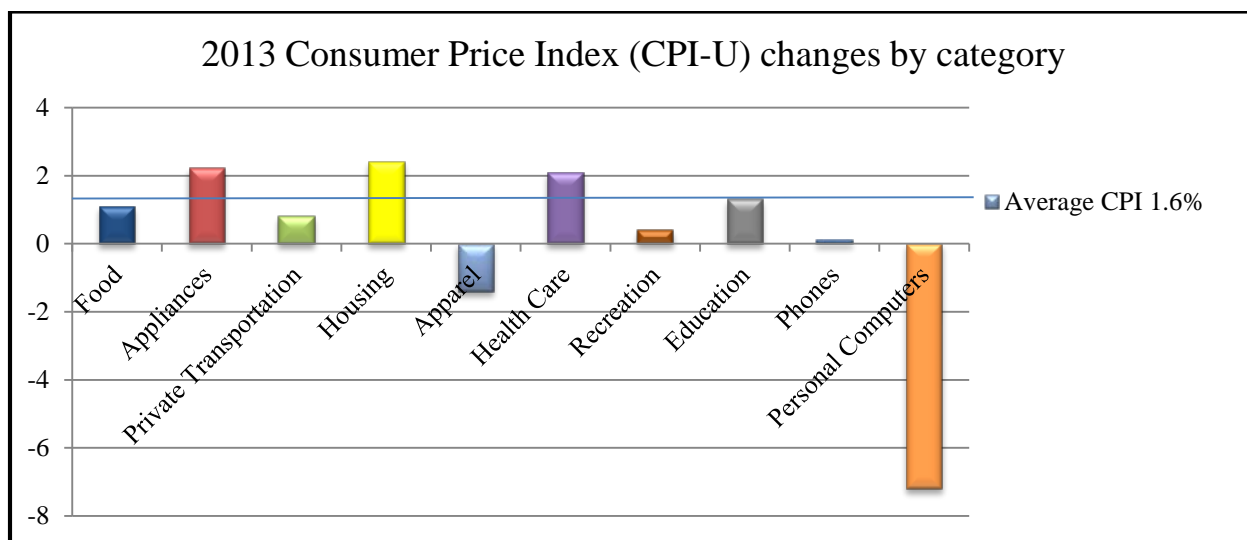


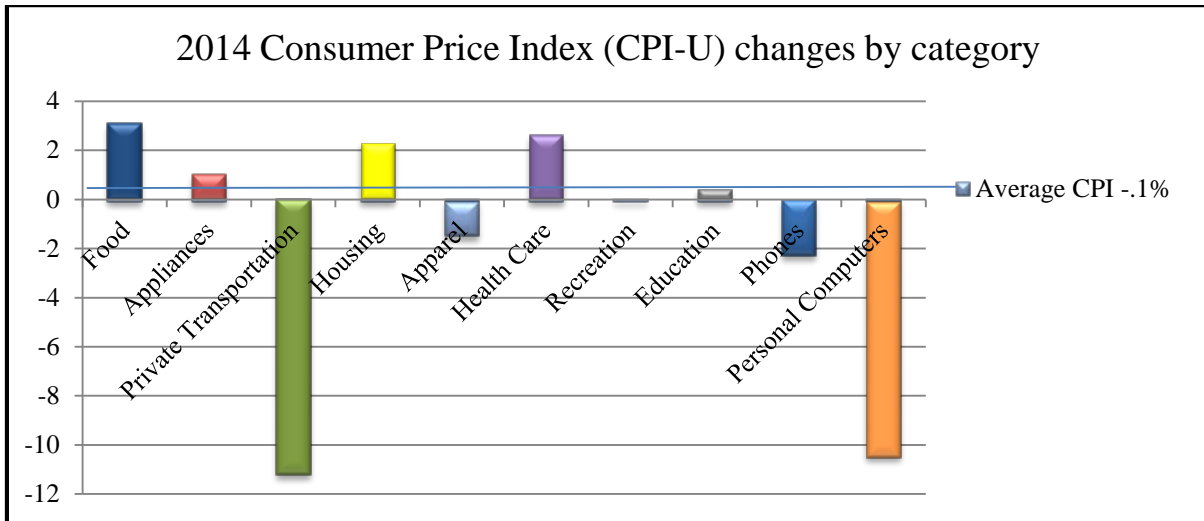
## The Problem with Indexing to the Consumer Price Index Instead of to Medical Inflation

