

Inflation fueled by oil prices in first 9 months of 1987

Oil price movements dominated the behavior of the CPI during the first three quarters; inflation slowed quarter by quarter, but remained higher on an annualized basis than in each of the preceding 5 years

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Inflation, as measured by the Consumer Price Index for All Urban Consumers (CPI-U), increased at a seasonally adjusted annual rate of 4.8 percent during the first 9 months of 1987. This increase, although slowing considerably between the first and third quarters, was notably larger than the 1.1-percent rise in 1986 and the advances of about 4 percent in each of the 4 preceding years.

The marked turnaround in energy prices—up at an annual rate of 12.6 percent in the first 9 months of this year after declining 19.7 percent in 1986—was the primary factor in the larger increase in the overall index. However, the rate of the advance of energy prices decelerated sharply quarter by quarter in 1987, from an annual rate of 26.1 percent to 7.9 percent and, finally, to 5.0 percent in the third quarter.

The CPI excluding energy also rose at a more rapid pace in the first 9 months of 1987. Although the pace moderated between the first and third quarters, this slowdown was not as pronounced as that for energy. Prices for nonfood-nonenergy commodities picked up quite rapidly, with the largest advances posted for clothing and used cars. During the first 9 months of 1987, the indexes for food and shelter each advanced at about the same rates as in the preceding year. Charges for other services, however, slowed over the same period. The annual rates of price change for these

groups and their relative impact on the All-Items index during the last several years and the first 9 months of 1987 are shown in table 1.

Current status

Over the first 9 months of this year, as in all of 1986, movements in oil prices have dominated the behavior of the CPI. If the heightened tensions in the Persian Gulf do not disrupt the flow of oil, however, the influence of this component seems likely to continue to diminish in the coming months. Food price increases also should slow.

Aggregate measures of material and labor costs appear to have bottomed out, but do not pose an immediate cause for concern. The Producer Price Index (PPI) for crude nonfood materials other than fuels did rise sharply in the first 9 months of 1987, and that for intermediate materials less food and energy advanced at a 4.3-percent rate. The index for finished goods less food and energy, however, has not yet accelerated.

Measures of labor costs indicate a lack of pressure on prices. The Bureau's Employment Cost Index increased only 3.4 percent over the year ended in September 1987. The 1.1-percent reduction in the unemployment rate over the past 12 months is likely to result in some upward pressure on labor costs, but it is expected to be moderate and gradual. In addition, capacity utilization has remained very steady throughout 1987 at rates significantly below their optimal level.

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Table 1. Percent changes and normalized effect on the All-items index for selected Consumer Price Indexes (CPI-U), selected periods, December 1982 to September 1987

Category	Percent change							
	December 1982 to December 1983	December 1983 to December 1984	December 1984 to December 1985	December 1985 to December 1986	Seasonally adjusted annual rates for—			
					9 months ended September 1987	3 months ended—		
						March 1987	June 1987	September 1987
All items	3.8	4.0	3.8	1.1	4.8	6.2	4.6	3.6
Energy	-.5	.2	1.8	-19.7	12.6	26.1	7.9	5.0
Energy commodities	-3.2	-1.9	3.4	-30.5	27.9	65.8	9.4	15.5
Energy services	4.1	3.4	-.5	-3.3	1.0	.4	6.4	-3.6
All items less energy	4.4	4.5	4.0	3.8	4.1	4.8	4.3	3.3
Food	2.6	3.8	2.7	3.8	3.4	2.5	6.5	1.4
Shelter	4.7	5.2	6.0	4.6	4.7	6.2	3.5	4.5
All items less food, shelter, and energy	5.0	4.4	3.7	3.4	4.0	4.5	4.2	3.4
Other commodities	5.0	3.1	2.2	1.4	4.0	5.1	3.8	3.0
Other services	4.9	6.0	5.4	5.6	4.1	4.1	4.4	3.9
	Normalized effect on All Items							
All items	3.800	4.000	3.800	1.100	4.800	6.200	4.600	3.600
Energy	-.057	.026	.211	-2.156	.939	1.815	.601	.409
Energy commodities	-.248	-.136	.236	-2.012	.897	1.800	.339	.565
Energy services .....	.191	.162	-.025	-.144	.042	.015	.261	-.155
All items less energy	3.857	3.974	3.589	3.256	3.861	4.385	4.000	3.191
Food	1.010	.722	.503	.691	.569	.418	1.030	.249
Shelter .....	.492	1.137	1.318	.999	1.326	1.721	.977	1.287
All items less food, shelter, and energy	2.355	2.115	1.768	1.567	1.966	2.246	1.994	1.655
Other commodities	1.303	.821	.569	.341	1.041	1.316	1.008	.800
Other services	1.052	1.294	1.199	1.226	.925	.930	.986	.855

