API-120: Advanced Macroeconomics for the Open Economy, Fall 2018

Harvard Kennedy School

Course Syllabus: prospectus, outline/schedule and readings

Staff:  
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Times:  
Lectures: Mondays and Wednesdays, 2:45-4:00 pm, in Starr Auditorium.¹
Review Sessions: Fridays: 10:15 am in L130; and 11:45 am, in L280.²
Final exam: Friday, Dec.14, 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 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 problems of commodity-exporting countries, among other topics. (Such topics as exchange rate overshooting, speculative attacks, and portfolio choice and debt crises will be covered in the first half of API 119.)

Nature of the approach: The course is largely built around analytical models. Although real-world examples will appear throughout, the course will rely 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 latter half of 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 Advanced Macroeconomics 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 recommendations or 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 BGP-620 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 and international economics is presumed. Analytical tools to be used include especially calculus.

¹ 1st lecture: Wed., Sept.5. 2nd lecture Friday, Sept. 7.
² On weeks when Problem Sets are due (on Thursdays) we also plan review sessions in advance: probably Tuesdays, 4:15-5:30.
Grading: Problem sets 25% (eight of them), mid-term exam 25%; final exam 50%.

<table>
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<tr>
<th>Problem Set</th>
<th>Due date (10:10 a.m. in the MPA/ID drop box)</th>
<th>Special problem set review sessions (normally 4:15-5:30 in R304)</th>
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<td>2.</td>
<td>Thurs., Sept. 20</td>
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<td>Thurs., Sept. 27</td>
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<td>8.</td>
<td>Thurs., Dec. 6</td>
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Please check the dates of the midterm and final exams. If you cannot take the exams, do not take the course.

You are urged to read the Academic Code: www.hks.harvard.edu/var/ezp_site/storage/fckeditor/file/pdfs/degree-programs/registrar/academic_code.pdf

Readings:

For most lectures, there is a single triple-starred reading that students are required to read in advance of the lecture. You may be called on in class to answer a question based on the reading.

Readings are either scholarly articles, short news media stories, or textbook chapters. The main textbook is the second half of World Trade and Payments, R. Caves, J. Frankel, & R. Jones (10th edition, Addison-Wesley Longman, 2007), which is abbreviated WTP on the reading list. Chapters available on canvas course site, plus some copies are on reserve at HKS library.

For lectures 7 and 10-13 [Money & Inflation], the text is “Monetary Policy,” Chapter 12, of David Romer’s Advanced Macroeconomics, 5th ed., McGraw Hill, 2019, or Chapter 10 in the 4th ed., 2012. (Romer is also the text for the 2nd half of API119, Macro II.)

Textbooks for further background: Most students will have already studied basic or intermediate macroeconomics. The necessary pre-requisite background in macroeconomics at a basic level is represented by Greg Mankiw, Macroeconomics, e.g., 9th ed. (Worth: NY), 2015.

At a considerably more advanced level than WTP, the recommended text is Maurice Obstfeld and Kenneth Rogoff, Foundations of International Economics (MIT Press, 1996).
API-120: Macroeconomic Policy Analysis I

Prof. Jeffrey A. Frankel, Harvard Kennedy School

Topics and schedule:

Tentative due dates for Problem Sets (Thursdays):

I. REVIEW OF BASIC MACRO CONCEPTS
1. (9/5) GDP accounting
2. (9/7) Balance of payments accounting & the National Saving identity
3. (9/10) The traditional Keynesian multiplier model

II. DEVALUATION AND THE TRADE BALANCE
4. (9/12) Pricing & the Marshall-Lerner condition

III. THE MUNDELL-FLEMING MODEL
6. (9/19) The Mundell-Fleming model with a fixed exchange rate
7. (9/24) Monetary policy at the Zero Lower Bound
8. (9/26) Mechanisms of adjustment: Reserve flows and exchange rate changes
9. (10/1) The model with a floating rate & perfect capital mobility; The Impossible Trinity.

IV. INFLATION
10. (10/3) Aggregate Demand and Aggregate Supply
11. (10/10) Inflation and the rational expectations hypothesis
12. (10/15) Dynamically inconsistent monetary policy vs. monetary rules
13. (10/17) Seigniorage and hyperinflation
14. (10/22) MIDTERM EXAM

V. INTEGRATION OF GOODS MARKETS
17. (10/31) Barriers to integration.
18. (11/5) Nontraded goods and Balassa-Samuelson relationship.

