

$$\frac{P}{S} = r + s_1 D + s_2 \frac{R}{S} + u \quad .1$$

$$PS = r + s_1 D + s_2 RS + u :$$

Model 1: OLS estimates using the 30 observations 1-30

Dependent variable: PS

VARIABLE	COEFFICIENT	STDERROR	T STAT	P-VALUE
const	477.079	88.6594	5.381	0.00001 ***
D	-0.228844	0.0550037	-4.161	0.00029 ***
RS	180.297	58.7841	3.067	0.00487 ***

Mean of dependent variable = 545.8

Standard deviation of dep. var. = 215.116

Sum of squared residuals = 643226

Standard error of residuals = 154.348

Unadjusted R-squared = 0.520685

Adjusted R-squared = 0.485181

F-statistic (2, 27) = 14.6652 (p-value = 4.88e-005)

Log-likelihood = -192.164

Akaike information criterion (AIC) = 390.328

Schwarz Bayesian criterion (BIC) = 394.532

Hannan-Quinn criterion (HQC) = 391.673

$$s_1 = -$$

$$s_2 = -$$

$$r =$$

$$\frac{P}{S} = 399.339 - 0.114057D + 186.935 \frac{R}{S} + e \quad .2$$

$$\frac{P}{S} = 559.571 - 0.298145D + 154.234 \frac{R}{S} + e$$

$$\frac{P}{S} = 559.571 - 160.233M - 0.298145D + 0.184088(M \cdot D) + 154.234 \frac{R}{S} + 32.7008(M \cdot \frac{R}{S}) + e \quad .3$$

$$H_0 : s_{M \cdot D} = 0 \quad .4$$

$$H_1 : s_{M \cdot D} \neq 0$$

$$H_0 \quad p\text{-value} = 0.13111 > 0.05$$

:CHOW

WALD

,F

.5

: WALD

:

$$\frac{P}{S} = 559.571 - 160.233M - 0.298145D + 0.184088(M \cdot D) + 154.234 \frac{R}{S} + 32.7008(M \cdot \frac{R}{S}) + e$$

$$\begin{matrix} UNRES \\ \Sigma e^2 = 582,102 \end{matrix} \quad R^2 = 0.566234$$

$$H_0 : S_M = S_{M \cdot D} = S_{M \cdot \frac{R}{S}} = 0$$

$H_1 : else$

:

:

$$\frac{P}{S} = 477.079 - 0.228844D + 180.297 \frac{R}{S} + e$$

$$\begin{matrix} RES \\ \Sigma e^2 = 643,226 \end{matrix} \quad R^2 = 0.520695$$

$$F = \frac{(643,226 - 582,102) / 3}{582,102 / (30 - 5 - 1)} = 0.84$$

:

$$F = \frac{(0.566234 - 0.520695) / 3}{(1 - 0.566234) / (30 - 5 - 1)} = 0.84$$

$$. H_0 \quad . F_{3,24,0.05} = 3.009 \quad 0.05 \quad "$$

: CHOW

$$H_0 : r^M = r^F, S_D^M = S_D^F, S_{\frac{R}{S}}^M = S_{\frac{R}{S}}^F$$

$H_1 : else$

$$\frac{P}{S} = 399.339 - 0.114057D + 186.935 \frac{R}{S} + e_1 \quad \Sigma e^2 = 287,270 \quad :$$

$$\frac{P}{S} = 559.571 - 0.298145D + 154.234 \frac{R}{S} + e_2 \quad \Sigma e^2 = 294,832 \quad :$$

$$\frac{P}{S} = 477.079 - 0.228844D + 180.297 \frac{R}{S} + e_3 \quad \Sigma e^2 = 643,226 \quad :$$

$$F = \frac{[643,226 - (287,270 + 294,832)] / 3}{(287,270 + 294,832) / (30 - 5 - 1)} = 0.84 \quad :$$

$$. H_0 \quad . F_{3,24,0.05} = 3.009 \quad 0.05 \quad "$$