**API-119: Advanced Macroeconomics for the Open Economy II, Spring 2020**

Harvard Kennedy School

**Staff:**

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**Times:**

Lectures: Monday & Wednesday, 10:15-11:45 a.m., in L140
Review Sessions: Friday, 10:15-11:30 am or 11:45 am-1:00 pm, in L140
Final exam: Tuesday, May 12, 9 a.m.-12 noon

**Course Description:** This course is the second in the two-course sequence on Macroeconomic Policy in the MPA/ID program. Topics covered in the first half of the course include international financial integration, exchange rate models, speculative attacks, the carry trade, portfolio choice, currency risk, and default risk. The second half of the course uses tools of dynamic optimization. It begins with long-term growth theory including the Solow, Ramsey, and endogenous growth – particularly Schumpeterian models. It then offers primers on Real Business Cycle theory, New Keynesian models, and Dynamic Stochastic General Equilibrium models.

**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.

**Who is expected to take the course:** This course, like Advanced Macroeconomics for the Open Economy I (API 120), is a required component of the MPA / International Development sequence. In addition to MPA/ID students, a student who has successfully taken API 120 in the fall can be admitted by permission of instructor.

**Grading:** 25% on Mid-term exam; 55% on final exam; 20% on problem sets & class participation. Problem sets are due by 10:10 a.m. on the due dates specified below, in the MPA/ID drop box. Please check the dates of the midterm and final exams before you make any alternate plans. Students are responsible for knowing what is in the **Academic Code** and abiding by it.
Topics and Lectures

Problem Set due-dates

Lectures, first half of semester: Professor J. Frankel

I. INTEGRATION OF FINANCIAL MARKETS
1. (1/27/2020) The theory of gains from intertemporal trade
2. (1/29) Imperfections in financial markets, including the Lucas Paradox
3. (2/3) Interest Rate Parity & other tests of financial integration ___ PS 1 due

II. EXPECTATIONS, MONETARY POLICY, AND EXCHANGE RATE DETERMINATION
4. (2/5) With flexible goods prices
5. (2/10) With sticky prices: the overshooting model
6. (2/12) Speculative attack models
   (2/17) President’s Day
   (2/18) ___ PS 2 due

III. THE CARRY TRADE, RISK, & PORTFOLIO DIVERSIFICATION
7. (2/19) Exchange rate forecasting, forward bias & risk premium
8. (2/24) Optimal portfolio diversification
9. (2/26) Exchange rate risk, equity risk, and home bias

IV. DEBT CRISIS & OTHER EM CRISIS
10. (3/2) Sovereign risk and debt dynamics ___ PS 3 due
11. (3/4) Fiscal failures, including political business cycle
12. (3/9) EM crises: Early Warning Indicators
13. (3/11) Midterm exam
   (3/14 – 3/22) SPRING BREAK

Lectures, second half of semester: Professor P. Aghion

V. GROWTH
14. (3/23) Solow neoclassical growth
15. (3/25) Ramsey model
   (3/30) ___ PS 4 due
16. (3/31 NOTE MOVE TO TUES., 8:45-10:00 am) Endogenous growth I: Externalities & Human Capital
17. (4/1) Endogenous growth II: Innovation
18. (4/6) Endogenous growth III: Competition
20. (4/13) OLG Models ___ PS 5 due

IV BUSINESS CYCLES
22. (4/20) New Keynesian models of fluctuations
23. (4/22) The DSGE approach
V CONSUMPTION & INVESTMENT

24. (4/27) Consumption

25. (4/29) Investment

PS 6 due

Final exam: Tuesday, May 12, 9 a.m.-12 noon

Readings, first half of semester (Prof. Frankel)

* = required reading
** = required strongly
*** = required strongly to read before lecture. You may be called upon.

World Trade & Payments (WTP), by R.Caves, J.Frankel, and R.Jones (10th edition, Addison Wesley, 2007). is available via the Coop; or at the professor’s Publications page; or via chapter links below (as are other readings).

