rent measure for homeowner shelter costs effective with the CPI-U for January 1983.² The second was an improved method for treating vacant housing units, beginning with data for January 1985.³

The introduction of these two improvements affected both the shelter component and the All Items CPI. Consequently, it is advantageous for purposes of analyzing the trends in shelter costs to estimate these effects and adjust for them. The first line of data in table 2 contains annual inflation rates for the official CPI for shelter. It exhibits the unusual behavior noted above.

BLS has previously constructed and published enhanced experimental indexes which provide estimates of what the CPI would have been in years prior to 1983 if the owners' equivalent rent measure had been used.⁴ The shelter component based on these rental equivalence estimates is contained in the second line of table 2. The owners' equivalent rent method produces indexes which reflect the change in shelter costs for homeowners. The previous method had included investment costs associated with purchasing a housing asset—costs that were inappropriate for the CPI. The differences between these two measures illustrate the problem. (See table 2.) The skyrocketing mortgage interest rates in early 1980 caused the official shelter index to rise 15.1 percent, two-thirds again as much as the actual shelter service cost rise measured using the more appropriate owners' equivalent rent measure. Similarly, when mortgage interest rates dropped sharply in 1982, the official shelter index rose less than half as much as the measure based on owners' equivalent rent.

The effects of the improved methods for treating vacant housing units in the CPI are a good deal less dramatic than

those from the introduction of owners' equivalent rent. The final line of table 2 provides an analytical reconstruction of the shelter index as it would have looked had both owners' equivalent rent and the enhanced vacant unit procedure been used.

By adjusting the shelter index for the two methodological changes, it becomes easier to identify and explain the trends of shelter costs in the last few years. Like the CPI as a whole, shelter cost increases (on the reconstructed basis) began slowing in 1981. They continued to slow through 1983, then moved up slightly to a 6.0-percent annual rate in both 1984 and 1985. The first half of 1986 gives some indication of a further slowdown. Although the rise in shelter costs has clearly slowed, both the degree and speed of that adjustment have been considerably less than in the overall CPI. There are a number of institutional factors that contribute to the relatively slower adjustment of shelter costs—the almost universal use of leases that hold rent constant for extended periods, rent control in some local areas, and existing stable tenant-landlord relationships that make both reluctant to change terms too rapidly. In addition, the available stock of housing cannot adjust as quickly to changing demand conditions as can the supplies of most other consumer items.⁵

These institutional expectations are borne out historically. A long historical series is not available for the shelter CPI based on owners' equivalent rent, but the use of the residen-

Table 3. Dates and timing of peak and trough rate for 12-month percent changes of consumer prices, 1947-80

