

The AIER Cost-of-Living Guide

During the first 11 months of 2001, the general price level, as measured by the Consumer Price Index (CPI), increased at a seasonally adjusted annual rate of 1.9 percent. This compares with an increase of 3.4 percent for all of 2000. A sharp decrease in energy prices accounts for the lower rate. The energy price index, which increased at double-digit rates in both 1999 and 2000, decreased at an annual rate of 11.1 percent during the first 11 months of the year. Most of this decline occurred in the second half of the year. Gasoline prices, for example, have fallen nearly 29 percent from the peak level reached in May.

The CPI itself fell in October and was unchanged in November, prompting some economists to raise the specter of “deflation,” (a prolonged period of falling prices). The last time this issue received attention was in 1998, when a similar episode of falling energy prices helped push the rate of general price inflation to a 10-year low. Those deflation worries evaporated when energy prices later surged. In our view, the recent downturn in the CPI is likely to be another temporary event, rather than the first step in a deflationary sequence. Chronic inflating has reduced

the purchasing power of the dollar by over 90 percent since 1913, and that process is likely to continue over the long term, as long as the dollar remains a fiat currency.

In the long run, price inflation is, in Milton Friedman’s words, a monetary phenomenon. It is attributable to the creation of excess purchasing media—as Friedman put it, “too much money chasing too few goods.” In our view, it remains a threat to the U.S. economy. Monetary inflating persists, i.e., the monetary base continues to grow faster than the real economy—and the *potential* for vastly accelerated price inflation resides in the all those greenbacks now held abroad. Moreover, a review of the historical record provides a stark reminder of how ineffective the Government has been at preserving the purchasing power of the dollar over the long term.

As shown in Chart 1, for more than a century the general price level fluctuated periodically in response to a series of wars and panics. From the Revolutionary War through World War I, wartime monetary excesses were followed by postwar decreases in prices. (The sharp upturns in prices preceding the three peaks shown in the chart coincide with the War of 1812,

the Civil War, and World War I.)

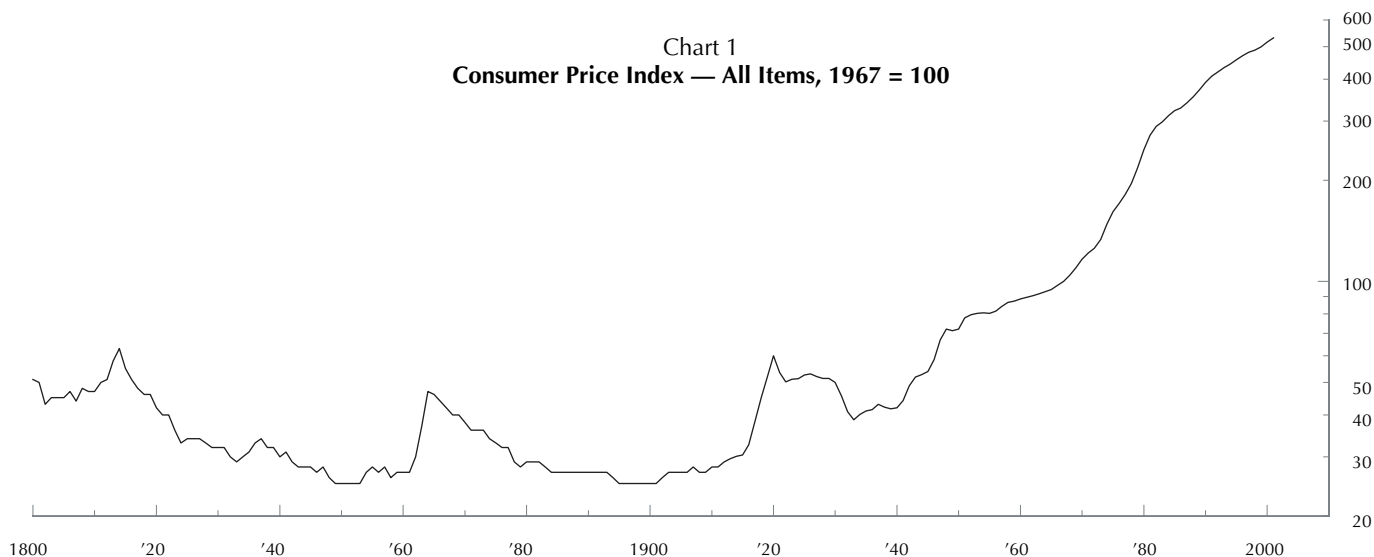
During each of those episodes when the dollar’s purchasing power plunged, the currency’s redeemability into monetary commodities (gold or silver) at fixed rates was impaired. After convertibility was restored, prices began to return to their prior levels. From the perspective of subsequent dollar price trends, for example, it may seem astonishing that *the price index in 1930 was exactly the same as it had been in 1801, 130 years earlier.* (The index for both years was 50.0, where 1967=100.)

