ECONOMETRICS II

Texts:


H. Thiel, *Principles of Econometrics*, 1971. (Requested held at Reserve desk, Dewey library.)


Supplementary Texts:

T. Amemiya, *Advanced Econometrics*, 1985. (Requested held at Reserve desk, Dewey library.)


E. Malinvaud, *Statistical Methods of Econometrics* (2nd or 3rd ed.). (Requested held at Reserve desk, Dewey library.)

Students should not take this course for credit unless they have previously taken 14.382 or have the permission of the instructor. The course work will consist of three problem sets and a final examination. Satisfactory completion of the problem sets is required for the course.

\(\text{P}\) Denotes more difficult paper.

\(\dagger\) See http://www.jstor.org/journals
1. Introduction to Simultaneous Equation Models

Hausman, Section I-II, pp. 392-402.
Greene, Sections 15.1-15.2.
Ruud, Chapter 26 (pp. 637-710)
Theil, Chapter 9.

†Liu, "Underidentification, Structural Estimation, and Forecasting," in Hooper and Nerlove, eds., *Selected Readings from Econometrica* (28, 4 (October 1960)).
†Fisher, Frank, "On the Cost of Approximate Specification," in Hooper and Nerlove (29, 2 (April 1961)).

2. Identification

Hausman, Section III, pp. 402-407.
Greene, Section 15.3.
Ruud, Chapter 26 (pp. 711-718)
Theil, pp. 443-450, 489-495.

†Koopmans, "Identification Problems in Economic Model Construction," in Hood and Koopmans, eds., *Studies in Econometric Method*, pp. 27-48 (also in Hooper and Nerlove, pp. 159-179 (17, 2 (April 1949)).


3. Limited Information Estimation

Hausman, Section IV, Single Equation Estimation, pp. 408-413.
Greene, Sections 14.2.1 - 14.2.6.
Ruud, more Chapter 26 (pp. 718-721)


†White, Chapters 2-3; Chapter 4, pp. 61-69, 78-105; Chapter 5, pp. 107-115.

Hausman, Section IV, Reduced Form Estimation, pp. 417-418.
Greene, Sections 13.9 and 15.5.
Ruud, more of Chapter 26 (section 26.2)
Theil, pp. 294-311.
†Byron, "Testing Structural Specification Using the Unrestricted Reduced Form," 
Hausman, Section V, pp. 430-436.

5. Full Information Estimation–Three Stage Least Squares, Instrumental Variables, and FIML (LIML)

Hausman, Section IV, System Estimation, pp. 413-417.
Amemiya, Chapter 7, pp. 228-242.
Greene, Section 15.6.
Ruud, more of Chapter 26 (pp. 721-727)
Theil, pp. 508-527.
Hausman, Section IV, Maximum Likelihood Estimation (FIML and LIML), pp. 418-430.

6. Weak Instruments

Donald, S.G. and Newey, W.K., “Choosing the Number of Instrumental Variables,” Econometrica, 2001


†Morimune, K., “Approximate Distribution of k-Class Estimators When the Degree of Overidentifiability is Large Compared with the Sample Size,” *Econometrica* 51, (1983), 821-841.

7. Nonlinear Simultaneous Equation Models/Generalized Method of Moments (GMM)

*Hausman, Sect. VI, Griliches and Intriligator, pp. 436-444.
Greene, Sections 10.4, 14.4, 15.5.2c, 15.6.3
Ruud, Chapter 21
Amemiya, Chapter 4