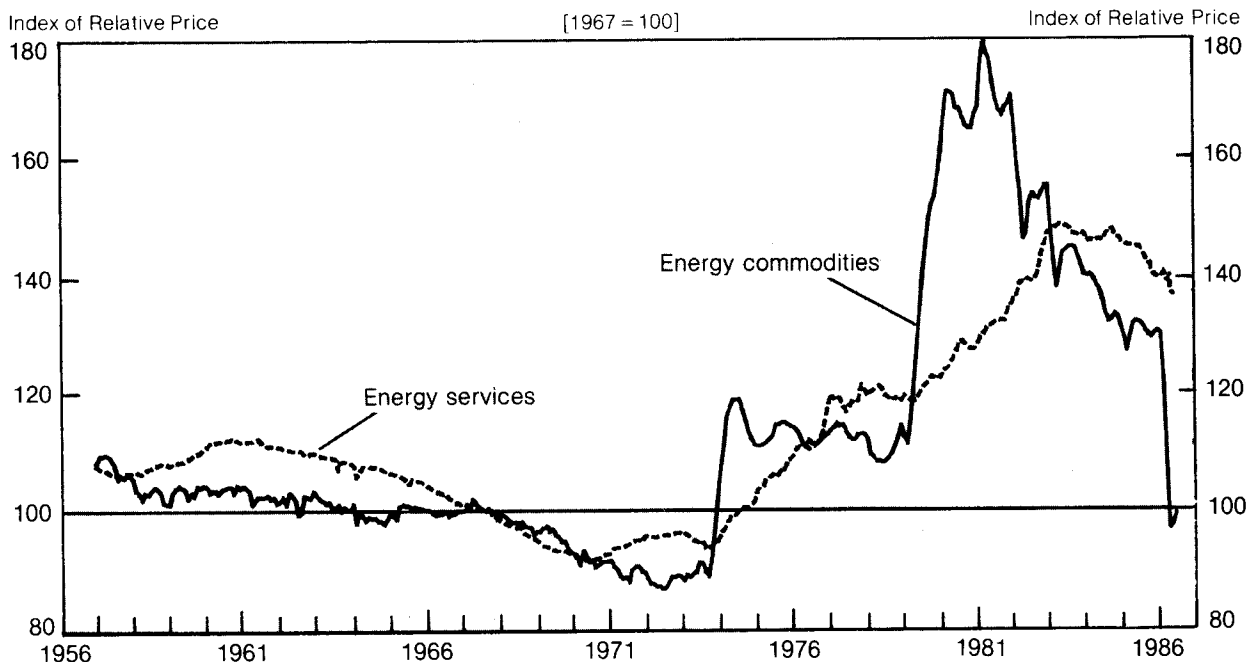
All items		Residential rent		Months by which rent lags (leads) all items ¹	
Peak	Trough	Peak	Trough	Peak	Trough
March 1947	August 1949	June 1948	January 1951	15	17
February 1951	October 1954	October 1953	September 1955	30	11
April 1957	April 1959	December 1956	September 1964	- 4	65
February 1970	June 1972	April 1971	June 1972	14	0
December 1974	December 1976	(²)	(²)	-	-
March 1980	—	July 1980	—	4	-

¹ Positive numbers are lags—number of months after all items change. Negative numbers are leads—numbers of months before all items.

² Skipped cycle. Rate did not slow for any significant period of time.

tial rent CPI provides a reasonable proxy for the timing of changes in shelter costs in earlier years.⁶ If we compare the points in time at which the residential rent CPI has reached its highest (peak) values and lowest (trough) values with the corresponding times for the All Items CPI, it is clear that the rate of rent increase almost always slows or accelerates well after the corresponding change occurs in the All Items CPI. (See table 3.) If the current episode of slowing inflation is consistent with earlier ones, one should not be too surprised if there were some additional modest slowing in shelter costs.⁷

Chart 4. Index of relative consumer prices of energy commodities and energy services, seasonally adjusted, 1957-1986



The trend in food prices

For the 6 months ended in June, the food index advanced at an annual rate of 1 percent with an increase in the cost of food away from home—up 4.1 percent at an annual rate—more than offsetting a decline in grocery store food prices—down 0.5 percent at an annual rate. Decreases in prices for beef and fruits and vegetables were responsible for the drop in the food-at-home component. Beef prices fell at an annual rate of 12.1 percent in the first 6 months. The drop in herd size, which has shrunk to its lowest levels in two decades, has not yet placed significant upward pressure on prices. Potential supplies were augmented when the U.S. Department of Agriculture (USDA) announced a large dairy cow buy-out program in late March. Nevertheless, in June, beef prices registered their first increase this year. Pork prices have already started upwards, as hog producers have begun to withhold breeding stock to rebuild their herds. As of June, the USDA estimated that pork cold storage supplies were 36 percent below their year-earlier levels. Poultry prices also advanced in the second quarter, partly due to increased demand and partly due to the impact on supplies of the adverse weather in the southeastern United States.

The decline in fruit and vegetable prices in the first half of 1986, however, is likely to continue. These prices, which rose sharply in response to adverse weather at the end of 1985, retreated and growing conditions generally were good in the first half of 1986. The severe drought in the Southeast should have only a limited effect on these prices because production is concentrated in other areas, which were not adversely affected by the weather conditions.

Other grocery store foods registered generally moderate increases during the first 6 months of the year. An exception was the index for nonalcoholic beverages, which advanced at double-digit rates, as coffee prices soared in the first quarter of 1986, before turning downward in the second quarter. This increase reflected the impact of the Brazilian drought in late 1985, which damaged the coffee bean crop.

