

Consumer inflation remains modest in 1998

Consumer prices increased only slightly for the second straight year, keeping the inflation rate at its lowest level in more than a decade

Todd Wilson

The Consumer Price Index for All Urban Consumers (CPI-U) for All Items for the U.S. city average increased 1.6 percent in 1998, about the same as during the prior year when the index increased 1.7 percent.¹ Last year's rise was the smallest annual increase since a 1.1-percent advance in 1986, when oil prices plummeted, and the second smallest since 1964.

As was the case in 1997, commodities prices were, on balance, relatively stable. Sharp decreases in prices were reported for a number of commodities, including gasoline, computers, clothing, and toys. Commodities, which generally are subject to greater global competition than services, rose by just 0.4 percent. Within commodities, durables prices decreased 0.5 percent, while nondurables prices increased 0.7 percent. Services prices increased 2.6 percent in 1998. (See table 1.)

The CPI-U excluding food and energy prices (often called the core CPI-U) increased 2.4 percent, slightly more than the 2.2-percent increase that occurred during the prior year.

Other economic measures

After adjusting for inflation, the U.S. economy grew 4.3 percent during 1998—as measured by the change in gross domestic product (GDP) from fourth quarter 1997 to fourth quarter 1998. Last year's increase in real GDP was the largest calendar-year rise during the current economic expansion, which began in 1991. In addition, the unemployment rate decreased during 1998, from 4.7 percent in December 1997 to 4.3 percent in December 1998, the lowest year-end level since 1969. The combination of relatively low con-

sumer inflation and low unemployment over the last 2 years is unusual. Historically, a sustained unemployment rate below 5 percent generally has been accompanied by accelerating (not decelerating or steady) inflation.

Pay increases have continued to grow more rapidly than consumer prices over the 1997–98 period. For example, the Employment Cost Index (ECI) for wages and salaries for private industry workers increased in both years by 3.9 percent—more than twice the rate of consumer inflation in each of those years. Despite such pay increases, however, rises in overall business costs and in the CPI have remained relatively low, due in part to productivity advances, decreased growth in corporate profits, decreased oil prices, increased foreign competition, and decreased nonoil-import prices.

Excluding petroleum, import prices for commodities decreased 3.3 percent in 1998, as measured by the Import Price Index. Declining import prices have decreased input costs for many businesses in this country. The combination of excess Asian industrial capacity and the depreciation of foreign currencies relative to the dollar has moved foreign producers to lower the dollar prices of commodities they export to this country. Furthermore, lower import prices have inhibited price increases by domestic firms facing import competition. Charges of manufactured commodities were also kept down by a large rise in U.S. industrial capacity over the past few years, as well as by recessions in many Asian economies. Lower aggregate demand in Asia has exerted much downward pressure on domestic commodity prices, such as crude oil and computer components.

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Table 1. Annual percent change in the Consumer Price Index for All Urban Consumers (CPI-U), selected expenditure categories, 1989–98

