

INDEX NUMBERS

Subscript 0 \Rightarrow Base year

1 \Rightarrow Current year

Kelly's Index (I_k)

$$I_k = \frac{\sum p_1 q}{\sum p_0 q} \times 100$$

Real Income & Deflation

$$\text{Real Wages} = \frac{\text{Nominal wages}}{I_f} \times 100$$

Walsh's Index (I_w)

$$I_w = \frac{\sum p_1 \sqrt{q_0 q_1}}{\sum p_0 \sqrt{q_0 q_1}} \times 100$$

$$\text{Real Income} = \frac{\text{Nominal Income}}{\text{CLI}} \times 100$$

Weighted Average Price Relative

$$P_{01} = \frac{\sum I_w}{\sum w}$$

Purchasing Power

$$\text{Purchasing Power} = \frac{100}{\text{CLI}}$$

CLI using Weighted Aggregative method

$$\text{CLI} = \frac{\sum p_1 q_0}{\sum p_0 q_0} \times 100$$

Link Relative (LR)

$$\text{LR} = \frac{\text{Price in current year}}{\text{Price in preceding year}} \times 100$$

Fixed Base Index (FBI)

$$(\text{FBI})_n = \frac{(\text{CBI})_n \times (\text{FBI})_{n-1}}{100}$$

CLI using Family Budget Method

$$\text{CLI} = \frac{\sum I_w}{\sum w}$$

Chain Base Index (CBI)

$$(\text{CBI})_n = \frac{(\text{FBI})_n}{(\text{FBI})_{n-1}} \times 100$$