

INTERNATIONAL MACROECONOMICS — THE INTERNATIONAL MONETARY SYSTEM

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University of Toronto undergraduates wishing to enrol in this course, Economics 419H, must obtain my permission. I will decide who should enrol by looking at their grades in relevant previous courses. To do this, I will need your student number. I will look up and carefully examine your grade record and make a decision as to whether to allow you to enrol. I will then inform both you and Jenny Fan (room 134) of my decision. Upon your subsequent request via e-mail to jenfan@chass.utoronto.ca which you should make by August 20, Jenny will enrol you in the course on that day if my permission has been granted. This course is currently not available for credit to graduate students enrolled at the University of Toronto but graduate students can work through the material and then take the final exam to prove to themselves that they have learned it, obtaining my letter of recommendation telling readers how well they have done. Because four one-and-one-half-hour one-on-one tutorials with me will be assigned to each and every student, the total Eco419H enrollment is capped at 15. The first 15 University of Toronto undergraduate students who enrol get the available positions. Some late enrollments will be possible to the extent that some of the initial 15 enrolling students drop out in the first week or two. Graduate students can begin study at any time during the year without my permission, although they should send me their e-mail address and inform me that they are going to work through the course—as the course is very demanding, those without any initial understanding of the subject matter should spread the course out over a full year and access my examination procedure when they are ready.

General Description of the Course

The reason for requiring permission for University of Toronto undergraduates to enrol is because the course is a difficult and demanding one which students with bad work habits will surely fail. It turns out that the undergraduates I have allowed into the course have typically achieved A's and high B's, in the past, doing as well or better than the graduate students that were then enrolled.

The objectives of this course are to help students develop a basic understanding of how the international monetary system functions and how macroeconomic policy is conducted in individual countries embedded in that system. Analytical tools will be developed to critically evaluate public policy arguments and comments appearing in the popular press. An introduction to the methodology and techniques of current research in the field will be given and students will develop their ability to read critically some of the professional literature. All this requires the establishment of an analytical framework into which current and historical issues in theory and policy can be placed. Building this framework is the central focus of the course.

I have written some elementary computer-assisted study modules that are assigned in the course. Past experience indicates that students who have done previous work in macroeconomics at an advanced level, or who have taken a third year international macroeconomics course, do not take these modules seriously, figuring that they already know the material. This is a big mistake! My experience is that even quite advanced students do not really understand the material they have taken in previous courses. One reason for this is that macroeconomics courses differ in organization and content so that students entering this class will have specific views of what macroeconomics is about that differ both from student to student and from the approach taken here. As a result students are typically unable to deal with questions posed in different ways than that to which they are accustomed. A second reason is that students' primary objective is often to get an appropriate grade in a course rather than learn the material, so they tend to learn just what is necessary to be able to put the "right things" down on the final exam. Figuring out what might be asked on the final exam and memorising that answer is quite different than learning the fundamentals of a subject. A third reason is that international macroeconomics is a difficult subject and it takes several courses before students begin to understand the fundamentals. The fundamentals are the **sine-qua-non** for understanding what is going on in this field. Every model has to be based on and relate properly to these fundamentals if it is to be of any use—students who understand mathematical models but not the fundamentals on which they are based have no useful knowledge of macroeconomics. On the other hand, students who understand the fundamentals and have the proper mathematics background can easily construct and evaluate models that deal with specific questions as they arise. The basic objective here is to teach students the fundamentals. These are completely contained at the simplest level in the computer-assisted learning modules. The advanced topic write-ups that are also assigned are necessary to get students to the point where they have a more sophisticated understanding of the material in those modules and more fully understand the theoretical foundations of that material. Students should therefore take the computer modules very seriously, and also work very carefully through the advanced topic presentations, because they will not get a decent grade in this course without understanding the material there contained. Students will also refresh their understanding of basic economics and mathematics and statistics and become familiar with procedures and computational methods used to do statistical work.

The basic theory presented in this course is discussed in detail in my book entitled **Interest Rates, Exchange Rates and World Monetary Policy**, published in 2010 by Springer - Verlag in Heidelberg Germany, and available on loan from Robarts Library at the University of Toronto. The Advanced Topic Handout .pdf file presentations contain everything in the book of importance so there is no reason for students to feel they should purchase it.

Assignment of Grades

All the material is in the Lesson Modules and Advanced Topic presentations. All students taking the course will be required to work through and write up answers to four sets of review questions which will contain all material tested on the final exam. A grade of up to 10 points will be given for each of these assignments. I will arrange, for each assignment, a one-on-one tutorial of one-and-one-half-hours with each student during which they will explain to me their answers to the assignment questions based on their understanding of the material without referring

to their writeups, and I will correct any misconceptions and explain to them, as needed, the principles covered in the assignment. These meetings for local students will take place in my office. In students' distance-learning internet effort, these meetings will be arranged on Skype. My assessment of students' understanding in the tutorials will form an important part of their Assignment Grades. If enrollment is very small, I may also have each University of Toronto enrolled Ec419H student come one-on-one to my office for two hours each week as a substitute for having lectures. At these meetings I will help them work through the material and develop their answers to the assignment questions. In the case of larger enrollment, I will be available in class every Tuesday from 11:00AM to 1:00PM to answer questions and help clarify material that is difficult to grasp. Non-enrolled graduate students and distance-learning students will have to work entirely off this web-page and via the internet and skype.

