

## The AIER Cost of Living Guide

Prices decreased in 2009, but history suggests this rare episode of deflation will be short-lived.

by the AIER research staff

The rate of consumer price inflation edged upward at the end of 2009, following a rare episode of price deflation in the first half of the year. Overall, the annual average Consumer Price Index (CPI), before seasonal adjustment, actually fell by 0.42 percent from 2008 to 2009 (through November). This decrease mainly reflected sharply lower energy prices in the wake of the financial crisis and the global recession. Netting out volatile food and energy prices, inflation averaged a steady 1.7 percent throughout 2009.

Deflation is unlikely to continue, if history is any guide. With a few exceptions, the price level has increased every year since World War II. Since 1913, the purchasing power of the dollar has fallen dramatically—according to the CPI statistics, by over 95 percent. That is the same year that Congress created the Federal Reserve System, which, as the nation’s central bank, is supposed to “fight” price inflation.

In our view, this long-term erosion in purchasing power is likely to continue as long as the United States retains a fiat currency. All the currencies of the world today are fiat currencies—that is, currencies that promise to pay nothing except more of the same currency and are legal tender (usable to extinguish debts and obligations) because their issuing governments say so. This

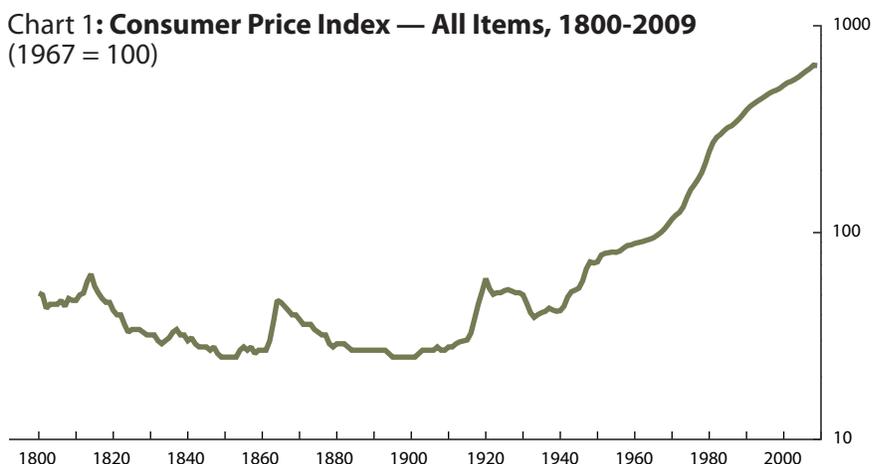
system stands in sharp contrast to a gold standard, in which currencies are defined as or redeemable in specific weights of gold. Fiat currencies derive their value solely from a government fiat, or decree, that they are legal tender.

The problem with fiat currency systems is that they lack the self-correcting mechanisms of a gold standard; if prices increase too much, there is no market mechanism to bring them back down. The historical evidence over many centuries and around the world suggests that governments tend to follow fiscal and monetary policies that foster higher prices. In the absence of a gold standard, there is little to restrain them from printing fiat money to excess.

All the fiat currencies of the world have lost value over the years, and none is immune from the rot of officially sponsored inflating.

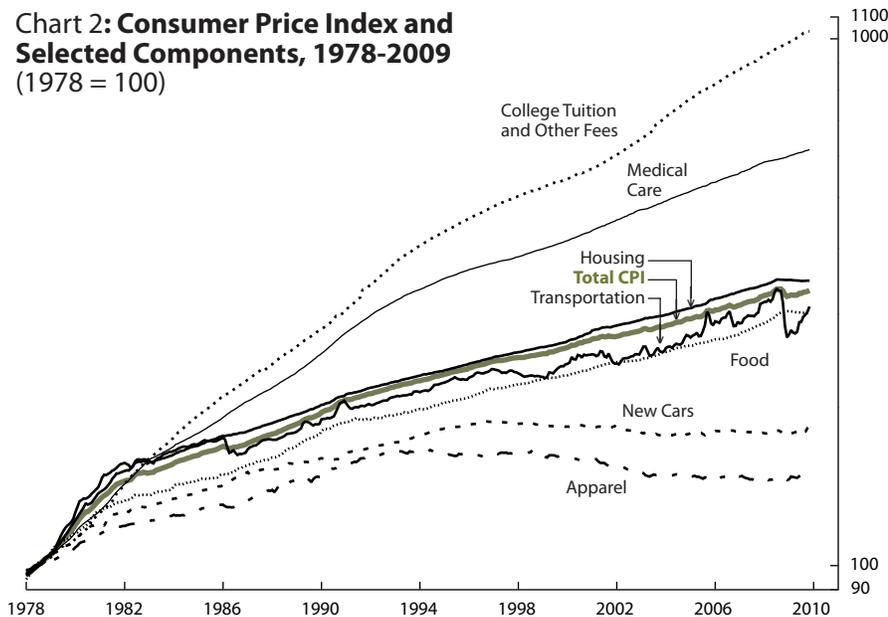
A review of the historical record provides a stark reminder of how ineffective the U.S. government has been at preserving the purchasing power of the dollar. As shown in Chart 1, for more than a century the general price level in the United States fluctuated periodically in response to a series of wars 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