I. INTEGRATION OF FINANCIAL MARKETS

1. (1/27) The theory of gains from intertemporal trade

World Trade and Payments, 10th edition, Chapter 21.5. ***


2. (1/29) Imperfections in financial markets, including the Lucas Paradox


3. (2/3) Interest Rate Parity & other tests of financial integration

WTP, Chapters 21.4, 27.1. ***


II. MONEY & MODELS OF EXCHANGE RATE DETERMINATION

4. (2/5) With flexible prices

WTP, 10th edition, Chapter 27.2-27.3 and Supplement to Ch. 27, S51-55 ***

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


“One-way baht: For 15 years two currencies have outperformed all others,” The Economist, Dec. 7, 2019. **

5. (2/10) With sticky prices: the overshooting model

WTP, Chapter 27.4-27.6. ***

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


6. (2/12) Speculative attack models

WTP, 10th edition, Ch. 24.3 ***


III. THE CARRY TRADE, RISK, PORTFOLIO DIVERSIFICATION

7. (2/19) Exchange rate forecasting, forward bias, and the risk premium

World Trade and Payments, 10th ed., Chapter 28.1 ***


8. (2/24) Optimal portfolio diversification

World Trade and Payments, Chapter 28.2 & Supplement to Ch.28, pp. S55-S58. ***


9. (2/26) Exchange rate risk, equity risk, and home bias

World Trade and Payments, Chapter 28.3 ***


IV. DEBT CRISIS & OTHER EM CRISIS

10. (3/2) Sovereign risk and debt dynamics

World Trade and Payments, Supplement to Ch.24, pp. S47-S48. ***


"Brazil warned of 'explosive' build-up of public debt," Financial Times, 24 May 2016.


“Jamaica’s tumultuous relationship with the IMF has a happy ending,” The Economist, Nov. 9, 2019.

11. (3/4) Fiscal failures, including political business cycle

Summary: "Fiscal Policy in Developing Countries: Escape from Procyclicality," Vox.EU, June 23, 2011. **

12. (3/7) EM crises: Early Warning indicators

Lessons from past crises and early warning indicators

WTP, Ch. 24.1-24.2. **


Contagion and the IMF

*WTP, Ch. 24.4-24.5 & 24.8.*

**Readings, second half of semester (Prof. Aghion)**


V. GROWTH

14. (3/23) Solow neoclassical growth
   *Aghion, P, and Howitt, P (2009), The Economics of Growth, Chapter 1*
   *Acemoglu, D (2008), Introduction to Modern Economic Growth*
   *Romer, D (2019) Advanced Macroeconomics, Chapter 1 (Same in 4th and 5th ed)*

15. (3/25) Ramsey model
   *Aghion, P, and Howitt, P (2009), The Economics of Growth, Chapter 1*
   *Acemoglu, D (2008), Introduction to Modern Economic Growth*
   *Romer, D (2019) Advanced Macroeconomics, Chapter 2A (Same in 4th and 5th ed)*

16. (3/31 NOTE MOVE TO TUES., 8:45-10:00 am) Endogenous growth I: Externalities & Human Capital
   *Aghion, P, and Howitt, P (2009), The Economics of Growth, Chapter 2*
   *Acemoglu, D (2008), Introduction to Modern Economic Growth*
   *Romer, D (2019) Advanced Macroeconomics, Chapter 3.1-3.3 (Same in 4th and 5th ed)*

17. (4/1) Endogenous growth models II: Innovation
   *Aghion, P, and Howitt, P (2009), The Economics of Growth, Chapters 3, 4, and 7*
   *Acemoglu, D (2008), Introduction to Modern Economic Growth, Chapters 13 and 14*
   *Romer, D (2019) Advanced Macroeconomics, Chapter 3.4-3.6 (Same in 4th and 5th ed)*

18. (4/6) Endogenous growth models III: Competition
   *Aghion, P, and Howitt, P (2009), The Economics of Growth, Chapters 12 and 15*
   *Acemoglu, D (2008), Introduction to Modern Economic Growth, Chapter 14*
*Aghion, P., Akcigit, U., and Howitt, P (2014), "What Do We Learn From Schumpeterian Growth Theory"

* Aghion, P, and Howitt, P (2009), The Economics of Growth, Chapters 8 and 15

20. (4/13) OLG models
*Romer, D (2019) Advanced Macroeconomics, Chapter 2B (Same in 4th and 5th ed)


VI BUSINESS CYCLES

*Romer, D (2019) Advanced Macroeconomics, Chapter 5 (Same in 4th and 5th ed)


22. (4/20) New Keynesian theories of fluctuations
*Romer, D (2019) Advanced Macroeconomics, Chapter 6 (Same in 4th and 5th ed)
23. (4/22) The DSGE approach

*Romer, D (2019) Advanced Macroeconomics, Chapter 7 (Same in 4th and 5th ed)

Tovar. C., “DSGE models and central banks”, BIS working paper 258

VII CONSUMPTION AND INVESTMENT

24. (4/27) Consumption

*Romer, D (2019) Advanced Macroeconomics, Chapter 8 (Same in 4th and 5th ed)

25. (4/29) Investment

*Romer, D (2019) Advanced Macroeconomics, Chapter 9 (Same in 4th and 5th ed)