

EE 325 class activity (19 October 2021)

Multiple regression

A variation of the wage-determination equation is as follows:

$$\widehat{W}_t = 1.073 + 5.288V_t - 0.116X_t + 0.054M_t + 0.046M_{t-1}$$
$$(0.797) \quad (0.812) \quad (0.111) \quad (0.022) \quad (0.019)$$
$$R^2 = 0.934 \quad df = 14$$

Where W = wages and salaries per employee (British pounds)

V = unfilled job vacancies in Great Britain as a percentage of the total number of employees in Great Britain

X = GDP per person employed

M = Import prices (British pounds)

M_{t-1} = Import prices in the previous (or lagged) year (British pounds)

(The estimated standard errors are given in the parentheses)

- Interpret the preceding equation.
- Test the overall significance of the observed regression.
- Which of the estimated coefficients are individual statistically significant?