Chart 1: Consumer Price Index — All Items, 1800-2009 (1967 = 100)



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

**Chart 2: Consumer Price Index and Selected Components, 1978-2009**  
(1978 = 100)



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 modern experience, it may seem astonishing that *the price index in 1930 was exactly the same as it had been in 1801, 130 years earlier.*

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 gold redeemability in 1971. As Chart 1 shows, the purchasing power of the dollar has eroded almost continuously since the early 1930s. There has been no reversal of the price trend such as occurred previously when the dollar returned to convertibility.

**T**here is, of course, no such thing as a general price level. Price indexes attempt to summarize the prices paid by millions of different individuals for the myriad goods and services produced in the overall economy. Hundreds of items are included in the CPI, covering spending on 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 clothing, thus housing costs are given more weight than clothing in the CPI.

In actual experience, price indexes such as the CPI are imperfect tools for tracking changes in the cost of living. Perhaps most importantly, the CPI may not be adequately adjusted for quality changes. In theory, the index measures the prices of items with qualities that remain constant over time. If a price increase for a good is accompanied by a comparable quality improvement (for example, the price of a car increases by \$400 but the car now has airbags), this increase should not affect the CPI. In practice, putting a price tag on quality changes can be tricky.

Many economists believe that, on balance, the quality of goods and services has increased more over the years, especially over the very long term, than indicated by these quality adjustments. To the extent this is so, the CPI has overstated price inflation. However, the degree to which

this has happened is still an open question.

**D**espite its shortcomings, the CPI is the best available statistical 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.

Some individuals contend that the government intentionally understates the CPI. However, hundreds of government economists, statisticians, and other number crunchers collect and process the price data that go into the CPI. A conspiracy to "cook" the data would be difficult to organize and impossible to conceal.

A breakdown of the CPI into broad categories of goods and services, as shown in Chart 2, reveals where price pressures were greatest during the past three decades. The prices of higher education and medical care have increased considerably faster than the overall price level, while prices for items such as clothing and food have increased more slowly.

The table on page 3 shows a detailed breakdown of consumer prices, revealing the cumulative price changes in goods and services from the beginning of 1990 through the end of 2009. Consumers who purchased relatively more of the items near the top of the table 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.

Prices are influenced by countless forces of supply and demand including technology, demographics, changing tastes, product innovation, international competition, and even the weather. Government policies are another important source of price pressures. Prices have increased the most for items that are heavily influenced by such policies: Tobacco is heavily taxed, and large subsidies for education and health care have increased demand for

them and helped push prices up.

The relationship between government policy and the costs of obtaining goods and services is 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.

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 old Soviet Union for “cheap” goods, and the long waiting lists for medical services in some countries with “low-cost” national health insurance.

In turn, rising prices do not always imply a corresponding increase in the cost of living. The sharply higher prices that typically arise when countries abandon central planning can overstate the impact on their standard of living. The higher prices are offset, at least to some extent, by the freeing of time formerly spent waiting in line and a greater selection of goods and services. Similarly, in the United States, when the government removed price controls on petroleum in the 1970s, the long lines to buy gas 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 decrease. Chronic price inflation even at “moderate” rates leads to substantial losses of buying power over time. In 1978, federal legislation first explicitly directed the Federal Reserve to conduct monetary policy with a goal that included “stable prices.” Yet, according to the CPI, the purchasing power of the dollar has decreased by 70 percent since then. How much more purchasing power will our money lose in the years ahead?

