Economics 468

November 7, 2020   **R. Davidson**

Assignment 2

The data for this assignment can be found here

https://russell-davidson.arts.mcgill.ca/e468/e468.as2.20.dat

There are 100 observations on four variables y, x_1, x_2, and x_3. Regress y on a constant and x_1, x_2, and x_3.

Obtain a number of estimates of the 4×4 covariance matrix of the OLS parameter estimate $\hat{\beta}$:

1. the standard OLS estimate $s^2(X^\top X)^{-1}$;

2. the four HCCMEs, HC_0, HC_1, HC_2, and HC_3;

3. versions of the Newey-West HAC estimator, with lag truncation parameters given by $p = 2, 3, 4, 5, 6, 20$.

Use each one of these 11 estimates in order to compute 11 standard errors for the estimate of the coefficient of x_3.