

The AIER Cost-of-Living Guide

Energy costs fueled price inflation's rollercoaster ride in 2008.

by the AIER research staff

The rate of consumer price inflation fluctuated greatly in 2008, from a peak year-over-year rate of 5.9 percent in July to a low of just 1.1 percent in November. The post-July moderation reflects a series of outright declines in the Consumer Price Index (CPI) itself. The CPI decreased for four consecutive months (through November)—the longest string of decreases in nearly 60 years. The primary factor in this rollercoaster inflation picture was energy prices, which soared in the spring and summer and crashed in the fall.

This short-term volatility is unusual, and history suggests it will be temporary. 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 that are legal tender (usable to extinguish debts and obligations) because their issuing governments say so. This system stands in sharp contrast to a

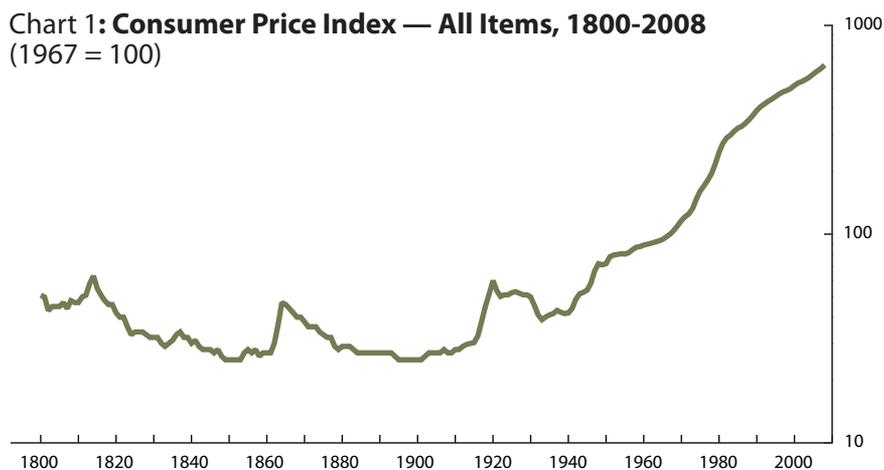
gold standard, in which currencies are defined as or redeemable in specific weights of gold. Fiat currencies derive their value solely from a government “fiat,” or decree, that they are legal tender.

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.

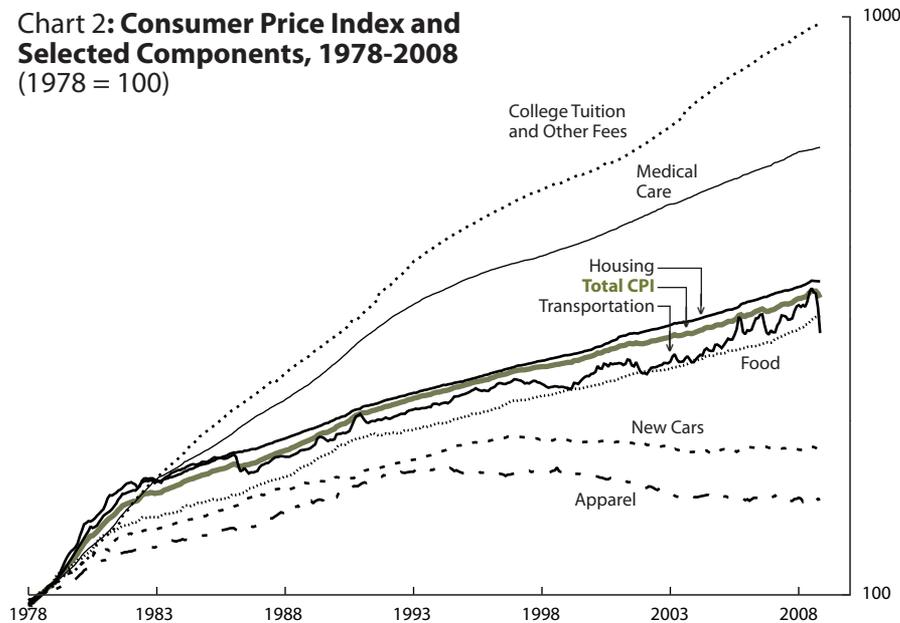
A review of the historical record provides a stark reminder of how ineffective the U.S. government has been at preserving the purchasing power of the dollar. As shown in Chart 1, for more than a century the general price level in the United States fluctuated periodically in response to a series of wars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

Chart 1: Consumer Price Index — All Items, 1800-2008
(1967 = 100)



Note: Prior to 1913, the 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, 1978-2008
(1978 = 100)



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.