Services except shelter and energy

As noted, price increases for services other than energy and shelter have, on average, slowed down significantly since 1981, but they remain substantially greater than the increases for nonenergy commodities.⁸ This section will explore the structure and possible causes of the more limited deceleration response of service prices. In an effort to systematize this investigation, all consumer services besides shelter and energy have been classified into one of four groups: (1) those which have contributed to the overall slowing of prices and generally continue to demonstrate only modest price rises; (2) those for which prices have clearly slowed, but continue to rise a good deal faster than other prices; (3) those which provide continuing or growing upward pressure on inflation; and (4) those that defy classification even by these rather general categories. The results of this classification are displayed in table 4.

Price changes for a large number of services have slowed substantially since 1981. Perhaps most dramatic has been the sharp drop in finance charges for automobiles as interest rates generally have declined and automobile manufacturers have made extensive use of "below market rate" financing to stimulate car sales. Increases in airline fares have also fallen off markedly as declining fuel costs and fierce competition from both existing and newly formed airlines have driven fares down to very low levels on many of the more competitive routes. Another transportation service, namely taxis, has also had much slower fare growth, in part due to lower fuel costs and in part due to increased competition from improved availability of mass transit in some areas.

The AT&T divestiture, combined with competition from new long distance telephone carriers, has led to a number of substantial reductions in interstate long distance tolls. Although postage rates rose 10.2 percent in 1985, that was the only increase in more than 3 years, with the result that postage also contributed to the overall price slowdown.

The remaining services which have shown clear reductions in their inflation rates to levels of about 4 percent or less include appliance and furniture repair, apparel services, automobile maintenance and repair, personal care services (beauty and barber shops), and moving, storage, freight, household laundry, and drycleaning. (The 1985 increase in moving costs may be related in part to the strengthening of the housing market and the associated demand for moving services.) These service establishments have benefited from moderation or declines in heating, transportation fuel, and supply costs. They also have a high proportion of relatively small establishments and fair amounts of local competition. Auto repair services may also be facing reduced demand because of the longer intervals between required maintenances on newer models.

Medical charges continue substantial rises

Other services have also experienced slowing price rises, but they continue to post substantial or even reaccelerating price increases. Medical care services are perhaps the most notable in that respect. Costs of professional medical services (physicians, dentists, optometrists, and so on) rose at double-digit rates during most of the 1979–81 period and slowed during 1982 and 1983 to annual rates of increase of between 7 and 8 percent. Beginning with 1984, charges for professional medical services have risen at a fairly constant rate of a bit over 6 percent. In addition to general reductions in inflation pressures on cost, factors which may have contributed to the slowing of professional medical service charges include (1) a voluntary 1-year freeze on physician fees urged by the American Medical Association (AMA) in February 1984; (2) declines in prices for precious metals used in dental fillings; (3) increased competition from advertising among dentists; and (4) modest increases in wages and benefits for employees in health industries—up 4.1 percent for the 12 months ended June 1986, about the same as for all civilian workers.⁹

Despite these factors, however, charges for services by medical professionals have stubbornly grown at annual rates in excess of 6 percent. One factor which may have contributed to this continued inflation is the widely publicized substantial increases in malpractice insurance premiums. These increases have tapered off, but continue to be quite high. After jumping more than 40 percent in 1982, average premium increases by 1984 were down to a smaller but still substantial 18.3 percent.¹⁰ It is also possible that the measured CPI increases reflect more than pure price change. New diagnostic and treatment methods, procedures, and equipment may increase the costs of professional services. At the same time, however, they may improve the efficiency and efficacy of a diagnosis or treatment. To the extent that the higher charges are the result of better medical care, the increases are not pure price increases and should, in principle, not be included in the CPI. We do not know whether such quality increases are in fact contributing to the continued substantial rises in the medical care CPI, but it is a possibility that must be kept in mind.

