

School of Economics and Finance

ECON 403 ADVANCED MACROECONOMIC THEORY B

Trimester One 2009

COURSE OUTLINE

Names and Contact Details

The Course Coordinator is: Professor Viv Hall

Room: RH 401 in Rutherford House, 23 Lambton Quay

Voice/Message: (04) 463 5081 Email: viv.hall@vuw.ac.nz

Contact is best initiated by email or through making an appointment

Lecturer: Adjunct Professor, Dr. John McDermott

Room: RH 430 in Rutherford House, 23 Lambton Quay

Voice/Message: (04) 463 5081 Email: john.mcdermott@vuw.ac.nz

Contact is best initiated by email or through making an appointment

Trimester Dates

The start and end dates for the first trimester in 2009, including the examination period, are Monday 2 March to Wednesday 1 July 2009.

Class Times and Room Numbers: Fridays 9.30 am – 12.20 pm

RWW 127

Withdrawal dates: Information available via

http://www.victoria.ac.nz/home/admisenrol/payments/withdrawlsrefunds.aspx

Course Content and Objectives

The **overall objective of** the two Advanced Macroeconomic Theory courses **ECON 403 and ECON 402** is to provide an in depth understanding of modern macroeconomic theory. ECON 402 focuses on developments in New Classical and Real Business Cycle macroeconomics, while the emphasis in ECON 403 is on New Keynesian macroeconomics and its implications for Dynamic Stochastic General equilibrium (DSGE) models.

Course Learning Objectives

By the end of this course students should be able to

1. demonstrate a comprehensive knowledge of the role of New Keynesian macroeconomic ideas and theories in modern macroeconomic thinking and macroeconomic modelling;

- 2. explain the important sectoral equations and building-blocks of small New Keynesian open economy macroeconomic models
- 3. describe how key New Keynesian macroeconomic relations are specified within DSGE models
- 4. identify and appreciate how these models are estimated and simulated
- 5. undertake supervised research work on a chosen topic

Expected Workload

ECON 403 is a 15-point course, and on the basis of VUW having designated one point typically equates to 10 hours of work, the expected work load would total 150 hours. If that workload were spread over 12 weeks, hours expected would average around 12.5 hours per week. This would involve attending classes (2 lecture hours per week), plus reading, studying and completing assignments for approximately 10.5 hours per week. The 10.5 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.

Assessment Requirements and relation to Course Learning Objectives

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 a Referee Report of no more than 1000 words, and a series of Assignments. 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 403 will be based on:

20% for the Referee Report, due no later than Wednesday 15 April;

20% for the Assignments; and

60% for the final two-hour examination.

The Referee Report will assist the student to achieve Course Learning Objectives 2, 3, 4 and 5; the Assignments will assist the student to achieve Course Learning Objectives 2, 3 and 4; and the final exam will assist the student to achieve Course Learning Objectives 1, 2, 3 and 4.

Examinations

Students with examinations are obliged to be at university until the end of the examination period. Examination dates for trimester one are: Friday 12 June to Wednesday 1 July 2009.

Penalties

Coursework submitted late will not be graded.

Mandatory Course Requirements

Mandatory course requirements will be satisfied if all assessment requirements are completed.

Communication of Additional Information

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

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

References relevant to all sessions

- * McDermott, John (2009), "Mathematics Review", available from Blackboard
- * Galí, Jordi (2008), Monetary Policy, Inflation, and the Business Cycle: An Introduction to the New Keynesian Framework, Princeton University Press, Princeton. We strongly recommend that you purchase a copy of this Galí book.

1. Introduction (VH)

Historical perspective on New Keynesian models, and the basic 3-equation New Keynesian model.

- * Carlin, Wendy and David Soskice (2006), *Macroeconomics: Imperfections*, *Institutions & Policies*, Oxford: OUP, ch 15, 563-574.
- * Mankiw, N. Gregory (2006), "The Macroeconomist as Scientist and Engineer", *Journal of Economic Perspectives*, 20(4), 29-46.
- * Goodfriend, Marvin and Robert King (1997), "The New Neoclassical Synthesis and the Role of Monetary Policy", in *NBER Macroeconomics Annual* (Ben S Bernanke and Julio Rotemberg (eds), Cambridge, MA: MIT Press, especially s 5.
- * Blanchard, Olivier (2008), "The State of Macro", NBER Working Paper 14259, August, http://www.nber.org/papers/w14259.
- * Woodford, Michael (2009), "Convergence in Macroeconomics: Elements of the New Synthesis", *American Economic Journal: Macroeconomics*, 1(1), 267-279.
- * Galí, Jordí (2008), *Monetary Policy, Inflation, and the Business Cycle: An Introduction to the New Keynesian Framework*, Princeton University Press, Princeton, ch 1.
- * Clarida, Richard, Jordi Gali and Mark Gertler (1999), "The Science of Monetary Policy: A New Keynesian Perspective", *Journal of Economic Literature*, 37(4), 1661-1671.
- * Walsh, Carl E (2003), *Monetary Theory and Policy* (2nd edition), Cambridge, MA: MIT Press, s 5.4, especially pp 230-234, 244-247.
- * Warburton, Sam and Kirdan Lees (2005), "A happy 'halfway-house'? Medium term inflation targeting in New Zealand", RBNZ DP2005/03, October.

