February 1997

National Economic Trends

THE FEDERAL RESERVE BANK of ST. LOUIS

A CPI-Based Bias for GDP?

The final report of the Advisory Commission to Study the Consumer Price Index (CPI) has sparked some erroneous ideas about the growth of real economic activity. Some people think that if the CPI overstates inflation, then real GDP growth is understated by the same amount. Others, extending that view, argue that the U.S. economy can therefore grow faster without triggering higher inflation.

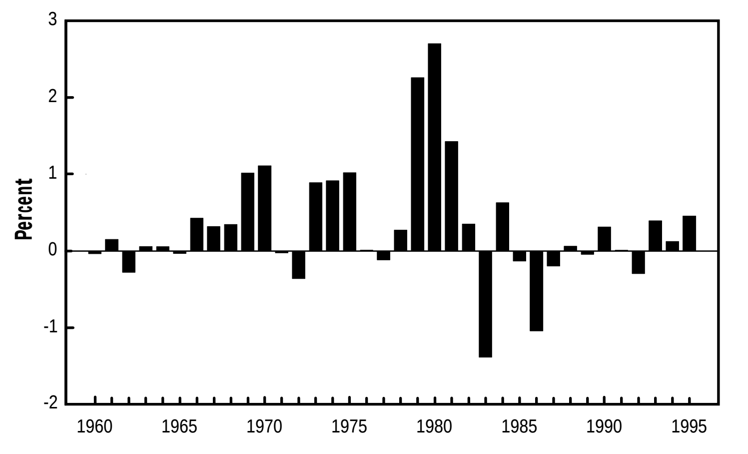
First, it should be noted that the Bureau of Economic Analysis does not use the CPI to calculate real GDP. In fact, GDP's four components—private investment, government expenditures, net exports and personal consumption expenditures—each have their own price index. The price index for the largest component of GDP, personal consumption expenditures (PCE), incorporates nearly three quarters of the price data collected for the components of the CPI. This overlap allows for the possibility that some of the problems identified by the commission—correctly valuing new products and product improvements, and the availability of new outlets—also apply to the PCE price index.

Still, there are numerous methodological differences between the CPI and GDP-related price indexes. One difference is the weighting scheme used by both series: GDP price indexes use chain weights, while the CPI uses fixed weights. The advisory commission attributes a large fraction of their estimate of the total CPI bias to the use of fixed weights. The commission believes the use of fixed weights creates a bias by implicitly assuming people do not substitute among goods. This and other methodological differences create notable divergences between the CPI and the GDP-related price indexes—even between the CPI and PCE price index. The chart shows the difference between yearly changes in the CPI and the PCE price index. The average difference between the two series is 0.32 percent.

As silly as it may seem, some people have claimed that the economy can grow at a faster rate without higher inflation because the CPI overstates inflation. Proponents of this view believe that overstated inflation implies a faster growth rate of potential GDP—the rate at which the economy can grow without triggering higher inflation—than currently believed. Consequently, they argue, there's more room for growth. The problem with this argument is that any bias in measures of inflation affects estimates of potential GDP and measured GDP in the same way. So any gap between measured and potential GDP will remain unchanged. Imagine you ask a tailor to make you a suit. The tailor measures you with his tape measure and marks the cloth using the same tape measure. Unfortunately, you discover his tape measure is missing the first two inches. Will your new suit fit? Of course. The measurements by the tailor will be wrong, but the suit will still fit.

—Peter Yoo

CPI Inflation Minus PCE Price Index Inflation



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