Can you trust the CPI?

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The short answer is a resounding yes. The CPI is prepared in accordance with current international standards by people committed to objectivity and accuracy. But you must know what the CPI is measuring. It is not the movement in the street prices that you have to pay in the shops.

This point is critical if you are buying a life time annuity indexed to CPI or you have a retirement pension indexed to CPI. It is important also if you are merely making estimates of what your nest egg will earn after allowing for inflation. The inflation figure reported by CPI is not the "inflation" you will see in street prices.

The reason for this is a little understood fact about the CPI. It measures movement in prices of the fabled basket of goods at constant quality. And quality is anything but constant for the products sold in the shops. When did you last buy a so called durable and not be assailed by marketing that promoted the latest improved model? As a general rule you simply cannot buy the superseded model. Believe it or not, it is effectively the estimated movement in the price of the obsolete model that goes into the CPI.

If you want to understand this in depth you should read the ABS Information Paper No 6461.0 titled "CPI Concepts, Sources and Methods, 2011". It contains descriptions of many methods used to correct for quality change. Unfortunately, the figures used in the Information Paper are only illustrative. The ABS does not publish information about the impact of quality adjustments it makes to street prices. Some idea has to be gleaned from other sources.

Between 1994 and 1998 the USA price index (adopted and followed by the ABS with only minor adjustment for timing) for personal computers fell by 33.3% pa, of which 7.7% pa was due to a fall in the shelf price and 25.6 % pa was due to improving quality. That is an exteme example.

In 1996, the Boskin Commission in the USA investigated inadequacies in the estimation of the CPI by the Bureau of Labour Statistics. It was critical of the Bureau's work and concluded the Bureau was overlooking some quality adjustments that would have further reduced the USA CPI by 0.6%. It did not publish any estimate of the adjustments that the Bureau was already making but it can be assumed these covered the majority of quality improvements. Technology improvements have increased in pace substantially since 1996 and, today, a believable scenario is that the reduction of the USA CPI for all quality adjustments would be between 1% and 2% per annum.

Closer to home the 2009 Report of the Harmer Pension Review provided two standout examples of a disconnect between the CPI and real life observation. It said:

> *Over the past 20 years, the CPI index for the purchase of motor vehicles has increased by just 7.3 per cent. This in part reflects the extent to which cars today are better equipped. From a consumer perspective, where such quality upgrades are often taken as granted or involve changes that consumers may not necessarily have chosen to purchase, the estimate is seemingly at odds with the prices of any particular model of new car, which may have risen by some 25 to 50 per cent over the same period.*

> *A third area in which the pricing to constant quality approach to the CPI may differ from consumer experience concerns the cost of renting. While the CPI rental component increased by 22.9 per cent between December 1994 and December 2005, the average rent paid by private tenants, as surveyed in the ABS Survey of Income and Housing over the same period, increased by 41.2 per cent (ABS 2005–06). Again, much of this difference can be related to improvements in the quality of the rental stock.*

More recently, since 5 December 2019, the Australian Securites and Investment Commission have required calculations made to estimate the worth of a future superannuation or retirement product to take into account a default inflation rate of 3.2% which "reflects CPI of 2% and real wage growth of 1.2%, the latter of which reflects the cost of meeting increases in community living" (See ASIC Corporations (Generic Calculators) Instrument 2016/207 and ASIC Corporations (Amendment) Instrument 2019/514).

What all this means is that CPI indexation is sufficient to maintain a constant standard of living but <u>only measured in a world of constant quality</u>. That is a theoretical abstraction. It is not the world we live in. The steady improvement in quality is what powers the improvements in community living standards. What matters to every Australian is the reality of the prices they have actually to pay and that is why ASIC has decreed that CPI on its own is inadequate as a measure of price inflation.

An erosion of a pension by just 1% pa will after eighteen years depress that pension by 20% in the eighteenth year. If the erosion is 1.5% pa it will take only twelve years for the reduction in the pension to equal 20%.

The bottom line is that the community needs to appreciate that indexation by the CPI will not protect the real-world living standards of those on annuities and pensions.