Expenditure category	Dec. 1997 relative importance	Percent change for 12 months ended December—									
		1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
All Items	100.000	4.6	6.1	3.1	2.9	2.7	2.7	2.5	3.3	1.7	1.6
Energy	7.013	5.1	18.1	-7.4	2.0	-1.4	2.2	-1.3	8.6	-3.4	-8.8
Food	15.326	5.6	5.3	1.9	1.5	2.9	2.9	2.1	4.3	1.5	2.3
All items less food and energy	77.661	4.4	5.2	4.4	3.3	3.2	2.6	3.0	2.6	2.2	2.4
Commodities less food and energy	24.053	2.7	3.4	4.0	2.5	1.6	1.4	1.7	1.1	.4	1.3
Commodities less food ..	27.309	3.3	7.4	.8	2.4	.6	1.9	1.1	2.6	-.5	-.7
All items less energy	92.987	4.6	5.2	3.9	3.0	3.1	2.6	2.9	2.9	2.1	2.4
Commodities	42.635	4.1	6.6	1.2	2.0	1.5	2.3	1.4	3.2	.2	.4
Durables	11.596	1.2	.9	2.4	2.5	2.7	2.9	1.7	.7	-1.5	-5
Furniture and bedding	1.141	-1.4	1.1	1.0	4.5	3.6	1.6	4.2	1.0	-.7	1.4
Televisions	0.215	-1.3	-3.6	-1.1	-1.2	-1.7	-1.4	-4.0	-5.3	-4.3	-4.8
New vehicles	5.063	2.4	2.0	3.2	2.3	3.3	3.3	1.9	1.8	-.9	.0
Motor vehicle parts and equipment	0.560	2.2	.9	1.6	-.6	-1.6	.5	.5	-.1	-.9	-.2
Sporting goods	0.493	2.1	1.8	3.7	.1	.3	3.2	-.6	-.1	-.4	-.6
Nondurables	31.039	5.2	8.5	.8	1.9	1.1	2.0	1.4	4.0	.8	.7
Energy commodities ..	3.256	7.9	35.4	-16.1	1.2	-5.1	5.2	-3.3	13.8	-6.9	-15.1
Gasoline	2.976	6.5	36.8	-16.2	2.0	-5.9	6.4	-4.2	12.4	-6.1	-15.4
Fuel oil	0.185	19.5	29.9	-19.9	-3.4	-4.6	.0	1.5	23.3	-11.7	-15.2
Apparel	4.944	1.0	5.1	3.4	1.4	.9	-1.6	.1	-.2	1.0	-.7
Medical care commodities	1.222	8.2	8.4	7.5	5.2	3.1	3.0	1.8	2.6	2.3	4.1
Toys	0.450	2.4	1.5	1.1	2.5	1.5	-.9	1.0	2.8	-1.6	-6.1
Services	57.365	5.1	5.7	4.6	3.6	3.8	2.9	3.5	3.3	2.8	2.6
Shelter	29.788	4.9	5.2	3.9	2.9	3.0	3.0	3.5	2.9	3.4	3.3
Airline fares	0.814	5.3	22.7	-6.0	6.6	17.0	-9.5	1.8	14.7	-4.8	4.1
Medical care services ..	4.392	8.6	9.9	8.0	7.0	5.9	5.4	4.4	3.2	2.9	3.2
Information and information processing other than telephone services	0.350	-7.3	-2.6	-4.1	-6.1	-7.6	-9.1	-10.7	-11.6	-12.1	-26.6
Medical care	5.614	8.5	9.6	7.9	6.6	5.4	4.9	3.9	3.0	2.8	3.4

Note: Data are not seasonally adjusted.

On balance, Producer Price Indexes declined during 1997 and 1998, putting downward pressure on the cost of materials to business and on consumer prices. Excluding energy from each of the following component indexes, finished consumer goods increased 2.5 percent, intermediate materials decreased 1.9 percent, and crude materials declined 12.6 percent. Much of the decline in the crude materials index reflects sharp decreases in prices for slaughter hogs, iron and steel scrap, aluminum and copper base scrap, wastepaper, cattle hides, and corn. (The PPI does not reflect changes in import prices.)

Finally, according to households surveyed by the University of Michigan, inflation expectations have declined in recent years.² These lower expectations have exerted downward pressure on inflation. The anticipation of lower inflation, by consumers as well businesses, translates into smaller wage and price increases, respectively, as these groups anticipate paying lower price increases for commodities and services in the future.