## Percent Changes in Selected Price Indexes, 1990-2009

<i>Item</i>	<i>% Change</i>	<i>Item</i>	<i>% Change</i>
Cigarettes & other tobacco products...	351.5	Telephone services, local charges .....	64.1
College tuition & fees.....	274.7	Sugar & sweets .....	62.7
Elementary & high school tuition & fees .....	251.3	Electricity .....	61.3
Hospital services, nursing homes, adult day care .....	245.8	Ice cream & related products .....	61.0
Household fuel oil.....	206.4	Frankfurters .....	59.0
Educational books & supplies.....	201.9	Coffee.....	58.3
Housing at school, excluding board....	171.3	Poultry .....	57.9
Oranges & tangerines .....	166.9	Pets & pet products .....	57.8
Motor oil, coolant, & fluids .....	165.4	Distilled spirits at home .....	55.9
Gasoline (all types).....	164.7	Cheese & related products.....	55.6
Dental services .....	160.5	Eyeglasses & eye care.....	54.7
Water & sewer maintenance.....	151.2	Frozen vegetables .....	52.2
Cable/satellite television & radio service .....	150.7	Wine at home.....	52.0
Funeral expenses.....	145.4	Butter .....	49.1
Legal services.....	142.7	Fresh whole milk.....	48.8
Bread other than white .....	134.5	Housekeeping supplies.....	48.6
Garbage & trash collection .....	134.4	Eggs.....	47.3
Prescription drugs.....	129.7	Ham .....	46.7
Tomatoes.....	126.1	Breakfast cereal .....	43.9
Bank services, tax return preparation, other financial services.....	123.7	Bananas.....	42.1
Lettuce.....	123.3	Nonprescription medical equipment & supplies .....	40.9
Fees for lessons or instructions .....	121.0	Nonprescription (over-the-counter) drugs.....	36.7
Admission to movies, concerts & sporting events .....	119.0	Stationery supplies & gift wrap.....	34.4
White bread.....	118.3	Carbonated drinks .....	30.5
Motor vehicle insurance .....	113.1	Shampoo, cosmetics, perfume, & other personal-care products.....	29.7
Physicians' services .....	109.1	Pork chops .....	28.4
Alcoholic beverages away from home..	105.1	Frozen & freeze-dried prepared foods ..	27.1
Airline fare .....	102.9	Jewelry .....	26.3
Bacon & related products.....	99.4	Vehicle parts & equipment other than tires.....	25.1
Apples.....	97.2	Sports vehicles including bicycles .....	23.5
Utility natural gas service .....	95.6	Tires .....	21.9
Fresh cakes & cupcakes .....	94.8	New trucks .....	19.1
Public transportation within city.....	94.0	Women's footwear .....	19.0
Motor vehicle maintenance & repair....	93.2	New cars .....	15.7
Fresh sweet rolls, coffee cakes, & doughnuts .....	89.5	Boys' & girls' footwear.....	14.7
Rice, pasta, cornmeal .....	89.2	Used cars & trucks .....	12.6
Crackers, bread, & cracker products.....	86.8	Furniture & bedding .....	8.2
Potatoes.....	86.5	Sports equipment .....	7.8
Frozen & refrigerated bakery products, pies, tar.....	84.3	Laundry appliances .....	7.3
Rent of primary residence.....	84.0	Public transportation between cities excl. airlines.....	5.6
Margarine.....	83.2	Men's footwear.....	5.5
Out of town lodging, incl. hotels & motels.....	82.0	Watches.....	4.6
Postage .....	81.2	Infants' & toddlers' apparel.....	0.4
Cookies.....	78.0	Women's outerwear.....	-2.4
Beef & veal.....	77.4	Women's dresses.....	-4.5
Haircuts & personal-care services.....	76.1	Men's suits, sport coats, & outerwear ..	-6.0
Food away from home .....	72.9	Men's pants & shorts .....	-9.0
<b>All-Items CPI.....</b>	<b>71.1</b>	Long distance in-state phone calls .....	-11.9
Snack foods .....	70.0	Girls' apparel .....	-12.4
Spices, seasonings, condiments, & sauces.....	68.4	Boys' apparel .....	-13.0
Soups .....	68.1	Long distance out-of-state phone calls.....	-18.7
Newspapers, magazines, books .....	67.9	Clocks, lamps, & decorator items.....	-42.4
Fish & seafood.....	66.3	Photographic equipment & supplies ..	-42.9
Beer, ale & other malt beverages at home.....	66.0	Toys.....	-47.4
		Audio Equipment .....	-48.7
		Televisions.....	-87.9
		Personal computers & other information processing equipment.....	-89.8

