Part IIA Paper 3 Theory and Practice of Econometrics I
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Paper Content
This paper is an introduction to Econometrics which builds on the material previously covered in Paper 3 of Part I. The aims of this paper are to introduce students to a number of econometric techniques which are used by economists to analyze economic behavior, and to give them experience in applying these techniques to practical problems.

Lectures
There are two lecture courses associated with this paper:

Introduction to Econometrics I (Dr. O. Kitov, 16 lectures, weeks 1-8, Michaelmas Term)

Introduction to Econometrics II (Dr O. Kitov, 16 lectures Micro and Macro econometrics weeks 1-8)

Objecties of the Paper
By the end of this paper, students should have acquired a basic understanding of the following concepts and methods:
- The concepts of an estimator and a test statistic, and of associated sampling distributions;
- the use of multiple regression models to learn about economic behavior;
- the use and interpretation of simple diagnostic tests in the context of the multiple regression model;
- the concept of Endogeneity and Instrumental Variables, and Simultaneous Equations
- Simple extensions of the multiple regression model to cases where the variable to be explained is the outcome of a binary choice, or where the dataset covers a number of distinct units which are observed over time (*panel data*)
- the concept of a stochastic process, and the distinction between stationary and nonstationary processes;
- the univariate analysis of economic time series, including the use of tests for nonstationarity.

Supervisions
Problem sets corresponding to the lecture material will be distributed, and college supervisors may go through one or more of these problems.

Computing
Programming and STATA classes are available for students. Full details of how to register for these sessions will be circulated.
Use of the package STATA will be demonstrated during lectures and classes and the Faculty Computer Officer will be available to help students with computing problems. The Faculty's site license for STATA allows students to install a copy of STATA on their own laptop or computer. Further information is available from the **IT Helpdesk Email:** it@econ.cam.ac.uk.

Preliminary Readings and Course Texts
Wooldridge, Jeffrey, M: Introductory Econometrics: A Modern Approach, South-Western.
Stock, J H and Watson, M W: Introduction to Econometrics, Harlow- Pearson.

Examination
Project: Questions released and project to be completed in approximately the first week of Easter term. Further details in Lecture.

For details of the examination structure, please refer to the Form and Conduct Notice pages on Moodle.