

*Required Text:*

A.C. Cameron and P.K. Trivedi (2005), *Microeconometrics*, Cambridge University Press.

*Recommended Texts:*

G.S. Maddala (1983), *Limited Dependent and Qualitative Variables in Econometrics*, Cambridge University Press.

T. Amemiya (1985), *Advanced Econometrics*, Harvard University Press.

1. Qualitative Choice Models — Linear Probability; Probit; Logit; Multinomial Probit; Conditional Logit; Nested Logit; Ordered and Sequential Outcomes; MLE; Single Index Model; Semiparametric Estimation; Maximum Score; Smoothed Maximum Score; Specification Tests; etc.

*Required Readings:*

Cameron and Trivedi (2005), ch. 14 and 15.

*Recommended Readings:*

Maddala (1983), ch. 2 and 3.

Amemiya (1985), ch. 9.

Manski, C.F. (1975), “Maximum Score Estimation of the Stochastic Utility Model of Choice”, *Journal of Econometrics*, 3, 205-228.

Horowitz, J.L. (1992), “A Smoothed Maximum Score Estimator for the Binary Response Model”, *Econometrica* 60, 505-531.

Hsiao, C. and B.H. Sun (1999), “Modeling Survey Response Bias — With an Application to the Demand for an Advanced Electronic Device”, *Journal of Econometrics* 189, 15-39.

Horowitz, J.L. (1993), “Semiparametric and Nonparametric Estimation of Quantal Response Models”, in *Handbook of Statistics*, vol. 11, ed. by G.S. Maddala, C.R. Rao and H.D. Vinod, Amsterdam: Elsevier.

2. Sample Selection Models — truncated and censored data; MLE; Heckman two-stage estimator; symmetrically trimmed Least Squares estimator; semi-parametric estimation; specification analysis; simultaneous equation models; coherency condition; etc.

*Required Readings*

Cameron and Trivedi (2005), ch. 16.

*Recommended Readings:*

Maddala (1983), ch. 6,7,8 and 9.

T. Amemiya (1985), ch. 10.

Nelson, F.D. (1977), "Censored Regressions with Unobserved Stochastic Censoring Thresholds", *Journal of Econometrics*, 6, 309-327.

Ahn, H. and Powell, J.L. (1993), "Semiparametric Estimation of Censored Selection Models with a Nonparametric Selection Mechanism", *Journal of Econometrics*, 58, 3-29.

Robinson, P.M. (1982), "On the Asymptotic Properties of Estimators of Models Containing Limited Dependent Variables", *Econometrica*, 50, 27-41.

Hsiao, C. and C. Kim (1990), "A Statistical Perspective on Insurance Rate-Making", *Journal of Econometrics*, 44, 5-24.

Andrews, D.W.K. and M.M.A. Schafagans (1998), "Semiparametric Estimation of the Intercept of a Sample Selection Model", *Review of Economic Studies*, 65, 497-517.

Chen, S. (1999), "Distribution-Free Estimation of the Random Coefficient Dummy Endogenous Variable Model", *Journal of Econometrics*, 91, 171-199.

Hsiao, C., Y. Shen, B. Wang and G. Weeks (2007), "Evaluating the Impacts of Washington State Repeated Job Search Services on the Earnings of Prime-Age TANF Recipients", *Journal of Applied Econometrics*, 22, 453-475.

Liu, E., C. hsiao, T. Matsumoto and S. Chou (2009), "Maternal Full-Time Employment and Overweight children: Parametric, Semi-parametric and Non-parametric Assessment", *Journal of Econometrics*, 152, 61-69.

3. Program Evaluation — Selection on observables and unobservables; Propensity Score Matching; Difference-in-difference estimator; regression discontinuity; local instrumental variable estimator; etc.

*Required Readings:*

Cameron and Trivedi (2005), ch. 25.

*Recommended Readings:*

Rosenbaum, P. and D.B. Rubin (1983), "The Central Role of Propensity Score in Observational Studies for Causal Effects".

Imbens, G.W. and T. Lemieux (2008), "Regression Discontinuity Designs: A Guide to Practice", *Journal of Econometrics*, 142, 615-635.

Angrist, J.D., G.W. Imbens, and D.B. Rubin (1996), "Identification of Causal Effects Using Instrumental Variables", *Journal of the American Statistical Association*, 91, 444-455.

- Dehejia, R.H. and S. Wahba (1999), "Re-evaluating the Evaluation of Training Programs", *Journal of the American Statistical Association*, 94, 1053-1062.
- Heckman, J.J. and E.J. Vytlačil (2001), "Local Instrumental Variables", in *Nonlinear Statistical Modeling*, ed. by C. Hsiao, K. Morimune, and J.L. Powell, Cambridge, U.K.: Cambridge University Press.
- Hahn, J. (1998), "On the Role of Propensity Score in Efficient Semiparametric Estimation Average Treatment Effects", *Econometrica*, 66, 315-331.
- Hsiao, C., Y. Shen, B. Wang and G. Wang (2008), "Evaluating the Effectiveness of Washington State Repeated Job Search Services on the Employment Rate of Prime-Age Female Welfare Recipients", *Journal of Econometrics*, 145, 98-108.
- Damronplisit, K., C. Hsiao and X. Zhao (2009), "Decriminalization and Marijuana Smoking Prevalence: Evidence from Australia", *Journal of business and Economic Statistics*.