EC1435: MACROECONOMIC POLICY IN THE GLOBAL ECONOMY

Spring 2019

Emmanuel Farhi

Littauer 208

Phone: 617 496 1835

Email: efarhi@harvard.edu

OVERVIEW

Uses simple models and empirical methods to analyze key macroeconomic policy challenges confronting the world economy. Examines balance of payments, the determinants of exchange rates, fiscal policy, monetary policy, exchange rate policy, balance of payment crises, international macroeconomic dependence, financial globalization and the challenges facing developing economies. Considerable attention to recent policy debates surrounding the financial crisis, global imbalances, China's exchange rate policy, Sovereign Wealth Funds, the Euro and Europe's crisis, and Japan's lost decade. While sophisticated economic reasoning will be involved, purely mathematical technicalities will be kept to a minimum.

Course prerequisites: Students taking this course should have taken an intermediate macroeconomics class (1010b or 1011b). Knowledge of univariate calculus and basic statistics will be assumed.

WHEN AND WHERE

The class meets in Littauer M15 on Tuesday and Thursday from 1:30pm to 2.45pm.

COURSE MATERIAL

The required text for the course is **International Economics** by Paul Krugman, Marc Melitz, and Maury Obstfeld, tenth edition (Pearson 2015).

Additional material will be available through the course web site. Readings can be accessed online on the course website through the links below. Required readings are indicated by *. Journal articles can be accessed online through the Harvard Library's e-Journals and e-Resources web site. You should check the web site fairly often for updates and additional material.

Students are expected to take note of economic events of relevance in the world. Empirical knowledge of key relationships, data, and current policy issues will be necessary for passing the course. You are also strongly encouraged to read "The Economist†magazine and the Financial Times.

LECTURE SLIDES AND NOTES

Lecture slides and notes will be posted on the class web page. You should check the web site fairly often for updates, announcements and additional material.

LEARNING CATALYTICS

There will be short quizzes at the beginning of each class. Please click the Learning Catalytics tab on the Canvas page. Follow instructions to create an account. You will be given a session code before each quiz.

EVALUATION

Problem Sets: There will be 2/3 problem sets assigned.

Quizzes: Each class will start with a 10 minute quiz that can be taken on a laptop, a tablet, or a phone. Participation in the quizzes (but not the actual results) counts towards class participation.

Midterm: There will be a 1.5 hour midterm examination during the last class before Spring Recess (March, 14).

Final: A 3 hour final exam will be given during finals week. The final will cover the entire course.

Final grade calculation: midterm (30%), final (40%), problem sets and class participation and discussions (30%).

TEACHING ASSITSTANT

Armando Miano

Email: amiano@g.harvard.edu

SECTIONS

There will be two sections per week, covering the same material.

Monday, 6pm to 7pm in Sever Hall 306, and Tuesday, 7:30pm to 8:30pm in Littauer M15.

OFFICE HOURS

Emmanuel's office hours: Mondays from 4pm to 5.30pm. It is safer to send me an email if you plan to drop by.

Armando's office hours: Tuesdays 6:30pm to 7:30pm or by appointment.

DETAILED SYLLABUS

A star (*) denotes required reading.

The contents of the syllabus are likely to change as we go along. You should check regularly on the course web page.

