

(Box-Cox Power Transformation)

→ a long right tail(skewed to the right)

$$\tilde{y} = \begin{cases} \frac{y^\lambda - 1}{\lambda}, & \lambda \neq 0, \\ \ln y, & \lambda = 0 \end{cases} \quad (y > 0)$$

$\Rightarrow \Rightarrow$

($\lambda \rightarrow 0$) L'Hopital's rule

$$\lim_{\lambda \rightarrow 0} \frac{y^\lambda - 1}{\lambda} = \lim_{\lambda \rightarrow 0} y^\lambda \ln y = \ln y$$

$$\text{cf) } a^{u(x)} \rightarrow a^{u(x)} u'(x) \ln a$$