There 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.

Despite 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 2008. 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 the CPI has tripled since then, suggesting that the purchasing power of the dollar has decreased by two-thirds. How much more purchasing power will our money lose in the years ahead?

Percent Changes in Selected Price Indexes, 1990-2008

<i>Item</i>	<i>% Change</i>	<i>Item</i>	<i>% Change</i>
College tuition and fees.....	248.4	Ice cream & related products.....	62.1
Cigarettes & other tobacco products..	246.5	Poultry.....	60.9
Elementary & high school tuition & fees.....	234.5	Beer, ale & other malt beverages at home.....	60.6
Household fuel oil.....	227.0	Telephone services, local charges.....	59.3
Hospital services, nursing homes, adult day care.....	222.6	Frankfurters.....	58.5
Educational books & supplies.....	182.5	Frozen vegetables.....	58.1
Motor oil, coolant, & fluids.....	170.7	Sugar & sweets.....	58.0
Oranges & tangerines.....	157.6	Ham.....	56.2
Housing at school, excluding board....	155.7	Pets & pet products.....	56.1
Dental services.....	153.9	Distilled spirits at home.....	52.7
Cable/satellite television & radio service.....	146.2	Wine at home.....	51.9
Funeral expenses.....	139.1	Eyeglasses & eye care.....	51.7
Apples.....	139.0	Housekeeping supplies.....	46.8
Potatoes.....	135.6	Breakfast cereal.....	43.1
Utility natural gas service.....	135.5	Nonprescription medical equipment & supplies.....	39.5
Water & sewer maintenance.....	135.3	Pork chops.....	39.2
Legal services.....	134.1	Stationery supplies & gift wrap.....	34.3
Garbage & trash collection.....	129.7	Nonprescription (over-the-counter) drugs.....	34.1
White bread.....	126.8	Carbonated drinks.....	32.6
Lettuce.....	123.3	Shampoo, cosmetics, perfume, & other personal care products.....	29.1
Bank services, tax return preparation, other financial services.....	123.2	Frozen & freeze dried prepared foods...	28.6
Tomatoes.....	123.0	Sports vehicles including bicycles.....	24.5
Gasoline (all types).....	122.5	Vehicle parts & equipment other than tires.....	23.9
Prescription drugs.....	120.5	Jewelry.....	23.2
Fees for lessons or instructions.....	115.8	Tires.....	20.7
Bacon & related products.....	112.9	Women's footwear.....	13.1
Physicians' services.....	104.6	Public transportation between cities, excl. airlines.....	13.1
Airline fare.....	104.5	New trucks.....	12.0
Motor vehicle insurance.....	102.6	Laundry appliances.....	11.5
Alcoholic beverages away from home...	100.7	New cars.....	11.4
Public transportation within city.....	95.5	Watches.....	10.0
Rice, pasta, cornmeal.....	95.1	Long distance in-state phone calls.....	10.0
Margarine.....	95.0	Furniture & bedding.....	9.6
Fresh cakes & cupcakes.....	92.4	Sports equipment.....	9.3
Crackers, bread, and cracker products...	91.8	Boys' and girls' footwear.....	9.2
Fresh sweetrolls, coffeecakes, doughnuts.....	88.7	Used cars & trucks.....	6.4
Motor vehicle maintenance & repair....	87.9	Haircuts and personal care services.....	6.4
Beef and veal.....	85.5	Admissions to movies, theaters, and concerts.....	4.8
Frozen and refrigerated bakery products.....	82.9	Men's footwear.....	3.4
Rent of primary residence.....	82.2	Out of town lodging, incl. hotels & motels.....	-0.8
Butter.....	79.2	Infants' and toddlers' apparel.....	-1.2
Soups.....	78.9	Men's suits, sport coats, & outerwear...	-4.9
Fresh whole milk.....	76.7	Men's pants & shorts.....	-7.4
Cheese & related products.....	73.5	Women's dresses.....	-9.5
Postage.....	72.2	Women's outerwear.....	-12.0
Cookies.....	72.2	Long distance out-of-state phone calls.....	-13.7
Bread other than white.....	69.7	Girls' apparel.....	-14.0
Food away from home.....	69.4	Boys' apparel.....	-14.6
All-Items CPI.....	68.6	Clocks, lamps, and decorator items.....	-39.1
Spices, seasonings, condiments, sauces.....	67.4	Photographic equipment & supplies...	-41.0
Electricity.....	66.9	Toys.....	-43.4
Fish & seafood.....	65.6	Audio equipment.....	-45.4
Coffee.....	64.4	Televisions.....	-83.0
Snack foods.....	64.3	Personal computers & other information processing equipment.....	-89.4
Eggs.....	64.2		
Bananas.....	63.3		
Newspapers, magazines, books.....	62.4		