INTRODUCTION AND MOTIVATION

Lecture 1

- *Rogoff, Ken, "Managing the World Economyâ€, The Economist, August 1, 2002
- additional readings:
 - Reinhart, Carmen and Ken Rogoff, <u>"This Time is Different: A Panoramic View of Eight Centuries of Financial Crisesâ€</u>, manuscript, Harvard University April 2008.
 - Brunnermeier, <u>"Deciphering the Liquidity and Credit Crunch 2007-2008†(Links to an external site.)</u>Links to an external site., Journal of Economic Perspectives, 2009.
 - Bank for International Settlements, 2009 Annual Report, <u>chapter I: Rescue, Recovery, Reform</u> (Links to an external site.)Links to an external site., June 2009.
 - Bank for International Settlements, 2010 Annual Report, <u>chapter II: From the Emergency Room to Intensive Care (Links to an external site.)</u>Links to an external site., June 2010.
 - o Donald Kohn, <u>"Monetary Policy in the Crisis: Past, Present and Futureâ€, (Links to an external site.)Links to an external site.</u> Brimmer Policy Forum, American Association Annual Meeting, January 2010.
 - Stanley Fisher, "<u>Globalization and Its Challenges (Links to an external site.)Links to an external site.</u>â€, Richard T. Ely Lecture, American Economic Review, May 2003, pp 1-30.
 - Farhi, Emmanuel, "<u>How to reconcile risk sharing and market discipline in the euro area, (Links to an external site.)Links to an external site.</u>†VOX EU, January 17, 2018
 - Farhi, Emmanuel and Maggiori, Matteo, "The new Triffin Dilemma: The concerning fiscal and external trajectories of the US,†(Links to an external site.)Links to an external site. VOX EU, December 20, 2017
 - Caballero, Ricardo and Farhi, Emmanuel and Gourinchas, Pierre-Olivier "<u>On the global ZLB</u>
 economy (Links to an external site.)Links to an external site.,†VOX EU, November 5, 2017

NATIONAL INCOME ACCOUNTS AND BALANCE OF PAYMENTS

Lectures 2 and 3

- *chapter 13
- articles:
 - * "Globalisation has faltered", The Economist, January 24, 2019.
- additional material:
 - Gourinchas and Rey, "From World Banker to World Venture Capitalist: US External
 Adjustment and The Exorbitant Privilege†(Links to an external site.)Links to an external site., in
 R. Clarida ed., G7 Current Account Imbalances: Sustainability and Adjustment.
 - o Gourinchas, Pierre-Olivier, <u>"Valuation Effects and External Adjustment: A Review (Links to an external site.)Links to an external site.</u>â€, in Kevin Cowan, Sebastian Edwards and Rodrigo Valdes, eds, <u>Current Account and External Financing (Links to an external site.)Links to an</u>

- <u>external site.</u>, Series on Central Banking, Analysis and Economic Policy, Banco Central de Chile, 2008.
- Deustche Bank Research, "Sovereign Wealth Funds State investments during the crisisâ€, July 2009.
- Aizenman, Joshua, <u>"Reserves and the Crisis: a Reassessment†(Links to an external site.)</u>Links to an external site., Central Banking, vol 19(3), 2009.

GLOBAL IMBALANCES: INVESTMENT, SAVING AND THE METZLER DIAGRAM

Lecture 4

- *chapter 17 (pp458-459) and chapter 6 (pp127-130 and 134-136)
- Blog posts:
 - *Maurice Obstfeld, Assessing Global Imbalances: The Nuts and Bolts
 https://blogs.imf.org/2017/06/26/assessing-global-imbalances-the-nuts-and-bolts/ (Links to an external site.)

 Links to an external site.
- Additional material:
 - Bernanke, Ben, <u>"The Global Saving Glut and the U.S. Current Account Deficitâ€</u>, (<u>Links to an external site</u>.)<u>Links to an external site</u>. Sandridge Lecture, Virginia Association of Economics, Richmond, Virginia, March 2005.
 - Feldstein M. and C. Horioka, "<u>Domestic Savings and International Capital Flows</u> (Links to an external site.)Links to an external site.â€, Economic Journal, June 1980.
 - Obstfeld, Maurice and Ken Rogoff, "Global Imbalances and the Financial Crisis: Products of <u>Common Causesâ€</u>, (Links to an external site.)Links to an external site. mimeo, UC Berkeley, Nov. 2009.
 - o Caballero, Ricardo, <u>"Commentary</u>: <u>Global Imbalances and the Financial Crisisâ€</u>, (<u>Links to an external site</u>.) <u>Links to an external site</u>. Federal Reserve Bank of San Francisco Asia Economic Policy Conference, October 2009.
 - Caballero, Ricardo, <u>"The `other' imbalance and the financial crisisâ€</u>, (Links to an external site.)Links to an external site. NBER Working Paper, 2010.
 - o Blanchard, Olivier and Gian Maria Milesi-Ferretti, <u>"Global Imbalances: In Midstream?â€,</u> (Links to an external site.)Links to an external site. IMF Staff Position Note, December 2009.

