

Inflation was low in 2017, but concerns remain

By Max Gulker, PhD, Senior Research Fellow

Inflation Remains Low

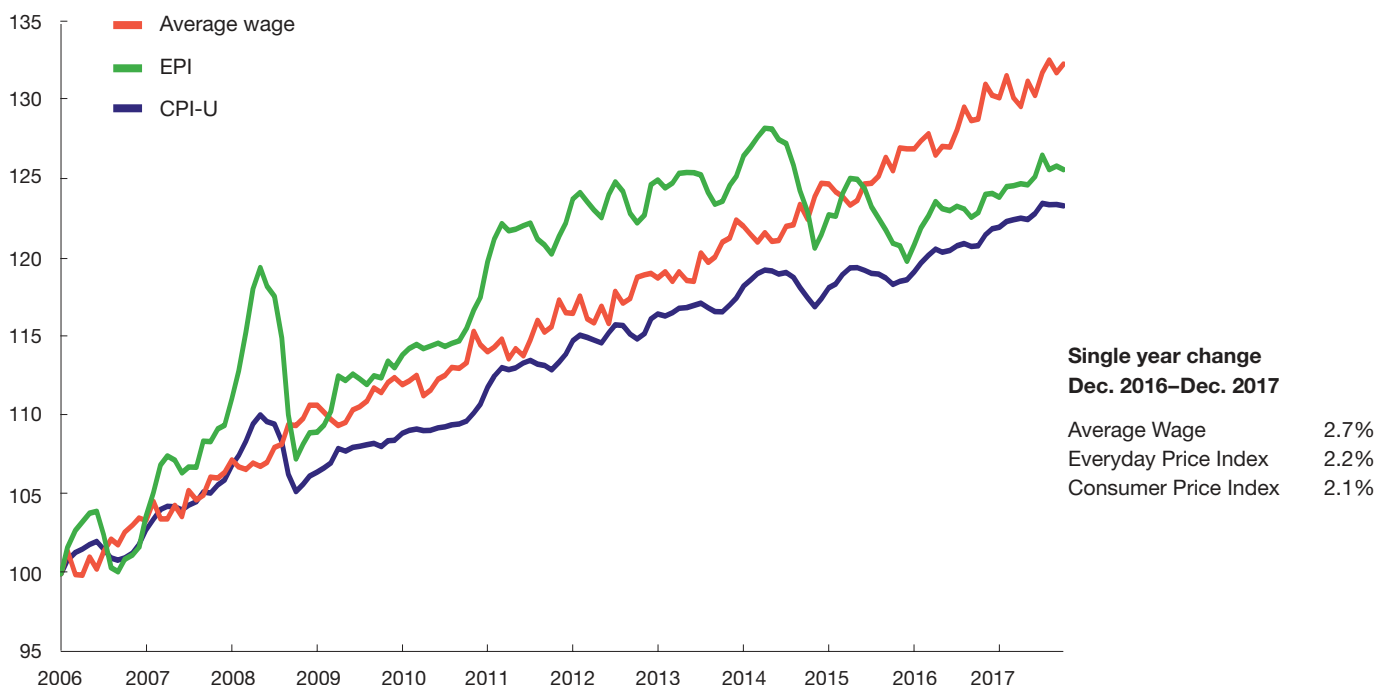
Standard measures of inflation remained low by historical standards in 2017. As Chart 1 shows, the Consumer Price Index for All Urban Consumers (CPI-U), the most commonly cited measure of inflation, increased by 2.1 percent for the year ending in December 2017. The Everyday Price Index (EPI), calculated monthly by AIER to reflect regular everyday purchases like food and gasoline and exclude big ticket items like cars and homes, behaved similarly to the overall CPI, increasing by 2.2 percent for the year. Chart 1 demonstrates that these measures do not always move in tandem, with considerably more volatility in the EPI over the past decade.

The Bureau of Labor Statistics' measure of average hourly earnings increased by 2.7 percent for the year ending December 2017, meaning that on average according to these measures, Americans' purchasing power increased last year. In fact, wages have grown by about 32 percent since March 2006 (when the BLS began collecting this data series) while the CPI has increased by 23 percent. Does this mean inflation isn't a problem?

