

$$\log(y_i) = \beta_0 + \log(x_i)\beta_1 + \epsilon_i$$

$$\frac{d\log(y_i)}{d\log(x_i)} = \beta_1$$

$$\frac{\frac{dy_i}{y_i}}{\frac{dx_i}{x_i}} = \beta_1$$

$$\beta_1 \approx \frac{\frac{\Delta y}{y}}{\frac{\Delta x}{x}}$$

$$\approx \frac{\% \Delta y}{\% \Delta x} \tag{1}$$

(1) for small changes.