

Economics 4520
International Finance
Open Economy Macroeconomics for a Turbulent World
Spring 2025, Mon./Wed. 10:15-11:45AM, Room: PCPE 101

Pre-requisites

ECON 2100 (Int. Micro Theory) **and** 2200 (Int. Macro Theory), **and either** MATH 1400 (Calculus 1) and 1410 (Calculus 2) **or** MATH 1070 (Mathematics of Change 1) and MATH 1080 (Mathematics of Change 2). Wharton students and students enrolled in the Huntsman Program in International Studies & Business can use BEPP 2500 HONORS to fulfill the ECON 2100 pre-requisite (the regular BEPP 2500 course does not count as a substitute).

Students visiting Penn must email Prof. Mendoza with information on the courses that may fit the prerequisites (course names, textbooks, grades, etc.) and obtain written permission to register.

The course requires the skills acquired in the pre-requisite courses, including intermediate Micro and Macro, algebra, and multivariate calculus (constrained optimization in particular). Because this is a highly analytic course, students are expected to be proficient in the use of mathematics in macroeconomic analysis.

Teaching Assistant

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office hrs: Tue. 4-5pm, Th. 9-10am, location: Room PCPE 500

Course description

A formal study of International Finance and Open Economy Macroeconomics with emphasis on financial crises and policy responses. Topics covered include macroeconomic equilibrium in open economies with and without money, theories of current account and exchange rate determination, the effects of exchange rate adjustments, macroeconomic policy under fixed and floating exchange rates, currency crises, financial crashes and contagion. Through the lens of these theoretical foundations, we examine financial crises that have affected advanced and emerging economies since the mid-1990s, the “global imbalances” phenomenon characterized by the large external deficits of the United States over the last 30 years, the 2008 Global Financial Crisis, the 2010 European debt crisis, and the ongoing crises in Argentina and several developing countries in China’s Belt and Road Initiative. Preparation of a policy essay and discussions of current international policy issues are also part of the curriculum.

The foundations of International Macroeconomics are covered using class notes and other material available in this course’s Canvas site. The objective is to build an analytic foundation for the preparation of the policy essay and for understanding and debating key macro issues in the world economy. We examine alternative hypotheses about the costs and benefits of financial globalization, and the causes and dynamics of financial crises and alternative proposals for dealing with them. These include issues related to capital-market imperfections, fiscal, monetary and exchange-rate policies, and cross-country contagion of crises. The course also examines the challenges financial crises pose to governments and international organizations.

Office hours

Monday, 3:30PM-6:00PM, Room 538 PCPE

Grading

In-class mid-term exam 30% (**set for March 26, 2025**), policy essay 30% (proposal due **March 3, 2025** final version due **April 30, 2025**), three problem sets 30% (due **Feb. 10, Feb. 26 & March 24, 2025**), and class attendance and participation 10%.

Policy Essay

The policy essay is an exercise in researching and writing a policy or action paper similar to those used to guide decisions in financial institutions, government agencies and international organizations. The essay will focus on the experience of one of the countries that has gone through a financial crisis since the 1990s. Each essay will be **written jointly by two students** and must be divided into three parts:

Part 1: Document key facts of the country's crisis using macroeconomic data.

Part 2: Present a diagnosis (i.e., an analysis of the causes and consequences of the crisis).

Part 3: Propose policy recommendations to deal with the crisis.

The analysis in parts 2 and 3 must be explicitly based on the analytic principles studied in the course and on readings about the particular country and other reference material. Parts 2 and 3 must present opposing views of the crisis: A "domestic" perspective from the viewpoint of the government, or the domestic banks, or the unions, etc., and a "foreign" perspective from the viewpoint of the IMF, global financial markets or "Wall Street", or the U.S. government, etc. One author of each pair will cover one of the opposing views, and the two authors should meet to discuss their viewpoints, expose them in Part 2, and articulate their positions in Part 3.

Authors will choose the country and view for their essay by **signing up** (first-come, first-served) on a list posted in my office door during the first month of the course. Each essay must be a **maximum of 10 double-spaced pages in a standard 12-point font with 1 inch margins** (including cover page, main text, and all figures and tables). A one-page proposal outlining the structure and contents of the essay must be submitted by **March 3, 2025**. *Only papers with an approved proposal will be graded.* The final version of the paper is due **April 30, 2025**.

Ethics and Etiquette:

(a) Use of course proprietary materials and internet sites: The midterm exam, problem sets, answer keys, class notes, policy essays and any other material created for this class are copyrighted and are not to be shared with anyone, either electronically or by other means. Internet uploads/downloads of course materials are prohibited (e.g., to/from sites like Course Hero, Chegg and Bartleby).

