Advanced Macroeconomics for the Open Economy, Fall 2014

Harvard Kennedy School

Course Syllabus: prospectus, outline/schedule and readings

Staff:  
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Teaching Fellow: Maximilian Eber  
Course Assistants: Kay Kim, Changgi Lee, and Tim O'Brien.

Times:  
Lectures: Mondays and Wednesdays, 2:40-4:00 pm, L230.  
Review Sessions: Fridays: 8:40-10:00 and 10:10-11:30 am, L230.  
Final exam: Monday, Dec. 15, 2:00-5:00 pm.

Course Description: This course is the first in the two-course sequence on Macroeconomic Policy in the MPA/ID program. It particularly emphasizes the international dimension. The general perspective is that of developing countries and other small open economies, defined as those for whom the terms of trade are determined on world markets and for whom foreign income, inflation and interest rates can also be taken as given. The focus is on monetary, fiscal, and exchange rate policy, and on the determination of the current account balance, national income, and inflation. Models of devaluation include those where the price of internationally traded goods in terms of non-traded goods is central. A major overall theme is the implications of increased integration of global financial markets. Another is countries’ choice of monetary regime, especially the degree of exchange rate flexibility. There will be applications to the Dutch disease and financial crises, among other topics.

Nature of the approach: The course is built around analytical models. Although real-world examples will appear throughout, the course will rely very heavily on theoretical and econometric analysis, as is customary in economics classes. This is not an appropriate course for students who want some basic exposure to open-economy macroeconomics. It requires sustained immersion in relevant economic theory, and will not present a primarily descriptive or historical approach. Having said that, the course largely leaves to the successor course, API 119, the mathematical derivation of behavioral equations from first principles of individuals’ optimization of intertemporal utility.

Who is expected to take the course: This course, like Advance Macro for the Open Economy II (API 119), is a required component of the MPA / International Development sequence. It is envisioned that a typical student might one day be making policy decisions in a central bank or economics ministry or an international financial institution, but first needs training at a high level of intellectual rigor. In addition to MPA/ID students, a very few other students are sometimes admitted by permission of instructor – for example, someone who has taken ITF220 and done well in it, and who in addition is comfortable with calculus and the other mathematical tools that distinguish the MPA/ID curriculum.

Required tools: Besides macroeconomics, some knowledge of basic microeconomics, international economics and statistics is presumed. Analytical tools that will be used include especially calculus; also some differential equations, probability, and multivariate regression analysis.

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1 1st two lectures: Wed. Sept.3 & Fri. Sept. 5.
2 Two exceptions to the normal section schedule:  
- Sections on Fri., Sep 5th, are moved to Mon., Sep 8th, 4.10pm, instead (in Starr auditorium).  
- Sections on Fri., Oct 10th, are moved to 1.10pm & 2.40pm on the same day (in Starr).
Grading: Problem sets 25% (eight of them), mid-term exam 25%; final exam 50%.

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<tr>
<th>Problem Set</th>
<th>tentative due date (11:30 a.m. in the MPA/ID drop box)</th>
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<tr>
<td>1</td>
<td>Wednesday Sep.10</td>
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<td>2</td>
<td>Wed., Sept. 17</td>
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<td>3</td>
<td>Wed., Sept. 24</td>
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<td>4</td>
<td>Wed., Oct. 8</td>
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<td>Wed., Nov. 12</td>
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<td>Wed., Nov. 19</td>
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<td>8</td>
<td>Wed., Dec. 3</td>
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For each problem set, each student must decide whether to work in a group or to do it on his or her own. Those who do it on their own (1) must not discuss any aspect of the problem set with any other student, (2) need to indicate below their name when they hand in the problem set that they did it on their own, and (3) will then receive a small bonus on the grade (one point). If you indicated that you did it on your own despite having discussed something with another student, that would be a violation of academic integrity. Read Academic Code: http://www.hks.harvard.edu/var/ezp_site/storage/fckeditor/file/pdfs/degree-programs/registrar/academic_code.pdf

Please check the dates of the midterm and final exams. If you cannot take the exams, do not take the course.

