

PP检验

OLS回归

参数估计

残差序列

$$\hat{u}_t$$

计算残差样本自协方差

$$\hat{\gamma}_j = T^{-1} \sum_{t=j+1}^T \hat{u}_t \hat{u}_{t-j}$$

$$\hat{\lambda} = \hat{\gamma}_0 + 2 \sum_{j=1}^q \left(1 - \frac{j}{q+1}\right) \hat{\gamma}_j$$

计算残差估计与rho的标准差

$$s^2 = \frac{1}{T-2} \sum \hat{u}_t^2$$

$$\hat{\sigma}_{\hat{\rho}} = \sqrt{\frac{s^2}{\sum y_{t-1}^2}}$$

计算Z-rho, Z-t, 查询DF临界值表