

School of Economics and Finance

ECON 402 ADVANCED MACROECONOMIC THEORY A

Trimester Two 2009

COURSE OUTLINE

Names and Contact Details

Course Coordinator and Lecturer (Week 1-6):

Dr. Chia-Ying Chang

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Lecturer (Week 7-12):

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Office Hours: By appointment.

Trimester Dates

Teaching Period: Monday 13 July to Friday 16 October 2009

End of Year Study Period: Monday 19 October to Monday 26 October 2009

Examination Period: Tuesday, 27 October to Saturday 14 November 2009 (inclusive)

Note: Students who enrol in courses with examinations should be able to attend an examination at the University at any time during the formal examination period.

Withdrawal dates: Information available via

<http://www.victoria.ac.nz/home/admisenrol/payments/withdrawalsrefunds.aspx>

Class Times and Room Numbers

Thursdays, 14:40-17:30pm, RWW 413.

Prerequisite: ECON 305, QUAN 203

Co-Requisites: ECON 403

Course Content

ECON 402 commences with a brief perspective on major modern approaches to macroeconomic theory. It then introduces models based on a representative agent's intertemporal optimisation problem. It is shown how the issues that pertain to consumption, investment and fiscal policy are investigated in these models.

The course then covers linear rational expectations models in some analytical detail. The concept of rational expectations and the characteristics of rational expectations solutions are discussed. Issues that pertain to macroeconomic stabilisation policy under rational expectations, e.g. the Lucas critique, policy neutrality, discretionary policy vs. rules, are reviewed. Implications of rational expectations for the behaviour of foreign exchange markets and business cycles are also discussed.

The primary emphasis in ECON 402 is on theory, but the policy relevance of theory and issues arising from empirical evidence are also given attention.

Week(s)	Topics
1	Major Modern Approaches to Macroeconomic Theory
1-2	Inter-temporal Consumption
3	Business Fixed Investment
4-5	Effects of Fiscal Policy
6	The Natural Rate Hypothesis and the Stabilisation Policy
7-8	The Rational Expectations Hypothesis and Solutions of Rational Expectations Model
8-9	Flexible v.s. Sticky Price Model of Exchange Rate Determination
10-12	Business Cycle Fluctuations

Course Learning Objectives

The learning objectives of ECON 402 are:

1. to provide students with a comprehensive knowledge of modern open economy macroeconomic theory.
2. to develop knowledge in New Classical Macroeconomics.
3. to formulate and solve macroeconomic problems analytically
4. to generate a general appreciation of how policymakers can use the analysis in practice.

Expected Workload

Class attendance: 2 hours/week

Reading and Reviewing: 8 hours/week

Assignments: 2 hours/week on average.

Readings

The textbook for the course is:

Obstfeld, Maurice and Kenneth Rogoff, *Foundations of International Macroeconomics*, Cambridge, MIT Press, 1996, Pp 804 + xxiii.

In addition to the textbook, the following book will be used in several sections of the course.

McCallum, Bennett T, *Monetary Economics: Theory and Policy*, New York, Macmillan, 1989, Pp 356 + xii.

In choosing the following reading material, we have generally tailored the degree of readability for beginning graduate students. Other relevant and more technical articles will be mentioned in the relevant class.

Week 1: Major Modern Approaches to Macroeconomic Theory (0.5 lecture) (Chia Ying)

This will provide a brief perspective on the major developments in approaches to Macroeconomic theory since early 1970s.

- Mankiw, N Gregory, “A Quick Refresher Course in Macroeconomics”, *Journal of Economic Literature*, 28(4), December 1990, pp. 1645-1660.
- McCallum, Bennett T, “New Classical Macroeconomics: A Sympathetic Account”, *Scandinavian Journal of Economics*, 91(2), 1989, pp. 223-264.
- McCallum, Bennett T, “Macroeconomics After Two Decades of Rational Expectations”, *Journal of Economic Education*, Summer 1994, pp. 219-234.
- *The Economic Record*, June 1989, Symposium on Macroeconomics, pp. 177-189 (contributions by Robert J Gordon, and John B Taylor)
- *American Economic Review*, Papers and Proceedings, May 1997, “Is There a Core of Practical Macroeconomics that We Should All Believe?”, pp. 230-246 (contributions by Robert M Solow, John B Taylor, Martin Eichenbaum, Alan S Blinder, and Oliver Blanchard)
- Taylor, John B and Michael Woodford, “Preface”, *Handbook of Macroeconomics*, Amsterdam, Elsevier North-Holland, 1999.

