Calculating Inflation Without The Inflation

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Before we really get started, let's discuss the definition of inflation. When the term was first created, it was/still is used by some to describe an increase in the money supply. That is, the currency supply is inflated/increased. Similar to pumping air into a basketball/football, the currency supply is "pumped up".

As time has gone on, the term has been used to describe an increase in prices. It is hard to allege that this new definition of inflation is "wrong". After all, the meaning of words can change with the culture, and language is something that is defined by humans. What I mean by this is, it is not like the laws of physics that exist by themselves. We as humans seek equations/other means to describe this phenomena, but the laws of physics exist with or without us.

Words/language would not exist without humans, so they can mean whatever we want them to mean. Some people make a distinction between "monetary inflation" and "price inflation". I would say that all of this is beside the point and we need to get back to discussing the REASONING behind calculating "inflation".

People only care about this is in the context of their everyday lives and whether their cost of living is going up. It is not an issue of semantics where we argue about what the term really means. This is why the consumer price index ("CPI") is such a misleading calculation. For a little background, the CPI is what the government reports when it reports the amount of inflation.

I will give the government SOME credit in that the WAY they calculate this is laid out at the www.bls.gov website. The calculation itself is quite involved and so I have not done any calculations myself to see if the numbers are legit. I will give the government the benefit of the doubt and assume that the numbers are consistent with the method they describe. My reasoning is that they are worried that SOMEONE might actually run the numbers. If the numbers did not match up, someone could call them out and they would lose all credibility.

So, unlike in so many other areas of government, the problem with this is not a lack of transparency. The issue is that there is too much subjectivity in the calculation. Let me clarify. The methodology that would yield the most "apples to apples" comparison would be to measure the price of the SAME basket of goods every year. If the overall price of the goods goes up, this will indicate a trend of increasing prices and a higher cost of living.

This is not a perfect calculation as the prices of some goods may go up and some may go down. A bigger basket of goods encompassing many different industries can make up for this somewhat. Of course, if the basket consists of items that a "typical" person buys, it will yield valuable information about the trend of prices.

This is where the problem arises. The government has introduced two concepts that allow for a lot of manipulation of the numbers. The first is "substitution". Let me elaborate on this. The government uses the logic that as prices of certain items goes up, the consumer will "substitute" cheaper items in their place. For instance, say that the price of a particular wine goes up from year to year. Rather than keeping that same wine in the basket of goods, the government will "substitute" a beer or some other cheaper form of alcohol.

On its face, this whole concept is ridiculous as the whole reason you do the calculation in the first place is to see if the prices of goods are going up. If you take out items when their prices go up, then by definition you are "taking the inflation out of calculating inflation". If this were not bad enough, the government also uses the idea of "hedonic adjustment".

This allows the government to adjust prices based on "improvements" in the underlying product. Say that a HDTV has a certain resolution one year and then the price goes up 20% the next year. The resolution of the HDTV has gotten better by 30%, so the government can claim that the price of the HDTV has actually gone down 10% from year to year.

I actually have a little more sympathy for this adjustment. Part of the reasoning behind introducing this concept is that the same products may not be available year after year. Still, it should be clear that this is an inexact science. In the case of HDTV's, it is easier to quantify the "improvement" from year to year because there are concrete numbers to use when it comes to screen resolution. Not all types of goods lend themselves to this type of numerical comparison. Also, what if a person can no longer afford the "improved TV"?

Let's use some numbers to illustrate this better. Say that an HDTV cost $500 last year and it had a resolution of 720p. The next year, this model is no longer available and the closest thing is an HDTV that costs $700 with a resolution of 1080p. So, based on a solely numerical analysis, the resolution of the HDTV has increased by 50% (increase of 360p or 50% of 720p). Meanwhile, the price has increased by 40%. The government would track this as a 10% DECREASE in prices. This calculation is not much consolation to you if you could afford the $500 HDTV but can no longer afford the $700 HDTV.

Yet another aspect of calculating the CPI that can lead to a muddled picture is the fact that "all goods are created equal" in the eyes of the CPI. For instance, the price of a necessity may go up 10% and the price of a luxury may go down 10%. So, the government can claim that there is no inflation in this instance. From a numerical standpoint, this is true. Of course, by definition, a necessity is something you HAVE to buy (such as food) whereas a luxury is something you CHOOSE to buy.

If you have enough money to buy both the more expensive necessity and the cheaper luxury, then maybe they cancel each other out and so you feel no difference in your standard of living (assuming the same income from the year before). HOWEVER, if you are living paycheck to paycheck and can only afford the necessity, then you only feel the increased price of this. You do not get the benefit of the decreased price in the luxury and now your standard of living has gone down (again assuming your income stays the same as from a year ago).

To top this all off, when the CPI is reported in a press release, it is broken down into three different "categories". These categories are: food, energy, and everything besides food and energy. Again, while I will give the government credit for publishing all the data, think about the last time you heard about how there is “no inflation”. Is this reported as “no inflation” in the cost of food? You can see that in a sound bite culture, we do not get enough details as to which number is being reported. For that matter, we don’t even know if it is the same number being reported each time.

For instance, say that one month/one quarter food prices stayed relatively stable compared to last year. However, energy prices skyrocketed over that same period. The subsequent month/quarter, the opposite happened and energy stayed flat relative to last year but food skyrocketed. It should be apparent that if you report the CPI for food the first month/quarter and the CPI for energy for the second month/quarter, you are not getting a true picture of the cost of living.

What does this all add up to? As the data is presented on the bls.gov website, this is more a case of the general public taking a more active role and analyzing the information for themselves. Do not just take whatever the media says as gospel. As reading through this information can be pretty dry, you can also just use your own personal experiences when you go shopping to see if prices are increasing.

What does it mean if prices are increasing? Some will argue that it is just the greedy corporations trying to increase their profits. While that may account for some of the increases (I would argue a substantial minority, but to each their own), I think most would agree that the money supply has a substantial effect on this. As the government is in charge of the money supply, it would be hard to argue that they bear no responsibility regarding increasing prices/a lower standard of living. Indeed, if the government has no effect on inflation, why go through all these numerical gymnastics to come up with these figures?

The government knows that a substantial portion of the public would not buy the argument that this is solely the fault of the private sector. If they felt they could just put all the blame there, they would actually have an incentive to publish the HIGHEST inflation figures possible so they could try to justify more government involvement to control prices.

Ultimately, this article is not intended to tell you what you should feel about inflation or what is causing it. The idea is to hopefully get you more interested in the topic and to realize that there is more to the story than what is being presented. Determining inflation is not as simple as taking your body temperature and any media/government source that presents it that way is lying.

It is also important to realize that this is not solely an academic/mathematical exercise. There are certain investment vehicles (TIPS bonds) and Social Security does/did have a COLA (cost of living adjustment) based off of inflation figures. So, you do have a vested interest in learning more about what is “inflation”.

For a further discussion on the cause of inflation and the role money plays in our economy, check out Anti Social: Rebooting Capitalism and the American Dream, available at www.rebootingamericandream.com!