FOREX MARKETS, ARBITRAGE AND PARITY CONDITIONS

Lecture 5

- *chapter 14 (pp342-352) and 20 (pp618-619)
- *The evolving structure of the global FX market Insights from the 2013 triennial survey, voxeu, December 2013

Lecture 6

- *chapter 14 (pp. 352-378)
- *John Cochrane, "Covered interest parity" and "More covered interest parity".
- Additional readings:
 - Bank for International Settlements, <u>Triennial Central Bank Survey</u>, <u>Foreign Exchange Turnover in April 2016</u> (<u>Links to an external site</u>.)<u>Links to an external site</u>., December 2016.
 - Baba, Naohiko and Franck Packer, "From Turmoil to Crisis: Dislocations in the FX Swap
 Market Before and After the Failure of Lehman Brothersâ€, (Links to an external site.)Links to an
 external site. BIS Working Paper 285, July 2009.
 - McCauley Robert and Patrick McGuire, "<u>Dollar Appreciation in 2008: Safe Haven, Carry Trades, Dollar Shortage and Overhedgingâ€, (Links to an external site.)Links to an external site.</u>
 BIS quarterly review, December 2009.
 - Cavallo, Michele, <u>"Interest Rates, Carry Trades, and Exchange Rate Movements</u>
 (<u>Links to an external site.</u>)<u>Links to an external site.</u><u>â€, FRSBF Economic Letter,</u>
 November 2006.
 - Froot, Ken and Richard Thaler, <u>"Anomalies: Foreign Exchangeâ€</u>, (Links to an external site.)Links to an external site. Journal of Economic Perspectives, 1990.

MONEY, INTEREST RATES AND EXCHANGE RATES

Lecture 7

• *chapter 15 (pp. 379-394)

• *Boesler Matthews, <u>A breakdown in old rules leads to a rethink on how global markets work</u>, Bloomberg news, June 2016.

Lecture 8

- *chapter 15 (pp. 394-407)
- *Rogoff, Ken, "<u>Dornbusch's Overshooting Model After Twenty-Five Years (Links to an external site.)</u>Links to an external site. â€, IMF working paper, February 2002.
- additional readings:
 - Rogoff, Ken, <u>"Perspectives on Exchange Rate Volatilityâ€</u>, in M. Feldstein ed, International Capital Flows, University of Chicago Press and the NBER, 1999.
 - Clarida, R. and D. Waldman, "<u>Is Bad News about Inflation Good News for the Exchange Rate?</u> â€, (Links to an external site.)Links to an external site. NBER Working paper 13010, April 2007.
 - Velde, F., "<u>Chronicles of a Deflation Unforetoldâ€, (Links to an external site.)Links to an external site.</u> Links to an external site. mimeo, Federal Reserve Bank of Chicago, November 2006.

EXCHANGE RATES AND PRICES IN THE LONG RUN

Lecture 9

- *chapter 16 (pp. 413-423)
- *World Bank, 2011 International Comparison Program Summary Results, April 2014.

