ECON 521: OPEN ECONOMY MACROECONOMICS MARK MOORE FALL 2015

Office: KAP 324C

Email: mpmoore@usc.edu Office Hours: M, 1-4 p.m.

TA: CHONG SHU

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This course examines the macroeconomics of open economies. Topics include the balance of payments, macroeconomic policy in an open economy, exchange rate determination, exchange rate systems, currency crises, international financial arrangements, and monetary history, among others. We will also discuss the worldwide Great Recession and financial crisis and the stresses within the Eurozone, as well as ongoing currency developments in China, among many other topics. Open economy macroeconomics is an inherently topical discipline, so world events that occur during the semester may also become part of our course.

There will be some updates and revisions to the reading list over the course of the semester. I will also add missing online links to papers on the reading list as we progress. Also, current events may warrant some updates to readings or even a change in topics covered toward the end of the course.

Requirements

There will be two in-class exams and a final exam. Each exam will count for one-third of the final grade. The in-class exams are scheduled for Monday, October 5, and Monday, November 9. The final exam is scheduled for Monday, December 9, 6 pm to 9 pm, in accordance with the University-wide exam schedule. The in-class exams will not require the entire class period. At least one hour at the end of these class periods will be reserved for presentation of new material. Likewise, the final exam will not require the full three hours.

I will assign (approximately six) problem sets throughout the semester and distribute (or post) answers. These will be submitted and graded only on a complete/incomplete basis. A reasonable effort is required to achieve a grade of complete. Students who receive two or more incompletes on these problem sets will be penalized with a reduction on their exam scores.

You are strongly encouraged to complete these problems. Struggling with problems is the best way to learn the material.

Textbook

I am not aware of any textbook that covers the breadth of material we will cover at the appropriate level for this course. Hence, there is no required text for the course. There will be substantial outside readings from academic, policy, and

institutional sources. I will also provide some lecture notes when material is not covered adequately by outside readings.

Note that some of the required outside readings will be above the mathematical level of the course. In these cases, I will provide guidance in class. Even when the mathematical modeling in a given article is beyond the level required for this course, it is still often useful to read the article's written description of the main points to be explored.

Since we will be using a variety of models in this course, I hesitate to suggest supplemental textbooks, but I will mention two that you might find useful. Again, I emphasize that these books are not required.

A useful undergraduate text is Krugman, Obstfeld, and Melitz, *International Economics: Theory and Policy*, 10th edition. The level of modeling is below the level of the course, but the coverage of topics is broad.

A useful graduate text is Obstfeld and Rogoff, *Foundations of International Macroeconomics*. This book has become a fundamental reference for the field. Some the modeling is accessible, some is beyond the level of this course.

<u>Disability Services and Programs (DSP)</u>

Students requesting academic accommodations based on disability are required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP when adequate documentation is filed. Please be sure the letter is delivered to me (or to our TA) as early in the semester as possible. DSP is open Monday-Friday, 8:30-5:00. The DSP office is GFS 120, and the phone number is (213) 740-0776.

Academic Integrity

The University takes academic integrity quite seriously. All violations of academic integrity will be reported to Student Judicial Affairs and Community Standards, in accordance with university policy. You can find the Trojan Integrity Guide at

http://www.usc.edu/student-affairs/SJACS/forms.tig.pdf.

Course Readings and Schedule

This schedule may be revised and additional readings may be added as the course progresses. The reading list is extensive. I will inform you of the most important readings as we approach each topic.

The analytical level of some of the readings is somewhat above the level of the course. I will use lecture to present simpler models to capture the main ideas of the papers, and distribute lecture notes if necessary. In cases where we use simpler models, it is still worthwhile to read the arguments presented in the papers.