2. The forward-looking IS curve (VH)

Consumption, and the role of habit formation

- * McCallum, Bennett T and Edward Nelson (1999), "An Optimizing IS-LM Specification for Monetary Policy and Business Cycle Analysis", *Journal of Money, Credit and Banking*, 31(3), part 1, 296-316.
- * Walsh (2003), s 5.4.1
- * Galí, ch 2, pp 15-20, 24-28, 34-36.
- * Dennis, Richard (2004), "New Keynesian Optimal-Policy Models: An Empirical Assessment", Federal Reserve Bank of San Francisco Working Paper 2003-16, November 2004, ss 2.2, 4.1, 4.2, pp 27-28.

3. New Keynesian Phillips Curve (JMcD)

Ideas underpinning Calvo pricing and the New Keynesian Phillips Curve; implications of nominal rigidities in the labour market

- * Galí, ch 6, pp 119-125.
- * Sbordone, Argia (2002), "Prices and Unit Labour Costs: A New Test of Price Stickiness," *Journal of Monetary Economics*, 49, 265-292.
- * Rudd, Jeremy and Karl Whelan (2005), "Does the Labour Share of Income Drive Inflation?" *Journal Money, Credit, and Banking*, 37, 297-312.
- * Woodford, Michael (2003), *Interest and Prices: Foundations of a Theory of Monetary Policy*, Princeton University Press, Princeton, New Jersey, pp 177-200.

4. DSGE Models (JMcD)

Solution strategy for DSGE models, estimations and simulation of DSGE models using MATLAB

* Galí, chs 2, 3, and 6 (pp 126-131)

Canova, Fabio (2007), *Methods for Applied Macroeconomic Research*, Princeton, Princeton University Press, Ch 11, s 4, especially example 11.13, pp 448-453.

* Cho, Seonghoon and Antonio Moreno (2006), "A Small-Sample Study of the New-Keynesian Macro Model," *Journal of Money, Credit, and Banking*, 38 (6), 1461-1481.

Galí, Jordi and Mark Gertler (2007), "Macroeconomic Modelling for Monetary Policy Evaluation, *Journal of Economic Perspectives*, 21, 4, 25-45.

5. Two key building blocks (VH)

Monopolistic competition, and Dixit-Stiglitz aggregation

- * Blanchard, Olivier Jean and Nobuhiro Kiyotaki (1987), "Monopolistic Competition and the Effects of Aggregate Demand", *American Economic Review*, 77(4), 647-666.
- * Romer, David (2006, 3rd ed), Advanced Macroeconomics, New York: McGraw-Hill Irwin, ch 5, p 285.
- * Walsh, ch 5, pp 216-217, 232-233.
- * Woodford, Michael (2003), Interest and Prices: Foundations of a Theory of Monetary Policy, Princeton University Press, Princeton, pp 146-147.

Dixit, Avinish K and Joseph E Stiglitz (1977), "Monopolistic Competition and Optimum Product Diversity", *American Economic Review*, 67, 297-308.

6. No class – Good Friday

7. Monetary Policy Issues and Design (JMcD)

Monetary policy issues from a New Keynesian perspective

- * Galí, ch 4
- * Clarida, Richard, Jordi Galí, and Mark Gertler (1999), "The Science of Monetary Policy: A New Keynesian Perspective," *Journal of Economic Literature*, XXXVII, 1661-1707.

Walsh, ch 11.

* Woodford, ch 8.4, pp 610-623.

8. Monetary Policy and Inflation Targeting (JMcD)

Monetary policy tradeoffs in the short run

- * Galí, ch 5
- * Clarida, Richard, Jordi Galí, and Mark Gertler (1999), "The Science of Monetary Policy: A New Keynesian Perspective," *Journal of Economic Literature*, XXXVII, 1661-1707.