Energy and food prices

Energy. Energy prices declined 8.8 percent in 1998, after decreasing 3.4 percent during the prior year. Last year gasoline prices decreased 15.4 percent. The other main component of energy, household fuels, decreased 3.8 percent. Since late 1997, crude oil and gasoline prices have, on balance, moved sharply lower, as their supplies have moved higher. Factors behind these price decreases have included a weakening in demand from the troubled economies of East Asia, milder-than-usual cold months that accompanied the El Nino weather system in much of the northern hemisphere, and increases in OPEC and non-OPEC oil production. Because the weather during late 1997 and early and late 1998 was milder than usual, many oil refiners did not switch production from gasoline to heating oil, as they usually do at those times of year. Consequently, gasoline inventories have climbed quite high. The average price per gallon of unleaded regular gasoline has fallen from \$1.26 in December 1996 to \$0.99 in Decem-

ber 1998. Household fuel oil charges decreased 15.2 percent last year.

Meanwhile, energy services (electricity and natural gas) costs decreased 3.3 percent. Electricity prices fell 3.2 percent last year, compared with a 1.3-percent decrease in 1997. Both California and Massachusetts introduced residential electric power deregulation in 1998. In these States, consumers can now choose the company from which they buy their power. Ideally, such competition will eventually lower the price of electricity. California and Massachusetts consumers also benefited from State-legislated 10-percent rate cuts. These reductions were part of a deregulation agreement between the respective State governments and investor-owned electric companies. Natural gas charges declined 3.5 percent in 1998, compared with a 3.3-percent increase during the prior year.

Food. Food inflation accelerated last year, with prices increasing 2.3 percent, following a 1.5-percent advance in 1997. Grocery store food prices (food at home) rose 2.1 percent in 1998, after rising 1.0 percent during the previous year. Increasing prices for fresh fruits, dairy products, and fish and seafood led the acceleration. These increases were partially offset by decreasing prices for pork and coffee.

The fresh fruits index rose 8.1 percent in 1998, after decreasing by nearly 5 percent in 1997. Prices of oranges, including tangerines, surged 18.5 percent last year. Uncertainty over the effect on the orange trees of the dry, hot weather in Florida was a factor behind the increase. Banana prices advanced 9.3 percent in 1998. Drought in Columbia and excessive rains in Ecuador, both part of the El Nino weather patterns, were principal factors.

Prices for dairy and related products rose 6.6 percent last year, after decreasing 0.5 percent during the prior year. Milk, as well as cheese, ice cream, and other dairy products, all registered increases of more than 6 percent in 1998. Milk production costs were up in 1998. Poor dairy-cow foraging conditions accompanied a hot summer, particularly in the Midwest and California. Also, unusually wet weather in California last year damaged much of the hay crop.

Fish and seafood prices rose 3.7 percent last year, compared with a 1.2-percent advance in 1997. Canned fish and seafood charges increased by nearly 4 percent in 1998. Canned tuna prices were up following both a decrease in tuna supplies from the prior year and an increase in the cost of producing tin cans. Canned and frozen red salmon charges also increased, reflecting a disappointing catch last year. Canned shrimp prices rose as U.S. supplies were down. Over the past two years, more stringent U. S. Food and Drug Administration quality standards for shrimp have been in effect and have lowered the supply of shrimp. Frozen and fresh catfish prices showed increases in 1998, accompanying a rise in per capita consumption of catfish. Frozen cod prices were up

as well, in part due to both a disappointing Atlantic catch and an increase in demand from the East Coast.

Prices for pork decreased 5.8 percent in 1998, following a 1.5-percent decrease during the prior year. Factors behind last year's decrease include the highest increase in pork production (slaughters) since 1979, an increase in the number of piglets born, and a possible lag in the passing through from the producer level to the consumer level of a 1997 decrease in the PPI for slaughter hogs. Hog producers expanded pork production and the hog population in 1998, largely in response to relatively high hog prices throughout most of 1996 and 1997. Between 1995 and 1997, the slaughter hogs index increased by about 24 percent on an annual-average-to-annual-average basis.

