October 9, 2022

Question 3 : Pricing errors in FM (3 points),compulsory

Solve the exercise in slide n. 100 of Chapter 3 "SUR, GRS, CSR, Fama-MacBeth". Note : the question in slide n. 100 of Chapter 3 has two sub-questions (i), (ii) : answer to both of them.

For $T \to +\infty$

(i) Show $\hat{\epsilon} \xrightarrow{p} 0$

(ii) Show $\frac{1}{T}\sum_{t=1}^{T}(\hat{\epsilon}_t - \hat{\epsilon})(\hat{\epsilon}_t - \hat{\epsilon})' \xrightarrow{p} M_\beta \Omega M_\beta$