- It is important to recognize that **the Consumer Price Index (CPI) is a weighted average of the change in prices of goods and services across the economy**. It is as foolish to expect the prices of *all* goods and services exactly to conform to the average as it would be to expect *all* students in a class to receive the average grade. As the charts for 2013 and 2014 below and on the next page illustrate, prices for some goods – like personal computers—fall, while prices in other categories rise by varying amounts.



Data: Department of Labor (Bureau of Labor Statistics) [Table 1: http://www.bls.gov/cpi/cpid1401.pdf](http://www.bls.gov/cpi/cpid1401.pdf)

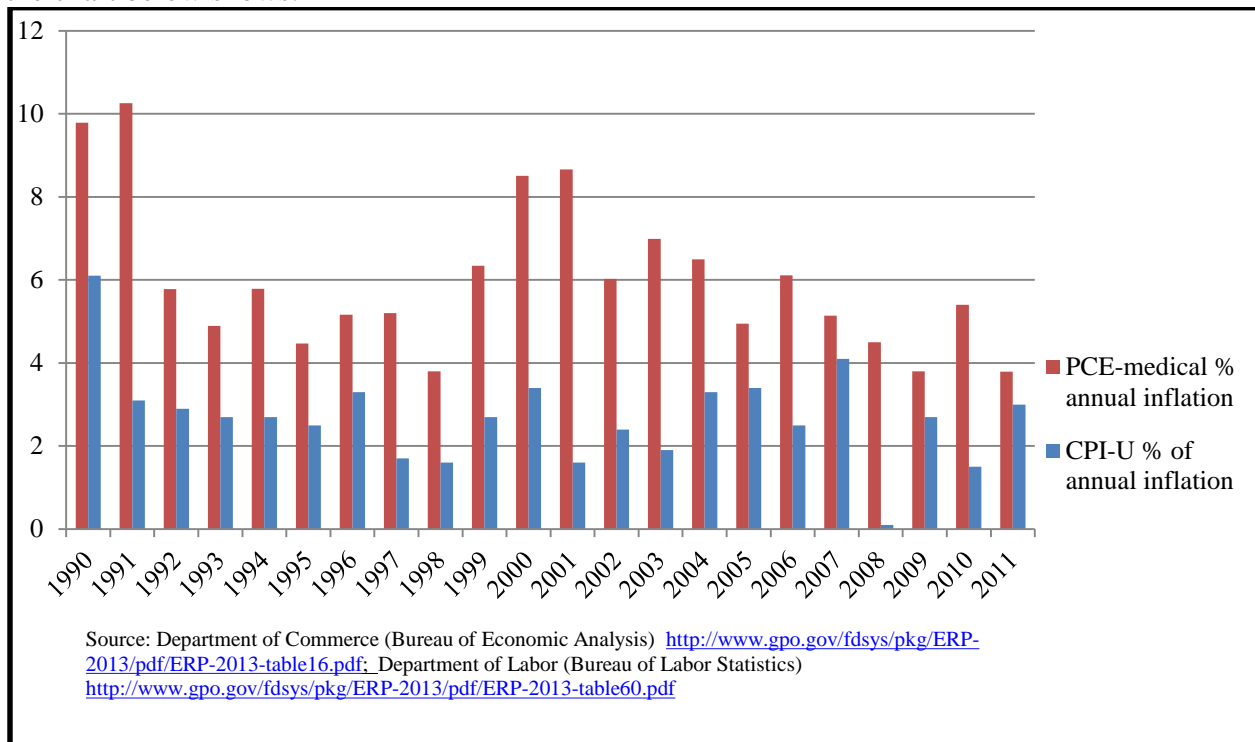
Note: In compiling the Consumer Price Index-Urban (CPI-U), the federal Bureau of Labor Statistics explains, "price changes are weighted by the importance of the item in the spending patterns of the appropriate population group. The combination of all these factors gives a weighted measurement of price change for all items . . . for the CPI." U.S. Dep't of Labor, Bureau of Labor Statistics, "Consumer Price Index Addendum to Frequently Asked Questions," <http://stats.bls.gov/cpi/cpiadd.htm#9> 1. Thus, in their impact on the CPI average, the price swings of particular categories of goods or services will have greater or lesser effect depending on the percentage of consumer spending devoted to purchasing each of them.