Charges for hospital rooms and for other hospital and medical care services both rose at very high double-digit rates through 1982. Like many large service organizations, hospitals tend to be slow to adjust their fee schedules to reflect changes in their costs. As a result, slower price increases for hospitals came later than for many other segments of the economy—including those by medical professionals. Nevertheless, from 1983 through 1985, hospital

fees slowed down quite significantly. Like the professional services component of the CPI, hospital costs have benefited from modest rises in compensation costs for employees. In addition, hospitals have come under increasing regulatory scrutiny by Federal, State and local government units in an effort to contain cost increases. In October 1983, the Federal Government imposed a Diagnostic Related Groups (DRG) fee structure on hospitals being reimbursed for Medicare-financed treatment. Under this process, a set fee is established for a specific class of treatment irrespective of the duration or specific procedures followed in a particular case. The objective is to encourage providers to identify and use the most cost-effective treatment. Some insurance carriers and health maintenance organizations (HMO's) are also establishing similar payment regimens.

Some of the slowing in hospital charges may reflect market adjustments to oversupply of hospital capacity. Between 1978 and 1984, occupancy rates in hospitals declined from 75.5 percent to 72.5,¹¹ at least partly as the result of shorter hospital stays. The average length of a hospital stay declined from 7.4 days in 1978 to 6.6 days in 1984.¹²

Following their substantial slowdown through 1985, hospital fees began to accelerate again during the first half of 1986. This rather abrupt turnaround is difficult to explain. The possible effects of liability insurance and higher quality care are, of course, factors for hospitals as well as professional services, but there is no obvious reason these effects should have become more pronounced in the first 6 months of 1986.

Table 4. Price change for consumer services other than shelter and energy, 1979-86

Consumer service	Seasonally adjusted annual rate of change (percent)					
	Dec. 1978 to Sept. 1981	Sept. 1981 to Dec. 1982	Dec. 1982 to Dec. 1983	Dec. 1983 to Dec. 1984	Dec. 1984 to Dec. 1985	Dec. 1985 to June 1986
Services excluding shelter and energy	10.1	7.8	4.9	6.0	5.4	6.3
Contributing to overall slowdown:						
Telephone—interstate toll calls	5.5	3.3	1.4	-4.3	-3.8	-11.0
Moving, storage, freight, household laundry, and drycleaning	10.9	7.6	6.2	4.9	7.2	3.1
Appliance and furniture repair	7.5	6.9	4.9	5.6	3.1	3.1
Postage	6.8	7.6	0	10.2	0	0
Apparel services	11.8	6.3	5.0	4.9	4.9	4.1
Automobile maintenance and repair	10.0	6.5	3.8	3.2	3.3	2.6
Automobile finance charges	19.4	-1.9	-7.9	6.8	-8.3	-13.1
Airline fares	28.0	7.7	4.8	6.5	6.3	1.6
Taxi fares	12.7	3.4	2.3	1.2	4.3	2.2
Personal care services	8.4	5.4	3.6	4.9	3.6	3.5
Contributing to slowdown, but remaining high:						
Water and sewage maintenance	8.8	8.3	8.5	5.5	5.5	7.2
Intercity train fares	18.2	12.0	5.5	4.7	4.8	7.5
Intracity mass transit	18.9	5.1	2.1	6.8	3.4	12.5
Professional medical services	10.5	7.3	7.6	6.3	6.5	6.1
Hospital rooms	13.5	14.6	9.3	7.4	4.8	8.3
Other hospital medical care services	13.1	12.0	11.2	7.8	5.2	7.0
Entertainment services	7.2	7.0	5.4	5.7	4.4	6.2
Tuition and other school fees	11.2	12.0	9.4	10.1	8.4	9.1
Personal expenses (bank charges, attorney fees, and funerals)	12.5	13.3	12.2	6.5	6.1	8.4
Contributing upward pressure:						
Telephone local charges	6.4	11.3	3.2	17.1	8.9	16.7
Refuse collection	-	-	-	6.1	6.4	7.8
Automobile insurance	6.2	8.1	9.1	7.9	12.0	13.6
Intercity bus fares	14.3	5.9	7.4	12.3	6.9	14.9
Little meaningful trend:						
Telephone—intrastate toll calls	0.9	5.8	7.4	3.7	.5	.5
Cable television	-	-	-	6.1	6.0	5.4
Automobile rental, registration, and other fees	5.3	12.6	5.9	7.4	3.0	6.2

