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2C222007

Date :

$\Sigma X_i = 48,2 \quad \Sigma X_i^2 = 348,28 \quad \Sigma X_i Y_i = 50,82 \quad \bar{x} = 4,82$

$\Sigma Y_i = 10,3 \quad \Sigma Y_i^2 = 11,39 \quad \bar{y} = 1,03$

$$b = \frac{n\Sigma X_i Y_i - \Sigma X_i \Sigma Y_i}{n\Sigma X_i^2 - (\Sigma X_i)^2} = \frac{(10 \times 50,82 - 48,2 \times 10,3)}{(10 \times 348,28 - (48,2)^2)}$$

$b = 0,01012452$

$a = \bar{y} - b\bar{x} = 1,03 - 0,01012452\,(4,82) = 0,981199$

Jk total $= \Sigma Y_i^2 = 11,39$

$$\text{Jk regresi } a = \frac{(\Sigma Y_i)^2}{n} = 10,609$$

$$\text{Jk regresi } b/a = b\left[\Sigma X_i Y_i - \frac{\Sigma X_i \Sigma Y_i}{n}\right]$$

$$= 0,01012452\left[50,82 - \frac{(48,2)(10,3)}{10}\right]$$

$= 0,01188618$

Jk Residu = Jk total − Jk regresi a − Jk regresi b/a

$= 11,39 - 10,609 - 0,01188618$

$= 0,76911382$

Jk Tuna Cocok = Jk Residu - Jk Galat
= 0,769111382 - 0
= 0,769111382

Jk Galat = 0

RJk regresi = Jk regresi
= 0,01188618

RJk Tuna Cocok = $\frac{\text{Jk residu}}{k-2} = \frac{0,769111382}{10-2}$
= 0,096139275

RJk Residu = $\frac{\text{Jk residu}}{n-2} = \frac{0,769111382}{10-2}$
= 0,096139275

Koef Regresi :
Fhitung = $\frac{\text{Jk regresi } a}{\left(\frac{\text{Jk residu}}{n-2}\right)} = \frac{0,01188618}{0,096139275}$
= 0,1236

Fα : 1 ; 8 = 5,32

Uji linearitas :

$$F_{hitung} = \frac{(JK\ Tuna\ Cocok\ /(k-2))}{(JK\ Galat\ /(n-2))}$$

$$= \frac{(0,096139\,2275\ /\ 8)}{(\ 0\ /\ 8)} = \frac{0,0120}{0}$$

= Error

$F_{\alpha} : 8 ; 8 = 3,44$

Kesimpulan

1). Untuk menguji koefisien regresi ternyata Ho diterima, artinya koefisien arah regresi tidak ada artinya

2). Untuk menguji linearitas dalam kasus ini menjadi tidak relevan karena pembaginya yaitu JK galat bernilai 0 sehingga dapat diasumsikan terjadi penyimpangan atau overfitting.