However, a sea change in the movement of the general price level followed the abandonment of the domestic gold standard in 1933 and the subsequent suspension of all redeemability in 1971. As Chart 1 shows, the purchasing power of the dollar since the late 1930s has eroded almost continuously at rates previously associated only with national crises—and there has been no reversal of the price trend such as occurred previously when the dollar returned to convertibility. As we have said many times, there *never* has been a paper currency that eventually has not become worthless.

Measuring Price Changes

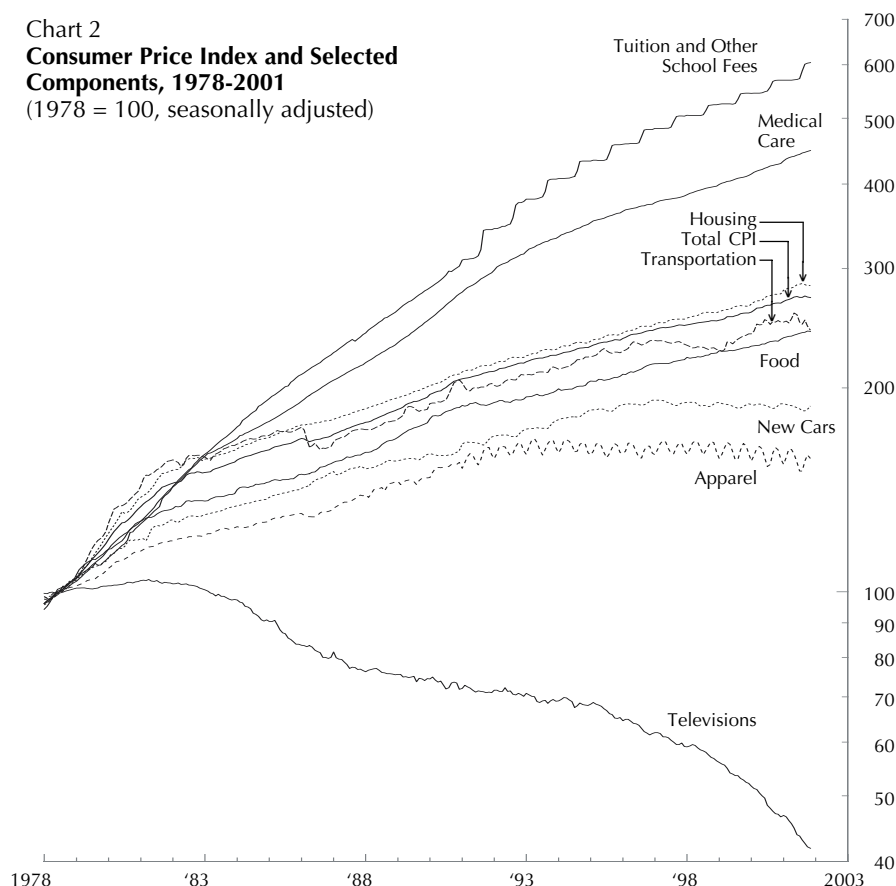
There is, of course, no such thing as the “general price level.” The CPI and

Chart 1
Consumer Price Index — All Items, 1967 = 100



Note: Prior to 1913 index largely is based on prices for goods rather than goods and services, and on wholesale rather than retail prices.

Chart 2
Consumer Price Index and Selected Components, 1978-2001
 (1978 = 100, seasonally adjusted)



other price indexes are a relatively crude attempt to summarize in a single statistic the changes in the prices of hundreds of different goods and services. The CPI, the most widely used barometer of price inflation, was originally developed during World War I at the request of Woodrow Wilson to help resolve wage disputes between management and labor in war industries. It continued to be used after the war to negotiate wages in private industry. After World War II, when price inflation became chronic, the CPI was used increasingly to make cost-of-living adjustments to a wide range of contracts and payments, including Social Security benefits, other Government benefits, wages, pensions, and income tax brackets and deductions. Although the CPI is one of the most familiar economic statistics, most people have little understanding of how it is calculated.

The CPI measures changes in the price of a specified basket of goods and services typically purchased by consumers. The first step in this process is to find out what people buy. The Census Bureau does this by surveying consumers. The survey currently used is believed to be representative of the spending habits of about 80 percent of the population. The price inflation experienced by the other 20 percent—mainly persons living in rural areas—may not be accurately measured by the CPI.