Many cost containment efforts have been focused on reducing the length of hospital stays and shifting more treatment to an outpatient basis (up from 6.9 percent of hospital revenue in 1978 to 8.8 percent in 1985).¹³ While these measures may have the effect of reducing the expenditure for a full treatment, they may actually place an upward pressure on the prices of separate services. On the one hand, higher vacant bed rates do increase the supply of hospital beds and, thereby, may exert some downward pressure on prices. On the other hand, the rather substantial fixed costs for a hospital must now be spread over fewer occupied beds. The final equilibrium price will depend, among other things, on the proportion that fixed costs are of total costs and on the consumer's price elasticity of demand.

The establishment of DRG pricing is intended to lower the total cost for those whose bills are paid by the third-party setting the DRG fee schedule. It is possible, therefore, that over time hospitals may restructure their prices in such a way that larger portions of the fixed costs are borne by those who are not covered by a DRG arrangement. Prices used in the CPI are not generally subject to such arrangements.

It may have taken several months for hospitals to sort out these consequences. As a result, hospital price indexes in the first half of 1986 may be reflecting restructuring of fee schedules to shift costs away from more highly regulated or competitive areas to those with less impact from regulation or competition. While plausible, this explanation is highly conjectural and is offered here primarily due to the lack of an obvious alternative explanation.

Tuition also continues high

Tuition and other school fees have also been slow to respond to the overall decline in inflation. Much of this is an institutional phenomenon. Tuition is usually set well in advance—often as much as 2 years. As a result, both accelerations and decelerations in tuition lag well behind many other price changes. Contributing to the substantial increases in the 1981–1984 period were steps by a number of State legislatures either to reduce funding for State higher education and/or to set higher levels of required student payment.

Intercity train fares have also been boosted as the result of reduced government funding. The Federal subsidy for Amtrak was cut by 4 percent in 85 and by 14 percent in 1986. Nevertheless, reduced fuel costs and competition from the airlines kept fare increases well below their 1979–82 rates.

Water and sewerage maintenance and intracity mass transit have both slowed down from their peak levels. Nevertheless, both continue to have relatively high rates of inflation, despite mass transit charges having benefited from lower energy costs. Because transit and water and sewer services are frequently owned and operated by local government units, the higher-than-average inflation for these services may reflect, in part, the higher-than-average compensation increases for State and local government employees—up

5.8 percent for the year ended June 1986, versus 3.8 percent for private industry workers in the same period.¹⁴ Continued large price increases for refuse collection may reflect not only compensation increases, but also rising “tipping charges” being levied by local government units for use of dump sites and other disposal locations.

Continuing inflationary effects also arise from the charges for local telephone services. The first effects were the direct result of restructuring of AT&T in 1984. Then additional “access charges” were added to local bills in June 1985 and June 1986 as part of the procedure for equalizing both the cost and ease of access among competing long distance carriers and for allocating costs for different elements of the telephone system to the users of those elements. Coincident with the added access charges were partially offsetting declines in interstate long distance charges. Intrastate telephone service is a mixture of (1) toll service supplied by the local operating companies and (2) service provided by long distance carriers. As a result, the index for intrastate toll calls is a mixture of the two factors with no distinct trend of its own.

Auto insurance up sharply

Automobile insurance rates rose at an annual rate of 13.6 percent during the first half of 1986. Not only is this one of the highest inflation rates for items in the CPI, it is more than double the rate which existed in the 1979–81 period. The largest increases have been for the liability portions of auto insurance. A number of reasons have been offered for this. First, accidents are becoming more frequent—up nearly 5 percent between 1984 and 1985, possibly as the result of reduced adherence to the 55-mile-per-hour speed limit.¹⁵ Second, the proportion of accident survivors who are severely injured has been increasing—ironically partly due to increased survival rates resulting from greater use of seatbelts, now mandatory in some States.¹⁶ Third, as in medical care, there seems to be a significant increase in the frequency and magnitude of liability suits.¹⁷ This fact not only increases direct insurance benefit outlays, it also increases uncertainty and carrier reserve levels. Fourth, declining interest rates have reduced insurance carriers' returns on their investments. While reduced interest income requires that additional income must be generated from premiums, the effect for automobile insurance is probably less than for some other types of insurance.