SCHEDULE & READINGS

I. PRELIMINARIES

Monday, August 24, 2015 A. The Balance of Payments Lecture notes

Bach, Christopher (2010), "A Guide to the U.S. International Transactions Accounts and the U.S. International Investment Position Accounts," BEA Briefing, February 2010. I list this as required, but it's really a reference for balance of payments accounting. Use it to supplement the material presented in class. Available at http://bea.gov/scb/pdf/2010/02 February/0210 guide.pdf

Bernanke, Ben S. (2015), "Germany's trade surplus is a problem," Ben Bernanke's blog, post on April 3, 2015. Available at http://www.brookings.edu/blogs/ben-bernanke/posts/2015/04/03-germany-trade-surplus-problem

(optional) Borga, Maria and Kristy L. Howell (2014), "The Comprehensive Restructuring of of the International Economic Accounts," BEA, March 2014. For those who want the full details of balance of payments accounting. Available at http://www.bea.gov/scb/pdf/2014/03
March/0314 restructuring the international economic accounts.pdf

Obstfeld, Maurice (2011), "Financial Flows, Financial Crises, and Global Imbalances," *Journal of International Money and Finance, 2011*. Available at http://eml.berkeley.edu/~obstfeld/. Look under "Recent Papers."

(optional) Obstfeld, Maurice (2012), "Does the Current Account Still Matter?," Ely Lecture, American Economic Association Annual Meeting, January 2, 2012. Extends the arguments in Obsteld (2011), cited above. Available at http://eml.berkeley.edu/~obstfeld/.

Monday, August 31, 2015
B. Exchange Rates, Real and Nominal, and Purchasing Power Parity

Lecture Notes

Chinn, Menzie D. (2008), "Real Exchange Rates," *New Palgrave Dictionary*, Steven N. Durlauf and Lawrence E. Blume, eds., Palgrave-Macmillan. Paper available at http://www.ssc.wisc.edu/~mchinn/NewPalgrave RER.pdf

Dornbusch, R.; S. Fischer, and P.A. Samuelson (1977), "Comparative, Advantage, Trade, and Payments in a Ricardian Model with a Continuum of Goods," *American Economic Review*, Vol. 67, No. 5 (Dec. 1977). Read pages 821-829. Available at JSTOR. Login at

 $\underline{https://www.jstor.org/action/showLogin?redirectUri=\%2F\%3F\%26loginSuccess=true}$

Type University of Southern California in the Login via an Institution and section and follow the login instructions that follow. Then search for the article to download.

Rogoff, Kenneth, "Dornbusch's Overshooting Model after 25 Years," *IMF Staff Papers* 49, Special Issue 2002. See in particular pages 1-18 and the conclusion. The rest can be read in Section II below. Available at https://www.imf.org/external/np/speeches/2001/kr/112901.pdf

Taylor, Alan M., and Mark P. Taylor (2004), "The Purchasing Power Parity Debate," *Journal of Economic Perspectives*, 18:4:135-158 (Fall 2004). Available at https://www.aeaweb.org/articles.php?doi=10.1257/0895330042632744

Monday, September 7, 2015 LABOR DAY-NO CLASS

II. MODELS OF ADJUSTMENT

Monday, September 14, 2015
A. A Small Open Economy in the Medium Run
Lecture Notes

B. The Mundell-Fleming Model Lecture Notes

Dornbusch, Rudiger (1976), "Expectations and Exchange Rate Dynamics," *Journal of Political Economy* 84, December 1976. Available at http://www.mit.edu/~14.54/handouts/dornbusch76.pdf

Monday, September 21, 2015 C. Open Economy New Keynesian Model: Graphical Approach Lecture Notes

Carlin, Wendy, and David Soskice (2010), "A New Keynesian Open Economy Model for Policy Analysis," CEPR Discussion Paper No. 7979, http://www.researchgate.net/publication/228222700

Monday, September 28, 2015 In-class Review

Monday, October 5, 2015 EXAM I (first 2 hours)

D. The Intertemporal Approach to the Current Account Lecture Notes

Obstfeld, Maurice, and Kenneth Rogoff, "The Intertemporal Approach to the Current Account", in *Handbook of International Economics*, Gene Grossman and Ken Rogoff, eds., North Holland, 1995. Available (in working paper form) at http://www.nber.org/papers/w4893

Monday, October 12, 2015 Exam Review (1st half) The Intertemporal Approach (continued) Lecture Notes

International Monetary Fund (2011), *World Economic Outlook: Slowing Growth, Rising Risks*, Chapter 4, September 2011. Available at https://www.imf.org/external/pubs/ft/weo/2011/02/pdf/text.pdf

(optional) Glick, Reuven, and Kenneth Rogoff (1995), "Global versus country-specific shocks and the current account," *Journal of Monetary Economics 35* (1995), pp. 159-192. Available at http://scholar.harvard.edu/rogoff/publications/global-Versus-Country-Specific-Productivity-Shocks-And-Current-Account