Lecture 10

- *chapter 16 (pp. 423-444)
- *"The Big Mac Indexâ€, The Economist, <u>Jan 12th 2019</u> and <u>Jan 10th 2019</u>.
- additional readings:
 - World Bank, International Comparison Program, <u>Purchasing Power Parities and Real Expenditures of World Economies</u>. <u>Summary of Results and Findings of the 2011</u>
 <u>International Comparison Program</u>, 2014 (look at Conceptual Framework and Overview of Methodology)</u>.
 - Rogoff, Ken, <u>"The Purchasing Power Parity Puzzle (Links to an external site.)Links to an external site.</u> Journal of Economic Literature, June 1996.
 - <u>"A Less Fiery Dragon?â€</u>, (Links to an external site.)Links to an external site. Economics Focus, The Economist, Nov. 29, 2007.

FLEXIBLE EXCHANGE RATES AND OUTPUT IN THE SHORT RUN

Lecture 11

- * chapter 17 (pp. 451-462)
- *Krugman, "The macroeconomics of trade war", NYTimes, March 3, 2018 <u>Link (Links to an external site.)</u>Links to an external site.

Lecture 12

- *chapter 17 (pp.462-471)
- *Boz, Gopinath, Plagborg-Muller, "Global trade and the dollar" (Links to an external site.) Links to an external site.
- *Gopinath, Gita, <u>"Trade, it's all about the dollar" (Links to an external site.)Links to an external site (Video).</u>

- *chapter 17 (pp. 471-485)
- *Farhi, Emmanuel, "The safety trap" (Links to an external site.)Links to an external site (Video).
- Posts:
- Summers, "Currency markets send a warning to the US economy", <u>Link (Links to an external site.</u>) <u>Links to an external site.</u>
- additional readings:
 - IMF, World Economic Outlook, chapter 3, <u>"From Recession to Recovery, How soon and how strong?â€</u>, (Links to an external site.)Links to an external site. April 2009

- IMF, World Economic Outlook, chapter 4, <u>"How Linkages Fuel the Fire: the transmission of financial stress from advanced to emerging economiesâ€, (Links to an external site.)Links to an external site. April 2009.</u>
- Krugman, Paul, <u>"It's Baaack: Japan's Slump and the Return of the Liquidity Trapâ€,</u>
 (<u>Links to an external site.</u>)<u>Links to an external site.</u> Brookings Papers on Economic
 Activity, 1998 vol 2, pp137-205
- Klyuev Vladimir, Phil de Imus and Krishna Srinivasan, <u>"Unconventional Choices for Unconventional Times</u>: Credit and Quantitative Easing in Advanced Economiesâ€, (Links to an external site.)Links to an external site. IMF Staff Position Note, November 2009.
- Bank for International Settlements, 2010 Annual Report, <u>chapter III: "Low Interest Rates: Do</u> the Risk Outweigh the Rewardsâ€, (Links to an external site.)Links to an external site. June 2010
- Gopinat, Gita, "The international monetary system", section 1, Link

EXTERNAL AND FISCAL SUSTAINABILITY

Lecture 14

- *Bank for International Settlements, 2010 Annual Report, <u>chapter IV: Fiscal Sustainability in the</u> Industrial Countries (Links to an external site.)Links to an external site., June 2010.
- *Farhi, Emmanuel and Maggiori, Matteo, "The new Triffin Dilemma: The concerning fiscal and external trajectories of the US,†(Links to an external site.)Links to an external site. VOX EU, December 20, 2017
- *Bernanke, Ben, <u>"The dollar's international role: An exorbitant privilege?"</u>, Brookings, January 7, 2016.
- *Boonstra, Wim, <u>"The external debt of the US is no cause for concern, yet"</u>, VOX EU, August 25, 2017.
- additional readings:
 - Martin Feldstein, "<u>Resolving the Global Imbalance: The Dollar and The U.S. Saving</u> <u>Rate</u>â€, Journal of Economic Perspectives, Summer 2008.
 - Reinhart, Carmen and Ken Rogoff, <u>"From Financial Crash to Debt Crisisâ€</u>, (Links to an external site.)Links to an external site. mimeo Harvard University, Feb 2010.
 - o Obstfeld, Maury and Ken Rogoff, <u>"Perspectives on OECD Economic Integration</u>: <u>Implications for US Current Account Adjustmentâ€</u>, Federal Reserve Bank of Kansas City, Symposium, 2000, and also <u>"The Unsustainable US Current Account Position Revisitedâ€</u>, (<u>Links to an external site</u>.)Links to an external site. October 2004.
 - Michele Cavallo, <u>"International Financial Integration and the Current Account Balance (Links to an external site.)</u>Links to an external site. FRBSF Economic Letter, June 2006.

