

4.4 c. d.

$$\text{Model 1: } \frac{d \widehat{\text{RATING}}}{d \text{EXPER}} = 0.990.$$

$$\text{Model 2: } \frac{d \widehat{\text{RATING}}}{d \text{EXPER}} = \frac{15.312}{\text{EXPER}}$$

c.

For Model 1, the marginal effect is constant and equal to 0.990

d.

For Model 2, the marginal effect changing by EXPER

The marginal effect of 10.20 years of Experience

$$\frac{15.312}{10} = 1.5312$$

$$\frac{15.312}{20} = 0.7656$$

e.

Model 1 在排除無經驗者後 R^2 上升, 但

整體解釋力不足 Model 2 \Rightarrow Model 2 is better.

f. for Model 2: $\frac{d^2 \widehat{RATING}}{d EXPER^2} < 0$

表示邊際遞減，較符合現實情況
例如初學者進步幅度較專業的更快