Inflation, Health Care, and Quality

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The Consumer Price Index (CPI) is the most widely used measure of inflation and forms the basis of cost-of-living adjustments for Social Security, tax codes, government budgets, pensions, wages, property leases, and so forth. But is there a single, true rate of inflation, and do we measure it accurately?

In 1996, a Congressional commission, headed by economist Michael Boskin, concluded that the CPI overstates the rate of inflation by more than a percentage point per year. The Commission recommended a downward correction in the CPI that, if implemented, would reduce annual cost-of-living adjustments for millions of Americans. This article looks at the CPI controversy, focusing especially on the price of medical care.

Stuff vs. Happiness

A price index and a cost-of-living index are two different things, though we often overlook the differences.

A price index is just the price of some stuff, relative to the price of the same stuff in another year. If a family spent $50,000 in 1975, and their 1975 shopping list would cost $100,000 in 1997, then this family's "personal" price index has doubled.

A cost-of-living index is a far more ambitious concept. Instead of comparing the price of stuff in two different years, a cost-of-living index compares the price of happiness in those years. (Economists use the word "utility" instead of "happiness.") We can't measure happiness with a bar code reader or polygraph, so economists use indirect methods to measure the price of happiness across the years.

The CPI is not a cost-of-living-index, even though we use it as one. It's a price index that tracks the cost of a vast shopping list over time. The shopping list changes now and then, giving the CPI some characteristics of a cost-of-living index. For example, before transistors, radios and TVs were full of big, clumsy components called vacuum tubes. Since the 1950s, the price of vacuum tubes has gone through the roof because they are manufactured in small quantities only--mostly for hobbyists. Transistors have replaced vacuum tubes in the CPI because it would be misleading to portray skyrocketing vacuum tube prices as indicating inflation.

The CPI, as the graph shows, says that $296 buys as much today as $100 bought in 1975. And a person whose salary has tripled since 1975 probably hasn't seen a whole lot of change in his standard of living. Because of this, we use the CPI to adjust payments for inflation.

How Economists Compare, or Let's Make a Deal

The CPI is composed of many smaller indexes--food, housing, medical care, etc. Each of these can be split into still-smaller indexes. Using these sub-indexes as cost-of-living measures gets risky, though. To understand why, you have to understand how economists compare the cost of happiness (utility) in different years.

Suppose someone offers to sell you gold at the 1997 price ($347/oz.) or at the 1975 price ($165/oz.). Anyone would go with the second option; there's no question that if gold is what makes you happy, then $100 bought a lot more happiness in 1975 than it does now.

Things get more complicated when you look at groups of goods, and especially those whose qualities change over time. Here's another deal: Suppose your family buys $8,000 worth of groceries in a year. You can spend $8,000 at your favorite store, paying 1997 prices; or take the same amount to a special 1975-vintage grocery store, pay 1975 prices, and pocket whatever you don't spend. (But if you buy food at the 1975 store, you can't go back to the 1997 stores--that's the deal.) The vintage store stocks all the products that were available in 1975 (all fresh), but it doesn't carry any products introduced since then--no microwave popcorn or 200 brands of salsa. The CPI implies that you could have bought $8,000 worth of 1997 groceries for about $3,000 in 1975. This means you can buy your groceries for $3,000 at the vintage store and have $5,000 left over to pay for college or a European vacation. If you have to think twice about which deal to take (say, if you need 200 brands of salsa), then quality differences are driving a wedge between price and cost of living.

Hippocrates Meets Adam Smith

In health care, the problem gets really sticky. The graph shows medical care prices quintupling since 1975. Does that mean that $484 buys the same medical care that $100 bought in 1975? Here's a third deal: you can go to your current doctor and your current pharmacy and pay 1997 prices, or, you can join our vintage health plan. With the vintage plan, you pay 1975 medical care prices, but your new physicians and pharmacists know nothing about any medical discoveries since 1975. In all likelihood, few would want to go back to 1975 medicine, even at 1975 prices.

Finally, the CPI says that dental services cost 1/17 as much in 1935 as today. But how many would be willing to face a 1935 drill in a 1935 dentist's chair, even at 1935 prices?

So changes in the quality of goods and services make it difficult to compare the cost of living in different years. Changes in quality make it difficult to measure output, and this

is especially true in medical care and in other industries where technology plays a major part. The table uses a hypothetical example to show why.

Suppose that expenditures on some surgical procedure go from $500,000 in Year A to $1,200,000 in Year B. With 1,000 operations in Year A and 2,000 in Year B, the price of an operation rises from $500 to $600.

Now, suppose doctors become more adept at performing this surgery; in Year A, they save only 100 lives, but in Year B, they save 600. Thus, the price of one life saved has gone from $5,000 to $2,000. The price of an operation has risen 20%, but the price of a life saved has dropped 60%. The second measure might seem preferable (because health, not operations, is what gives us happiness), but the CPI uses the price of operations (or pills, or office visits), because measuring the number of operations is easy and measuring the quality of the results is difficult and expensive.

In fairness, one should note that quality changes in health care cut both ways, with plenty of examples of deterioration. Doctors no longer make house calls. Some argue that the shift from inpatient care to outpatient care has gone too far. Many people miss the intimacy and permanence of the relationship that families once enjoyed with their doctors. And some question the morality and desirability of procedures that extend the length of life, but not the quality. These effects would tend to bias the CPI downward rather than upward.

To Adjust or Not to Adjust

The Boskin Commission said that an exaggerated inflation index has become too expensive for America to afford. It arbitrarily rewards some people and penalizes others. The Congressional Budget Office estimates that overestimating the CPI by 1.1% per year alone will add over $1 trillion to the federal debt by 2008. And distorting inflation upwards means that we distort our national growth and productivity numbers downward; in other words, we create a perception that the economy is in worse shape than it is.

Conclusion

The CPI is almost surely too high, and this exaggeration is extremely costly. Yet adjusting the CPI downward would be a tremendous policy change with its own set of costs. The question is which action is costlier. American citizens must make that decision.

On the Other Hand *challenges popularly held economic beliefs. The name comes from President Harry S Truman's statement that he wanted a "one-handed economist" to replace the economic advisors he said couldn't express an opinion without adding "but on the other hand ..." The icon shows the sort of ATM card that consumers use today for many of their banking needs.*

Source: http://www.rich.frb.org/pubs/equilibria/issue2/otoh.html