VI. SMALL OPEN ECONOMIES
19. (11/7) Devaluation in small countries
20. (11/14) The Salter-Swan model featuring nontraded goods
21. (11/19) EM crises: Sudden stops, currency mismatches & contractionary devaluation
22. (11/26) Dutch Disease
   [possible optional lecture on The Natural Resource Curse]

VII. EXCHANGE RATE REGIMES
23. (11/28) Classification; Pros and cons of fixed vs. floating Rates
24. (12/3) Optimum Currency Areas & currency unions.
25. (12/5) Application: Macro policy in China #2

Friday, Dec. 14, 2:00-5:00 pm. FINAL EXAM
API-120: Macroeconomic Policy Analysis I

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READING ASSIGNMENTS

* = required reading, available online, when possible
** = required strongly, available online, when possible
*** = required strongly to read before lecture. You may be called upon.
[ ] = background readings

I REVIEW OF MACROECONOMIC CONCEPTS

1. (9/5) GDP accounting

2. (9/7) Balance of payments accounting and the National Saving identity
   Caves, Frankel & Jones, World Trade and Payments (WTP), 2007, Chapter 15 & 17.2 ***
   “China Concerns: Tourism deficit leaves current account vulnerable to trade shock,” Financial Times, June 14, 2018. **
   “Pakistan’s economy: In need of re-stitching,” The Economist, June 16, 2018. *

3. (9/10) The Keynesian multiplier model
   Caves, Frankel and Jones WTP, 2007, Chapter 17.1 & 17.3. ***

II. DEVALUATION AND THE TRADE BALANCE

4. (9/12) The Marshall-Lerner condition
   Caves, Frankel & Jones, WTP, 2007, Chapter16 & Supplement, pp. S43-S44. ***


III. THE MUNDELL-FLEMING MODEL
6. (9/19) Mundell-Fleming model of monetary & fiscal policy with a fixed exchange rate
Caves, Frankel and Jones WTP, 2007, Chapters 22.1-22.3. ***
[For background: WTP Chapter 18. Also Romer, Chapter 6.1]
“Argentine businesses battle to survive 40% interest rates,” Fin. Times, June 11, 2018. **

7. (9/24) Monetary Policy at the Zero Lower Bound
Romer’s Advanced Macroeconomics, Chapter 12.2 & 12.7 in 5th ed. **

8. (9/26) Mechanisms of adjustment: Reserve flows and exchange rate changes
Caves, Frankel and Jones WTP, 2007, Chapters 19.1, 22.4-22.7. ***
“Hot money flows into Argentine peso spook President Macri,” Fin. Times, May 27, 2016. *
“Turkish lira up 2% after central bank raises interest rates to keep inflation in check,” Financial Times, July 8, 2018. **

9. (10/1) The model with a floating rate & perfect capital mobility; Impossible Trinity.
Caves, Frankel and Jones WTP, 2007, Chapter 23. ***
“Brazil’s economy: Wild horses – A soaring currency...” The Economist, Apr.23, 2011. **

IV. MONEY AND INFLATION

10. (10/3) Aggregate Demand, Aggregate Supply, and money growth
WTP, Chapter 26.1 & 12. 6***
Romer’s Advanced Macroeconomics (McGraw Hill, 2019), Chapter 12.1 in 5th ed.
“Some like it hot: Which emerging economies are at greatest risk of overheating?” Economist, July 2, ++2011, p.65. **
“India lifts interest rate to curb price pressures,” Financial Times, June 7, 2018. *

11. (10/10) Inflation and the rational expectations hypothesis
David Romer, *Advanced Macroeconomics*, Chapt. 12.3 in 5th ed. ***
[Chapter 6.2-6.4 of David Romer’s *Advanced Macroeconomics* 4th ed., 2011]

12.  **(10/12) 10/15  Dynamically inconsistent monetary policy vs. monetary rules**

   *WTP*, Chapters 26.3-26.4 ***
   Romer, *Advanced Macroeconomics*, Chapters 11.7-11.8 in 4th ed. , or 12.8-12.9 in 5th ed. **

13.  **(10/17) Seigniorage and hyperinflation**

   *WTP*, Chapter 19.3 & page 582 ***
   Romer’s *Advanced Macroeconomics*, Chapter 11.9 in 4th edition or 12.10 in 5th edition

14.  **(10/22)  MIDTERM EXAM**


V. INTEGRATION OF GOODS MARKETS

16. (10/29) PPP
Caves, Frankel and Jones, WTP, 2007, Chapter 19.2. ***

17. (10/31) Barriers to integration

18. (11/5) Nontraded goods and Balassa-Samuelson
“The Big Mac Index: Of Bucks and Burgers,” The Economist, July 15, 2017. **
Jose De Gregorio, Alberto Giovannini, and Holger Wolf, 1994, "International Evidence on Tradables and Nontradables Inflation,” European Economic Review 38, no. 6, June, 1225-44.

VI. SMALL OPEN ECONOMIES

19. (11/7) Devaluation in small open countries
Caves, Frankel and Jones, World Trade and Payments, Ch. 19.4 & Appendix 19.C. ***

20. (11/14) The Salter-Swan Model
Caves, Frankel and Jones, World Trade and Payments, Chapter 20. ***
21. (11/19) EM crises: Sudden stops, currency mismatches & contractionary devaluation

*WTP, 2007, Ch. 24.1-24.2, 24.4-24.9***


22. (11/26) Dutch Disease


POSSIBLE OPTIONAL LECTURE: The Natural Resource Curse & solutions


VII. EXCHANGE RATE REGIMES

23. (11/28) Classification; Pros and cons of fixed vs. floating Rates


24. (12/3) Optimum Currency Areas & Currency Unions

*WTP, Section 26.5.* ***


25. (12/5) APPLICATION: Macro Policy in China #2 (RMB policy & 2012-16 slowdown)