Food. Prices paid by consumers for food rose at a 3.4-percent annual rate in the first 9 months of 1987. While about the same as recent annual increases, this change represents a slowdown from the sharp advance in the second half of 1986. That increase followed a severe drought in the southeastern part of the country in late spring of 1986, which partially accounted for sharp hikes in prices for fresh fruits and vegetables, meats, poultry, and eggs. The index for fresh fruits and vegetables rose even more rapidly in the first half of 1987, but then declined sharply in the third quarter, resulting in a 5.8-percent annual rate of advance for the first 9 months. Prices for tomatoes, potatoes, bananas, and the other fresh fruits category, which rose substantially during the last half of 1986, declined or decelerated sharply in 1987. On the other hand, prices for lettuce, other fresh vegetables, and apples accelerated in 1987, while those for oranges rose sharply over the entire period since mid-1986.

The slower advance in the food component in 1987, relative to the second half of 1986, was primarily due to a decline in prices for poultry and a much smaller increase in those for pork—items whose prices had been greatly influenced by the 1986 drought. Reflecting declining stocks, prices for beef and veal rose at a double-digit rate in the last half of 1986 and slowed to an 8.8-percent rise during the first 9 months of 1987. Other food groups contributing to deceleration in the food index over the first 9 months were dairy products and nonalcoholic beverages, particularly coffee—the largest food import—the price of which continues

to be affected by a sudden release of huge stocks that were built up through the now-defunct producers' quota system during most of the 1980's. On the other hand, prices turned up for fats and oils and accelerated moderately for cereals and bakery products and other prepared foods. Prices for food away from home and alcoholic beverages rose at 3.4-percent and 3.8-percent annual rates, respectively.

Shelter. During the first 9 months of 1987, shelter costs rose at an annual rate of 4.7 percent. This was about the same as the 4.6-percent rise in 1986—the smallest rise in this component since the rental equivalence approach to homeownership was adopted in 1983.¹ The 2.8-percent rise in charges for house or apartment rents was the smallest half-year annual rate since 1968. In the third quarter, rents accelerated, resulting in a 3.9-percent annual rate of advance for the first 9 months compared with an increase of 5.0 percent in 1986.

Energy. The surge in petroleum-based energy prices was the result of the steady drawing down of the tremendous glut of crude oil produced over a period beginning in late 1985, during which production quotas were formally abandoned by the Organization of Petroleum Exporting Countries (OPEC). OPEC pricing discipline was gradually reestablished towards the end of 1986. Thereafter, inventories dropped lower than expected at times, putting upward pressure on motor fuel and fuel oil prices. The refiners' acquisition cost

of imported crude oil as of August 1987 was \$19.30 per barrel compared with only \$10.91 in July 1986.

Despite these price increases, imported petroleum captured a greater proportion of the U.S. market, with imports representing 39 percent of the supply of crude in July 1987 compared with 36 percent a year earlier. During the first 9 months of 1987, fuel oil prices erased more than one-third of their 1986 declines and the price of motor fuel made up almost half of its 1986 drop. However, as of September of this year, fuel oil prices remained 31.2 percent below their April 1981 peak and motor fuel prices were 26.2 percent below their March 1981 high point.

The index for energy services—natural gas and electricity—also turned around in the first 9 months of 1987. After declining 3.3 percent in 1986, it advanced at a 1.0-percent annual rate, despite a modest decline in the third quarter. Charges for natural gas fell at a rate of 1.7 percent and those for electricity rose at a 2.3-percent annual pace.

