

$$\frac{\sum q_{ht} P_{ht}}{\sum q_{ht} P_{h0}} \times \frac{\sum q_{ht} P_{h0}}{1(\$)} = \frac{\sum q_{ht} P_{ht}}{\sum q_{h0} P_{h0}} \quad (7)$$

Yet, in view of some findings in the section which follows, observe in particular that the denominators of equation (6) and (7), valued 1, are not pure numbers, but absolute values: compound utility units in (6) and monetary dollars in (7). So they should not be left out or forgotten, though a simplification of, say, (7) as:

$$\frac{\sum q_{ht} P_{ht}}{\sum q_{ht} P_{h0}} \times \frac{\sum q_{ht} P_{h0}}{\sum q_{h0} P_{h0}} = \frac{\sum q_{ht} P_{ht}}{\sum q_{h0} P_{h0}} \quad (7a)$$

appears mathematically fully justifiable. But note down the fact that the first component of (7a) fails to express semantically an index formula at all, and the third component, too. Note that the numerator of the third component rightly represents a value in monetary dollars, its denominator, however, represents its value in utility dollars (there is a prime sign next to  $p_{h0}$ ). Moreover, the bold product property fails to be presented by the simplified form, (7a). Thus we are prepared enough for the issue coming up.

## 7. HOW THE COMMON INDEX NUMBER THEORY (CINT) DERIVES ITS SPECIAL FORMS OF INDEX NUMBER EQUATIONS

fundamentals at all. Instead, CINT applies the following approach. Firstly, the formula of the value index is set up by argument of evidence. Secondly, by way of economic considerations, the Laspeyres index form (be it a price, or a quantity index) is introduced; while, finally, the gap between the two index formulae, thus compiled, is filled in by dividing the value formula with the Laspeyres formula: i.e., by way of formal implication. This is the approach recommended by leading writers like R.G.D. Allen: "The Paasche quantity index is the value change deflated by the Laspeyres price index" (1975, p. 46). Similarly, Jazairy writes: "The Paasche quantity index is the implied quantity index to match the Laspeyres price index" (1983, p. 67). Diewert, among other authors, wrote to the same effect (1987, p. 769).

The issue appears somewhat ticklish for CINT because this theory does not dispose of  $F_2$  and  $F_3$  and even not of