Purchasing Power Conversion Factors

Year	To Convert: -----		Year	To Convert: -----		Year	To Convert: -----	
	Past Dollars to 2008 Dollars use Multiplier A	2008 Dollars to Past Dollars use Multiplier B		Past Dollars to 2008 Dollars use Multiplier A	2008 Dollars to Past Dollars use Multiplier B		Past Dollars to 2008 Dollars use Multiplier A	2008 Dollars to Past Dollars use Multiplier B
1920	10.7882	0.0927	1950	8.9529	0.1117	1980	2.6185	0.3819
1921	12.0538	0.0830	1951	8.2986	0.1205	1981	2.3736	0.4213
1922	12.8431	0.0779	1952	8.1420	0.1228	1982	2.2359	0.4472
1923	12.6178	0.0793	1953	8.0810	0.1237	1983	2.1663	0.4616
1924	12.6178	0.0793	1954	8.0210	0.1247	1984	2.0766	0.4815
1925	12.3294	0.0811	1955	8.0509	0.1242	1985	2.0052	0.4987
1926	12.1900	0.0820	1956	7.9325	0.1261	1986	1.9686	0.5080
1927	12.4002	0.0806	1957	7.6784	0.1302	1987	1.8993	0.5265
1928	12.6178	0.0793	1958	7.4659	0.1339	1988	1.8239	0.5483
1929	12.6178	0.0793	1959	7.4146	0.1349	1989	1.7400	0.5747
1930	12.9200	0.0774	1960	7.2893	0.1372	1990	1.6508	0.6058
1931	14.1950	0.0704	1961	7.2162	0.1386	1991	1.5842	0.6312
1932	15.7492	0.0635	1962	7.1445	0.1400	1992	1.5379	0.6502
1933	16.5972	0.0603	1963	7.0511	0.1418	1993	1.4932	0.6697
1934	16.1018	0.0621	1964	6.9601	0.1437	1994	1.4559	0.6869
1935	15.7492	0.0635	1965	6.8496	0.1460	1995	1.4158	0.7063
1936	15.5226	0.0644	1966	6.6594	0.1502	1996	1.3752	0.7272
1937	14.9836	0.0667	1967	6.4600	0.1548	1997	1.3443	0.7439
1938	15.3024	0.0653	1968	6.2001	0.1613	1998	1.3237	0.7555
1939	15.5226	0.0644	1969	5.8791	0.1701	1999	1.2951	0.7721
1940	15.4117	0.0649	1970	5.5609	0.1798	2000	1.2530	0.7981
1941	14.6778	0.0681	1971	5.3275	0.1877	2001	1.2183	0.8208
1942	13.2370	0.0755	1972	5.1618	0.1937	2002	1.1994	0.8338
1943	12.4719	0.0802	1973	4.8595	0.2058	2003	1.1726	0.8528
1944	12.2593	0.0816	1974	4.3765	0.2285	2004	1.1422	0.8755
1945	11.9869	0.0834	1975	4.0105	0.2493	2005	1.1048	0.9052
1946	11.0648	0.0904	1976	3.7920	0.2637	2006	1.0703	0.9344
1947	9.6755	0.1034	1977	3.5605	0.2809	2007	1.0406	0.9610
1948	8.9529	0.1117	1978	3.3093	0.3022	2008	1.0000	1.0000
1949	9.0657	0.1103	1979	2.9720	0.3365			

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 in the past to its 2008 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 2008 dollars is $\$25,000 \times 6.8496 = \$171,240$. This is approximately how much the house would have to sell for today just to keep up with price inflation.

To convert 2008 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 0.2058 = \1.44 .

Use the **AIER Cost-of-Living Calculator** at our website: www.aier.org