III. THE POLICY TRILEMMA IN THEORY AND HISTORY

A. The Policy Trilemma

Obstfeld, Maurice; Jay C. Shambaugh; and Alan M. Taylor (2004), "Monetary Sovereignty, Exchange Rates, and Capital Controls: The Trilemma in the Interwar Period," *IMF Staff Papers*, Vol. 51, Special Issue. Available at http://www.imf.org/External/Pubs/FT/staffp/2003/00-00/ost.pdf

(optional) Obstfeld, Maurice, Jay C. Shambaugh, and Alan M. Taylor, "The Trilemma in History: Tradeoffs Among Exchange Rates, Monetary Policies, and Capital Mobility," *The Review of Economics and Statistics*, 87:3, 2005. Available at http://eml.berkeley.edu/~obstfeld/ost12.pdf

Monday, October 18, 2015

B. Some Monetary History: The Gold Standard Lecture Notes

(optional) Cherynyshoff, Natalia, David S. Jacks, and Alan M. Taylor, "Stuck on Gold: Real Exchange Rate Volatility and the Rise and Fall of the Gold Standard, 1875-1939," *Journal of International Economics* 77, April 2009. Available at http://www.sfu.ca/~djacks/papers/publications/Stuck%20on%20Gold.pdf

(optional) Rockoff, Hugh, "The 'Wizard of Oz' as a Monetary Allegory," *Journal of Political Economy*, 98:739-760, 1990. Available at https://www.unc.edu/~salemi/Econ006/Rockoff.pdf

IV. TRILEMMA I: CONFIDENCE/EXCHANGE RATE STABILITY

A. Exchange Rate Economics Lecture notes.

Chinn, Menzie D. (2006), "The (Partial) Rehabilitation of Interest Rate Parity in the Floating Rate Era: Longer Horizons, Alternative Expectations, and Emerging Markets," *Journal of International Money and Finance* 25, 7-21. Available at http://www.ssc.wisc.edu/~mchinn/partialrehabilitation_IIMF2006.pdf

(optional) Engel, Charles (2015), "Exchange Rates and Interest Parity," *Handbook of International Economics 4*, 2015. Available at http://www.ssc.wisc.edu/~cengel/PublishedPapers/Handbook.pdf

B. Fixed Exchange Rates I: Currency and Financial Crises (optional) Diaz-Alejandro, Carlos. F., "Good-Bye Financial Repression, Hello Financial Crash," *Journal of Development Economics* 19 (September/October 1985): 1-24. Available at https://kellogg.nd.edu/publications/workingpapers/WPS/024.pdf

Krugman, Paul R. "A Model of Balance-of-Payments Crises," *Journal of Money, Credit and Banking* 11 (August 1979): 311-25. http://www.mit.edu/~14.54/handouts/krugman%20BPO%20crisis.pdf

Obstfeld, Maurice, "Models of Currency Crisis with Self-Fulfilling Features," *European Economic Review* 40 (April 1996): 1037-47. Available at http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.423.1051&rep=rep1&type=pdf

Monday, October 26, 2015

C. Fixed Exchange Rates II: Currency Unions Lecture Notes

(optional) Farhi, Emmanuel, and Ivan Werning, "Fiscal Unions," mimeo, March 2013. Available at https://dl.dropboxusercontent.com/u/125966/fiscal-unions.pdf

O'Rourke, Kevin H. O., and Alan M. Taylor, "Cross of Euros," *Journal of Economic Perspectives*, 27:3, Summer 2013. Available at https://www.aeaweb.org/articles.php?doi=10.1257/jep.27.3.167

Wren-Lewis, Simon (2013), "Macroeconomic Stabilisation in the Eurozone: Lessons from Failure," *Global Policy*, Volume 4, Supplement 1, July 2013. Available at http://onlinelibrary.wiley.com/doi/10.1111/1758-5899.12048/abstract

D. Fixed Exchange Rates III: Liquidity Trap Economics (a close cousin of fixed exchange rate regimes)
Lecture Notes

Blanchard, Olivier (2013), "Monetary Policy will Never be the Same," iMF Direct, International Monetary Fund, November 19, 2013. Available on the iMF Direct blog: http://blog-imfdirect.imf.org/2013/11/19/monetary-policy-will-never-be-the-same/