Other services. After rising faster than the average for all items over a period of at least 5 years, the change in prices for services other than shelter and energy slowed to a below-average pace of 4.1 percent during the first 9 months of 1987. Several components of this index that had shown recent declines continued to decrease, most notably, auto

finance charges and long distance telephone rates. The drop in the latter category was sharp enough to cause the index for telephone services to decline at an annual rate of 0.7 percent, despite a 6.5-percent rate of increase for local telephone charges.

Charges for several services which slackened in the first half of 1987 continued to outpace the overall CPI. Despite a slowing in the first quarter, medical care service costs posted a 5.8-percent annual rate of increase during the first three quarters of the year. After rising at an 11.8-percent rate in 1986, auto insurance charges slowed to an annual rate of 6.3 percent during the 9 months ended in September. Refuse collection charges accelerated at a double-digit annual rate, apparently reflecting the scarcity of landfill sites around major metropolitan centers. Table 2 shows price changes for consumer services other than shelter and energy during recent years and during the first three quarters of 1987.

Other commodities. Price movements for many groups of items in this category reflect the impact of the declining value of the dollar in international markets because of their import component. However, two important elements with little or no import influence also contributed to the price acceleration of this category.

Table 2. Price changes for consumer services other than shelter and energy, selected periods, December 1982–September 1987

Consumer service category	Percent change							
	December 1982 to December 1983	December 1983 to December 1984	December 1984 to December 1985	December 1985 to December 1986	Seasonally adjusted annual rate for—			
					9 months ended September 1987	3 months ended—		
						March 1987	June 1987	September 1987
Services excluding shelter and energy	4.9	6.0	5.4	5.6	4.1	4.1	4.4	3.9
Telephone:								
Local charges	3.2	17.1	8.9	7.1	6.5	9.2	.4	10.2
Interstate toll calls	1.4	-4.3	-3.8	-9.5	-16.5	-30.5	-2.1	-14.4
Intrastate toll calls	7.4	3.7	.5	.4	-4.2	-1.9	-13.1	3.0
Water and sewerage maintenance	8.5	5.5	5.5	5.4	6.4	5.9	7.4	5.9
Cable television	(1)	6.1	6.0	3.8	8.5	19.4	3.0	4.0
Refuse collection	(1)	3.2	6.4	9.4	10.4	12.2	4.2	15.1
Postage .....	.0	.0	10.2	.0	.0	.0	.0	.0
Appliance and furniture repair	4.9	5.6	3.1	2.6	3.3	2.0	5.9	1.9
Moving, storage, freight, household laundry, and drycleaning	6.2	4.9	7.2	3.2	(1)	(1)	(1)	(1)
Gardening and other household services	(1)	(1)	(1)	(1)	5.6	5.7	5.6	5.6
Apparel services	5.0	4.9	4.9	3.9	3.4	5.0	3.2	2.0
Automobile maintenance and repair	3.8	3.2	3.3	3.7	3.6	2.5	3.6	4.8
Automobile insurance	9.1	7.9	12.0	11.8	6.3	7.9	5.7	5.3
Automobile finance charges	-7.9	6.8	-8.3	-7.3	-4.9	-11.1	6.1	-8.9
Automobile registration, licensing, and inspection fees	7.8	8.5	2.1	3.4	1.6	-5	0	5.4
Other automobile related fees	3.5	5.8	4.2	10.0	7.0	9.6	3.5	8.0
Airline fares	4.8	6.5	6.3	5.3	2.0	4.5	-6.4	8.7
Other intercity public transportation	7.0	10.7	6.4	4.9	3.5	-5	3.7	7.4
Intracity public transportation	2.1	5.9	3.6	6.8	2.7	3.3	3.7	1.1
Professional medical services	7.6	6.3	6.5	6.3	6.9	6.0	8.0	6.9
Hospital and related services	10.4	7.6	5.0	7.2	6.9	4.6	9.3	6.8
Entertainment services	5.4	5.7	4.4	5.4	4.8	3.2	4.3	6.9
Personal care services	3.6	4.9	3.6	2.6	4.3	3.9	3.8	3.5
Tuition and other school fees	9.4	10.1	8.4	7.9	6.8	9.5	9.8	1.3
Personal expenses (legal, financial, and funeral)	12.2	6.5	6.1	9.0	4.8	9.1	4.4	4.3

¹ Data not available.