The remaining 60 points in the course will be given for students' performance on the final exam, and final assessment in distance-learning cases. Working through the assignments, doing the reading, and paying close attention in the tutorials will be critical determinants of students' ability to do well on the final exam.

The required hand-in dates for written answers to the Review Question Assignments, in chronological order, are

1. Sept. 30
2. Oct. 21
3. Nov. 13
4. Dec. 2

Please bring your answers (in printed form) to my office on the relevant due date. Since, in many cases the number of questions is large, your answer to each question should be short, containing the simplest and shortest explanation of the economics principles involved. Each student must arrange with me a one-on-one tutorial session following each of the four completion dates. A grade out of 10 points will be awarded for each assignment at the end of the tutorial, based on my evaluation of the student's understanding of the material. Failure to hand in the written answers and/or to show up for the tutorial will result in a zero grade out of ten.

For questions, discussion and tutorial-time arrangements, e-mail me at floyd@chass.utoronto.ca.

Tutorials can be arranged during the periods 10:00AM to 11:30AM, 11:30AM to 1:00PM, 2:00PM to 3:30PM and 3:30PM to 5:00PM on Mondays, Wednesdays and Thursdays, and at 9:30AM to 11:AM on Tuesday class days in addition to the above afternoon times. Each student should pick the day and the time they find most useful for them. Ideally, we should try to avoid the 3:30PM to 5:00 PM time where possible.

COURSE MATERIAL

This course consists of four parts, each of which should take one-quarter of students' total study time for the course, although students with poor background may have to spend additional effort on the first part.

Part I

Economics Background Review—HTML Lesson Modules

Introductory Material

1. Module DEA.html — Dimensions of Economic Activity
2. Module PEC.html — Political Economy

Microeconomics

1. Module SAD.html — Supply and Demand
2. Module RAE.html — Rents and Externalities
3. Module ATP.html — Additional Topics

Macroeconomics

1. Module IAV.html — Interest Rates and Asset Values
2. Module MIN.html — Money, Inflation and Output
3. Module IRG.html — Interest Rates and Growth
4. Module UEM.html — Unemployment

Mathematics Review for Economists — `mathrev.html`

Basic Statistics Review for Economics Students — `statrev.html`

To build up your understanding of basic math work through the material in Appendix A of Jack Johnston and John DiNardo, "Econometric Methods", McGraw Hill 1997, Appendix A, pp. 453-467 (To end of section A2.7), Appendix B, pp 485-490 (To the end of section B4) and Chapter 3, section 3.1, pp. 69-76, and section 3.4, pp. 86-98 (skip subsection 3.4.4) Students who need a more elementary statistics review should work through the document in the file `instat.html` containing a .pdf document entitled "Statistics for Economists: A Beginning".

Students doing statistical analysis may need to review some free software that they can use. To learn some basics of three good programs they should work through material entitled "Statistical Analysis using Xlispstat, R and Gretl: A Beginning" accessible in the file `statcomp.html` on the course web-page to be found on my web-page.

Students' Answers to the First Set of Review Questions, in the file `revques1.pdf`, dealing with the underlying Economics Basics and the required understanding of Mathematics and Statistics should now be handed in for grading. The best procedure is to download and print out the assignment before starting your work on the relevant course material, and construct answers as you work through that material. Important data is presented in the Excel worksheet file `causqdat.xls` which you should download.

Part II

Additional HTML Lesson Modules

Before starting these lessons, it will be worthwhile for you to read Bennett T. McCallum, **International Monetary Economics** Chapter 2, Exchange Rate Concepts, pp. 14-42.

1. Module ASM.html — Asset Markets
2. Module FXM.html — The Foreign Exchange Market
3. Module BPX.html — Small Open Economy Equilibrium I: The Balance of Payments and the Exchange Rate
4. Module MFI.html — Small Open Economy Equilibrium II: Monetary Policy Under Fixed Exchange Rates
5. Module MFL.html — Small Open Economy Equilibrium III: Monetary Policy Under Flexible Exchange rates
6. Module FIP.html — Small Open Economy Equilibrium IV: Fiscal Policy
7. Module BOE.html — Big Open Economy Equilibrium

Advanced Topic Presentations: Intertemporal Foundations

1. ATitfnd1.pdf — Intertemporal Foundations I
2. ATitfnd2.pdf — Intertemporal Foundations II

Advanced Topic Presentation: Monetary and Real Shocks and Balance of Payments Equilibrium

ATbalpay.pdf

A Further HTML Lesson Module

Module API.html — Additional Policy Issues

Students' Answers to the Second Set of Review Questions should be handed in for grading and a one-on-one tutorial arranged. The assignment is contained in the file revques2.pdf

The Gold Standard

At this point students should develop their understanding of balance of payments adjustment under the international gold standard by reading the following journal article

Trevor J. O. Dick and John E. Floyd, "Balance of Payments Adjustment under the International Gold Standard: Canada, 1871-1913", in **Explorations in Economic History**, **28**,

1991, pages 209-238.