Eggertsson, Gauti B., and Paul Krugman, "Debt, Deleveraging, and the Liquidity Trap: A Fisher-Minsky-Koo Approach," *Quarterly Journal of Economics*. 127(3), 2012. Available at http://www.econ.brown.edu/fac/gauti-eggertsson/cu-papers.html

Krugman, Paul R., (1998), "It's Baaack: Japan's Slump and the Return of the Liquidity Trap," *Brookings Papers on Economic Acitivity, 2:1998.* Available at http://www.brookings.edu/~/media/projects/bpea/1998%202/1998b bpea krugman dominguez rogoff.pdf

Krugman, Paul R. (2015), "Rethinking Japan," *The Conscience of a Liberal*, blog post, October 20, 2015. Available at http://krugman.blogs.nytimes.com/2015/10/20/rethinking-japan/

Monday, November 2, 2015 In-class Review for EXAM 2

Monday, November 9, 2015 EXAM 2 (first two hours)

V. TRILEMMA II: ADJUSTMENT—THE FISCAL VARIETY
A. Fiscal Policy in Open Economies
Blanchard, Olivier, and Daniel Leigh (2013), "Fiscal consolidation: at what speed?,"VoxEU.org. Available at http://www.voxeu.org/article/fiscal-consolidation-what-speed

Blanchard, Olivier, and Daniel Leigh (2013), "Growth Forecast Errors and Fiscal Multipliers," IMF Working Paper 13/1, January 2013. Available at https://www.imf.org/external/pubs/cat/longres.aspx?sk=40200.0

International Monetary Fund, "Will It Hurt? Macroeconomic Effects of Fiscal Consolidation," *World Economic Outlook*, October 2010, Chapter 3. Available at https://www.imf.org/external/pubs/ft/weo/2010/02/

Jorda, Oscar, and Alan M. Taylor, "The Time for Austerity: Estimating the Average Treatment Effect of Fiscal Policy," NBER Working Paper 19414, September 2013. Available at https://sites.google.com/a/ucdavis.edu/amtaylor/

Monday, November 16, 2015 Exam Review

B. Debt Crises

(optional) Corsetti, Giancarlo, and Luca Dedola, "The Mystery of the Printing Press: Self-fulfilling debt crises and monetary sovereignty," mimeo, November 2012. Available at

http://www.eui.eu/Documents/DepartmentsCentres/Economics/Researchandteaching/Conferences/FiscalPolicyWorkshop/Corsetti.pdf

Krugman, Paul (2014), "Currency Regimes, Capital Flows, and Crises," *IMF Economic Review* (2014) **62**, 470-493. Available at https://www.imf.org/external/np/res/seminars/2013/arc/pdf/Krugman.pdf

Wren-Lewis, Simon, "Default panic and other tall stories," mainly macro blog, March 21, 2015. Available at http://mainlymacro.blogspot.com

VI. TRILEMMA III: LIQUIDITY

1. Financial Frictions, Risk Sharing, and Capital Controls

Chang, Chun; Zheng Liu; and Mark M. Spiegel, "Capital Controls and Optimal Chinese Monetary Policy," Federal Reserve Bank of San Francisco, Working Paper 2012-13, January 2015. Available at http://www.frbsf.org/economic-research/files/wp12-13bk.pdf

Coeurdacier N, and H. Rey, "Home Bias in Open Economy Financial Economics," *Journal of Economic Literature*, 51(1), 2013 <a href="http://www.helenerey.eu/AjaxRequestHandler.ashx?Function=GetSecuredDOC&DOCUrl=App Data/helenerey.eu/Published-Papers en-GB/ Documents 2012-13/72586765901 67186463733 homebias-feb2013-finalJEL 0.pdf

(optional) Farhi, Emmanuel, and Ivan Werning (2013), "Dilemma not Trilemma? Capital Controls and Exchange Rates with Volatile Capital Flows," MIT mimeo. Available at http://economics.mit.edu/faculty/iwerning/papers

Rey, Helene, "Dilemma not Trilemma: The Global Financial Cycle and Monetary Policy Independence," Jackson Hole Symposium, 2013. Available at http://www.helenerey.eu/MAP.aspx?pid=News_en-GB&aid=nn_84501414_67186463733

