

Advanced Theory

Survival Analysis 2005

Problem for March 15, 2005

Prove: if

$$y_{ij} = b_0 + b_1 F_i + b_2 x_i + \epsilon_{ij}$$

(standard linear regression model where $F=0,1$ and X is a continuous measure)
and

$$y_{ij} = B_0 + B_1 F_i + \epsilon'_{ij}$$

then

$$E[\widehat{B}_1 - \widehat{b}_1] = E[\widehat{b}_2(\bar{x}_1 - \bar{x}_0)]$$