Equações monografia

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Correlação de Pearson

$$r = \frac{\sum_{i=1}^{n}(x_i - \overline{x})(y_i - \overline{y})}{\sqrt{\sum_{i=1}^{n}(x_i - \overline{x})^2}\sqrt{\sum_{i=1}^{n}(y_i - \overline{y})^2}} \tag{1}$$

Compactada

$$r = \frac{Cov(X,Y)}{\sqrt{Var(x), Var(y)}} \tag{2}$$

$$r = \frac{Cov(X,Y)}{\sigma(x)\sigma(y)} \tag{3}$$

$$rk = \frac{Cov(x_t, x_{t-k})}{\sqrt{Var(x_t, x_{t-k})}} = \frac{Cov(x_t, x_{t-k})}{Var(x_t)} = \frac{\gamma_k}{\gamma_0} \tag{4}$$

Autocorrelação

$$\hat{} \tag{5}$$

$$\hat{r_k} = \frac{\sum_{t=k+1}^{T}(x_t - \overline{x})(x_{t-k} - \overline{x})}{\sum_{t=1}^{T}(x_t - \overline{x})\check{\text{s}}}$$

Teste De CHow

$$F = \frac{(SQR_R - SQR_{SR})/k}{(SQR_{SR})/(n_2 + n_3 - 2k)}$$

$$F_{[k,(n_1+n_2-2k)]}$$

Pressupoe

$$u_{2t} \sim N(0, \sigma^2) \;\; e \;\; u_{3t} \sim N(0, \sigma^2)$$

MOdelo log-log

$$lnY_i = \alpha + \beta_2 lnP_i + \beta_4 lnS_i + \mu_i$$

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$$Período \;\; de \;\; 1821 \;\; a \;\; 1900 : lnY_t = \alpha_1 + \alpha_2 lnP_t + \alpha_3 lnC_t + \alpha_4 lnS_t + \mu_t$$

$$Período \;\; de \;\; 1821 \;\; a \;\; 1850 : lnY_t = \lambda_1 + \lambda_2 lnP_t + \lambda_3 lnC_t + \lambda_4 lnS_t + \mu_{1t}$$

$$Período \;\; de \;\; 1851 \;\; a \;\; 1900 : lnY_t = \gamma_1 + \gamma_2 lnP_t + \gamma_3 lnC_t + \gamma_4 lnS_t + \mu_{2t}$$