Econometric Theory

Final year module

Lecturer: **Marco R Barassi (/staff/profiles/business/barassi-marco.aspx)**

Weeks 1 to 6 cover: Maximum Likelihood Estimation in general; properties of the score, information, efficiency, consistency, asymptotic distributions. Tests based on MLE: Likelihood ratio, Wald and Lagrange Multiplier. Weeks 7 to 11 introduce stationary and non-stationary time series, unit root testing and cointegration. GARCH Models.

Learning outcomes

On completion of this module the student will be able to: construct the likelihood function for simple models, derive the score and information, MLE, and develop their properties; derive simple properties of some elementary time series models, and demonstrate important difference between stationary and non-stationary processes.

Assessment

- 2 hr written examination