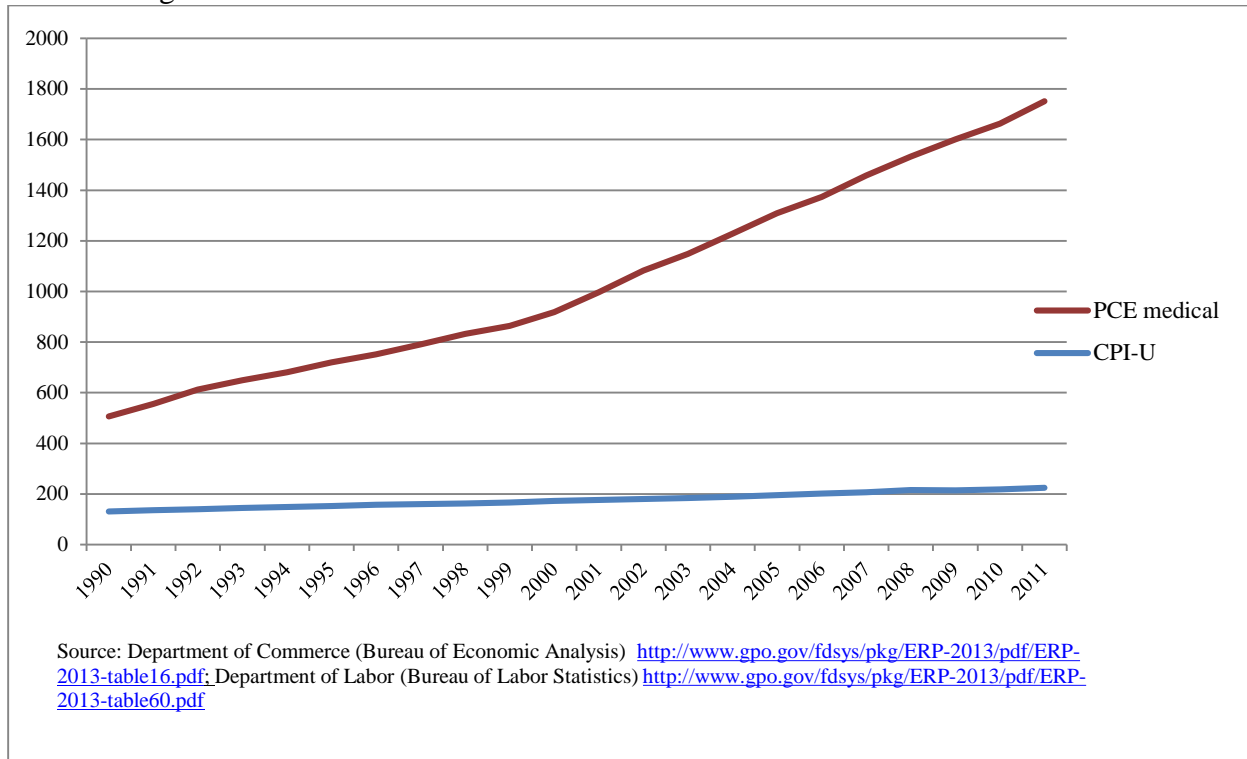
Data: Department of Labor (Bureau of Labor Statistics) Table 1: <http://www.bls.gov/cpi/cpid1501.pdf>

**Price increases for health care have consistently outpaced the “average” rate of inflation across the economy** for a variety of reasons, among which is the inherent labor intensiveness of the health care sector.<sup>1</sup> It is neither realistic nor just to tie limits on health care spending, which must reflect inflation in the health care sector, to a measure of inflation that is less than the real rate of medical inflation.