Advanced Topic Presentations: Real Exchange Rate Determination

1. ATexrdt1.pdf — Advanced Presentation: Exchange Rate Determination I

The in the above file, discussion refers to and analyzes forces determining real exchange rates, and statistical issues regarding real exchange rates as potentially random walks, dealing with power of test, and failure of purchasing-power-parity.

To acquire the necessary background related to stationarity of time series and spurious regression, you should read my two expositional papers "Econometrics Basics: Investigating the Stationarity of Time Series" `unitroot.pdf` and "Econometric Basics: Avoiding Spurious Regression" `spurreg.pdf`. You should also read the expositional paper "Econometric Basics: Dealing with Simultaneity Bias" `simlbias.pdf`.

You should also find it useful to read

Kenneth Rogoff, "The Purchasing Power Parity Puzzle," **The Journal of Economic Literature**, Vol. 34, June 1996, pages 647-668.

and

2. ATexrdt2.pdf — Advanced Presentation: Exchange Rate Determination II

The material presented in the above file deals with Exchange Rates and Asset Markets. In this respect, the discussion deals with covered and uncovered interest parity, as well as using the current spot and forward exchange rates as forecasts of next-period spot exchange rates. Pages 17-19 deal with Exchange Rate Overshooting.

To acquire fuller understanding of the empirical work discussed below you should now read

Walter Enders, **Applied Econometric Time Series**, Chapter 4, pages 211-227 and 233-250.

3. ATexrdt3.pdf — Advanced Presentation: Exchange Rate Determination III

The above file contains an empirical analysis of the factors determining real exchange rate

levels and interest rate differentials.

Broaden your understanding here by working through

Jay H. Leven, "A Guide to the Euro", New York, Houghton Mifflin Company, 2000

and

Michael B, Devereux, "Real Exchange Rates and Macroeconomics: Evidence and Theory," **Canadian Journal of Economics**, Vol., 30, No 4a, 1999, pages 773-787.

4. `ATexrdt4.pdf` — Advanced Presentation: Exchange Rate Determination IV

The above file contains an empirical analysis of the relationship between unanticipated money shocks and real exchange rate levels and interest rate differentials.

Students' Answers to the Third Set of Review Questions `revques3.pdf` should now be handed in for grading and the third one-on-one tutorial arranged. The material for a required econometric exercise is available in the Excel file `ausdata.xls` and in the Gretl data file `ausdata.gdt`.

Part IV

More Advanced Topic Presentations: Implications of the Above Analysis

1. [ATmodel.pdf](#) — Advanced Topic: A Basic Two-Country Model

A More Advanced HTML Module

8. [Module CMP.html](#) — Conducting Monetary Policy

2. [ATmonpol.pdf](#) — Advanced Topic: Conducting Monetary Policy

Finally Students should work through two working papers

Jack L. Carr and John E. Floyd, "Real and Monetary Shocks to the Canadian Dollar: Do Canada and the U.S. Form an Optimum Currency Area" [dollar.pdf](#) — published in the **North American Journal of Economics and Finance**, Vol. 13, May, 2002, pages 21-39.

and

John E. Floyd, "Small-Open-Economy Monetary Policy and Real and Nominal Exchange Rates: The Canadian Case" [monpolca.pdf](#) University of Toronto.

as well as through the following published paper

Allan C. Stockman, "Choosing an Exchange Rate System," **Journal of Banking and Finance**, Vol. 23, 1999.

and two chapters in the well-known book by Laidler and Robson,

David E.W. Laidler and William B.P. Robson, "Two Percent Target: Canadian Monetary Policy Since 1991" **CD Howe Institute Policy Study 37**, July 2004, Chapters 2 and 3.

For an insiders view on monetary policy, you can read John Crow's book "Making Money: An Insider's Perspective on Finance, Politics and Canada's Central Bank", John Wiley and Sons Canada Ltd., 2002. (John Crow was at one time Governor of the Bank of Canada)

Students' Answers to the Fourth Set of Review Questions [revquesq4.pdf](#) should now be handed in for grading. And the fourth tutorial should then be arranged.

After doing the above work and taking the one-on-one-tutorials, you should be ready to get an A on the final exam.