ECON 623 ECONOMETRICS II

Purpose

This is an overview of time series econometrics, designed to introduce students to a range of material in stationary time series, nonstationary time series, multivariate time series, including unit root theory, state-space models, VAR models, and cointegrated models.

Content Outline

Topic 1: A review of asymptotic theory

Topic 2: Asymptotic theory for M-estimators

Topic 3: Stationary Time Series Models

Topic 4: Non-Stationary Time Series Models: Deterministic Trend, Unit Root, Explosive Root

Topic 5: State-space Models and Kalman Filter

Topic 6: VAR

Topic 7: Cointegration

Learning, Teaching and Office Hours:

This course will be taught in the second semester. There will be a three-hour lecture on each Thursday. Office hours are TBA.

Instructor:

Jun YU, room 5055, SESS bldg., extn. 0858, email: yujun@smu.edu.sg

Learning Resources

Prescribed Text:

Hamilton, J., *Time Series Analysis*, 1st edition, Princeton University Press, 1994.

Additional Reading:

White, H., *Asymptotic Theory for Econometricians*, second edition, Academic Press, 2001.

Fuller, W.A., *Introduction to Statistical Time Series*, second edition, Wiley, 1996.

Assessment:

40% of the final grade will be assessed on assignments.

The remaining 60% of the final grade will be assessed on the final exam.