Econometrics 220C

Department of Economics, UCSD Spring 2015

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Economics #210 Office Hours: Fridays 3:00-5:00

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Sections: On Fridays, time to be announced. Start on April 10.

Course Outline

Econ 220C covers the standard models used in the econometric analysis of panel data and cross-sectional data. The material is divided into the following four sections:

<u>Panel Data Models:</u> Applies to datasets that follow cross sections of individuals through time. We will study tools for estimating both (1) Static Panel Data Models and (2) Dynamic Panel Data Models.

<u>Extremum Estimators</u>: We will develop a general asymptotic framework for establishing the consistency and asymptotic normality of estimators defined as optimums of criterion functions. Special cases of our analysis will include Maximum Likelihood Estimation and Generalized Method of Moments.

<u>Limited Dependent Variables:</u> Employing the theory of extremum estimators, we will study standard non-linear models used for censored/truncated and discrete valued data. Special cases will include discrete choice Probit/Logit and censored regressions such as Tobit.

Advanced Topics: Time permitting we will introduce concepts in Identification and Partial Identification.

Web Page

The course materials will be posted on ted.ucsd.edu, including all the class notes. These notes were generously prepared by Yixiao for this class and are an excellent resource. Do not circulate them, or make them publicly available, without asking for his permission first.

Throughout the quarter I will make announcements through the mail function in Ted. Please set up a forwarding address if you prefer to get the announcement in your regular email account.

Grading There will be 4 Problem Sets and a Final Exam.

<u>Problem Sets:</u> (35% of Final Grade) You may form a group with no more than three people and work together on the problem sets. Each student must hand in their own write up of the answer with the names of other students who helped in the problem set.

1

<u>Final Exam</u>: (65% of Final Grade) Will be a take home exam open book and open notes, but no discussion. The only people you can talk with about this exam are the TA and myself.

Textbook

Hayashi F., "Econometrics". Princeton University Press, 2001.

Woolridge J., "Econometric Analysis of Cross Section and Panel Data". MIT Press, 2010.

Additional References

Amemiya T., "Advanced Econometrics". Harvard University Press, 1985.

Arellano M., "Panel Data Econometrics". Oxford University Press, 2003.

Greene W., "Econometric Analysis". Prentice-Hall, 2005.

HSIAO C., "Analysis of Panel Data". Cambridge University Press, 2005.