Currently over 400 items are included in the CPI, covering a wide range of spending categories that includes food, transportation, household operation, education, recreation, etc. When the prices of all these items are combined to construct a “general price level” the price of each item is weighted according to the proportion of income that consumers spend on it. For example, people spend more on housing than they do on fruit, thus housing costs are given more weight than the price of fruit in the CPI.

In actual experience, of course, people do not spend the same proportion of income on the same items every year. Tastes change. Moreover, in a dynamic economy like that of the United States, new products continually become available, others become obsolete, and established products are modified. To account for such changes, the CPI basket of goods and services is changed every few years, when a new Census Bureau survey provides updated information on how people are spending their money. Even so, the index may not keep up with innovations and shifting consumer tastes. Furthermore, the prices of new items often drop sharply

after they are introduced (e.g., cell phones and VCRs) but, because new items are not added to the CPI for some time, the index misses these decreases, and thus may overstate price inflation.

In addition, shoppers often juggle their purchases to take full advantage of “good buys,” and thus are able to reduce their total expenditure. The index does not reflect this so-called “substitution effect.” It probably also fails to fully account for rebates, senior citizen/student/member-ship discounts, frequent-flier miles and other tie-ins, and other complex prices practices that have become common. Moreover, CPI price data are not collected on weekends or holidays, when stores have sales and many consumers shop. All these shortcomings probably cause the CPI to overstate the impact of price increases on the cost of living.

The index also may not be adequately adjusted for quality improvements. The CPI is supposed to measure the prices of items whose quality remains constant over time. Thus, if a price increase for a good is accompanied by a comparable quality improvement, this increase should not affect the CPI. In practice, putting a price tag on quality changes requires subjective judgments. If a new medication costs \$10 more but causes fewer side effects, is the difference in price entirely due to this improvement? If so, the “constant quality” price has not increased. If airlines offer a greater choice of flights, or if they eliminate meals and shrink their seats, how do analysts account for this when measuring changes in the price of “constant quality” air travel?

The Bureau of Labor Statistics, which computes the CPI, takes quality changes into account when pricing some items, such as cars and computers, but not others. Most economists believe that, on balance, the quality of goods and services has increased more over the years than indicated by these quality adjustments. To the extent this is so, the CPI overstates price inflation. The adjustments are thought to be least adequate for medical care, which suggests that the rapid increase in medical care prices in recent decades is partly a statistical illusion.

It would be all but impossible to avoid completely these and other pitfalls in the computation of the CPI. Despite its shortcomings, it is the best available measure of changes in the cost of living, if that is described as the dollar outlays required to reach a given level of consumer satisfaction.

A breakdown of the CPI into broad categories of goods and services, as shown Chart 2, reveals where price pressures were greatest for the past 20 years. Consumers who purchased relatively more of

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the items near the top of the chart suffered a larger increase in their cost of living than that implied by the increase in the aggregate CPI. Those who spent more on the items shown near the bottom experienced a relatively smaller increase.

Price Changes in the 1990s

Chronic price inflation even at “moderate” rates leads to significant losses of buying power over time, a fact often obscured by media reports that focus on comparatively small monthly or annual price changes. For example, during the 1990s, a period in which annual rate of price inflation averaged 3 percent, the dollar lost a fourth of its purchasing power.

The accompanying table shows a detailed breakdown of consumer prices, revealing the cumulative price changes in goods and services from the beginning of 1990 through November 2001. Cigarettes and other tobacco products lead the list, having increased 151.8 percent since 1990. At the other extreme, the prices of personal computers and other information processing equipment have plummeted 78.4 percent.

Prices are influenced by countless forces of supply and demand including changing technology, demography, and tastes, product innovation, international competition, etc. However, Government policies are another important source of price pressures, and it is notable that prices have increased the most for items that are heavily influenced by such policies: tobacco is heavily taxed and burgeoning subsidies for college education and for Medicare and Medicaid have created a classic “demand side” price squeeze that has forced prices for covered services upward. Oppositely, consumer prices for video and audio products, a lightly regulated industry, have sharply decreased.

The relationship between Government policy and the costs of obtaining goods and services is, of course, not as simple as these examples might suggest. Myriad policies distort prices, and it is all but impossible to identify the relative impact of different, sometimes conflicting, policies.

In addition, Government policies affect not only the prices of items but their availability. Policies that artificially limit price increases also tend to limit supply. When this happens, low prices do not necessarily reflect a lower cost of living, or a higher standard of living. Witness the long lines in the former Soviet Union for “cheap” goods, and the long waiting lists for medical services in countries with “low cost” national health insurance.