Week 1-2 Intertemporal Consumption (1.5 lectures) (Chia Ying)

Models of consumption demand from the point of view of intertemporal optimisation are presented and critically appraised.

- Obstfeld and Rogoff, Chs. 1(pp. 1-5, 28), 2(pp. 60-66, 70-72, 79-85, 96-98), Ch3(pp. 133-136, 146-147).
- Hall, Robert E, “Consumption”, Ch. 4 in Robert J Barro (ed.), *Modern Business Cycle Theory*, Cambridge, Harvard University Press, 1989, pp. 153-177.
- Abel, Andrew B, “Consumption and Investment”, Ch. 14 in B M Friedman and F H Hahn (eds.), *Handbook of Monetary Economics*, Vol II, Elsevier, 1990, pp. 725-750, 774-778.
- Campbell, J Y and N G Mankiw, “Consumption, Income and Interest Rates: Reinterpreting the Time Series Evidence”, in O J Blanchard and S Fischer (eds.), *NBER Macroeconomics Annual 1989*, Cambridge, MIT Press, pp. 185-245.

Week 3 Business Fixed Investment (1 lecture) (Chia Ying)

Various approaches to the explanation of business fixed investment are discussed. Particular attention is given to the q theory, which is an intertemporal optimization approach that explicitly takes account of adjustment costs. Empirical relevance of q theory is also investigated.

- Obstfeld and Rogoff, Ch. 2(pp. 99-113).
- Abel, Andrew B, “Consumption and Investment”, Ch. 14 in B M Friedman and F H Hahn (eds.), *Handbook of Monetary Economics*, Vol II, Elsevier, 1990, pp. 753-771, 774-778.

- Hayashi, F, “Tobin’s Marginal q and Average q: A Neoclassical Interpretation”, *Econometrica*, January 1982, pp. 213-224.
- McKibbin, Warwick J and Eric S Sieglhoff, “A Note on Aggregate Investment in Australia”, *The Economic Record*, 64(186), September 1988, pp. 209-215.

Week 4-5 Effects of Fiscal Policy (2 lectures) (Chia Ying)

Effects of fiscal policy are analysed using the intertemporal optimisation framework. Implications of overlapping generation models are compared with those of representative agent models. Models that integrate the overlapping generations and representative agent models are also investigated.

- Obstfeld and Rogoff, Ch. 3(pp. 130-136, pp. 141-145, pp. 174-184, pp. 190-191).
- “Symposium on the Budget Deficit”, *Journal of Economic Perspectives*, Spring 1989, pp. 1793, (contributions by Yellen, Barro, Bernheim, Eisner, and Gramlich).
- Bohn, Henning, “Budget Balance through Revenue or Spending Adjustments?”, *Journal of Monetary Economics*, 27, 1991, pp. 333-359.
- Frenkel, Jacob A and Assaf Razin, *Fiscal Policies and Growth in the World Economy*, 3rd edition, Cambridge, MA: MIT Press, 1996, Ch. 9.
- Wells, Graeme, “Fiscal Policy”, Ch. 10 in Brian Silverstone, Alan Bollard, and Ralph Lattimore (eds.), *A Study of Economic Reform: The Case of New Zealand*, Amsterdam, North-Holland, 1996.
- Abel, Andrew B, “Consumption and Investment”, Ch. 14 in B M Friedman and F H Hahn (eds.), *Handbook of Monetary Economics*, Vol II, Elsevier, 1990, pp. 750-753.
- Auerbach, Alan J, Jagadeesh Gokhale, and Laurence J Kotlikoff, “Generational Accounting: A Meaningful Way to Evaluate Fiscal Policy”, *Journal of Economic Perspectives*, Winter 1994, pp. 73-94.