## Purchasing Power Conversion Factors

Year	To Convert: _____		Year	To Convert: _____		Year	To Convert: _____	
	Past Dollars to 2009 Dollars Use	2009 Dollars to Past Dollars Use		Past Dollars to 2009 Dollars Use	2009 Dollars to Past Dollars Use		Past Dollars to 2009 Dollars Use	2009 Dollars to Past Dollars Use
	<b>Multiplier A</b>	<b>Multiplier B</b>		<b>Multiplier A</b>	<b>Multiplier B</b>		<b>Multiplier A</b>	<b>Multiplier B</b>
<b>1920</b>	10.7204	0.0933	<b>1950</b>	8.8966	0.1124	<b>1980</b>	2.6020	0.3843
1921	11.9781	0.0835	1951	8.2465	0.1213	1981	2.3587	0.4240
1922	12.7624	0.0784	1952	8.0909	0.1236	1982	2.2219	0.4501
1923	12.5385	0.0798	1953	8.0303	0.1245	1983	2.1527	0.4645
1924	12.5385	0.0798	1954	7.9706	0.1255	1984	2.0636	0.4846
<b>1925</b>	12.2519	0.0816	<b>1955</b>	8.0003	0.1250	<b>1985</b>	1.9926	0.5018
1926	12.1135	0.0826	1956	7.8827	0.1269	1986	1.9563	0.5112
1927	12.3223	0.0812	1957	7.6302	0.1311	1987	1.8874	0.5298
1928	12.5385	0.0798	1958	7.4190	0.1348	1988	1.8124	0.5518
1929	12.5385	0.0798	1959	7.3680	0.1357	1989	1.7291	0.5783
<b>1930</b>	12.8388	0.0779	<b>1960</b>	7.2435	0.1381	<b>1990</b>	1.6405	0.6096
1931	14.1058	0.0709	1961	7.1709	0.1395	1991	1.5742	0.6352
1932	15.6503	0.0639	1962	7.0996	0.1409	1992	1.5282	0.6544
1933	16.4930	0.0606	1963	7.0068	0.1427	1993	1.4838	0.6739
1934	16.0006	0.0625	1964	6.9164	0.1446	1994	1.4468	0.6912
<b>1935</b>	15.6503	0.0639	<b>1965</b>	6.8066	0.1469	<b>1995</b>	1.4069	0.7108
1936	15.4251	0.0648	1966	6.6176	0.1511	1996	1.3665	0.7318
1937	14.8895	0.0672	1967	6.4194	0.1558	1997	1.3359	0.7486
1938	15.2063	0.0658	1968	6.1612	0.1623	1998	1.3154	0.7602
1939	15.4251	0.0648	1969	5.8422	0.1712	1999	1.2870	0.7770
<b>1940</b>	15.3149	0.0653	<b>1970</b>	5.5260	0.1810	<b>2000</b>	1.2451	0.8031
1941	14.5856	0.0686	1971	5.2940	0.1889	2001	1.2107	0.8260
1942	13.1539	0.0760	1972	5.1294	0.1950	2002	1.1918	0.8391
1943	12.3936	0.0807	1973	4.8290	0.2071	2003	1.1653	0.8582
1944	12.1823	0.0821	1974	4.3491	0.2299	2004	1.1350	0.8810
<b>1945</b>	11.9116	0.0840	<b>1975</b>	3.9853	0.2509	<b>2005</b>	1.0978	0.9109
1946	10.9953	0.0909	1976	3.7682	0.2654	2006	1.0635	0.9403
1947	9.6147	0.1040	1977	3.5381	0.2826	2007	1.0341	0.9670
1948	8.8966	0.1124	1978	3.2885	0.3041	2008	0.9958	1.0042
1949	9.0088	0.1110	1979	2.9533	0.3386	2009	1.0000	1.0000

### How to Convert Past and Present Values

The table above provides a simple way to convert values from the past into their equivalent value today (or vice versa). To convert a value from a particular year to its 2009 equivalent, simply multiply the original price by the conversion factor **Multiplier A** shown in the table for the appropriate year.

For instance, say you want to know if the value of your house has “kept pace with inflation.” Multiply

the original price of the house by the **Multiplier A** factor shown for the year you purchased it.

Example: A house was purchased in 1965 for \$25,000. Adjusting for price inflation, this price in terms of 2009 dollars is  $\$25,000 \times 6.8066 = \$170,165$ . This is approximately how much the house would have to sell for today just to keep up with price inflation.

To convert 2009 dollars into past

dollars, simply multiply today’s dollar amount by the conversion factor **Multiplier B** shown in the table for the appropriate year.

Example: If the price of a movie ticket is about \$7 today, what was the constant-dollar equivalent in, say, 1974? Today’s \$7 purchase price in terms of 1974 dollars is  $\$7 \times 0.2299 = \$1.61$ .



Use the **AIER Cost of Living Calculator** at our website: [www.aier.org](http://www.aier.org)