

Inaccurate Cost-of-Living Adjustments Are Soaking Taxpayers

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Social Security and other government programs receive automatic cost-of-living adjustments every year for the purpose of protecting beneficiaries from inflation. The size of benefit for some government transfer payments such as food stamps and Medicaid are raised using other mechanisms, but eligibility for those programs is determined by comparing household income levels to Federal Poverty Levels that are automatically adjusted for inflation.

The adjustments for inflation use traditional Consumer Price Indexes (CPIs). These CPIs have two types of biases that cause them to overstate inflation. The first is "substitution bias." For example, when the price of ground beef rises more than the price of chicken, people will buy less ground beef and more chicken because they can get more chicken while giving up less beef. When airfares were deregulated, the price of air travel relative to rail travel declined. As a result, people flew more and rode trains less.

Traditional CPI calculations ignore these substitutions and continue pricing the same amount of each item, irrespective of consumers' behavior. When compared with what people are buying currently, the CPI overstates the amount of the item with the increasing relative price and understates the amount of the item with the declining relative price. The net result is an overstatement of inflation for the all-items CPI that is used to calculate cost-of-living adjustments and Federal Poverty Levels.

This overstatement averages only about 0.4 percent per year, but when compounded and accumulated from 1975, when the automatic cost-of-living adjustments began, to 2021, the effects of this overstatement on the six largest personal government benefits have added almost \$2.8 trillion to the national debt.

Fortunately, fixing this problem could be quick and easy. The Bureau of Labor Statistics (BLS), which calculates the CPI, has for more than 20 years been publishing the "Chained Consumer Price Index for All Urban Consumers" (C-CPI-U), which eliminates this bias. Congress has recognized the superiority of this improved chained CPI and legislated its use for adjusting tax

brackets in the personal-income tax, but it has yet to mandate the Chained CPI-U for calculating cost-of-living adjustments and Federal Poverty Levels.

The second bias in traditional CPIs comes from the introduction of new or improved items into the index. Price-index calculations are made using the percentage change in prices for identical items in two time periods. But the arrival of a totally new item such the cell phone in 1984 or a modification to an existing item such as a specific car model makes this comparison between identical items impossible. Price indexes attempt to solve this problem by using additional data to separate the pure price change for the new or modified item from the price changes that reflect the change in market value of the new or modified features.

For example, the price tag for a new variety of streaming service might be \$10 more per month than the version it replaced. If its larger catalog of programs had a market value of \$5 and its greater virtual storage capacity had a market value of \$2, there would be a total of \$7 in higher market value for the new version, and the pure price change would be an increase of \$3. The key to making these adjustments is obtaining accurate estimates of the market value of the modifications.

The general methods required to remove the new-item bias are well known and have already been applied to several key items, but more work is required to extend them to the entire CPI. The BLS has also created the Disease-Based Price Indexes that point the way to an improved method for the medical-care components of the CPI. Although there is no official comprehensive index that corrects for all the new-item biases, extensive technical literature indicates that correcting it would have a similarly sized effect as the correction for the substitution bias. From 1975 to 2021, the combined effects from both sources of bias on the six largest personal payments by government contributed about \$5.6 trillion to the national debt, or 24 percent of the total.

In addition to improving the overall financial health of the nation, a rapid reduction and elimination of the upward biases in the cost-of-living adjustments for Social Security's Old Age Survivors and Disability Insurance (OASDI) offers an additional benefit. Until recently, the payroll taxes paid for Social Security each year have usually exceeded the cost of benefits paid in that year. This balance was transferred to the general fund of the U.S. Treasury, which in turn issued special Treasury bonds to the Social Security Trust Fund to be redeemed later when taxes collected were less than the benefits to be paid. The fund balance reached \$2.9 trillion at the end of 2020. Then in 2021, the Social Security Trust Fund had to redeem \$56.3 billion of those bonds to pay OASDI benefits. Social Security actuaries have calculated that increasingly larger withdrawals will continue until the Trust Fund is fully depleted in early 2035. Under current law, once the Trust Fund balance is fully depleted, payments to beneficiaries must be reduced to the level supported by then-current Social Security taxes.

If Social Security cost-of-living adjustments had been calculated using indexes without substitution bias, then the Trust Fund balance in 2020 would have been \$3.5 trillion, and full depletion of the Trust Fund and reduced benefits would have been delayed two more years to 2037. If the price indexes had also been improved to minimize new-item bias, the balance in

2020 would have been \$4.4 trillion, and full depletion of the fund would have been delayed until 2039.

While fixing the cost-of-living adjustment alone will not come close to solving the entire Social Security fiscal crisis, it would help provide a little breathing room while a full remedy is implemented, as well as provide guidance for designing that remedy.

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