From 1990 to 2011 medical inflation has exceeded the CPI by an average of 3.3% annually, as the chart below shows.<sup>2</sup>



As the graph below demonstrates, because the difference between medical and average inflation “compounds” over time, two decades bring a dramatic gap between the medical inflation index and that for general inflation:



Any effort to index a measure of health-care related spending, to be realistic, must therefore be tied to an appropriate measure of medical inflation, rather than to the average of price changes in all goods that is the CPI.

### **Why Use the Health Care Component of the Price Index for Personal Consumption Expenditures (PCE) instead of the Overall Medical Component of the Consumer Price Index (CPI)?**

The health care component of PCE is widely recognized as a better measure of medical inflation than is the overall medical component of CPI.

Craig S. Hakkio, senior vice president of the Federal Reserve Bank of Kansas City, has summarized the difference between the Consumer Price Index (CPI) and the price index for personal consumption expenditures (PCE):

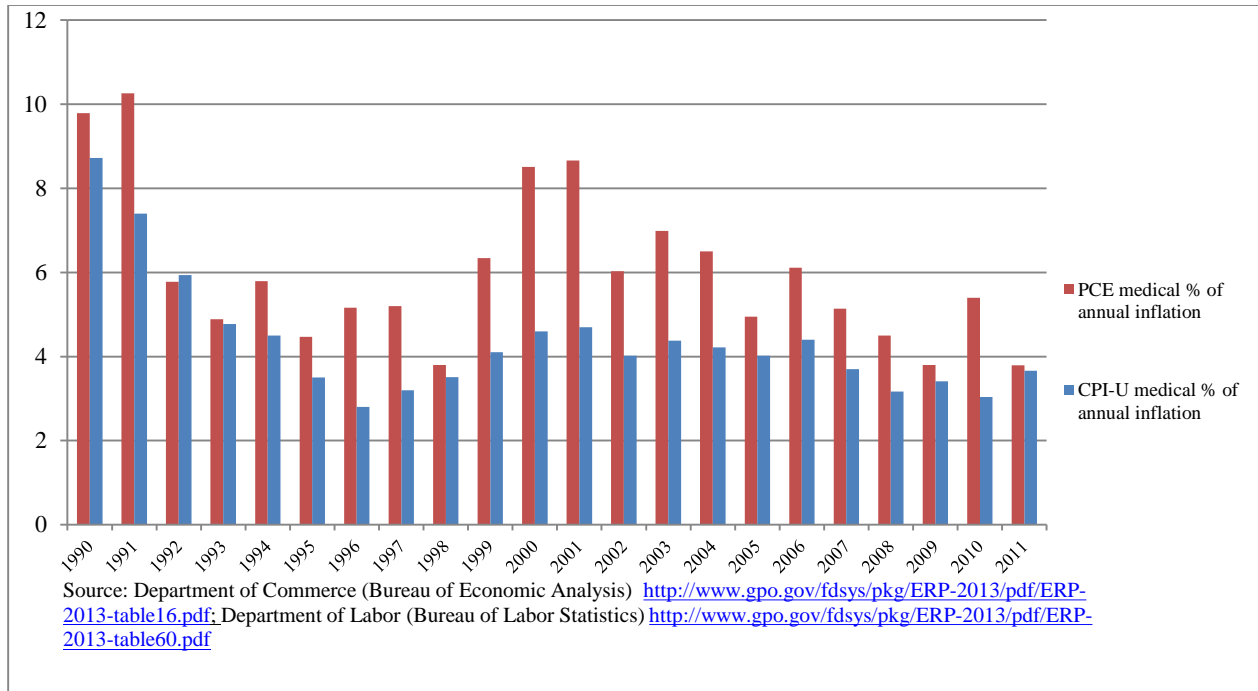
The consumer price index and personal consumption expenditure price index are both designed to capture changes in consumer prices. While similar, the two measures have important conceptual differences. . . .