Week 6 The Natural Rate Hypothesis and the Stabilisation Policy (1 lecture) (Chia Ying)

Alternative explanations of inflation-unemployment correlations and their implications for stabilisation policy are discussed. The concept of dynamic inconsistency and its relevance to the policy rules versus discretion debate is also covered.

- McCallum, Bennett T, *Monetary Economics: Theory and Policy*, New York, Macmillan, 1989, Pp 356 + xii, Chs. 9, 10, 11 & 12.
- Walsh, Carl E, *Monetary Theory and Policy*, 2nd Edition, Cambridge, MIT Press, 2003, Pp 612 + xviii, Sections 5.3.3, 8.1 & 8.2.
- Woodford, Michael, “The Return of Monetary Rules”, Chapter 1, *Interest and Prices*, Princeton, Princeton University Press, 2003, pp. 1-58.
- Obstfeld and Rogoff, Ch. 9(pp. 634-647).

Week 7 The Rational Expectations Hypothesis and Solutions of Rational Expectations Models (1.5 lectures) (Tim)

This session covers the basic properties of and solution procedures for linear rational expectations models. Topics covered also include (a) comparison between fundamental and bubble solutions, and (b) a brief introduction to how nonlinear rational expectations model can be analysed by loglinearising the necessary conditions for optimisation around the steady state.

- McCallum, Bennett T, *Monetary Economics: Theory and Policy*, New York, Macmillan, 1989, Pp 356 + xii, Chs. 7 & 8.
- Obstfeld and Rogoff, Ch. 8(pp. 515-523).

- McCallum, Bennett T, “On Non-Uniqueness in Rational Expectations Models: An Attempt at Perspective”, *Journal of Monetary Economics*, March 1983, pp. 139-168.
- Uhlig, Harald, “A Toolkit for Analysing Nonlinear Dynamic Stochastic Models Easily”, mimeo. at <http://www.wiwi.hu-berlin.de/wpol/html/toolkit.htm>, and also Ch.3 in Ramon Marimon and Andrew Scott (ed.), *Computational Methods for the Study of Dynamic Economies*, Oxford University Press, 1999.

Week 8-9 Flexible vs. Sticky Price Models of Exchange Rate Determination

(1.5 lectures) (Tim)

In this session we present and evaluate the implications of rational expectations for the behaviour of foreign exchange markets in the light of empirical evidence. An interesting topic covered here is the relative importance of real shocks and nominal shocks as sources of exchange rate fluctuations. The implications of flexible price (i.e. market-clearing) models and sticky price (i.e. non-market-clearing) models are compared. The degree of empirical support for the different approaches is also discussed.

- McCallum, Bennett T, *Monetary Economics: Theory and Policy*, New York, Macmillan, 1989, Pp 356 + xii, Ch. 14(ss. 14.1-14.4).
- Obstfeld and Rogoff, Ch. 8 (pp. 526-530, pp. 546-547).
- Blanchard, Oliver J and Danny Quah, “The Dynamic Effects of Aggregate Demand and Supply Disturbances”, *American Economic Review*, 79(4), September 1989, pp. 655-673.
- Enders, Walter and Bong-Soo Lee, “Accounting for Real and Nominal Exchange Rate Movements in the Post-Bretton Woods Period”, *Journal of International Money and Finance*, Vol. 16, No. 2, 1997, pp. 233-254.
- McCallum, Bennett T, “Unit Roots in Macroeconomic Time Series: Some Critical Issues”, *Economic Quarterly*, Federal Reserve Bank of Richmond, Spring 1993, pp. 13-43.
- Stockman, Alan C, “The Equilibrium Approach to Exchange Rates”, *Economic Review*, Federal Reserve Bank of Richmond, March-April 1987, pp. 12-30.

