

Usual

$$Y_i = b_0 + b_1 X_{i1} + b_2 X_{i2} + \epsilon_i$$

fit the correct model, we obtain

$$\hat{y}_i = \hat{b}_0 + \hat{b}_1 X_{i1} + \hat{b}_2 X_{i2}$$

$$E_i = y_i - \hat{y}_i$$

$$= \overset{\approx 0}{(b_0 - \hat{b}_0)} + \overset{\approx 0}{(b_1 - \hat{b}_1)} X_{i1} + \overset{\approx 0}{(b_2 - \hat{b}_2)} X_{i2} + \epsilon_i$$

$$\approx \epsilon_i$$