According to the U.S. Department of Agriculture, the farm value of hogs reached \$1.00 per pound in July 1997. By December 1998, the price had fallen to \$0.23 per pound. Over the past few years, there has been an expansion of hog-raising facilities. It is widely believed that in recent years, hog producers have been expanding their facilities in an effort to beat a recent series of new environmental protection State laws. Because such regulations set new limits on the permissible size of new hog-raising facilities, it has been to producers' advantages to expand their facilities before these laws take effect.

Coffee prices dropped substantially in 1998—nearly 9 percent—moving back down to more moderate levels following the 1997 price rise of nearly 17 percent. Lowered forecasts of Brazil's coffee harvests were partially responsible for the rapid increase in coffee prices in 1997. Supply disruptions in Central and South America also played a significant role. Heavy rains in those regions in 1997 damaged coffee crops. Strikes in Columbia among dockworkers and truckers and threatened strikes among growers were contributing factors as well.

Items other than food and energy

Shelter. Shelter inflation remained about steady in 1998, at 3.3 percent. Acceleration in the index for rent of primary residence—from 3.1 percent in 1997 to 3.4 percent in 1998—was partially offset by sharp decelerations in both other lodging away from home, including hotels and motels, and housing at school, excluding board. The other lodging away from home category, which excludes housing at school, increased just 3.7 percent last year, following a 6.2-percent rise during the previous year. Among the contributing factors, fewer tourists visited the United States last year, and the supply of rooms increased. Also, wildfires burned out of control in California, Texas, and Florida, decreasing the demand for rooms in these States. Charges for housing at school increased 4.2 percent in 1998, following a 4.9-percent increase in 1997. Owners' equivalent rent of primary residence increased 3.2 percent last year, a

little higher than during the prior year.

Apparel. The apparel index fell 0.7 percent in 1998, compared with a 1.0-percent advance in 1997. On a seasonally-adjusted basis, apparel prices showed sharp declines in both the first and fourth quarters. A warmer-than-usual fall season across the United States, coupled with disappointing Christmas sales, depressed demand for fall and winter clothing during the fourth quarter of last year. The relatively warm fall season resulted in low sales of cold weather clothing. In response to this weak demand, many clothiers reduced prices. Traditional department store sales suffered the worst declines, while many discount clothing stores and specialty stores reported solid business. First quarter apparel prices were down as well. In addition to sluggish Christmas sales in 1998, those of 1997 were also generally lower than expected. Consequently, many clothing stores, stuck with large inventories, resorted to price cutting early last year. Women's and girls' apparel prices decreased 1.0 percent in 1998, while prices for men's and boys' apparel decreased 0.7 percent. The footwear index declined 0.5 percent.

Medical care. After decelerating for 7 years, the medical care index increased by 3.4 percent in 1998, following a 2.8-percent rise the previous year. Acceleration in the following indexes was largely responsible for last year's increase in medical care inflation: prescription drugs and medical supplies, physicians' services, and dental services. Prescription drugs charges were up 4.9 percent last year, about twice the increase recorded during 1997. Increases in generic drug prices were primarily responsible for the acceleration. Generic psychotherapeutics, cardiovasculars, anti-infectives, and oral diabetes therapy drugs all showed substantial price increases last year. The price of physicians' services rose 3.3 percent, after increasing 2.7 percent during the earlier year. Charges for dental services increased 4.4 percent, following a 4-percent rise in 1997.

The index for hospital and related services rose 3.2 percent in 1998, the same as during 1997, marking the first time since 1990 that the index did not decelerate. Throughout the 1990s until mid-1998, year-over-year increases in hospital charges steadily decreased, along with increases in insurance reimbursements. Within the insurance sector, competition among health maintenance organizations (HMOs) for increased market share kept downward pressure on premiums, translating into downward pressure on reimbursements to hospitals. By 1997, however, many HMOs had suffered large financial losses. At the same time, hospitals experiencing shortfalls due to tight reimbursement policies sometimes reacted by increasing published charges. Finally, in the late 1990s, employers and insurers have responded to concerns by some HMO members of inferior treatment and lack of over-

all choice by slowly expanding reimbursement dollars.