Week 10-12. Business Cycle Fluctuations (3 lectures) (Tim)

In these sessions, the main ideas and tools of the Real Business Cycle (RBC) approach to business cycle fluctuations are explained. In this approach, business cycles are considered to be equilibrium outcomes of optimizing behaviour by individual agents. Stochastic general equilibrium models built on the foundations of intertemporally optimizing behaviour of economic agents are used. The model parameters are typically calibrated rather than estimated. Dynamic simulation techniques are used to analyze the models. Some of the criticisms of early RBC models and recent developments in the RBC literature are discussed. The impact of the RBC approach on recent developments in modelling for practical policy analysis is also discussed.

- Obstfeld and Rogoff, Ch. 7(pp. 496-507).
- Blanchard, Oliver J and Danny Quah, “The Dynamic Effects of Aggregate Demand and Supply Disturbances”, *American Economic Review*, 79(4), September 1989, pp. 655-673.
- Boldrin, Michele, Lawrence J Christiano, and Jonas D M Fisher, “Habit Persistence, Asset Returns and the Business Cycle”, *American Economic Review*, 91(1), March 2001, pp. 149-166.

- Buckle, Robert A, Kunhong Kim, Heather Kirkham, Nathan McLellan, and Jared Sharma, “A Structural VAR Business Cycle Model of a Volatile Small Open Economy”, *Economic Modelling*, 24, November 2007, pp. 990-1017.
- Carlstrom, Charles T and Timothy S Fuerst, “Agency Costs, Net Worth, and Business Cycle Fluctuations: A Computational General Equilibrium Analysis”, *American Economic Review*, 87, December 1997, pp. 893-910.
- Horvath, Michael, “Sectoral Shocks and Aggregate Fluctuations”, *Journal of Monetary Economics*, 45(1), 2000, pp. 69-106.
- Kim, Kunhong, Robert A Buckle and Viv B Hall, “Key Features of New Zealand Business Cycles”, *The Economic Record*, 70(208), March 1994, 56-72.
- Kim, Kunhong and Young Sik Kim, “How Important is the Intermediate Input Channel in Explaining Sectoral Employment Comovement over the Business Cycle?”, *Review of Economic Dynamics*, 9, October 2006, pp. 659-682.
- King, Robert G, “Quantitative Theory and Econometrics”, *Federal Reserve Bank of Richmond Economic Quarterly*, 81/3, Summer 1995, pp. 53-105.
- Kydland, Finn E and Edward C Prescott, “Business Cycles: Real Facts and a Monetary Myth”, *Federal Reserve Bank of Minneapolis Quarterly Review*, Spring 1990, pp. 3-18.
- Uhlig, Harald, “A Toolkit for Analysing Nonlinear Dynamic Stochastic Models Easily”, mimeo. at <http://www.wiwi.hu-berlin.de/wpol/html/toolkit.htm> and also Ch.3 in Ramon Marimon and Andrew Scott (ed.), *Computational Methods for the Study of Dynamic Economies*, Oxford University Press, 1999.

Assessment Requirements

There will be 12 meetings during the trimester. Students are expected to read the relevant literature before each meeting and to take part in class discussion.

20% One report (due [August 20th \(Thursday\)](#) at 2:40pm before class in PDF format via email)

20% One assignment (due [October 8th \(Thursday\)](#) at 2:40pm in class)

60% for final examination (see below for dates)

Examinations

The final examination for this course will be scheduled at some time during the period from Tuesday 27 October to Saturday 14 November 2009.

Penalties

Any late assignment will be awarded a grade of zero (unless a VALID medical certificate issued by licensed medical centre is presented or a valid form of proof that an extension is warranted).

Mandatory Course Requirements

One assignment and one report must be submitted ON TIME

Communication of Additional Information

Additional information will be posted on Blackboard through announcements.

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/academic.aspx>

Faculty of Commerce and Administration Offices

<http://www.victoria.ac.nz/fca/studenthelp/Contactus.aspx>

Manaaki Pihipihinga Programme

http://www.victoria.ac.nz/st_services/mentoring/