Complete readings:

In short: Most of the course will be based on articles. (See reading list.) For lectures 5-7, the text will be Chapter 10, “Inflation and Monetary Policy,” of David Romer’s *Advanced Macroeconomics* (McGraw Hill: New York), 4th edition, 2012. This is just one chapter, but Romer is the text for API119, Macro II, so most students will have to buy it anyway.

Textbooks for further background: Most students will have already studied basic and intermediate macroeconomics. The necessary pre-requisite background in macroeconomics at a basic level is represented by Greg Mankiw, *Macroeconomics*, 8th edition, Worth: NY, 2013. Students will probably want to acquire *World Trade and Payments*, R. Caves, J. Frankel, and R. Jones (10th edition, Addison-Wesley Longman, 2007), especially those who have not previously taken a serious course in international economics. It is abbreviated *WTP* on the syllabus and will be referred to often in the course. At a considerably more advanced level, the recommended text is Maurice Obstfeld and Kenneth Rogoff, *Foundations of International Economics* (MIT Press, 1996).

Readings: The complete reading list is below and posted on the course website under “online materials.” Required readings in this course (indicated with asterisks) should be available online. Please see the online reading list for full details about availability of readings and links to online readings.
Topics and schedule:  

I. DEVALUATION AND THE TRADE BALANCE
1. (9/3) Derivation of Marshall-Lerner condition; J-curve

II. THE MUNDELL-FLEMING MODEL
2. (9/5) Keynesian trade balance; TB empirics; Intro to Mundell-Fleming
3. (9/8) Monetary and fiscal policy with a fixed exchange rate; Reserve flows
4. (9/10) The model with a floating rate, perfect capital mobility; Impossible Trinity

III. MONEY AND INFLATION
5. (9/15) Aggregate Supply, money growth and inflation
6. (9/17) Monetary policy: Dynamic inconsistency and rules
7. (9/22) Seignorage and hyperinflation

IV. PURCHASING POWER PARITY
9. (9/29) Why does PPP fail? Sticky prices; Tariffs & transp. costs; Nontraded goods

V. SMALL OPEN ECONOMIES
10. (10/1) Devaluation in small countries
11. (10/6) The Salter-Swan Model (nontraded goods)
12. (10/8) Dutch Disease

VI. EXCHANGE RATE REGIMES
13. (10/15) Classification; Pros and Cons of Fixed vs. Floating Rates
14. (10/20) Optimum Currency Areas & Currency Unions
15. (10/22) MIDTERM EXAM

VII. INTEGRATION OF FINANCIAL MARKETS
16. (10/27) The theory of gains from intertemporal trade
17. (10/29) The Lucas Paradox
18. (11/3) Interest Rate Parity

VIII. MODELS OF EXCHANGE RATE DETERMINATION
20. (11/10) With sticky prices: the overshooting model

IX. CRISES IN EMERGING MARKETS
21. (11/12) Speculative attack models
22. (11/17) Warning indicators; Sudden stops; Contagion.

X. THE CARRY TRADE, RISK, AND PORTFOLIO DIVERSIFICATION
23. (11/19) Exchange rate forecasting and Forward rate bias
24. (11/24) Optimal portfolio diversification
25. (12/1) Sovereign risk & debt dynamics
26. (12/3) Fiscal failures

Monday, Dec 16, 2:00-5:00 pm  FINAL EXAM
API-120: Macroeconomic Policy Analysis I

Prof. Jeffrey A. Frankel
Harvard Kennedy School

READING ASSIGNMENTS
* = required reading, available online, when possible
** = required most strongly, available online, when possible
[ ] = background readings

1. DEVALUATION AND THE TRADE BALANCE
Caves, Frankel and Jones, World Trade and Payments (WTP), 2007, Chapters 15-16. **

Derivation of Marshall-Lerner Condition

J-Curve and Empirical Estimates of Elasticities

2. Monetary & Fiscal Policy Under International Capital Mobility
Mundell-Fleming Model under Fixed Rates; Floating; & Perfect Capital Mobility
Caves, Frankel and Jones WTP, 2007, Chapters 19.1, 22 and 23. **
[For background: WTP Chapters 17.1-17.3 & 18. Also Romer, Chapter 6.1, or Blanchard-Fischer, 10.4.]