College tuition and fees. Inflation in college tuition and fees has decelerated every year since 1992, having peaked at 12.1 percent in 1991. In 1998, these costs rose 3.9 percent, following a nearly 5-percent increase in 1997. Last year's rise was the smallest for this measure since BLS began publishing it in 1978. Many State universities in California reported tuition decreases. Elsewhere, some universities raised tuition to pass on increased costs of merchandise and materials. While the rate of increase in college tuition has slowed in recent years, its increases continue to far exceed overall consumer inflation.

Information and information processing other than telephone services. The index for information and information processing decreased 26.6 percent last year, compared with a 12.1-percent decrease in 1997. The increased rate of decline in this index was due mainly to a 35.8-percent decrease in the index for personal computers and peripheral equipment. Beginning with the release of the CPI for January 1998, BLS began using an improved quality-adjustment regression procedure, hedonic modeling, for calculating the index for personal computers and peripheral equipment. This procedure decomposes the price of personal computers into implicit prices for each of its essential features and components. The value of a quality improvement is deducted from the price change of the computer or peripheral equipment, which may have impacted the measured rate of deflation for this category.

A factor behind the decrease in computer prices is a drop in the price of components, such as memory chips. For about the past 3 years, there has been a worldwide glut of capacity to produce RAM chips. Additionally, competition among makers of computers and computer components has increased in recent years.

Another stratum of information and information processing, computer software and accessories, decreased 10 percent in 1998. Over the past several years, an increased incidence of software bundling by computer manufacturers has exerted downward pressure on software prices. In other words, as computer manufacturers have included free software with the purchase of computers, they have indirectly imposed price disciplining on software manufacturers who sell software separately.

Tobacco and smoking products. The tobacco and smoking products index rose 31.8 percent in 1998, following a 7.2-percent increase during the previous year. Cigarette prices, up 33.7 percent last year, explain most of the increase. Following losses from medicaid lawsuits, tobacco manufacturers raised the price of a pack of cigarettes by 45 cents in late November. Over the past 2 years, the tobacco and smoking products index has risen by more than 40 percent, mainly due to increases in cigarette

prices. In 1997, tobacco companies had also raised cigarette prices following large settlements in lawsuits. In addition, increases in State excise taxes on cigarettes had raised prices even more.

The 1998 CPI revision: Beginning with the release of the January 1998 CPI, BLS revised the CPI market basket to reflect 1993–

95 consumer expenditure patterns. This new set of expenditure weights, using 1993–95 Consumer Expenditure Survey data, has replaced the 1982–84 weights used before the revision. BLS estimated that the 1998 CPI revision would reduce the annual change in the CPI by 0.1 or 0.2 percent. The effect of the new weights is difficult to predict, however, and will vary depending on the patterns of relative price changes in any given year.³ □

Notes

¹ Annual percent changes are December-to-December changes unless otherwise noted.

² *Economic Report of the President, Transmitted to the Congress February 1999* (Washington, U.S. Government Printing Office, 1999), p. 55.

³ In the past, BLS has revised the CPI market basket about every 10 years. In the future, such revisions will occur more frequently. As a result, BLS will be able to calculate a more accurate CPI, reflecting the inflation experience of modern consumers. With the implementation of more recent weights, BLS

will be able to calculate relative importances of CPI components which more precisely mirror current allocations of consumer spending.

Effective with the release of CPI data for January 2002, BLS will update the consumption expenditure weights to the 1999–2000 period. The newer weights will replace the 1993–95 weights. Following the 2002 revision, BLS will update CPI expenditure weights every 2 years. Accordingly, effective with the release of January 2004 data, BLS will use 2001–02 consumer expenditure patterns. The effect on the index of these future revisions is likely to be slightly upward following some revisions, and slightly downward following others.