Is the cost of living rising faster than the official inflation rate?

Inflation, measured by annual changes in the consumer price index (CPI), is a widely used indicator to track the cost of living. At around 1% for several months now, Canada’s inflation rate is very weak from a historical standpoint. On average, inflation in Canada has advanced by about 2% each year since the early 1990s. However, many people are sceptical of these results, estimating that in reality the cost of living is rising much faster.

This Economic Viewpoint explains how the perception of the cost of living can differ from the official numbers. That our attention tends to focus on prices that are rising rather than falling may be one of the main explanations. Our personal consumption can also differ significantly from what is usually included in the reference basket used to calculate inflation. This basket is not always stable over time, by the way. Revisions have been made to take into account changes in consumption habits. These revisions, however, reduce the effect of price increases for certain goods and services if their weighting in the CPI reference basket declines over time. Other more methodological factors can also skew our personal perception of the official inflation rate. Finally, some studies suggest that inflation might even be overstated.

NOT ALL PRICES ARE GOING UP!

It could be that our attention focuses on a limited number of prices, especially those that increase the most. Still, while the prices for several goods and services are rising faster than the official inflation rates, others are rising at a much slower pace or are simply declining.

A prime example is shelter costs. If it is true that housing costs are continually rising, the cost of furniture and electrical appliances has been trending downwards since the early 2000s (graph 1).

In terms of transportation, we tend to focus on the sharp increases in gas prices at the pump. Other costs connected with using a car have also risen significantly. On the flip side, the cost of car or the cost of leasing a car has remained flat for more than 10 years (graph 2 on page 2).

In terms of current consumption, we probably pay more attention to increases in food prices. The same does not apply to clothing, however (graph 3 on page 2). The cost of several entertainment products is also falling (graph 4 on page 2). The trends for clothing and certain entertainment products reflect the competition from Asia and the loonie’s appreciation.
NOBODY CONSUMES THE REFERENCE BASKET AS IT STANDS

The CPI is the weighted average price of a multitude of goods and services. Approximately 600 goods and services are used to represent 170 basic categories that make up the reference basket. The categories are then aggregated. The weighting attributed to each category is derived from surveys on average household spending.

In practice, there is no reason for people to consume based on the exact same ratios compiled in the CPI’s reference basket. Yet if some people consume a higher ratio of goods with prices increases over the average, the cost of living for these consumers will increase more than official inflation figures. The reverse would also be true for those who consume a higher ratio of goods that have smaller price increases. On average however, we should track consumer spending line with the CPI’s reference basket.

Other than personal tastes, different factors can influence consumption, such as income, age groups, where people live and the number of dependent children they have. For example, we could assume that a low-income student allocates a larger than average share of his financial resources towards rent, food, education and public transit. And yet the price increases for most of these categories have outpaced the inflation rate for the past few years (graph 5). Also worth considering: the case of a retiree who is losing its capabilities and grappling with spiralling costs for healthcare, restaurant and housecleaning services that are more likely to affect his personal budget (graph 6). For a resident of Victoria,

Sources: Statistics Canada and Desjardins, Economic Studies
British Columbia, the cost of living would probably have risen at a slower pace than in most other Canadian cities, however. Indeed, broad disparities in price advances have been noted across the country (graph 7).

Changes in consumption habits are taken into account when calculating inflation

The reference basket’s weightings are revised regularly to take into account changes in consumption habits. This review used to take place every four years—now it’s every two years. The last review is effective from March 2013, and it is based on data from 2011.

Perceptions on inflation can be skewed if changes in the basket’s weighting are not taken into account. Even if the cost of an item is much higher today than it was before, this might have a limited effect on the official inflation rate if the weighting of this item declined in the CPI. These types of changes are actually visible between the major categories of goods and services. If we compare the 2011 basket with the 1992 basket, we would note that the weighting attributed to food, shelter, clothing, alcohol and tobacco products has declined. In contrast, the weighting for transportation, current expenditure of households and recreation has increased (graph 8).

