

Sociology 622
Limited and Qualitative Dependent Variable Models
Fall semester, 2006
Thursday, 3:00 – 4:50 PM

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The readings for this course will consist of:

Texts:

J. Scott Long. 1997. *Regression Models for Categorical and Limited Dependent Variable Models*. Thousand Oaks, CA: Sage. [**text**]

J. Scott Long and Jeremy Freese. 2003. *Regression Models for Categorical Dependent Variables Using Stata*. Revised Edition. College Station, TX: Stata Press. [**cat vars using stata**]

[Available on-line through the library:]

Richard Breen. 1996. *Regression Models: Censored, Sample Selected, or Truncated Data*. Sage University Papers: Quantitative Applications in the Social Sciences, number 111. [**censored data**]

[Supplementary and in Computer Lab:]

Mario A. Cleves, William V. Gould, and Robert G. Gutierrez. 2004. *An Introduction to Survival Analysis Using Stata*. College Station, TX: Stata Press. [**surv anal using stata**]

Sep. 7 Probability distributions, survival and hazard functions. Introduction to class data file.
Chs. 1, 2, & 3 of cat vars using stata. Access Stata file limdep06.dta.
Ch. 1 of text.

Sep 14. Introduction to maximum likelihood estimation. Binary logit and probit models.
Text Ch. 2: 11-15, 20-22, 25-33.
Text Ch. 3: 34-47, 52-54, 61-84.
Recommended but more difficult: Text, Ch. 4, pp. 85-98, 109-113.
Ch.4 of cat vars using stata.
Computer exercise 1 assigned. Due September 21.

Sep 21. Models with more than two nominal outcomes: ordinal and multinomial logit and probit.
Text Ch. 5: 114-145.
Text Ch. 6: 148-155 [skip Sec. 6.2.3], 156-178.
Chs.5 and 6 of cat vars using stata.
Computer exercise 2 assigned. Due Oct. 5

Sep 28. No class.

Oct 5 Applications of the logit and probit models

Clem Brooks. 2000. "Civil Rights Liberalism and the Suppression of a Republican Political Alignment." *American Sociological Review* 65: 483-505. Available at: www.jstor.org.

Pande, Rohini P. 2003. "Selective Gender Differences in Childhood Nutrition and Immunization in Rural India: The Role of Siblings." *Demography* 40: 395-418. Available at: www.jstor.org

- Short summaries of above articles due.

Oct 12. Treatment Effects Models.

Herbert L. Smith. 1997. "Matching with Multiple Controls to Estimate Treatment Effects in Observational Data." *Sociological Methodology* 27: 325-353. Available at: www.jstor.org.

David J. Harding. 2003. "Counterfactual Models of Neighborhood Effects: The Effect of Neighborhood Poverty on Dropping Out and Teenage Pregnancy." *American Journal of Sociology* 109: 676-719. Available on-line through Hopkins library.

Recommended: Christopher Winship and Stephen L. Morgan. 1999. "The Estimation of Causal Effects from Observational Data." *Annual Review of Sociology* 25: 659-706. Available at: www.annualreviews.org.

- Short summaries of above articles due.

Oct 19. Introduction to censored and truncated regression models. The tobit model.

Text Ch. 7, 187-210.

Computer exercise 3 assigned. Due. Oct. 26.

Oct 26. The sample selection problem / Endogeneity in causal modeling

Ch. 7: 215-216.

Breen, 1-45, 57-72.

Christopher Winship and Robert Mare. 1992. "Models for Sample Selection Bias." *Annual Review of Sociology* 18: 327-350. Available at: www.annualreviews.org.

Computer exercise 4 assigned. Due Nov. 2.

Nov 2. Applications of the censored regression model and of sample-selection-bias models.

John Walton and Charles Ragin. 1990. "Global and National Sources of Political Protest: Third-World Responses to the Debt Crisis." *American Sociological Review* 55: 876-890. Available at: www.jstor.org.

Hughes, Marion R. 1997. "Sample Selection Bias in Analysis of the Political Democracy and Income Inequality Relationship." *Social Forces* 75: 1101-1117. Available at: www.jstor.org.

Betsy Sleath and Ya-Chen Tina Shih. 2003. "Sociological Influences on Antidepressant Prescribing." *Social Science & Medicine* 1335-1344. Available through Hopkins Library.

- Short summaries of above articles due.

Nov 9. Hazard Models / Survival Analysis

Computer exercise 5 assigned. Due Nov. 16.

Nov 16. Hazard Models / Survival Analysis, continued

Jennifer S. Barber, S. A. Murphy, W. G. Axxin, and J. Maples. 2000. "Discrete-Time Multilevel Hazard Analysis." *Sociological Methodology* 30: 201-235. Available at: www.jstor.org.

Nov 23. No class. (Thanksgiving)

Nov 30. Applications of Hazard Models

Computer exercise 5 assigned. Due Dec. 8.

Zheng Wu and T. R. Balakrishnan. 1995. "Dissolution of Premarital Cohabitation in Canada." *Demography* 32: 521-532. Available at: www.jstor.org.

Laura Porter, et al. 2004. "HIV Status and Union Dissolution in Sub-Saharan Africa: The Case of Rakai, Uganda." *Demography* 41: 465-482. Available through Hopkins library.

• Short summaries of above articles due.

Dec 7. General Problems in Causal Modeling

Robert Moffitt. 2005. "Remarks on the Analysis of Causal Relationships in Population Research." *Demography* 43: 91-108. Available through Hopkins library.

Dec 14. Open-book, open-note Final.