School of Economics and Finance

ECON 423: MACROECONOMIC MODELLING OF THE NEW ZEALAND ECONOMY

Trimester One 2010

COURSE OUTLINE

Names and Contact Details

Contact is best initiated by email or through making an appointment
The Course Coordinator is: Professor Viv Hall
Room: RH 401 in Rutherford House, 23 Lambton Quay
Voice/Message: (04) 463 5081
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Trimester Dates

Teaching Period: Monday 1st March – Friday 4th June 2010
Study Period: Monday 7th June – Thursday 10th June 2010
Examination Period: Friday 11th June – Wednesday 30th June 2010 (inclusive)

Class Times and Room Numbers

Wednesdays 2.40 p.m. – 4.30 p.m.
RWW 128

Pre-requisite: ECON 305, together with suitably strong quantitative/econometric preparation; ECON 402 and ECON 403 would be ideal co-requisites, if not already completed.

Withdrawal from Courses:

Information available via

Withdrawal dates: Late withdrawals with Associate Dean (Students) permission
(See Section 8: Withdrawals - from the Personal Courses of Study Statute)
http://policy.vuw.ac.nz/Amphora!~policy.vuw.ac.nz~POLICY~00000001743.pdf

Withdrawal dates: refunds:
http://www.victoria.ac.nz/home/admisenrol/payments/withdrawlsrefunds.aspx
Course Content

ECON 423 features macroeconomic and structural modelling of the New Zealand economy, blending relevant economic theory, applied econometric and policy relevant material. In 2010, the modelling will place most focus on the Reserve Bank of New Zealand’s new core macroeconomic model, KITT, and on selected applied/computable general equilibrium (AGE/CGE) modelling.

Course Learning Objectives

By the end of this course students should be able to
1. assess the key insights from best practice international modelling, and recent New Zealand policy applications
2. critically evaluate the relative strengths and weaknesses of comparative static and dynamic approaches to computable general equilibrium modelling
3. explain and assess the relative roles of deterministic and stochastic macroeconomic models, and their steady state and dynamic properties
4. display a sound appreciation of the roles of macroeconomic and structural models in forecasting, projection and policy processes

Course Delivery

There will be 12 meetings during the trimester. Guest lecturers will lead several sessions. The first four two-hour lectures will feature an introduction to structural/ CGE modelling. The first session will feature introductory concepts, including how to assess structural change and the role of interindustry analysis. The next two sessions will complete our coverage of essentially short run comparative static CGE modelling concepts and applications, and the fourth session will feature recent developments in dynamic/intertemporal CGE modelling. The eight macroeconomic modelling sessions will cover: macroeconomic modelling processes, including evaluation of the relative strengths and weaknesses modelling and non-modelling approaches; underlying macroeconomic concepts and ideas; applications featuring the National Bank of New Zealand model (NBNZ-DEMONZ), and the RBNZ’s FPS model; and four sessions on the structure, steady state and dynamic properties, and evaluation methods of the RBNZ’s Dynamic Stochastic General Equilibrium (DSGE) model KITT (Kiwi Inflation Targeting Technology). Reference will also be made, where appropriate, to features of the recent write-up of New Zealand Treasury’s NZTM model.

Expected Workload

ECON 423 is a 15-point course, and on the basis of VUW having designated one point = 10 hours work, expected workload would total 150 hours. If that workload were spread over 15 weeks, hours expected would average around 10 hours per week. This would involve attending classes (2 lecture hours per week, for the 12 teaching weeks), plus reading for and completing assignment work and preparing for the final examination, for approximately 8.5 hours per week over 15 weeks. The 8.5 hours would of course vary for individual students, depending on the student’s previous knowledge and understanding, and the final grade at Honours level to which the student aspires.
Readings

Topics and Readings (* denotes a key reading; denotes available from Commerce Library Reserve Collection)

1. Why model? Structural/CGE Modelling: An Introduction (1 session)

Why model?


The Economist, 13 July 2006, Special Report, “Economic models: Big questions and big numbers”.


Piecemeal/partial, static, and dynamic (including intertemporal) approaches


2. **Comparative Static CGE modelling (2 sessions)**

*Introduction, Input-Output Data and Models, The Johansen Approach*


* Parmenter (1982), s. 3.2 (a).


* Further detail can be found in Dixon, Peter B., B. R. Parmenter, John Sutton and D. P. Vincent (DPSV), *ORANI: A Multisectoral Model of the Australian Economy*, North-Holland Contributions to Economic Analysis Volume 142, 1982, chs. 1, 2 (ss. 3-7), 4 (ss. 24-27, 29), 5 (ss. 30-32, 34).