A Tax on Savers

When one looks with a wider historical lens, the effect of the government's inflationary monetary policy on the dollar is staggering. The purchasing power of the dollar

Chart 1. Percentage Change in CPI, EPI and Average Wage (2006 = 100) 2006–2018



Source: CPI-U and Average Hourly Earnings from BLS; Everyday Price Index (EPI) calculated monthly by AIER.

has fallen over 90 percent since 1925 (see Table 2 at the end of this article), with that trend accelerating greatly after the abandonment of the domestic gold standard in 1933 and the suspension of gold redeemability in 1971. These long-term trends essentially amount to a transfer of money from households who save over their lifetime to the government which receives seigniorage revenue from printing more money—basically a tax on saving. As AIER President Edward Stringham recently wrote about our founder E.C. Harwood’s efforts to sound the alarm on currency devaluation:

The more government inflates the money supply, the more that prices will eventually go up, and without inflation proof bonds, people who kept their money in the bank would gradually see the value of their deposits eaten away. This is not to mention the boom and bust associated with monetary disruption.

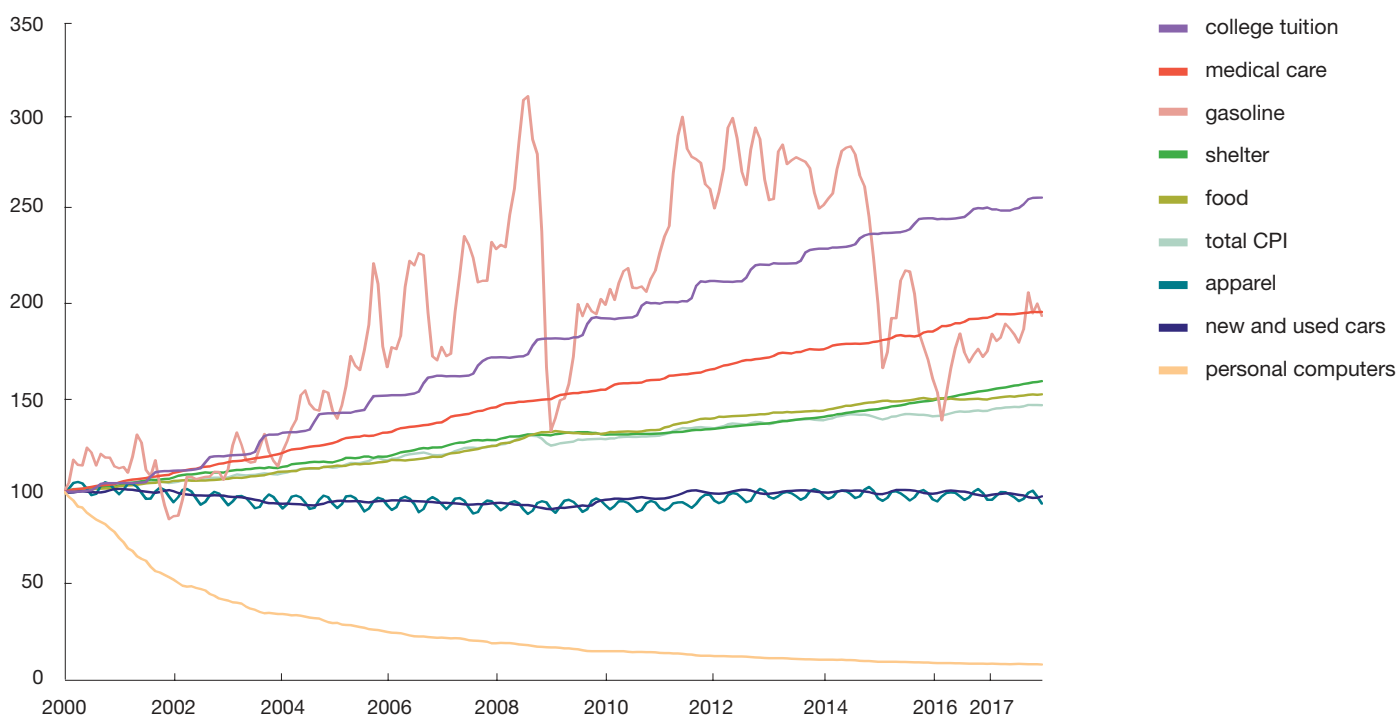
In addition, the government’s inflating of the currency may be reflected in more than simply consumer prices. During the period covered by Chart 1 (March 2006 through December 2017), while the CPI increased by 23 percent, the S&P 500 stock index increased by 106%. While there is some debate on the matter, many believe

that this large increase reflects an asset bubble fueled by inflationary monetary policy rather than real increases in the value of corporate stocks.