Monday, November 23, 2016

2. External Adjustment

Caballero, Ricardo J., 2010, "A Caricature (Model) of the World Economy," MIT Working Paper 10-17, November 23, 2010. Available at http://economics.mit.edu/faculty/caball/papers

Gourinchas, Pierre-Olivier, and Hélène Rey (2014), "External Adjustment, Global Imbalances, Valuation Effects," in Elhanan Helpman, Kenneth Rogoff, and Gita

Gopinath, eds., *Handbook of International Economics*, vol 4, Elsevier B.V. Available at http://www.helenerev.eu/RP.aspx?pid=Published-Papers en-GB

Monday, November 30, 2015

VII. THE FINANCIAL CRISIS, THE EURO CRISIS, AND THE GREAT RECESSION Baldwin, Richard; Thorsten Beck; Agnès Bénassy-Quéré; Olivier Blanchard; Giancarlo Corsetti; Paul de Grauwe; Wouter den Haan; Francesco Giavazzi; Daniel Gros; Sebnem Kalemli-Ozcan; Stefano Micossi; Elias Papaioannou; Paolo Pesenti; Christopher Pissarides; Guido Tabellini; and Beatrice Weder di Mauro (2015), "Rebooting the Eurozone: Step 1 – agreeing a crisis narrative," Center for Economic Policy Research, Policy Insight No. 85, November 2015. Available at http://www.voxeu.org/sites/default/files/file/Policy%20Insight%2085.pdf

Blanchard, Olivier (2009), "The Crisis: Basic Mechanisms, and Appropriate Policies," IMF Working Paper WP/09/80, April 2009. Available at https://www.imf.org/external/pubs/ft/wp/2009/wp0980.pdf

(optional but recommended) Blanchard, Olivier; Eugenio Cerutti; and Lawrence Summers (2015), "Inflation and Activity—Two Explorations and their Monetary Policy Implications," IMF Working Paper WP/15/230, November 2015. Available at https://www.imf.org/external/pubs/ft/wp/2015/wp15230.pdf

(optional) Caballero, Ricardo J., 2009, "The 'Other' Imbalance and the Financial Crisis, prepared for the Bank of Italy's Pablo Baffi Lecture. Available at http://economics.mit.edu/faculty/caball/papers

(optional but recommended) Brunnermeier, Markus K., 2009, "Deciphering the Liquidity and Credit Crunch 2007- 08," *Journal of Economic Perspectives*, 23:1, 77-100. Available at

http://scholar.princeton.edu/sites/default/files/liquidity_credit_crunch_nber.pdf

(optional) Brunnermeier, Markus K., Andrew Crocket, Charles Goodhart, Avinash D. Persaud, and Hyun Shin, 2009, "The Fundamental Principles of Financial Regulation," Geneva Reports on the World Economy 11. Available at http://scholar.princeton.edu/sites/default/files/geneva11 0.pdf

(optional) Kashyap, Anil (2015), "A Primer on the Greek Crisis: the things you need to know from the start until now," mimeo, University of Chicago, Booth School of Business, June 29, 2015. Available at

https://faculty.chicagobooth.edu/anil.kashyap/research/papers/A-Primer-on-the-Greek-Crisis june29.pdf

Krugman, Paul (2015), "Iceland, Ireland, and Devaluation Denial," *The Conscience of a Liberal*, blog post, November 27, 2015. Available at

http://krugman.blogs.nytimes.com/2015/11/27/iceland-ireland-and-devaluation-denial/

O'Brien, Matt (2015), "The miraculous story of Iceland," Wonkblog, *The Washington Post*, June 17, 2015. Available at

https://www.washingtonpost.com/news/wonk/wp/2015/06/17/the-miraculous-story-of-iceland/

(optional) Obstfeld, Maurice (2013), "Finance at Center Stage: Some Lessons of the Euro Crisis," *Economic Papers*, 493, European Commission, April 2013. Available at http://eml.berkeley.edu/~obstfeld/

(optional) Whelan, Karl (2013), "Ireland's Economic Crisis: The Good, the Bad, and the Ugly," UCD Centre for Economic Research, WP13/06, July 2013. Available at http://karlwhelan.com/blog/?page_id=26

Wren-Lewis, Simon (2015), "The Great Recession and the Eurozone crisis," mainly macro blog, July 12, 2015. Available at http://mainlymacro.blogspot.com

Monday, December 14, 6-8 p.m. FINAL EXAM