But automobile insurers are also benefiting from some significant reductions in cost pressures. The prices for automobile repair have slowed substantially. And, even though medical costs continue to rise more than many items, they are rising much more slowly than 6 years ago and much more slowly than the automobile insurance costs.

Intercity bus fares also rose at double-digit rates during the first half of 1986—up 14.9 percent. This large increase occurred despite the much more modest rises for the chief competing services—airlines and trains. This apparent

anomaly can be understood, at least in part, by realizing that the competition is only partial. First, buses go many places that airlines and trains do not. Bus fares on these, usually shorter-haul, trips are not as constrained by competition. Second, airfares have not moved homogeneously. They have risen most slowly (or even fallen) on the routes with the heaviest competition and traffic. Other routes have had larger fare increases and given buses less competition.

Other commodities

Even excluding the sharp drop in energy prices and lower used car prices, prices for commodities have risen at a much slower rate than those for nonenergy services. This divergence in commodity and service prices suggests that commodity prices in this country may have been affected by lower priced imports resulting from the high value of the dollar relative to the currencies of other countries.

When the dollar was appreciating from 1981 to March 1985, foreign suppliers of imports could receive the same income in their own currency by selling the same quantity of imports at lower dollar prices, as each dollar received by them commanded a greater amount of their own currency. However, it may have taken some time for the rising value of the dollar to have translated into relatively lower costs of imports; a recent Federal Reserve Bulletin article estimated that such an impact may take up to 2 years to appear.¹⁸ The impact of the changing value of the dollar on import prices can be delayed or reduced substantially as a result of changing profit margins of suppliers, the necessity to revise dollar denominated contracts, and specific trade restrictions such as import quotas. Also, changes in the rates of exchange between the dollar and the currencies of the Nation's various trading partners have not been uniform. While the dollar has depreciated significantly against the yen and a number of major European currencies, there has been little change against the currencies of many less developed countries which are significant trading partners. Another point to con-

sider is that the relative price level of imports may be strongly affected by the growth rate of the domestic economy. Although U.S. economic growth has been quite modest, it still exceeds that of many of the country's principal trading partners. Thus, a large number of factors may have intervened to minimize the price-reducing effect of the 1981-85 dollar appreciation, and these same factors may vitiate or delay any inflationary impact of the post-March 1985 devaluation.

From June 1982 through March 1985, as the dollar was appreciating, prices paid by importers for consumer commodities (other than energy, food, and used cars) rose at an annual rate of only 0.7 percent, while prices paid by consumers for the same set of commodities (as measured by the CPI) rose at an annual rate of 3.0 percent.

In the 15 months following the March 1985 peak value of the dollar, these import prices accelerated sharply, rising at an annual rate of 7.9 percent, while the corresponding consumer prices actually slowed more and rose only 2.2 percent. At least for the first 15 months of the dollar's decline, therefore, there was no obvious aggregate effect on consumer prices. Prices paid by importers did not show any obvious impact of the dollar devaluation until the third quarter after it began. After two more quarters, prices paid by consumers still showed no major effects.

Comprehensive analysis relating changes in import prices to changes in consumer prices is difficult. However, some data on price changes have been compiled for nonfood, nonenergy components of the CPI which are judged to have an above average representation of imports in market sales. For each of the 16 commodity groups presented in table 5, import sales constituted more than 10 percent of 1984 total sales.

Table 5 presents annualized rates of change in the commodity price indexes for five periods; price changes shown for the first and last periods were periods of depreciation of the dollar in foreign exchange markets and the others, peri-

Table 5. Seasonally adjusted annual rates of change for Consumer Price Indexes for selected commodities with higher than average import proportions, December 1978 to June 1986

