Quality Adjustment Methods

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Abstract: The paper presents a unified approach to the problem of adjusting products for changes in quality using a consumer perspective. The basic assumption is that purchasers of a group of related products have identical homothetic preferences defined over the products and they maximize utility subject to expenditure constraints. Inflation adjusted carry forward or backward price adjustment can be put into this framework as can hedonic regressions and the estimation of Hicksian reservation prices for the missing products. Feenstra's Constant Elasticity of Substitution (CES) new products methodology also is a special case of the general methodology.

The paper is available on the IMF CPI website:

Diewert, W.E. (2021), "Quality Adjustment Methods", Draft Chapter 8 in Consumer Price Index Theory, Washington D.C.: International Monetary Fund.

https://www.imf.org/en/Data/Statistics/cpi-manual.