

Combined growth in prices and quantities

Relative price increase: 3%

$$\frac{p_t}{p_{t-1}} = 1.03$$

Real quantity growth: 2%

$$\frac{x_t}{x_{t-1}} = 1.02$$

Growth in value (nominal growth):

$$\frac{p_t x_t}{p_{t-1} x_{t-1}} = \frac{p_t}{p_{t-1}} \frac{x_t}{x_{t-1}} = 1.03 * 1.02 = 1.0506 \approx 1.05$$

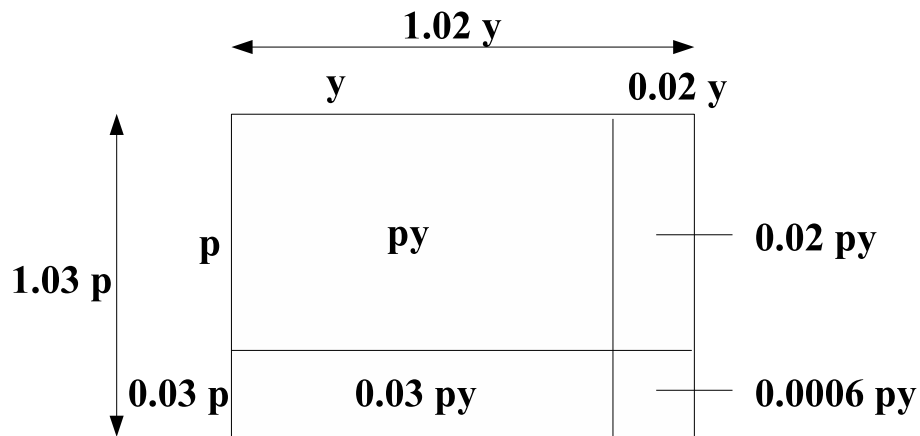


Figure 1: Growth in p and y