

In Pursuit of Value

June, 2015

Inflation and Investing

At its most fundamental level, investing is about preserving the purchasing power of savings into the future. It reflects the hope, or expectation, that by deferring consumption today the saver will be able to consume more tomorrow. Without that belief, the incentive to save at all makes little sense. Growing your savings faster than inflation is the point of investing.

As I wrote in *Bonds Are Not Forever; The Crisis Facing Fixed Income Investors*, all is not as you may assume regarding how the government calculates inflation. Any saver truly interested in realizing increased purchasing power on money invested for the future is well advised to understand exactly what is measured, and how.

Changes in the cost of goods and services are reflected through inflation statistics. The All-Urban Consumer Price Index (CPI-U) is probably the most widely used index of inflation. The Bureau of Labor Statistics calculates CPI and employs a small army of checkers to sample prices for thousands of goods and services each month. The Federal Reserve prefers the Personal Consumption Expenditures Index Ex-Food and Energy, known as the PCE Index. The Bureau of Economic Analysis calculates the PCE Index using actual consumption data, which makes it more reflective of spending patterns but also delays its publication until the supporting figures are available. The differences between the two indices are not that important for most people; what is far more interesting are many little-known quirks and features of how inflation indices are calculated.

One item that many non-economists find surprising is the use of "hedonic quality adjustments". This is to account for the numerous changes that take place in the quality of most of what we buy. One of my favorite examples is laptop computers. Although their actual prices don't vary much from year to year, their speed and productivity improve relentlessly. To the statistician, a faster laptop at last year's price represents a price cut. They translate the improved performance into a price reduction and the result feeds into the inflations statistics.

The theory behind this is that a better laptop provides you with greater satisfaction, referred to as *utility*, which really gets to the heart of the matter. The basket of goods and services whose average price is being tracked is intended to provide constant utility through time. When you spend money, an economist observes that what you bought provides you with greater utility than the money you paid. People are assumed to make decisions that maximize their utility, in that they spend their money in ways that give them the most satisfaction. Although a faster laptop is better, the price reduction inferred by statisticians from this increased utility doesn't leave you with money left over to spend on something else, if the actual price is unchanged. Computer prices routinely subtract from the inflation statistics in this way.

For the long term saver, the constant utility construct represents a subtle but insidious shortcoming in the inflation statistics. Over any reasonable period of years, living standards rise. The quality of products and services improves; per capita GDP, or average incomes, rise in real (i.e. inflation-adjusted) terms. The consequence is that merely keeping up with inflation is to forego the general rise in living standards that is part of any capitalist economy. If today your income matches the average exactly, growing your income at the inflation rate will result in you slipping inexorably below the average.

Economists know this and wonder why it's surprising. The rest of us are surprised and wonder why it's so. Constructing a price index based on constant utility has a far sounder basis and is easier than one relying on a constant standard of living, which is why things are the way they are. Most of us care about maintaining our standard of living, which is a relative measure, not our utility, which is an absolute one. The Government is measuring something, just not what we think they're measuring. The

SL Advisors, LLC is a registered investment advisor offering separately managed accounts to individuals, family offices and institutions.



designers believe they're measuring what counts, it's just not what counts to us. The result is, preserving your standard of living relative to the rest of the population requires growing your income faster than inflation. Probably 1-2% faster.

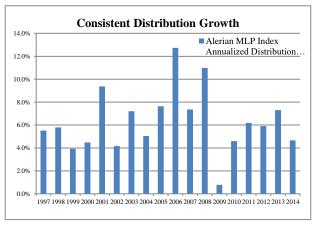
Some economists torment their profession by revealing gaping holes in the traditional model of individual behavior that economics relies on. Behavioral Finance is a fascinating area of research that explains why the world is often as it is and not the way that neatly fits conventional economic theory. People routinely and happily make decisions that don't maximize their utility. Lotteries are an example. Since the expected value of a lottery ticket is less than what it costs the buyer, its negative utility should render lotteries obsolete. Nonetheless, lotteries do exist and represent a useful supplement to many state government's revenues. Their existence illustrates a weakness in the assumption that consumers maximize their utility. Economic theory is frequently forced to adapt to the inconvenient human invalidation of its models.

Another important flaw is the way housing costs are calculated. Inflation statistics are intended to

measure the cost of goods and services. For most households, housing is their biggest monthly expense, so changes in its cost really are important. The problem for economists is that owning a house provides shelter but also represents an investment in an asset. They need to separate the "service" of shelter provided by housing from the return on your home as an asset. The solution they've come up with is Owners' Equivalent Rent of Primary Residence (OER). They measure this by asking people what they think their house would rent for. It's a strange concept. Who even knows to any degree of accuracy, unless you live in an apartment building where neighboring units like yours are rented out? It's a rare cocktail party or barbeque where conversation turns to recent increases in OER, whereas increases in house prices are routinely discussed. The theory is that the market price of a house represents the cashflows it will generate just like any other asset, so over time the two ought to keep track. Over periods of a decade or more, the evidence supports that this is true. But it's a non-intuitive method, and it didn't work well in the years leading up to the 2008 financial crisis when inflation (including OER) was well behaved while house prices were rising sharply. The OER methodology would regard rising house prices as being predictive of rising actual rents in the future, just as rising stock prices might reflect the expectation of higher corporate profits. The problem back then was, for most people (since home ownership is how the majority obtains its shelter) the actual cost of housing was rising sharply, but OER wasn't. Perhaps a CPI based on the costs of home ownership instead of OER might have alerted policymakers to a looming problem in time to respond before the full-blown crisis hit.

From time to time minor enhancements have been made to inflation indices with the stated objective of improving their accuracy while also conveniently resulting in lower inflation. As a result, conspiracy theorists have much to work with and there's no doubt that understating inflation provides fiscal benefits through reduced entitlement spending and perhaps even lower interest rates on debt. Although it's tempting to believe, I highly doubt the Federal government with the thousands of bureaucrats all involved in producing inflation statistics could orchestrate such a scheme, never mind keep it quiet. However, Congress can be relied upon to readily approve methodological changes that flatter their financial management.

As-reported inflation may rise in the future, as well as the anecdotal version we all find higher already. The Federal Reserve desires higher inflation since its 2% target is not being met. Long term investors need assets that will truly offer protection. Clearly bonds, with their measly yields, offer no protection against uncertainty and, after taxes, no capital preservation either. A substantial part of the solution must be to own assets whose cash-generating ability can be relied upon to grow at least as



fast as inflation; ideally, as fast as living standards themselves.

SL Advisors, LLC focuses on investment strategies that provide income without relying on fixed income securities.