9. Nominal rigidities, real rigidities, & sticky information versus sticky prices (VH)

- * Romer, ch 6, pp 271-272, 284-285, 294-302, 333-339
- * Galí, s 3.5.
- * Ball, Laurence and David Romer (1990), "Real Rigidities and the Non-Neutrality of Money", *Review of Economic Studies*, 57, 183-203.
- * Mankiw, N Gregory and Ricardo Reis (2002), "Sticky information versus sticky prices: A proposal to replace the New Keynesian Phillips Curve, *Quarterly Journal of Economics*, 117, 1295-1328.
- * Arslan, M Murat (2008), "Dynamics of sticky information and sticky price models in a New Keynesian DSGE framework", *Economic Modelling*, 25, 1276-1294.

10. Deterministic staggered price and wage adjustment (VH)

- * Romer, ch 6, pp 309-310, 319-323, 331-333
- * Taylor, John B. (1999), "Staggered price and wage setting in macroeconomics", in *Handbook of Macroeconomics*, John B Taylor and Michael Woodford (eds), volume 1B, ch 15, p 1310, s 1, pp1020-1021, ss 4-7.
- * Taylor, John B (1979), "Staggered Wage Setting in a Macro Model", *American Economic Review Papers and Proceedings*, 69(2), 188-113.
- * Taylor, John B (1980), "Aggregate Dynamics and Staggered Contracts", *Journal of Political Economy*, 88(1), pp 1-11, 14-22.
- * Blanchard (2008, pp 12-14).

11. Open economy building-blocks (VH)

Imported intermediate goods, nominal/real exchange rates, world interest rates, terms of trade, tradables and non-tradables inflation

* McCallum, Bennett T and Edward Nelson (1999), "Nominal income targeting in an open-economy optimizing model", *Journal of Monetary Economics*, 43, ss 1, 3-5, 8.

McCallum, Bennett T (2008), "Reconsideration of the P-bar model of gradual price adjustment", *European Economic Review*, 52, 1480-1493.

* McCallum, Bennett and Edward Nelson (2000), "Monetary Policy for an open economy: An alternative framework with optimizing agents and sticky prices", *Oxford Review of Economic Policy*, 16(4), ss I, II, Table 1, pp 74-82, 86.

- * Gali, Jordi and Thommaso Monacelli (2005), "Monetary Policy and Exchange Rate Volatility in a Small Open Economy", *Review of Economic Studies*, 72, ss1, 2, 3 (pp 709-719).
- * Monacelli, Thommaso (2005), "Monetary Policy in a Low pass-Through Environment", *Journal of Money, Credit and Banking*, 37(6), s1 (pp 1047-1057).

12. New Keynesian Model and the Open Economy (JMcD)

Issues in modelling a small open economy in a New Keynesian Framework

^{*} Galí, ch 7

^{*} Gali, Jordi and Thommaso Monacelli (2005), "Monetary Policy and Exchange Rate Volatility in a Small Open Economy", *Review of Economic Studies*, 72, ss1, 2, 3 (pp 709-719).

Victoria University of Wellington School of Economics and Finance

ECON 403 1/3 2009

Referee Report

Due Wednesday April 15th by close of business (cob), by email

The referee report is to be on the following paper, available in pdf format from the ECON 403 Assignments Folder on Blackboard:

Kirker, Michael (2008), "Does natural rate variation matter? Evidence from New Zealand", RBNZ DP2008/17, also available from www.rbnz.govt.nz/research/discusspapers/.

Guidelines

- The maximum length (excluding the list of references, equations, and figures) is 1000 words
- Neither footnotes nor appendices are permitted.
- The report should be word-processed on A4 paper with adequate margin on both sides and spacing between lines.
- The file of the report should be submitted by email attachment to Viv Hall (viv.hall@vuw.ac.nz). You should retain a printed copy of your report.
- Note that no form of plagiarism is allowed in FCA. Information on how to access details on VUW policy in this area appears in the Course Outline. Any violation will result in unmarked work. For more extreme cases, University academic disciplinary procedures may be invoked.
- The criteria of the report are as follows:
 - Summarize concisely the key elements of the paper under review, providing a summary objective assessment of the significant contributions of the paper
 - ❖ As backing for your summary judgements, your detailed critique of the paper should include:
 - 1. a review of the "current" state of the relevant literature and how this paper has moved this literature forward*.
 - 2. a comparison of the paper's methods and arguments with alternative methods used in other papers.
 - 3. an indication of what problems have been left unresolved or by-passed
 - 4. suggestions on how future research might tackle these issues.