**The Construction of a Model for Practical Policy Analysis**

* Parmenter (1982), s. 3.2 (b).

* DPSV, ch. 3 (especially ss. 13, 14, 18, 19, 22)

3. **Intertemporal CGE Modelling (1 session)**

*An Introduction to Intertemporal Modelling*


* Nana, Ganesh, chs. 1, 3, (pp. 75-101), 4 (pp. 141-149, 151-155), 5 (pp. 160-175).

4. **Introduction to macroeconomic modelling for the generation of forecasts and projections, and for policy analysis (1 session)**


The following websites can also be investigated to gain a useful perspective on quality, model-based technical reports and working papers:

www.bankofcanada.ca/en/pubs.htm
www.norges-bank.no
www.riksbank.com
www.bcentral.cl/eng/stdpub
www.econtech.com.au
www.sensiblepolicy.com
www.rbnz.govt.nz

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5. Macroeconomic Modelling: Underpinning Concepts and Ideas (1 session)


* Black et al., s. 2.


6. A Deterministic Practical Application, using NBNZ-DEMONZ (1 session)


7. FPS: An Application (1 session)


8. KITT: Model design, microfoundations and economic structure


9. **KITT: The log linear model, data, steady state, estimation and model evaluation**


10. **KITT: Some further tools to assist model evaluation and “storey telling”, some dynamic responses to selected shocks.**


11. **KITT: An application (1 session)**

    Specific application, presenter from the RBNZ: Reading to be advised.

**Assessment Requirements**

For assessment purposes, you are required to sit the final examination in the Trimester One final examination period, and to complete coursework requirements. The coursework consists of two short assignments (to be distributed in the first half of the trimester), and an essay of no more than 2500 words (see the final page of this outline). Unlike the situation that exists in undergraduate papers, your final grade will be determined on the basis of your overall performance in the Honours programme. However, as a guide to the allocation of your efforts, the assessment in ECON 423 will be based on:

- 15% for assignments: Ass. 1 due no later than 5 pm Weds. 31 March;
- 25% for the essay: due no later than 5 pm Weds. 26 May
- 60% for the final two-hour examination.

**Note:** Your assessed work may also be used for quality assurance purposes, such as to assess the level of achievement of learning objectives as required for accreditation and audit purposes. The findings may be used to inform changes aimed at improving the quality of FCA programmes. All material used for such processes will be treated as confidential, and the outcome will not affect your grade for the course.

**Examinations**

Students who enrol in courses with examinations are obliged to attend an examination at the University at any time during the formal examination period. The final TWO HOUR examination for this course will be scheduled at some time during the period from

**Examination Period:** Friday 11th June – Wednesday 30th June 2010

**Penalties**

Coursework submitted late will not be graded.
Mandatory Course Requirements
Mandatory course requirements will be satisfied if all assessment requirements are completed.

Class Representative
A class representative is to be elected in the first class, and that person’s name and contact details will be available to VUWSA, the Course Coordinator and the class. The class representative provides a communication channel to liaise with the Course Coordinator on behalf of students.

Communication of Additional Information
Additional information or information on changes will be conveyed to students through emails and Blackboard.

For the following important information follow the links provided:

Academic Integrity and Plagiarism
http://www.victoria.ac.nz/home/study/plagiarism.aspx

General University Policies and Statutes
http://www.victoria.ac.nz/home/about/policy

AVC (Academic) Website: information including: Conduct, Academic Grievances, Students with Impairments, Student Support
http://www.victoria.ac.nz/home/about_victoria/avcacademic/Publications.aspx

Faculty of Commerce and Administration Offices
http://www.victoria.ac.nz/fca/studenthelp/

Manaaki Pihipihiinga Programme
http://www.victoria.ac.nz/st_services/mentoring/
Critically evaluate any one major reference or set of references (not covered directly in class sessions), relevant to any one of ECON 423’s Computable General Equilibrium or Macroeconomic Modelling topics 1 to 8.

Guidelines

- The maximum length (excluding footnotes, list of references, and a 100 word Abstract) is 2500 words.

- The essay should be written legibly, typed or word-processed on A4 paper, with adequate margins on each side and spacing between lines.

- The original should be handed in at the class on or before the above date. You should retain a copy of your essay.

Viv Hall
February 2010