Lampiran 17

Uji Homogenitas Ragam

Uraian	X1	X2	X3	Y
St Deviasi	7,942	7,171	6,546	9,339
Ragam	62,414	60,465	61,324	60,007
n	84	84	84	84

Uji Bartlett

Sampel	Dk	Si^2	Log Si^2	dk,Log Si^2
X1	83	63,071	1,799	149,317
X2	83	51,427	1,711	142,013
X3	83	42,853	1,632	135,456
Y	83	87,224	1,941	161,103
Jumlah	**332**			**587,889**

Menghitung ragam gabungan dari 4 sampel

$$S^2 = \frac{(dk_1 S_1^2) + (dk_2 S_2^2) + (dk_3 S_3^2) + (dk_4 S_4^2)}{(dk_1 + dk_2 + dk_3 + dk_4)}$$

$$S^2 = \frac{(83)(63,071) + (83)(51,427) + (83)(42,853) + (83)(87,224)}{(83 + 83 + 83 + 83)}$$

$$S^2 = \frac{4072,53 + 3951,31` + 4070,605 + 4296,05}{332}$$

$$S^2 = \frac{16390,495}{332} = 77,313$$

$LogS^2 = \log (77,313) = 1,888$

$B = (LogS^2)\ \Sigma dk = (1,888)(212) = 400,256$

χ^2 hitung $= (Ln\ 10)\ [B- (\Sigma dk(LogSi^2)]$

$= (2,302)(400,256 – 399,818)$

$= (2,302)(0.438)$

= 1,008

Dari perhitungan diperoleh nilai χ^2 hitung sebesar **1,008** sedangkan χ^2 tabel pada dk = k-1 = 4-1 = 3 sebesar **7,815.** Karena χ^2 hitung < χ^2 tabel maka ragam dari keempat variabel **homogen.**