In practice, then, the index formula is as follows:

$$(3)\quad I_{i:o} = \frac{\sum (q_o p_{i-s})}{\sum (q_o p_o)} \times \frac{\sum (q_a p'_{i-1})}{\sum (q_a p'_{i-s})} \times \frac{\sum (q_a p'_{i-1})\left(\frac{p'_i}{p'_{i-1}}\right)}{\sum (q_a p'_{i-1})} \times 100$$

Thus, although the cost weight changes with every change in price, the implicit quantity (q_o) or (q_a) remains fixed between major weight revisions.

The long-term price relative for each priced item $\left(\frac{p_i}{p_o}\right)$ in reality is:

$$R_{i:o} = \left(\frac{p_1}{p_o}\right) \cdot \left(\frac{p'_2}{p_1}\right) \cdot \left(\frac{p''_3}{p'_2}\right) \cdot \;\ldots\ldots\ldots\; \cdot \left(\frac{p_i^{\prime\prime\prime\ldots\ldots\ldots}}{p_{i-1}^{\prime\prime\ldots\ldots\ldots}}\right)$$

That is, $R_{i:o}$ is the product of a number of short-term relatives. The superscripts on the p's indicate that these average prices are not necessarily derived from identical samples of outlets and specifications over long periods. This chaining of monthly, or quarterly, price relatives based on comparable specifications in successive periods allows the requisite flexibility to make substitutions of items, specifications, and outlets.