3. MONEY AND INFLATION


INFLATION, MONEY GROWTH AND INTEREST RATES
Romer’s Advanced Macroeconomics, Chapter 11.1-11.3 in 4th ed. (Chapter 10 in 3rd ed.) **

THE DYNAMIC INCONSISTENCY OF LOW-INFLATION MONETARY POLICY; RULES
Romer’s Advanced Macroeconomics, Chapters 11.7-11.8 in 4th ed. **

SEIGNORAGE, INFLATION, AND HYPERINFLATION
WTP, Ch. 19. 3, p. 582. *
Romer’s Advanced Macroeconomics, Chapter 11.9 **

4. PURCHASING POWER PARITY
Caves, Frankel and Jones, WTP, 2001, Chapter 19. 2. **
REAL EXCHANGE RATE VARIABILITY AND STICKY PRICES


SLOW PASS-THROUGH TO IMPORT PRICES, AND PRICING TO MARKET


TESTS OF INTEGRATION ACROSS BORDERS


NON-TRADED GOODS


5. SMALL OPEN ECONOMIES

Caves, Frankel and Jones, World Trade and Payments, Ch. 19.4, Appendix 19.C, & Chapter 20. **

DEVALUATION IN SMALL COUNTRIES


THE SALTER-SWAN ("NONTRADED GOODS") MODEL


DUTCH DISEASE


6. EXCHANGE RATE REGIMES


WTP, Section 26.4-26.5.

FIXED VS. FLOATING RATES; OPTIMUM CURRENCY AREAS


INTERMEDIATE REGIMES: BANDS, BASKETS, CRAWLS, AND ADJUSTABLE PEGS


7. INTEGRATION OF FINANCIAL MARKETS

“Policing the frontiers of finance – Is foreign capital a luxury that poor countries can live without?” [summary of Rodrik & Subramanian], The Economist, Apr. 12, 2008, p. 87 **


“Capital controversy,” The Economist, April 14, 2012, p.86. *


THE THEORY OF GAINS FROM INTERTEMPORAL TRADE

World Trade and Payments, 2007, Section 21. 5. **

Maurice Obstfeld and Kenneth Rogoff, Foundations of International Macroeconomics, Parts 1-4.

THE LUCAS PARADOX AND OTHER CAPITAL FLOW PUZZLES


8. MONETARY MODELS OF EXCHANGE RATE DETERMINATION

WTP, 2007, Ch. 27, especially Supplement S51-S55. **

FLEXIBLE-PRICE MODELS

Michael Mussa, "The Exchange Rate, the Balance of Payments, and Monetary and Fiscal Policy under a Regime of Controlled Floating, Scandinavian J. of Econ.78, May 1976, 229-48.

STICKY-PRICE MODELS AND OVERSHOOTING

Rudiger Dornbusch, 1976, "Expectations and Exchange Rate Dynamics" JPE, 84, 1161-76. **

FORECASTING


9. EMERGING MARKETS

WTP, 2007, Ch. 24.

THE OPENING OF EMERGING MARKETS; DETERMINANTS OF INFLOWS; COUNTRY RESPONSES

Guillermo Calvo, Leo Leiderman and Carmen Reinhart, “Inflows of Capital to Developing Countries in the 1990s,” Journal of Economic Perspectives, 10, 2, Spring 1996, 123-139. **

INTRO TO SPECULATIVE ATTACK MODELS: 1ST, 2ND AND 3RD GENERATION


CONTAGION


CONTRACTIONARY EFFECTS OF DEVALUATION: WAGE INDEXATION & BALANCE SHEET EFFECT

10. PORTFOLIO DIVERSIFICATION

WTP, Chapter 28. **

CARRY TRADE: BIAS IN THE FORWARD EXCHANGE MARKET


CURRENCY RISK AND OPTIMAL PORTFOLIO DIVERSIFICATION

WTP, 10th ed., pp. S55-S58. **

SOVEREIGN DEBT: COUNTRY RISK, SUPPLY OF DEBT TO BORROWERS & DEBT DYNAMICS


PROCYCLICAL FISCAL POLICY & FISCAL INSTITUTIONS


EMERGING MARKETS COME OF AGE? (THE 2008-09 CRISIS)