FIXED EXCHANGE RATES

Lecture 15

- *chapter 18 (pp. 495-509)
- *Federal Reserve History, "East Asian Financial Crisis", Link (Links to an external site.)
- *"It's been a privilege", The Economist, February 11, 2017.
- *Ilzetki, Ethan, Reinhart, Carmen, and Rogoff, Kenneth, <u>"Exchange Arrangements Entering the Twenty-First Century: Which Anchor will Hold?"</u>, Quarterly Journal of Economics, January 2019 Focus on Section III
- additional readings:
 - IMF's Classification of Exchange Rate Arrangements, April 2017.
 - Calvo, Guillermo and Carmen Reinhart, "Fear of Floatingâ€, Quarterly Journal of Economics May 2002, available as NBER WP 7993. (Links to an external site.)Links to an external site.
 - Reinhart, Carmen and Ken Rogoff, <u>"The Modern History of Exchange Rate Arrangements: A Reinterpretation</u>â€, Quarterly Journal of Economics, February 2004.
 - Higgins, Matthew and Thomas Kliitgard, "Reserve Accumulation: Implications for Global Capital Flows and Financial Marketsâ€, (Links to an external site.)Links to an external site.
 Current Issues in Economic and Finance, Federal Reserve Bank of New York, October 2004.

BALANCE OF PAYMENT CRISIS

- *chapter 18 (pp. 509-511)
- *Kalemil-Ozcan, "The next sudden stop" (Links to an external site.)Links to an external site.,

Vox

• *Eichengreen, Gupta, <u>"Managing sudden stops"</u> (<u>Links to an external site.</u>)Links to an external site., Vox

Lecture 17

- *chapter 18 (pp. 512-526)
- *Rose, Andrew and Mark Spiegel, <u>"What do we know about the causes of the crisis?"</u>, Voxeu.org, August 2010
- additional readings:
 - o Obstfeld, Maury "<u>Models of Currency Crisis with Self-Fulfilling Features (Links to an external site.)Links to an external site.</u>â€, European Economic Review, 40(3-5), April 1996, pages 1037-47.
 - Jeanne, Olivier, "<u>Currency Crisis, A Perspective on Recent Theoretical Developments (Links to an external site.)Links to an external site.</u>â€, Special Papers in International Economics, Princeton University, March 2000
 - Rose, Andrew and Mark Spiegel, "Could an early warning system have predicted the crisis (Links to an external site.)Links to an external site.?â€, vox-eu, August 2009

THE INTERNATIONAL MONETARY SYSTEM

Lecture 18

- *chapter 19 (pp. 538-559)
- *Eichengreen Barry, Arnaud Mehl, Livia ChiÅ£u, "Mars or Mercury? The geopolitics of international currency choice" (Links to an external site.) Links to an external site., Vox
- *"Thrills and spills", The Economist
- *Bordo Michael, "The operation and demise of the Bretton Woods system: 1958 to 1971" (Links to an external site.) Links to an external site., Vox
- additional readings:
 - Eichengreen Barry and Nathan Sussman: "the International Monetary System in the (very) Long Run (Links to an external site.)Links to an external site.â€, IMF working paper, March 2000. Summary version also available in the World Economic Outlook, May 2000, Chapter 5.
 - Krugman, Paul, "What Do We Need to Know about the International Monetary System (Links to an external site.)Links to an external site.?†Princeton Essays in International Finance, 190, 1993
 - Mateos y Lagos Isabelle, Rupa Duttagupta and Rishi Goyal, <u>"The Debate on the International</u>
 <u>Monetary Systemâ€</u>, (<u>Links to an external site</u>.)<u>Links to an external site</u>. IMF Staff Position Note,
 Nov. 2009.
 - Maury Obstfeld, "Lenders of Last Resort in a Globalized World (Links to an external site.)Links to an external site.â€, mimeo, UC Berkeley, June 2009