. . . Produced by the Bureau of Labor Statistics (BLS), the CPI is designed to measure the price of out-of-pocket spending of urban consumers. In contrast, the PCE price index is produced by the Bureau of Economic Analysis (BEA) and measures the prices of goods and services purchased by persons, individuals, and nonprofit institutions in the National Income and Product Accounts—so-called personal consumption expenditures (PCE). In addition to spending *by* households, PCE measures spending *on behalf of* households. For example, PCE spending on medical care includes both direct purchases of medical care by households and purchases on behalf of households by employers or government programs. PCE also includes estimated spending on some goods and services that do not have market prices, such as free financial services and employer-funded medical care and insurance programs.<sup>2</sup> (Emphasis added.)

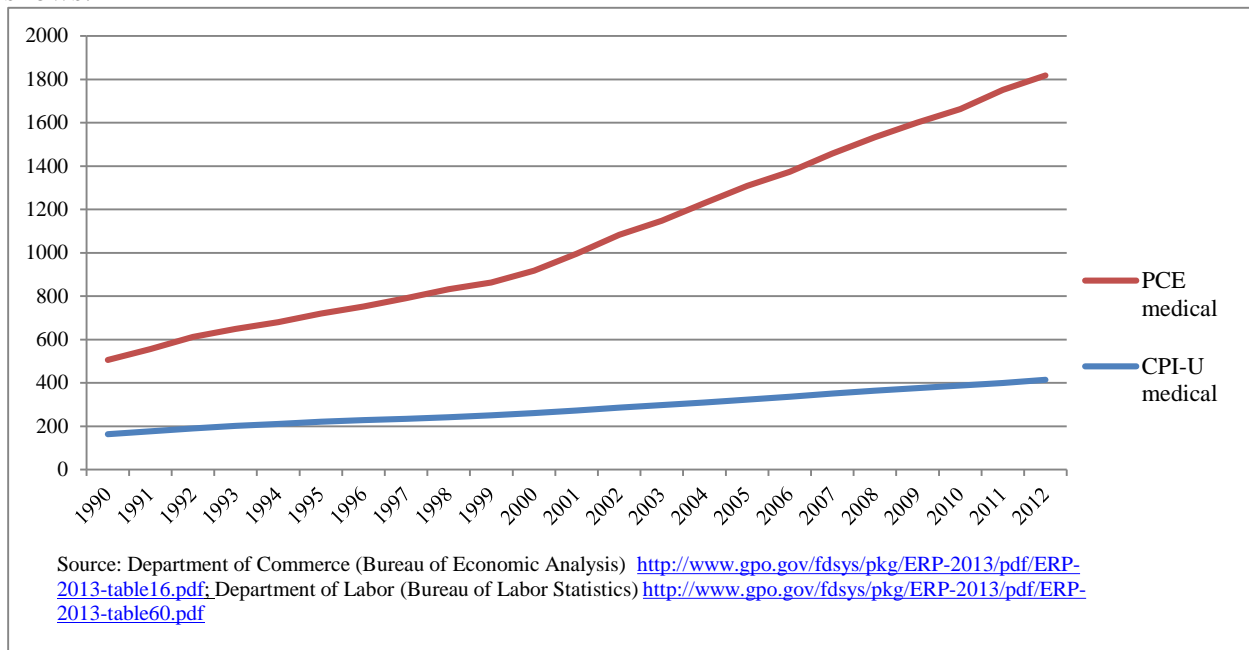
As Former Chairman Ben Bernanke has noted, the Federal Reserve uses the PCE deflator, rather than the CPI, to measure inflation because, among other factors, it “arguably does a better job measuring medical inflation.”<sup>3</sup> The government agency responsible for the CPI, the Bureau of Labor Statistics (BLS), itself points out, “The weights in the CPI do not include employer-paid health insurance premiums or tax-funded health care such as Medicare Part A and Medicaid. . . . Since medical care only includes consumers’ out-of-pocket expenditures (and excludes employer-provided health care), its share in the CPI is smaller than its share of gross domestic product (GDP) and other national account measures.”<sup>4</sup> A study by BLS analysts concluded, “In our examination of weight and price effects we found that items related to medical care, such as hospitals, physicians, and health insurance, play a significant role within both the weight effect and the price effect [in the differences between PCE and CPI]. . . .”<sup>5</sup>

