

Inflation, What Inflation?

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Inflation for calendar year 2010 was just shy of 1¾%, yet the average person's experience was quite different. In this quarter's commentary, I will explore what makes that discrepancy possible, and who benefits from this different view of reality.

I will begin by stating that inflation has become a necessary and beneficial component of the US economic system. We have been virtually guaranteed price inflation as a result of our abandonment of the gold standard in 1971. That is the reality of our world today.

Although not under its direct control, the US Federal Reserve Bank attempts to manage the inflation rate through its monetary policies. Indeed, inflation's evil twin, *deflation*, would be very detrimental to our economy, both domestically and globally. It is something that the Federal Reserve actively campaigns against.

The calculation of inflation utilizes changes in the Consumer Price Index. The US Bureau of Labor Statistics' "CPI" is a weighted average of a collection of goods and services that represents the purchases of a typical consumer. Approximately 80,000 prices are input into the CPI calculation, with each price multiplied by a factor for the amount purchased by the average consumer.

On the surface, this sounds like a very objective and reasonable way to calculate cost of living changes. However, even the BLS admits that the CPI is not a cost of living index. A true cost of living index would account for changes in consumers' standard of living and changes to governmental and environmental factors such as health, public safety, water quality and crime. This would be very difficult, if not impossible, to boil down to a reasonable numeric index.

The CPI is not a cost of living index.

Therefore, we are stuck with the CPI as a poor proxy for a cost of living index. However, even the CPI calculation has issues.

In the minds of most consumers, the CPI measures monthly changes of a fixed basket of goods and services that they purchase. However, the concept of a fixed basket of goods has been gradually abandoned as a result of a study commissioned by the Clinton administration (and continued by all following administrations).

The reasoning for abandoning the fixed basket was that the CPI calculation at the time was thought to be over reporting inflation. Since at least half of governmental expenditures are directly tied to CPI changes, this was seen as a major budgetary problem for the government.

An underreported CPI benefits government, not the citizen.

Over the following decades, the CPI calculation was gradually modified in an attempt to better reflect the inflation rate. In the process, several adjustments were introduced that many believe have lead to a radical divergence from what consumers experience:

Product Substitutions. In an attempt to mimic consumer behavior, individual products in the CPI are substituted when prices in a particular category rise disproportionately. For example, drumsticks may be substituted for chicken breasts when breast prices rise.

Note that the reduced standard of living represented by eating cheaper cuts of chicken are not accounted for in the index. It is assumed that the consumer is just as satisfied with an inferior choice of products.

Quality Improvements. Through a process called "Hedonics" some prices in the CPI may be adjusted for their perceived quality and value improvement to the consumer. For example, if TVs rise in price due to the addition of new features, the price of TVs in the CPI are adjusted for these new features and may not increase the index at all.

This is defended by noting that the consumer is getting more value for their dollar. Yet, since older, less feature-rich TVs are not available for purchase, the net effect to the consumer is an increase in TV purchase price that is not accounted for in the reported CPI.

Housing Costs. In 1983, the CPI calculation began using a concept called "Owner's Equivalent Rent" to represent housing costs. With OER, the costs of home ownership (primarily mortgage principal, interest, property taxes and maintenance) are replaced by the cost it would take to rent the equivalent home. The OER is the value of shelter that owner-occupants forego by not renting out their homes to someone else.

However, in the US over two-thirds of all housing is owner-occupied. The pricing that these owners face is most heavily influenced by mortgage interest rates and home purchase prices.

That leaves less than one-third that rent their housing. The pricing pressure that renters experience is most heavily influenced by rent levels, which are not only a function of the underlying housing cost, but also, and to a greater extent, the market forces of supply and demand.

Notice that the pricing influences on each population are very different. In my opinion, the conversion of both categories of pricing into a rental equivalency introduces significant distortion into the CPI calculation. Since the OER represents almost 25% of that calculation, the impact of this distortion can be significant.

*Owners and Renters
experience different
pricing pressures.*

This has caused some to argue that this leads to a perpetual underreporting of inflation. The reality is that how this affects the CPI calculation varies wildly with current housing prices, mortgage rates and the supply/demand balance for rental units.

New Product Categories. As new types of products are introduced, old products in the index may be deemphasized or retired completely, leading to a subjective adjustment to the index.

For example, the iPad has replaced many notebook computers recently. If an iPad is seen as a "must have" product, its relatively higher price may or may not be adjusted correctly to reflect the net impact to consumer spending and the CPI.

Sampling Error. The CPI calculation relies on the price of a representative sample of products and the purchasing behaviors of a representative sample of consumers. By its very nature, this subjects the CPI calculation to errors, although by utilizing a sufficiently large population the errors are statistically very small.

Geometric Mean. The pre-Clinton era CPI formula used an arithmetic mean, or simple average, in its calculation. The current formula uses a geometric mean that puts less weight on the prices that have risen the most, and more weight on the prices that have increased the least.

The net effect is that, in a rising price environment, the consumer experiences inflation faster than the CPI recognizes it.

Volatility Control. A completely subjective “Intervention Analysis” adjustment may be made depending on seasonal factors or even if the prices are in what is perceived as a temporary price swing.

Granted the CPI calculation is complex and may be impossible to craft to accurately represent the reality of pricing. By its very nature, it is an average of a variable basket of products, purchased at an average quantity, for an average price.

However, according to some, the CPI may now be underreported by as much as 7% per year, as calculated using the pre-Clinton, fixed-basket method. I do not know about the average family, but my family generally purchases the same items each week (excluding major purchases). In our case, a fixed-basket would seem to be a more accurate representation. Are our purchasing habits that different from the average family? I would like to think not.

So, if the underreporting is true, who benefits? The same government that is performing the calculation. With over 50% of government expenditures tied to the CPI changes, the government stands to benefit by not having their indexed costs adjusted upwards as much as they should. In other words, they save money with an underreporting of the CPI.

Who suffers when CPI is underreported? Anyone whose government payments and services are tied to CPI changes. The largest group in that category are those that receive Social Security payments. Other groups include government labor unions, and those on disability. Of course, even a CPI adjustment does not truly account for their actual cost of living changes (as argued previously).

Changes to the CPI affect the income of approximately 80 million people.

I will leave the conspirators for the rest of the story. I hope that this short explanation has explained some of the reality of inflation reporting: the CPI does not represent the typical consumers’ pricing experience. But, you already knew that.

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