EXCHANGE RATE REGIMES AND POLICY COORDINATION

Lecture 19 - Part I

- *chapter 19 (pp. 560-576)
- *Ocampo, José Antonio, <u>"The IMF at 75: Reforming the global reserve system"</u>, Voxeu April 2019

Lecture 19 - Part II

- *Frankel, Jeffrey, <u>"International macroeconomic policy coordination"</u> (Links to an external site.)Links to an external site., Vox
- *The economist, "Why Germany's current-account surplus is bad for the world economy" (Links to an external site.)Links to an external site.

- *chapter 19 (pp. 576-596)
- *The Economist, <u>"The independence of central banks is under threat from politics"</u>, April 13, 2019
- *Rey, HélÃ"ne, "Dilemma not trilemma: the global financial cycle and monetary policy independence", Voxeu August 2013

- video:
 - o Rey, HélÃ"ne, "The global financial cycle", Voxeu
- additional readings:
 - Barry Eichengreen, "Back to the Thirties with a Twistâ€, Financial Times, June 30, 2008.
 - Rose, Andrew, "A Stable International Monetary System Emerges: Bretton Woods, Reversedâ€, Keynote address at the SCCIE JIMF Conference, 2006.
 - Yellen, Janet, "Monetary Policy in a Global Environment (Links to an external site.)Links to an external site.", FRSBF Economic Letter, June 2006

OPTIMUM CURRENCY AREAS AND EUROPEAN MONETARY UNION

Lecture 21

- *chapter 21 (pp. 634-642)
- *Buti, Marco, JollÃ"s, Maya and Salto, Matteo, <u>"The euro a tale of 20 years: The priorities going forward"</u>, Voxeu, February 2019
- *Bénassy-Quéré, AgnÃ"s et al. <u>"How to reconcile risk sharing and market discipline in the euro area"</u>, Voxeu, January 2018.

Lecture 22

- *chapter 21 (pp. 642-665)
- *Krugman, Paul, "<u>Can Europe Be Saved (Links to an external site.)Links to an external site.</u>)Links to an external site.)Links to an external site.)Lin
- *Gourinchas, Pierre-Olivier, Philippon, Thomas, and Vayanos, Dimitri, <u>"The Greek crisis: An autopsy"</u>, Voxeu, August 2016.
- additional readings:
 - Lane, Philip, "<u>The Real Effects of European Monetary Union (Links to an external site.)Links to an external site.</u>â€, Journal of Economic Perspectives, Fall 2006.
 - Blanchard, Olivier, "Adjustment with the Euro: The Difficult Case of Portugal (Links to an external site.)Links to an external site.â€, mimeo, MIT, February 2006.
 - Farhi, E. and I. Werning, "<u>Fiscal Unions</u>â€, American Economic Review, vol. 107(12), pp. 3788-3834, December 2017.

THE GLOBAL CAPITAL MARKET

- *chapter 20
- additional readings:
 - o Obstfeld M. and A. Taylor, "Globalization and Capital Markets (Links to an external site.)Links to an external site.â€, NBER Working Paper 8846, March 2002.
 - Gourinchas Pierre-Olivier and Olivier Jeanne, "The Elusive Gains from International Financial
 Integrationâ€, (Links to an external site.)Links to an external site. Review of Economic Studies,
 2006.
 - Maury Obstfeld, "<u>Lenders of Last Resort in a Globalized World (Links to an external site.)Links to an external site.</u>â€, mimeo, UC Berkeley, June 2009