

EE325 Participation credit #5

Restricted v.s. Unrestricted model

1. The demand for roses.

$$\ln Y_t = \beta_1 + \beta_2 \ln X_{2t} + \beta_3 \ln X_{3t} + \beta_4 \ln X_{4t} + \beta_5 X_{5t} + u_t \quad (1)$$

Where

Y =quantity of roses sold, dozens

X_2 = average wholesale price of roses, \$/dozen

X_3 = average wholesale price of carnations, \$/dozen

X_4 = average weekly family disposable income, \$/week

X_5 = the trend variable taking values of 1,2, and so on, for the period 1971 quarter 3 to 1975 quarter 2 in the Detroit Metropolitan area

Suppose someone maintains that roses and carnations are unrelated products in the sense that roses consumption is not affected by the price of carnations.

What is the restricted model and unrestricted model?

Unrestricted model:

Restricted model:

What is the null hypothesis statement?