The Congressional Budget Office has stated, “In CBO’s judgment, the PCE price index is a more appropriate deflator for the measures of [household] income . . . because its scope includes health care services purchased by third parties on behalf of people (services that are included in the measures of income. . .) and because it more fully accounts for the adjustments that consumers make to their spending patterns as some prices change relative to other prices.”<sup>6</sup>

The health care component of the PCE price index has on average exceeded the medical component of the CPI by 1.64% between 1990 and 2011. As the bar graph on the next page shows, during that period the incomplete medical component of the CPI has almost always underestimated the medical inflation rate as shown by the health care component of the PCE.



Because of the compounding year-after-year effect of even small differences, over time the gap between the medical/health care components of the two indices is dramatic, as the chart below shows.



So as accurately to reflect actual medical inflation, it is essential to index to the health care component of the PCE price index.

## ENDNOTES

1. See esp. William J. Baumol, "Health Care, Education and the Cost Disease: A looming crisis for public choice," *Public Choice* 77:1 (September 1993):17-28.

2. Table: Difference between Medical Inflation (PCE) and CPI-U Inflation Rate

Year	CPI-U Inflation Rate	Medical Inflation (PCE)	Difference
1990	6.1	9.79	3.69
1991	3.1	10.26	7.15
1992	2.9	5.78	2.88
1993	2.7	4.89	2.19
1994	2.7	5.79	3.09
1995	2.5	4.47	1.97
1996	3.3	5.16	1.86
1997	1.7	5.2	3.5
1998	1.6	3.8	2.2
1999	2.7	6.34	3.64
2000	3.4	8.51	5.11
2001	1.6	8.66	7.06
2002	2.4	6.03	3.63
2003	1.9	6.99	5.09
2004	3.3	6.5	3.2
2005	3.4	4.95	1.55
2006	2.5	6.11	3.6
2007	4.1	5.14	1.04
2008	0.1	4.5	4.4
2009	2.7	3.8	1.1
2010	1.5	5.40	3.9
2011	3.0	3.79	.79
<b>Average</b>	2.7	6.0	3.3

Source: Department of Commerce (Bureau of Economic Analysis) <http://www.gpo.gov/fdsys/pkg/ERP-2013/pdf/ERP-2013-table16.pdf>; Department of Labor (Bureau of Labor Statistics) <http://www.gpo.gov/fdsys/pkg/ERP-2013/pdf/ERP-2013-table60.pdf>

2. Craig S. Hakkio, "PCE and CPI Inflation Differentials: Converting Inflation Forecasts," *Federal Reserve Bank of Kansas City Economic Review* (First Quarter 2008):51, 52-53, <http://www.kc.frb.org/Publicat/Econrev/PDF/1q08Hakkio.pdf>

3. *Remarks by Governor Ben S. Bernanke Before the Money Marketeers of New York University, New York, New York* (Feb. 3, 2003), n.5, <http://www.federalreserve.gov/boarddocs/speeches/2003/20030203/>

4. U.S. Bureau of Labor Statistics, *Measuring Price Change for Medical Care in the CPI* (Washington, D.C.: April 12, 2010) <http://data.bls.gov/cgi-bin/print.pl/cpi/cpifact4.htm>

5. Dennis Fixler & Ted Jaditz, U. S. Bureau of Labor Statistics, *An Examination of the Difference Between the CPI and the PCE Deflator*, BLS Working Paper 361 (Washington, D.C.: June 2002), 14.

6. Congressional Budget Office, *The Distribution of Household Income and Federal Taxes, 2008 and 2009* (Washington, D.C.: July 2012), 21, <http://www.cbo.gov/sites/default/files/cbofiles/attachments/43373-06-11-HouseholdIncomeandFedTaxes.pdf>