

NATIONAL UNIVERSITY OF SINGAPORE
Faculty of Business Administration
Department of Strategy & Policy

BSP4513 Econometrics: Theory & Practical Business Applications

Lecturer: Associate Professor Toh Mun Heng
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Session: Semester I 2015/2016

Course Objective & Description:

When a university graduate presents himself/herself to the business world, it carries a pertinent and distinct advantage that he/she had done a course in **econometrics**, and that is explicitly stated in his/her *resume*. This course to be introduced is not about tortuous algebra and mathematical proofs but will slowly but surely immerse students into a state of appreciation and mastery of basic skill in data analysis, econometric evaluation and forecasting. These are essential skills that are well appreciated and valued by 21st century knowledge based enterprises in the digital business world. They need executives that are able to back their **research, analysis**, suggestions and advice with adequate quantitative and empirical support.

Econometric tools covered in this module can be used to analyse a wide range of issues from economics, finance, business studies and the other social sciences. The techniques and methodological approaches introduced in the course will enable students to think of and design appropriate strategies and solutions to achieve the desired objectives.

This course has no pre-requisites. In this revised version of the module, the approach is to apply the practical aspects of regression analysis to some interesting issues and without adopting an excessively esoteric and/or mathematical approach. Examples from economics, finance, marketing and other disciplines will be used for exposition of methodologies, case studies and tutorial exercises.

Basic Text:

Baddeley M.C. and D.V. Barrowclough (2009) **Running Regressions: A Practical Guide...**; Cambridge University Press. (Referenced as B&B)

Supplementary Texts

Gujarati D. & Porter D. (2010) **Essentials of Econometrics**, 4th edition, N.Y.: McGraw-Hill. (Referenced as GP)

Dennis Halcoussis (2005) **Understanding Econometrics**, USA: Thomson*South-Western. (Referenced as DH)

RC Hill, WE Griffiths, GC Lim(2011) **Principles of Econometrics** (4th ed): John Wiley & Son.

Woolridge J.M.(2009) **Introductory Econometrics: A Modern Approach**, 4th edition, South-Western

Topics covered in the Course:

	Topics	Chapter in B&B (4th ed)	Chapter in GP (4th ed)	Chapter in DH
1	What is meant by the Econometric Approach? Introduction to Ordinary Least Squares	1	1	1
2	Running SRM: Global Poverty & Economic Growth	2	2	2
3	Running SRM: Functional form : Elasticity measures in Air Travel Demand	3	5	5.5
4	Hypothesis Testing: Health Expenditure & Quality of Life	4	3	3
5	Running MRM: Housing Demand in the UK	5	4 and 6	4
6	Running MRM: Heteroscedasticity: R&D, invention and innovation;	6	9	8
7	Running MRM: Autocorrelation: Tourism & Environment	7	10	7
8	Model Misspecification: Omitted variables; Consequences & Ramsey Test	8	7	13
9	Structural Breaks; non-stationarity & spurious regression: Venture capital & computing investment in USA	9	12.2, 12.3 and 12.5	11
10	Error Correction Model: Consumption and the multiplier in UK.	10	12.4	11
11	Panel Estimation: Divorce & Income	11		9
12	Logit and Probit Model: War and poverty	12	12.6	12
13	Simultaneous Equation Model: Macro econometric model estimation	Notes	11	10

Course Assessment:

Class Assignment, Quiz & Attendance	20%
Project Report and Presentation*	30%
End of Term Test (Open Book)	50%
Total	100%

*A report of the project will be submitted for assessment and also the findings will be presented to the class during the last two weeks of the semester.

ACADEMIC HONESTY & PLAGIARISM

Academic integrity and honesty is essential for the pursuit and acquisition of knowledge. The University and School expect every student to uphold academic integrity & honesty at all times. Academic dishonesty is any misrepresentation with the intent to deceive, or failure to acknowledge the source, or falsification of information, or inaccuracy of statements, or cheating at examinations/tests, or inappropriate use of resources.

Plagiarism is 'the practice of taking someone else's work or ideas and passing them off as one's own' (The New Oxford Dictionary of English). The University and School will not condone plagiarism. Students should adopt this rule - You have the obligation to make clear to the assessor which is your own work, and which is the work of others. Otherwise, your assessor is entitled to assume that everything being presented for assessment is being presented as entirely your own work. This is a minimum standard. In case of any doubts, you should consult your instructor.

Additional guidance is available at:

<http://www.nus.edu.sg/registrar/adminpolicy/acceptance.html#NUSCodeofStudentConduct>

Online Module on Plagiarism:

<http://emodule.nus.edu.sg/ac/>