Oppositely, rising prices do not always imply a commensurate increase in the cost of living. In this regard, the sharply higher

PERCENT CHANGES IN SELECTED PRICE INDEXES

1990 — 2001

Item	% Change	Item	% Change
Cigarettes & other tobacco products	158.1	Stationery supplies & gift wrap	34.3
Elementary & high school tuition & fees ...	119.0	Breakfast cereal	33.0
College tuition and fees	114.0	Ham	32.9
Hospital services, nursing homes, adult day care	106.5	Nonprescription medical equipment & supplies	32.9
Oranges & tangerines	95.5	Beef and veal	31.9
Bank services, tax return preparation, other financial services	92.7	Fish & seafood	31.8
Cable television	92.4	Used cars & trucks	30.7
Tomatoes	89.8	Household fuel oil	30.4
Educational books & supplies	85.6	Poultry	30.2
Dental services	82.0	Housekeeping supplies	29.7
Prescription drugs & medical supplies	78.1	Rice, pasta, cornmeal	29.3
Bacon & related products	77.4	Telephone services, local charges	28.8
Housing at school, excluding board	75.4	Sugar & sweets	28.2
Legal services	75.4	Bananas	26.9
Out of town lodging, incl. hotels & motels	74.8	New trucks	26.5
Funeral expenses	73.7	Pork chops	26.2
Airline fare	72.8	Margarine	25.8
Garbage & trash collection	72.2	Nonprescription (over-the-counter) drugs	25.6
Admissions to movies, theater, sporting events, etc.	68.8	Shampoo, cosmetics, perfume, & other personal care products	24.6
Fees for lessons or instructions	68.8	Coffee	24.4
Lettuce	68.3	Gasoline (all types)	20.8
Physicians' services	66.5	Pets & pet products	20.0
Butter	66.1	Electricity	19.0
Apples	65.5	Frozen & freeze dried prepared foods	17.1
Bread other than white	64.6	Sports vehicles including bicycles	16.7
Water & sewerage maintenance	63.4	New cars	15.1
Motor vehicle insurance	61.7	Furniture & bedding	14.8
Crackers, bread, and cracker products	58.8	Infants' and toddlers' apparel	14.3
White bread	57.6	Jewelry	11.1
Alcoholic beverages away from home	56.0	Carbonated drinks	9.2
Soups	53.4	Watches	8.9
Fresh sweetrolls, coffeecakes, doughnuts	48.5	Women's footwear	8.9
Fresh cakes & cupcakes	47.9	Public transportation between cities excl. airlines	8.8
Lamb & organ meats	47.2	Boys' and girls' footwear	7.3
Motor vehicle maintenance & repair	46.5	Laundry appliances	5.5
Frozen and refrigerated bakery products ..	46.5	Men's suits, sport coats, & outerwear	5.2
Spices, seasonings, condiments, sauces ...	45.6	Men's pants & shorts	3.7
Newspapers, magazines, books	44.7	Vehicle parts & equipment other than tires	3.7
Public transportation within city	44.5	Eggs	3.1
Rent of primary residence	44.4	Boys' apparel	2.2
All-items CPI	40.5	Tires	1.9
Potatoes	40.3	Men's footwear	1.7
Ice cream & related products	40.2	Women's outerwear	1.1
Utility natural gas service	39.3	Girls' apparel	-1.8
Distilled spirits at home	39.1	Photographic equipment & supplies	-3.6
Fresh whole milk	39.1	Clocks, lamps, and decorator items	-4.8
Cookies	38.4	Sports equipment	-6.3
Postage	38.0	Long distance out-of-state phone calls	-8.1
Motor oil, coolant, & fluids	37.6	Long distance in-state phone calls	-9.6
Frankfurters	37.1	Haircuts and other personal care services	-12.1
Frozen vegetables	36.4	Toys	-13.7
Cheese & related products	36.0	Audio equipment	-18.7
Eyeglasses & eye care	35.8	Women's dresses	-18.9
Food away from home	35.3	Televisions	-43.7
Snack foods	35.1	Personal computers & other information processing equipment	-78.4
Beer & ale at home	34.5		
Wine at home	34.4		

price inflation that typically occurs when countries abandon central planning overstates the impact on their standard of living. The higher prices are offset, to some extent, by the freeing of time formerly spent standing in line and a greater selection of goods and services. Similarly, after the Government removed price controls on petroleum, the gas lines of the 1970s disappeared.

