ECON90050
Quantitative Decision Making 3

SUBJECT GUIDE

Semester 1, 2013

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Subject Outline

This subject is an extension of the econometric techniques you learnt from ECON90049 Quantitative Decision Making 2 or its equivalent. The focus of this course is to set up valid statistical models and interpret key results for making decision in business and economics.

Topics will include modelling time series, stochastic regressors, endogenous variables, binary variables, count data and panel data. All these modelling techniques can be applied in accounting, consulting, marketing, and human resources.

All empirical works are to be computed by EViews.

Prerequisites

ECON90049 Quantitative Decision Making 2 or its equivalent

Contact Details

Maurice Ng
Office Hours: Mon, Tue & Fri 1:00pm – 2:00pm
Office: Room 541, 5th floor, Arts West Building (before Wed 3rd April, 2013)
        Room 345, 3rd floor, FBE Building (on and after Wed 3rd April, 2013)
Email: wng@unimelb.edu.au
Lectures and Tutorial

One 2-hour lecture every Tuesday at 2:15 – 4:15pm followed by a 1-hour tutorial at 4:15 – 5:15pm. Both lecture and tutorial are to be held at the Spot-3010 computer lab.

Lecture Schedule

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<tr>
<th>Week</th>
<th>Topics</th>
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<tr>
<td>1</td>
<td>Time series modelling (I): Trend, structural break &amp; seasonality</td>
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<td>2</td>
<td>Time series modelling (II): Behavioural persistence and cycle</td>
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<td>3</td>
<td>Time series modelling (III): Stationarity &amp; random walk model</td>
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<td>4</td>
<td>Time series modelling (IV): Univariate error correction model</td>
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<tr>
<td>5</td>
<td>Modelling stochastic regressors: Instrumental variable methods</td>
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<td>6</td>
<td>Modelling endogenous variables: Two-stage least squares methods</td>
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<td>7</td>
<td>Regression on discrete variables (I): Linear probability model</td>
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<td>8</td>
<td>Regression on discrete variables (II): Probit &amp; ordered probit models</td>
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<td>9</td>
<td>Regression on discrete variables (III): Poisson &amp; negative binomial models</td>
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<tr>
<td>10</td>
<td>Panel data estimation (I): Fixed effects model</td>
</tr>
<tr>
<td>11</td>
<td>Panel data estimation (II): Random effects model</td>
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<tr>
<td>12</td>
<td>Course review &amp; exam overview</td>
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Reading

The textbook used in ECON90049 Quantitative Decision Making 2 continues to serve well for the this course.


Other textbooks serve equally well include:


Assessment

10% Individual assignment #1 due at 4:00pm on Mon 8th Apr
10% Individual assignment #2 due at 4:00pm on Mon 29th Apr
10% Individual assignment #3 due at 4:00pm on Mon 20th May
70% A 2-hour closed-book final exam during the exam period. Time and venue will be available towards the end of the semester.

Plagiarism and Collusion

Presenting material from other sources without full acknowledgement (referred to as plagiarism) is heavily penalised. Penalties for plagiarism can include a mark of zero for the piece of assessment or a fail grade for the subject.

Plagiarism is the presentation by a student of an assignment identified as his or her own work even though it has been copied in whole or in part from another student’s work, or from any other source (e.g. published books, web-based materials or periodicals), without due acknowledgement in the text.

Collusion is the presentation by a student of an assignment as his or her own work when it is, in fact, the result (in whole or in part) of unauthorised collaboration with
another person or persons. Both the student presenting the assignment and the student(s) willingly supplying unauthorised material are considered participants in the act of academic misconduct.

For more information, please visit the website at:
http://academichonesty.unimelb.edu.au/turnitin/

Special Consideration

Students who have been significantly affected by illness or other serious circumstances during the semester may be eligible to apply for Special Consideration.

The following website contains detailed information relating to who can apply for Special Consideration and the process for making an application:
http://gsbe.unimelb.edu.au/students/services/special_consideration

Late Submission

Late submissions must be approved by the subject co-ordinator.

Late assignments, where approval for late submission has not been given, will be penalised at the rate of 20% of the total mark per day, or part thereof, for up to 5 days, at which a mark of zero will be given.
Further Assistance

_FBE Centre for Excellence in Learning and Teaching_

The FBE Centre for Excellence in Learning and Teaching (CELT) provides services and resources to enhance your learning in Business and Economics.

Maximise your academic success by taking part in CELT services that develop:

- Skills in research, referencing and academic writing
- Mastery of different assignment types
- Effective study techniques
- Abilities to learn effectively with your peers
- Transition to the faculty and understanding of academic expectations

The Centre also provides an extensive range of helpsheets that can enhance your academic performance in Business and Economics. These are available or online or at the Centre.

Visit the CELT site [www.fbe.unimelb.edu.au/celt](http://www.fbe.unimelb.edu.au/celt) to learn more and get involved.