Table 3. Selected seasonally adjusted annual rates of change for Consumer Price Indexes for commodities with higher-than-average import proportions, selected periods, December 1982–September 1987

Category	December 1982 to December 1983	December 1983 to March 1985	March 1985 to June 1986	June 1986 to December 1986	December 1986 to September 1987
Commodities less food and energy	5.0	3.5	0.7	2.0	3.9
Wine at home	-1.5	0.7	2.6	-1.3	6.9
Whiskey at home	1.5	1.3	7.8	.2	1.3
Alcoholic spirits, excluding whiskey	1.0	2.0	9.7	-3	1.3
TV and sound equipment	-2.2	-4.1	-5.1	-3.0	-3.3
Clocks, lamps, and decor items	2.4	1.0	1.6	-5.8	3.4
Tableware, serving pieces, and nonelectric kitchenware	1.6	0.5	2.2	.9	2.6
Lawn equipment, power tools, other hardware	2.3	1.9	-1.9	1.8	1.5
Men's and boys' apparel	2.3	2.3	1.3	.9	3.6
Women's and girls' apparel	3.3	2.5	-2.3	5.0	7.8
Infants' and toddlers' apparel	3.5	5.5	4.6	-4.3	.4
Jewelry and luggage	3.4	0.3	-1.1	5.1	114.4
Footwear	1.0	2.0	-1.4	3.9	3.2
New vehicles	3.3	3.0	4.1	5.8	1.2
Sporting goods and equipment	2.6	2.5	.4	-3.1	2.7
Toys, hobbies, and other entertainment commodities	1.5	1.3	2.5	2.6	1.8
Other toilet goods and small personal care appliances	5.2	3.6	2.9	2.4	3.0

¹ Jewelry only.

Used car prices rose at a 12.9-percent annual rate, after recording a 5.1-percent decline in 1986. This is largely because the recent weakness in new car sales has reduced the supply of trade-ins. For example, sales of new cars in the first 8 months of 1987 were 7.9 percent lower than they were in the same period last year. Prices for tobacco products also advanced at a 9.4-percent annual rate after a 6.0-percent rise in 1986.

Other commodities (imported). When the dollar was appreciating from March 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.² However, it may have taken some time for the rising value of the dollar to have translated into relatively lower costs of imports; according to one estimate, such an effect may take up to 2 years to appear.³ A large number of factors have been listed as having the potential to minimize the price-reducing effect of the 1981–85 dollar appreciation, and those same factors may have vitiated or delayed any inflationary impact of the post-March 1985 depreciation. Nevertheless, 12 of 16 commodity groups, which were judged to have an above average representation of imports in market sales, had exhibited some evidence of the impact of the declining dollar by the third quarter of 1987. (See table 3.)

Of these 12 groups, 3 showed significant differences in price behavior over the 9 months ended in September. Par-

ticularly evident was the acceleration in prices for apparel. Clothing prices had declined during the 12-month period ended in June 1986. Over the next 15 months, these prices rose at an annual rate of 4.7 percent, with the largest increases coinciding with the introduction of the spring- and summer-weight wear in early 1987. New vehicle prices, however, showed a larger rate of increase in the 12 months ended in June 1986 than in the 15 months ended in September 1987. Other economic factors—notably impending tax law changes—had stimulated demand for new vehicles in calendar year 1986. This concentration of demand in 1986 has resulted in fewer sales in 1987, even with prices increasing at a modest 1.2-percent annual rate. In fact, when the decline in the cost of financing an automobile over the first 9 months is taken into account, the cost of purchasing a new vehicle has remained almost unchanged since the end of 1986. The behavior of automobile prices in the past year certainly is one case where other factors influencing price change in particular markets have dwarfed the effects of exchange rate movements. □

—FOOTNOTES—

¹ See "Changing the Homeownership Component of the Consumer Price Index to Rental Equivalence," *The CPI Detailed Report*, January 1983, pp. 7–13.

² See "A half-year pause in inflation: its antecedents and structure," *Monthly Labor Review*, October 1986, p. 12.

³ Catherine L. Mann, "Prices, Profit Margins, and Exchange Rates," *The Federal Reserve Bulletin*, July 1986.