Consumption habits can change over time for a variety of reasons, but changes usually occur in the best interests of people and based on their needs. The effects of substitutions are still debatable, nevertheless. When goods or services are too expensive, people tend to replace them with less expensive equivalents (or almost). The CPI reference basket is adjusted as a result, and inflation will be weaker than it would be if people refrained from substituting their consumption in response to price hikes. Traditionalists will probably keep an eye on price changes for the goods or services they preferred to consume before they opted to make substitutions. This type of effect could be seen when choosing meat, for example. The price of chicken or beef may rise to the point where people could be forced to reduce their consumption, or opt for pork instead, or even tofu! While this choice would allow people to feed themselves at less cost, they might miss the taste of beef or chicken and keep track of prices. These examples are still fairly rare, however.

Home prices are not factored in the CPI

Other more methodological factors can lead to differences in perceptions vis-à-vis the official inflation figures. Certain prices are difficult to ascertain, and the estimation methods used are often subject to debate. Some prices are simply not included in the CPI, such as the cost of education and healthcare services that are covered by the government. Income tax is also not included. A tax increase nevertheless gives you the impression that the cost of living is increasing, since it cuts your disposable income for consumption.

The absence of home prices from the CPI may be more surprising to some. In fact, an owner-occupied dwelling can at once be viewed as an investment and consumer good, a situation that complicates how the numbers would be handled. The methods for calculating the shelter component differ widely from country to country, and Statistics Canada has adopted an approach that focuses on homeowners’ cost excluding the cost of buying the property. These costs are divided into six different elements: mortgage interest, replacement cost, property taxes, insurance, maintenance and repairs, and other variable expenses.

Significant differences are often noted between home prices and the owned accommodation component of the CPI. We have noted that existing home prices have risen much faster since 2002 (graph 9 on page 4). Individuals who include home prices in their perception of inflation tend to overestimate the cost of living compared with the official figures.
Sources: Canadian Real Estate Association, Statistics Canada and Desjardins, Economic Studies

Graph 9 – The CPI component for owned property has not increased as much as the home price component

Early Adjustments for Quality
Price index adjustments with respect to the quality of goods and services are critical to capture pure price movements only. If a good costs more simply due to a change in its quality, this should not be considered as inflation. On the other hand, if the price of a good does not change but its quality has been reduced, this has to be considered as inflation.

Measuring changes in quality is not always easy however, neither for individuals nor for statistical agencies. Perceptions can once again vary from the official figures. Quality does not always mean durability, but it does equate with a series of characteristics that define a good or service vs. another. For example, a car that comes equipped with air conditioning will be considered a better quality car compared to one that does not have this option.

To the extent possible, the product samples used to calculate the CPI are selected based on the likelihood that they will maintain an identical or equivalent quality over time and will be sold in identical or equivalent points of sale. This does not mean that regular adjustments are not required. The prices of better quality products are often used to make these adjustments in order to determine the value of the quality. More in-depth statistical analyses can be made, but no method is completely infallible.

Official Inflation May Rather Be Overstated
Our perceptions of inflation in a number of areas can veer away from the official figures. Human nature sometimes plays tricks on us, by shifting our attention to prices that are increasing the most. Keeping track of all the different methodologies used to determine the CPI in our personal perceptions is not easy to do either. Since certain prices are not included in the official calculations, such as home prices, this can skew our perceptions further. On average however, the official figures on the rate of inflation are a fairly good barometer of the cost of living. Some people may feel their cost of living rise faster while others may feel the opposite.

Those who steadfastly believe that inflation is underestimated may be even more surprised to learn that studies show that instead, Canada’s CPI overstates price advances1 by about 0.6% per year. This upward bias stems mainly from poorly captured changes in consumption habits. Up until very recently, the CPI reference basket was only updated every four years. And yet in any 4-year period, consumers usually make material adjustments in their consumption, usually by consuming less expensive products and services (substitution effect), thus in fact limiting cost of living increases. Now that the basket will be revised every two years, this bias is likely to be reduced. The adjustments made for product quality would also be a source of bias, as shown by studies and the growing market share enjoyed by big box stores and online retailers that often offer more competitive prices. Having a reference basket that is up to date is not enough—we also need to have a representative sample of points of sale.

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