Winners and Losers

The upward pressure on prices does not affect all goods and services equally. As Chart 2 shows, college tuition (257 percent increase since 2000), medical care (196 percent) and gasoline (extremely volatile, but an overall increase of 193 percent) have increased more than other categories since 2000. Housing (58 percent) and food (51 percent) have increased less, but outpaced the overall CPI (46 percent). Apparel (-6.3 percent) and cars (-2.5 percent) slightly decreased in price in real terms, and computers, as they are measured by the BLS, decreased in price almost 92 percent. The behavior of computer prices over time illustrates one of many problems in calculating the CPI: we obviously don’t spend 92 percent less when purchasing a computer today than in 2000, but we get a lot more for our money in terms of speed, portability and other capabilities. Adjusting for quality changes over time is one of the most difficult aspects of calculating price indices.

Chart 2. Consumer Price Index and Selected Products and Services (2000=100)
2000–2017



Source: Bureau of Labor Statistics

Table 1 provides price changes tracked by the BLS for a wider variety of expenditure categories, for both the past year and since 2000. While tobacco products top the list of largest increases since 2000, largely due to new taxes, four of the top ten largest increases are related to education,

three are related to energy, and water and sewerage maintenance and healthcare round out the ten largest increases. At the bottom, electronics account for seven of the top ten largest decreases seen since 2000, highlighting the same issue discussed with computers above.

Table 1. Price Changes of Individual Products and Services

Expenditure Category	Dec. 2016– Dec. 2017	Jan. 2000– Dec. 2017	Expenditure Category	Dec. 2016– Dec. 2017	Jan. 2000– Dec. 2017
Tobacco and smoking products	6.5%	179.1%	Recreational reading material	-2.0%	28.2%
College tuition and fees	2.1%	156.6%	Housekeeping supplies	-1.0%	23.0%
Educational books and supplies	-1.8%	151.1%	Watches and jewelry	2.8%	21.7%
Elementary and high school tuition	3.7%	141.6%	Airfare	-4.0%	14.9%
Propane, kerosene and firewood	9.5%	140.8%	Footwear	-2.6%	9.5%
Water and sewerage maintenance	3.5%	140.5%	Personal care products	-0.8%	5.6%
Fuel oil	15.2%	138.3%	Other intercity transportation	0.0%	0.9%
Technical and business school tuition	3.4%	117.6%	New and used cars	-0.3%	-2.5%
Car insurance	7.9%	114.2%	Non-prescription drugs	0.7%	-3.6%
Medical-care service	1.6%	95.7%	Sporting goods	-1.0%	-6.8%
Gasoline	10.7%	93.6%	Womens' apparel	-3.1%	-7.8%
Child care and nursery school	1.8%	90.8%	Tools, hardware, and outdoor equipment	-1.4%	-9.7%
Prescription drugs	2.8%	87.0%	Telephone service	-6.5%	-9.7%
Intracity public transportation	2.7%	83.5%	Mens' apparel	-0.3%	-12.0%
Cable, satellite TV, and radio	4.8%	78.7%	Audio discs, tapes, other media	5.4%	-12.5%
Postage and delivery service	3.3%	75.4%	Infants' and Toddlers' Apparel	-0.3%	-13.8%
Motor-vehicle fees	0.3%	73.0%	Boys' apparel	-3.9%	-15.7%
Misc. personal services	2.2%	72.4%	Girls' apparel	1.2%	-17.4%
Garbage collection	2.0%	69.7%	Furniture and bedding	-0.7%	-18.1%
Electricity	2.6%	69.4%	Misc. personal goods	-2.4%	-20.9%
Household operations	2.6%	66.4%	Internet service	-1.5%	-21.0%
Admissions to movies, etc.	2.5%	66.4%	Video discs, including rental	-1.0%	-21.6%
Fees for lessons	5.5%	65.4%	Photography	-1.6%	-23.9%
Pets, products and services	0.1%	63.0%	Appliances	-1.0%	-25.1%
Food away from home	2.5%	62.6%	Window and floor coverings	-2.1%	-43.4%
Car maintenance and repair	1.8%	62.1%	Other household equipment	-5.1%	-45.8%
Shelter	3.2%	58.9%	Other recreational goods	-7.5%	-56.2%
Gas service	4.7%	50.0%	Computer software, accessories	0.5%	-63.0%
Personal care services	1.5%	48.0%	Audio equipment	-16.2%	-64.8%
Food at home	0.9%	43.5%	Internet equipment	-5.0%	-75.1%
Alcoholic beverages	1.4%	43.2%	Other video equipment	-4.0%	-86.9%
Car parts and equipment	-0.5%	40.9%	Personal computers and peripherals	-4.7%	-92.0%
Club dues and fees	3.8%	29.0%	Televisions	-6.3%	-95.9%