Item	Dec. 1978 to Sept. 1981	Sept. 1981 to Dec. 1982	Dec. 1982 to Dec. 1983	Dec. 1983 to Mar. 1985	Mar. 1985 to June 1986
Commodities less food and energy	8.7	5.1	5.0	3.5	0.7
Wine at home	8.4	2.0	-1.5	.7	2.6
Whiskey at home	5.9	2.6	1.5	1.3	7.8
Alcoholic spirits excluding whiskey	4.6	1.8	1.0	2.0	9.7
TV and sound equipment	1.9	-1.1	-2.2	-4.1	-5.1
Clocks, lamps, and decor items	8.3	1.7	2.4	1.0	1.6
Tableware, serving pieces, and nonelectric kitchenware	9.8	2.7	1.6	.5	2.2
Lawn equipment, power tools, other hardware	6.3	6.1	2.3	1.9	-1.9
Men's and boys' apparel	4.7	2.9	2.3	2.3	1.3
Women's and girls' apparel	2.0	.1	3.3	2.5	-2.3
Infants and toddlers' apparel	7.3	2.0	3.5	5.5	4.6
Jewelry and luggage	11.9	-2.2	3.4	.3	-1.1
Footwear	6.7	1.4	1.0	2.0	-1.4
New vehicles	7.2	2.6	3.3	3.0	4.1
Sporting goods and equipment	7.6	2.7	2.6	2.5	.4
Toys, hobbies, and other entertainment commodities	8.2	4.0	1.5	1.3	2.5
Other toilet goods and small personal care appliances	9.3	5.3	5.2	3.6	2.9

ods of dollar appreciation. On the one hand, as the dollar strengthened from 1981 to early 1985, one would expect, all other things being equal, that commodities with substantial proportions of imports would exhibit a reduction in prices relative to those of other commodities. That is, while inflation for nonfood, nonenergy commodities on average dropped from 5.1 percent in the early part of the period to 3.5 percent in the latter, one might expect that the price change for commodities with significant import concentrations would slow even more. In fact, only four of these commodity indexes (TV and sound equipment; tableware, serving pieces, and nonelectric kitchenware; lawn equipment, power tools, and other hardware; and toys, hobbies, and other entertainment commodities) showed such a greater reduction.

On the other hand, as the dollar weakened, one would expect that prices for import-affected items would accelerate relative to other prices. Prices for some items have accelerated as one might expect, although quite modestly—for example, tableware, serving pieces, and nonelectric kitchenware; toys, hobbies, and other entertainment commodities; wine at home; and new vehicles. But whiskey and other distilled spirit prices accelerated strictly as the result of the imposition of an additional Federal excise tax on distilled spirits in October 1985 and prices for many other items actually slowed or declined more.

The case of new vehicles is an interesting one and illustrates the fact that not only the foreign producer, but also the domestic distributor, may expand profit rates during periods of rising dollar value. During the past few years, it became increasingly common for imported car dealers to add sometimes substantial surcharges because of the limited supply available to them. As the import prices of new cars have begun to rise sharply, there is evidence that dealers are cutting back on their surcharges so that the final prices to the consumer are rising more slowly. While the price paid by

the importer rose 14.7 percent in the 9 months ended June 1986, the prices paid by consumers for all cars rose only 3.8 percent. Most of this CPI increase has, however, occurred in the last 3 months.

There is some evidence that a strong dollar may have helped lower inflation and that subsequent dollar weakness may be causing some upward price pressure. Nevertheless, the analysis summarized in table 5 indicates that general exchange rate movements may not serve as a reliable guide in predicting changes in consumer costs for specific products having high import representation, as other factors influencing price change in particular markets may predominate.

Conclusion

The absence of any overall inflation for consumers during the first half of 1986 derived primarily from the sharp decline in petroleum prices. Nevertheless, price moderation was very widespread. On average, cost pressures from materials and labor remained very subdued, and consumer prices for most commodities and many services rose only slightly or declined. The rates of price increase for shelter costs were greater than for overall consumption, but they have been slowing and, based on experience, one would expect that continued moderation in overall inflation will slowly continue to bring them down. The remaining pockets of persistent inflation seem to derive from particular structural factors that may not be very responsive to additional market forces. Among these factors are: reductions in Government subsidies and services, possible cost shifting from regulated activities of an establishment to the unregulated, putative increases in liability litigation, above average increases in compensation for State and local government employees, the court-ordered restructuring of AT&T, and higher rates of nonfatal personal injury in automobile accidents. □

—FOOTNOTES—

¹ See, for example, *Blue Chip Economic Indicators*, Aug. 10, 1986, a consensus of 52 economists, who, on average, estimate an increase of 1.9 percent in the CPI for 1986.

