Course Outline for EC 901: Analysis of Financial Data

The official course outline is available on the teaching section of the departmental website: http://www.strath.ac.uk/economics/teaching/. Details on course level, credits, prerequisites and assessment are provided there. The purpose of this unofficial outline is to provide additional details not available on the official outline.

Lecturer: Gary Koop, Sir William Duncan Building Room 4.06. Office hour: Tuesday 3-4. Email: gary.koop@strath.ac.uk

Tutor: Darryl Holden, Sir William Duncan Building Room 6.06. Office hours: Monday 3-4 and Thursday 3-4. Email: d.holden@strath.ac.uk

Website: The address of my website is http://personal.strath.ac.uk/gary.koop/. On this you will find a link to this course, Analysis of Financial Data. I will use the website extensively for announcements and course materials (i.e. problem sheets, copies of the overheads used in lectures, a mock exam paper, details about the empirical project and other materials will all be placed there).

Module Organization: This module will be taught using a combination of lectures and computer laboratory classes. There will be 12 hours of lectures and 6 hours of computer labs.

Lecture Schedule: There will be 2 lecture hours per week (Tuesday 1-3) for weeks 7 through 12 of Semester 2.

Tutorial Schedule: There will be one computer lab hour per week for weeks 7 through 12 of Semester 2.

Assessment: There will be a 2 hour written examination counting for 50% of the total mark for the course. A mock exam paper will be made available on the course website. This will illustrate the structure of the exam. To give an idea of what is expected of you, sample answers will be provided (and, if time permits, discussed in a lecture).

The remaining 50% of the assessment for this module will come from an empirical project, in which you are required to apply the techniques learned in the course with a financial data set. Details of the project will be made available on the course website and discussed in the lectures.

Reading: The textbook for this course will be Analysis of Financial Data by Gary Koop, published by John Wiley and Sons.

You may already have this textbook from your earlier course. This course will focus on Chapters 8 through 12 of this book. I will assume you already know the material in Chapters 1 through 7 (i.e. basic data analysis including multiple regression).

Course Content

Note: Chapter citations are from my textbook.

1. A quick review of regression for cross-sectional data (Chapters 1 through 7)
   Example: The determinants of market capitalization.

2. Regression with lagged explanatory variables (Chapter 8)
   Example: The effect of news on market capitalization.

3. Univariate time series analysis (Chapter 9)
   Example: Stock prices on the New York Stock Exchange.

4. Regression with time series variables (Chapter 10)
   Examples: The effect of financial liberalization on economic growth.
   Cointegration between spot and forward exchange rates.

5. Regression with time series variables with several equations (Chapter 11)
   Examples: Do stock price movements in one country affect another?
   What moves the stock and bond markets?
   Consumption, aggregate wealth and expected stock returns.

6. Financial volatility (Chapter 12)
   Examples: Volatility in stock prices.