Source: Bureau of Labor Statistics

Conversion Factors

Table 2 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 2017 equivalent, multiply the original price by the conversion factor, Multiplier A, shown in the table for the appropriate year. For instance, if you want to know whether the value of your house has kept pace with inflation, multiply the 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 2017 dollars is $\$25,000 \times 7.7795 = \$194,488$. This is approximately how much the house would have to sell for today just to keep up with price inflation.

To convert 2017 dollars into past dollars, 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 \$10 today, what was the constant-dollar equivalent in 1974? Today's \$10 price in 1974 dollars is $\$10 \times 0.2012 = \2.01 .

Table 2. Purchasing Power Conversion Factors

To convert past dollars into 2017 dollars use Multiplier A. To convert 2017 dollars to past dollars use Multiplier B.								
	Multiplier A	Multiplier B		Multiplier A	Multiplier B		Multiplier A	Multiplier B
1925	13.9736	0.0716	1956	9.0173	0.1109	1987	2.1573	0.4635
1926	13.8486	0.0722	1957	8.7257	0.1146	1988	2.0727	0.4825
1927	14.1211	0.0708	1958	8.4939	0.1177	1989	1.9773	0.5057
1928	14.2857	0.0700	1959	8.4089	0.1189	1990	1.8760	0.5330
1929	14.2857	0.0700	1960	8.2881	0.1207	1991	1.7998	0.5556
1930	14.6778	0.0681	1961	8.2003	0.1219	1992	1.7469	0.5724
1931	16.1175	0.0620	1962	8.1031	0.1234	1993	1.6968	0.5893
1932	17.9684	0.0557	1963	8.0039	0.1249	1994	1.6537	0.6047
1933	18.9525	0.0528	1964	7.9028	0.1265	1995	1.6086	0.6217
1934	18.3153	0.0546	1965	7.7795	0.1285	1996	1.5628	0.6399
1935	17.8594	0.0560	1966	7.5518	0.1324	1997	1.5271	0.6549
1936	17.6769	0.0566	1967	7.3481	0.1361	1998	1.5037	0.6650
1937	17.0419	0.0587	1968	7.0470	0.1419	1999	1.4715	0.6796
1938	17.3946	0.0575	1969	6.6820	0.1497	2000	1.4235	0.7025
1939	17.6239	0.0567	1970	6.3134	0.1584	2001	1.3843	0.7224
1940	17.4981	0.0571	1971	6.0536	0.1652	2002	1.3627	0.7338
1941	16.6465	0.0601	1972	5.8618	0.1706	2003	1.3325	0.7505
1942	15.0073	0.0666	1973	5.5207	0.1811	2004	1.2977	0.7706
1943	14.1619	0.0706	1974	4.9712	0.2012	2005	1.2551	0.7967
1944	13.9338	0.0718	1975	4.5547	0.2196	2006	1.2159	0.8224
1945	13.6241	0.0734	1976	4.3073	0.2322	2007	1.1822	0.8459
1946	12.5595	0.0796	1977	4.0443	0.2473	2008	1.1385	0.8784
1947	10.9796	0.0911	1978	3.7576	0.2661	2009	1.1426	0.8752
1948	10.1956	0.0981	1979	3.3775	0.2961	2010	1.1241	0.8896
1949	10.2955	0.0971	1980	2.9745	0.3362	2011	1.0897	0.9177
1950	10.1850	0.0982	1981	2.6958	0.3709	2012	1.0676	0.9367
1951	9.4428	0.1059	1982	2.5401	0.3937	2013	1.0522	0.9504
1952	9.2324	0.1083	1983	2.4610	0.4063	2014	1.0354	0.9658
1953	9.1576	0.1092	1984	2.3596	0.4238	2015	1.0342	0.9669
1954	9.1292	0.1095	1985	2.2788	0.4388	2016	1.0213	0.9791
1955	9.1548	0.1092	1986	2.2363	0.4472	2017	1.0000	1.0000

Source: Bureau of Labor Statistics

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