Why it is so difficult to measure inflation

September 5, 2017 – *The Economist*

Britain introduced its first index of the cost of living in 1914. It has gone through plenty of iterations since then. The retail-prices index was introduced in 1947 and a consumer-prices index came into being in 1996. Most recently, in March 2017 Britain's statistics office introduced a new headline measure of inflation, the "consumer-prices index including owner-occupiers' housing costs" (CPIH), which includes the specific costs of owning a home, such as mortgages and estate agents' fees. The update makes sense: after all, about 15% of household spending in Britain goes on owner-occupied housing. CPIH may be ultra-sophisticated (statistical agencies in other countries struggle to incorporate housing costs), but like all inflation measures it remains an imperfect measure of changes to Britain's living standards.

At its simplest, inflation is a measure of how quickly prices increase. To estimate the figure, statisticians choose what they believe to be a representative "basket" of goods and services consumed by the population. The figures are usually expressed in terms of the percentage change on a year earlier. If all that sounds simple, it is not. First there is the question of what to put in the basket. Consumption habits change all the time and wonks must estimate what to put in the basket through surveys on household spending. Britain updates its basket once a year, so it is likely to be fairly representative (this year, gin and cycling helmets were added; menthol cigarettes were out). But America only does so every two years, and used to do so every ten. At the same time statisticians must account for the fact that the quality of the basket often improves. This year's smartphone might cost more than last year's, but it will also do more. If statisticians focus only on changes in price, they will overstate the true inflation rate by missing improvements in performance. An advisory committee set up by America's Senate in the mid-1990s reckoned that the failure to adjust for quality and new products meant true inflation was overstated by at least 0.6% a year.

A single measure of inflation cannot reflect the different cost-of-living changes faced by different sorts of people. For instance, London has seen rapid increases in house prices each year, yet since CPIH is a national figure, the inflation faced by Londoners may be understated. There is also a rich-poor divide. The method of constructing an inflation index is often described as "plutocratic", rather than "democratic". In other words, the choice of what to put in the basket is skewed by what rich people buy, since rich people spend more. (So if a rich wag decided to spend billions of pounds all in one go on, say, shoehorns, then in theory shoehorns would make up a big chunk of the inflation basket the following year.) This can mean that rich and poor folk experience different inflation rates. For instance, poor households spend more of their budgets on food, and in the 2000s food prices were rising quickly. One paper found that from 2003 to 2014, the average inflation rate for those in the bottom income quintile was 3.4% compared with 3% for the top quintile.

It is not easy to get around any of these problems. Britain's statistics office has mooted introducing regional indicators, as well as stratifying inflation by income. Yet even with these changes, inflation will remain a fuzzier measure than is commonly acknowledged.