Be that as it may, the larger point to be

gained from the table is simple: no matter what the politicians and monetary authorities say, the buying power of the dollar continues to sink in this era of inflating. Chronic price inflation even at “moderate” rates leads to substantial losses of buying power over time. Since 1990, the dollar has lost more than 25 percent of its purchasing power. The obvious question would seem to be: how little will the dollar be worth 10 years from now? □

PURCHASING POWER CONVERSION FACTORS

To Convert: _____			To Convert: _____			To Convert: _____		
Past Dollars		2001 Dollars	Past Dollars		2001 Dollars	Past Dollars		2001 Dollars
to 2001 Dollars		use	to 2001 Dollars		use	to 2001 Dollars		use
Year	Multiplier A	Multiplier B	Year	Multiplier A	Multiplier B	Year	Multiplier A	Multiplier B
1920	8.8417	0.1131	1947	7.9297	0.1261	1974	3.5917	0.2784
1921	9.9159	0.1008	1948	7.3681	0.1357	1975	3.2909	0.3039
1922	10.5677	0.0946	1949	7.4404	0.1344	1976	3.1114	0.3214
1923	10.3816	0.0963	1950	7.3578	0.1359	1977	2.9229	0.3421
1924	10.3411	0.0967	1951	6.8188	0.1467	1978	2.7149	0.3683
1925	10.0856	0.0992	1952	6.6646	0.1500	1979	2.4402	0.4098
1926	10.0094	0.0999	1953	6.6147	0.1512	1980	2.1495	0.4652
1927	10.2019	0.0980	1954	6.5901	0.1517	1981	1.9475	0.5135
1928	10.3210	0.0969	1955	6.6065	0.1514	1982	1.8350	0.5450
1929	10.3210	0.0969	1956	6.5092	0.1536	1983	1.7778	0.5625
1930	10.6100	0.0943	1957	6.3005	0.1587	1984	1.7052	0.5864
1931	11.6593	0.0858	1958	6.1329	0.1631	1985	1.6465	0.6074
1932	12.9707	0.0771	1959	6.0767	0.1646	1986	1.6154	0.6190
1933	13.7080	0.0730	1960	5.9876	0.1670	1987	1.5585	0.6417
1934	13.2294	0.0756	1961	5.9208	0.1689	1988	1.4973	0.6679
1935	12.9075	0.0775	1962	5.8554	0.1708	1989	1.4288	0.6999
1936	12.7831	0.0782	1963	5.7789	0.1730	1990	1.3554	0.7378
1937	12.3372	0.0811	1964	5.7043	0.1753	1991	1.3002	0.7691
1938	12.5711	0.0795	1965	5.6138	0.1781	1992	1.2622	0.7923
1939	12.7218	0.0786	1966	5.4522	0.1834	1993	1.2260	0.8156
1940	12.6310	0.0792	1967	5.3050	0.1885	1994	1.1948	0.8369
1941	12.0295	0.0831	1968	5.0912	0.1964	1995	1.1621	0.8605
1942	10.8709	0.0920	1969	4.8315	0.2070	1996	1.1290	0.8858
1943	10.2413	0.0976	1970	4.5615	0.2192	1997	1.1031	0.9065
1944	10.0664	0.0993	1971	4.3735	0.2287	1998	1.0864	0.9205
1945	9.8423	0.1016	1972	4.2338	0.2362	1999	1.0631	0.9406
1946	9.0839	0.1101	1973	3.9857	0.2509	2000	1.0285	0.9723
						2001	1.0000	1.0000

How to Convert Past and Present Prices

Our readers often ask us what prices their property might have commanded at some earlier date—or what price would have to be paid today for something purchased years ago. The table of “Purchasing Power Conversion Factors” provides a simple way for anyone interested to obtain a rough estimate of what the purchase price of goods, services, or real estate is in terms of present and past dollars.

To convert past-dollar prices into 2001-dollar prices, simply multiply the original price by the conversion factor Multiplier A shown in the table for the appropriate year. Say that you want to know if the house you bought years ago has “kept pace with inflation.” Simply multiply the price of the house in the year that you purchased it by the Multiplier A factor shown for that year. *Example:* A California house purchased in 1957 for \$17,000 has a current market value of \$525,000. Has it enjoyed a *real* gain or suffered a *real* loss in terms of its market value’s purchasing power? The \$17,000 original purchase price in terms of 2001 dollars is $\$17,000 \times 6.3005 = \$107,109$ —or a real gain of about \$417,891.

Oppositely, to convert 2001 dollars into past dollars, simply multiply today’s price by the conversion factor Multiplier B shown in the table for the appropriate year. *Example:* If the price of a loaf of bread is about \$1.50 today, what was the constant-dollar equivalent in, say, 1970? Today’s \$1.50 purchase price in terms of 1970 dollars is $\$1.50 \times 0.2192 = \0.33 .

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