Viv Hall February 2009

* Note that "current" could be interpreted **either** as being around the time the paper was substantively developed **or** as being at the time your report is prepared.

Faculty of Commerce and Administration Offices

Railway West Wing (RWW) - FCA Student and Academic Services Office

The Faculty's Student and Academic Services Office is located on the ground and first floors of the Railway West Wing. The ground floor counter is the first point of contact for general enquiries and FCA forms. Student Administration Advisers are available to discuss course status and give further advice about FCA qualifications. To check for opening hours call the Student and Academic Services Office on (04) 463 5376.

Easterfield (EA) - FCA/Education/Law Kelburn Office

The Kelburn Campus Office for the Faculties of Commerce and Administration, Education and Law is situated in the Easterfield Building on the ground floor (EA005). This counter is the first point of contact for:

- Duty tutors for student contact and advice.
- Information concerning administrative and academic matters.
- Forms for FCA Student and Academic Services (e.g. application for academic transcripts, requests for degree audit, COP requests).
- Examinations-related information during the examination period.

To check for opening hours call the Student and Academic Services Office on (04) 463 5376.

Use of Turnitin

Student work provided for assessment in this course may be checked for academic integrity by the electronic search engine http://www.turnitin.com. Turnitin is an on-line plagiarism prevention tool which identifies material that may have been copied from other sources including the Internet, books, journals, periodicals or the work of other students. Turnitin is used to assist academic staff in detecting mis-referencing, misquotation, and the inclusion of unattributed material, which may be forms of cheating or plagiarism. At the discretion of the Head of School, handwritten work may be copy-typed by the School and subject to checking by Turnitin. You are strongly advised to check with your tutor or the course coordinator if you are uncertain about how to use and cite material from other sources. Turnitin will retain a copy of submitted materials on behalf of the University for detection of future plagiarism, but access to the full text of submissions will not be made available to any other party.

General University Policies and Statutes

Students should familiarise themselves with the University's policies and statutes, particularly the Assessment Statute, the Personal Courses of Study Statute, the Statute on Student Conduct and any statutes relating to the particular qualifications being studied; see the Victoria University Calendar or go to www.victoria.ac.nz/home/about/policy/students.aspx

For information on the following topics, go to the Faculty's website www.victoria.ac.nz/fca under Important Information for Students:

- Academic Grievances
- Student and Staff Conduct
- Meeting the Needs of Students with Impairments
- Student Support

Academic Integrity and Plagiarism

Academic integrity is about honesty – put simply it means *no cheating*. All members of the University community are responsible for upholding academic integrity, which means staff and students are expected to behave honestly, fairly and with respect for others at all times.

Plagiarism is a form of cheating which undermines academic integrity. The University defines plagiarism as follows:

The presentation of the work of another person or other persons as if it were one's own, whether intended or not. This includes published or unpublished work, material on the Internet and the work of other students or staff.

It is still plagiarism even if you re-structure the material or present it in your own style or words.

Note: including the work of others will not be considered plagiarism as long as the work is acknowledged by appropriate referencing.

Plagiarism is prohibited at Victoria and is not worth the risk. Any enrolled student found guilty of plagiarism will be subject to disciplinary procedures under the Statute on Student Conduct and may be penalised severely. Consequences of being found guilty of plagiarism can include:

- an oral or written warning
- cancellation of your mark for an assessment or a fail grade for the course
- suspension from the course or the University.

Find out more about plagiarism, and how to avoid it, on the University's website:

www.victoria.ac.nz/home/studying/plagiarism.html

Manaaki Pihipihinga Programme

Manaaki Pihipihinga is an academic mentoring programme for undergraduate Māori and Pacific students in the Faculties of Commerce and Administration, and Humanities and Social Sciences. Sessions are held at the Kelburn and Pipitea Campuses in the Mentoring Rooms, 14 Kelburn Parade (back courtyard), Room 109D, and Room 210, Level 2, Railway West Wing. There is also a Pacific Support Coordinator who assists Pacific students by linking them to the services and support they need while studying at Victoria. Another feature of the programme is a support network for Postgraduate students with links to Postgraduate workshops and activities around Campus.

For further information, or to register with the programme, email <u>manaaki-pihipihinga-programme@vuw.ac.nz</u> or phone (04) 463 6015. To contact the Pacific Support Coordinator, email <u>pacific-support-coord@vuw.ac.nz</u> or phone (04) 463 5842.