² See Robert Gillingham and Walter Lane, "Changing the treatment of shelter costs for homeowners in the CPI," *Monthly Labor Review*, June 1982, pp. 9–14. See also "Changing the Homeownership Component of the Consumer Price Index to Rental Equivalence," *The CPI Detailed Report*, January 1983, pp. 7–13.

³ Joseph D. Rivers and John P. Sommers, "Vacancy Imputation Methodology for Rents in the CPI," *Proceedings of the Business and Economics Section of the American Statistical Association*, 1983, pp. 201–05.

⁴ "The effect of rental equivalence on the consumer price index, 1967–82," *Monthly Labor Review*, February 1985, pp. 53–55.

⁵ There is also limited anecdotal evidence that in some rental markets landlords may be offering special incentives other than lower rents to attract new tenants. Such incentives as reduced security deposits and free merchandise would not be reflected in the CPI rent index.

⁶ Residential rent and owners' equivalent rent constitute nearly 92 percent of the shelter CPI. (Other components are maintenance and repair,

tenants' and household insurance, lodging while out of town, and college housing.) In addition, while residential rent has usually risen somewhat faster than owners' equivalent rent since 1983, the two series have been quite close.

⁷ As in any such analysis, unpredictable external factors can occur. One such potential factor in the coming months is the impending new income tax legislation which some analysts believe may cause upward pressure on residential rent if tax treatment of real estate investment is changed.

⁸ The acceleration in these service prices from 1983 to 1984 might suggest the hypothesis that at that point in time there were the early stirrings of renewed economywide inflation. However, it was a very narrow phenomenon; almost the entire acceleration between those 2 years can be attributed to a temporary rise in automobile finance charges and to sharply higher local telephone charges arising from the divestiture of AT&T.

⁹ Employment Cost Index (ECI) for compensation, Bureau of Labor Statistics.

¹⁰ American Medical Association, *Socioeconomic Characteristics of Medical Practice*, 1985.

¹¹ American Hospital Association, *Hospital Statistics*, 1984.

¹² *Vital and Health Care Statistics* (National Center for Health Statistics, various years).

¹³ *Social Security Bulletin*, Health Care Financing Administration, various years.

¹⁴ Employment Cost Index.

¹⁵ Insurance Information Institute.

¹⁶ *Ibid.*

¹⁷ *Ibid.*

¹⁸ Catherine L. Mann, "Prices, Profit Margins, and Exchange Rates," *Federal Reserve Bulletin*, July 1986.

A rope of sand

My job as the president of the A. F. of L. was coveted by no one in the early days. There was much work, little pay, and very little honor. Though the Federation had been created by agreement, it had to be given reality by making it a force in industrial affairs. The necessary first step was to win for the Federation the good will of the wage-earners. The Federation was the unified activity of the trade union men. It was dependent upon good will and understanding of economic power. So I became a seeker of men. I wanted to win them for a labor movement which was sound philosophically, competent economically, and inspiring spiritually. At times I was well-nigh consumed with zeal, so that I gave little thought to anything else. My work was my life. So in recording the events of my life the labor movement is the controlling purpose.

I watched our local unions and gave them suggestions and advice. I fostered the organization of city centrals and State federations. I sent reminders to national officers urging them to pay per capita dues. In the case of national bodies which the Federation had fostered, local unions and members expected me to be a sort of fatherly supervisor of the organization. I wrote letters and talked to officials, diplomatically urging them to performance of duties and constructive policies. I got trade unions to put on their letterheads "affiliated to the American Federation of Labor" and thus helped advertise the name. All this work had to be done in such a way as to win men to the cause. The Federation had no compulsory authority—it was absolutely dependent upon voluntary cooperation.

—Samuel Gompers,
Seventy Years of Life and Labor:
An Autobiography, Nick Salvatore, ed.
(Ithaca, NY, ILR Press, 1984), p. 103.
