

How to adjust for inflation:

Most people express the results in the current year. Some purists might argue that you have to use the "base year" of the index. Don't worry about it. You'll confuse your readers more by referring back to some long-ago time than you will by using a technically impure calculation.

You'll often see these calculations referred to as "real dollars" or "constant dollars." For example, the Bureau of Economic Analysis reports the "real Gross Domestic Product." When you see the word "real" or "constant" before the word "dollars," you are looking at numbers that are already inflation-adjusted.

In reports, statisticians may say that a figure is expressed in "millions of 1982 dollars" or something like it. These are also already adjusted for inflation, but they are expressed in the value of money in 1982, for example, rather than today.

If you see the phrase, "current dollars," the answer isn't already inflation adjusted and you ought to do it yourself.

You need three pieces of information to adjust for inflation: the ratio of prices in one period (now) to the prices in another period (then) and the value in the past (then).

To get that ratio, look on the Bureau of Labor Statistics' Web site at www.bls.gov and click on "Most Requested Series." There will be a section for price indexes. Most people use the Consumer Price Index for Urban Consumers, or CPI-U, all items, not seasonally adjusted, with the most recent base period available. (The index ignores rural consumers.) You will have the option of having this given back to you in tabular form or in a form that is easily transferred to a spreadsheet program like Excel. To just check one figure, try the cost-of-living calculator at www.newsengin.com, and look under "Free Tools."

Step 1: Divide the latest year's CPI by the CPI for the year of your earlier data.

Step 2: Multiply the answer by the dollar figure for the year you want to adjust.

Formula:

Step 1: Ratio of prices now to prices then = $(\text{CPI Now} / \text{CPI Then})$

Step 2: Multiply by old value: $\text{Answer} \times \text{Value then}$

A more complex version would use another period as a base:
That is,

$\text{Adjusted value} = (\text{CPI Year} / \text{CPI Base}) \times \text{Value Year}$. You'd have to do this with both the previous and the current numbers to get the comparable values.

Example:

Teachers made about \$9,000 in 1970. By 1996 (the most recent survey available at this writing), they made \$38,000. Is that a big raise or a little one?

Step 1: Get the ratio of prices in 1996 to prices in 1970 using the CPI-U for All Items (All cities). This is $156.9 / 38.8 = 4.0438$. This means it took about \$4 in 1996 to buy what people bought for \$1 in 1970.

Step 2: Apply the answer to the original salary by multiplying:
 $4.0438 \times \$9,000 = \$36,394$.

This means that, after inflation, the average teacher got a raise of $\$38,000 - \$36,394$, or about \$1,600. So there's not much difference in salaries over 26 years, once inflation is factored out.

Notice that this is expressed in numbers your readers will understand - everything is in the latest year's dollars. You could reverse the process and see that, at least a couple of years ago, teachers made the equivalent of about \$9,400 in 1970. That wouldn't tell your readers much.

This gives you a powerful tool to work with. When someone quotes you dollar figures expressed in a long-ago time, they often look very low. Ask them to reverse it for you and give you the answers in today's dollars. If they say they can't, then they don't understand how it works.