(b) Use of AI apps (e.g., ChatGPT, Gemini, Copilot, Grammarly, etc.) is prohibited. This applies in particular to the policy essay. Using AI for preparing or writing the essay will be considered a violation of the **Code of Academic Integrity**. Internet resources can be used for conducting the research used in the essay, with proper citations.

(c) **Classroom guidelines:** Attendance is required and adherence to the **Code of Academic Integrity** is expected. 5 mins. maximum tolerance for late arrivals. Laptops and tablets for taking notes are allowed, cellphones should be silenced and put away during class.

(d) **Freedom of speech and mutual respect:** This course involves your participation with informed comments and questions related to economic policy issues and class material, based on the analytic principles covered in class. Opposing views are welcome and will be respected, but keep in mind our discussions will focus on alternative analytic perspectives on economic phenomena and economic policies, not on debating ideologies or political and philosophical views.

Canvas Site, Video Material & Reference Book

Canvas site: Navigate through the various pages on this site to find the class notes, course materials, problem sets, and announcements.

Class notes: Access via [Canvas site](#)

Video material: Links included in [Canvas pages](#) provide access to video material related to the topics covered in class

Commanding Heights, Episode 3-The New Rules of the Game

Commanding Heights is one of the best documentaries on the globalization phenomenon during the 1990-2001 period. It is based on the 2002 book "The Commanding Heights" by Daniel Yergin and Joseph Stanislaw. The documentary has three episodes. We will **discuss in class** the third episode ("The New Rules of the Game"), split into 23 "chapter" video clips distributed over three Canvas pages. We will discuss one chapter at the beginning of each class. **Prior to each class, three students will be selected to start the discussion with their comments on the day's video.** This material deals with the origins, promise and challenges of globalization, covering international trade and finance, political and social links and the economic and political instability associated with the start of the globalization era.

Additional video material

Links provided in other Canvas pages point to useful documentaries on globalization and financial crises, including the 2008 U.S. and Global Financial Crisis, the 2011 European Debt Crisis and China's Belt and Road Initiative. These two are particularly interesting:

Alan Greenspan, Brooksley Born and the Warning

This a documentary from the PBS series Frontline. It analyzes the period of major financial reforms in the late 1990s in the United States, and the roles played by two key actors, Alan Greenspan (Chair of the Federal Reserve) and Brooksley Born (Chair of the Commodity Futures Trading Commission). Greenspan, together with most members of the economic team of the Clinton administration favored the reforms, Born opposed them presenting arguments highlighting risks that ended up materializing in the 2008 crash.

Money, Power and Wall Street

This is another excellent Frontline documentary. It is an in-depth analysis of the causes, and consequences of the 2008 financial crisis and of the mechanisms that drove it. It provides useful explanations of the sophisticated financial instruments that were behind the collapse of the financial system, and it examines the worldwide spillovers of this crisis. It covers the material over four one-hour episodes.

Reference Book: *Macroeconomics in the Global Economy* by J. Sachs and F. Larrain (S&L)

Part of the class notes follow this book, but the notes are self-contained so that the book is not required. Starting with the analysis of money, my class notes differ from the book significantly. Purchasing the book is not required. The book is out of print but can be found at low-cost resale (e.g., in Amazon, ebay) and possibly in free pdf download sites.

Course Outline

1 Introduction: Financial Globalization and Global Imbalances (Promises & Facts)

(Presentation slides)

- A. Historical perspective on financial globalization
- B. Stylized facts of global imbalances
- C. The case for globalization v. the outcomes of globalization

2 Macroeconomic equilibrium in a small open economy without money

(Class notes, S&L Chs. 4-7)

- A. The Households Saving Decision
- B. The Firms Investment-Output Decisions
- C. The Current Account
- D. The Government Sector

3 Equilibrium in the Small Open Economy with Money

(Class notes, S&L Chs. 8-11)

- A. Interest Rates and Prices in a Monetary Economy
- B. Money and the Households Budget Constraint
- C. The Demand for Money: A Transactions Costs Approach
- D. The Money Supply Process
- E. Money Supply and the Consolidated Government Budget Constraint
- F. Equilibrium in the Money Market
- G. Money, Exchange Rates and Prices

4 Inflation, Unsustainable Policies and Balance-of-Payments Crises

(Class notes, S&L Ch. 12)

- A. Government Deficits and Inflation
- B. Balance-of-Payments Crises: The Collapse of Fixed Exchange Rates
- C. The Inflation Tax and Seigniorage

5 Sustainable Exchange Rates and Currency Crises in General Equilibrium

(Class notes)

- A. Sustainable fixed exchange rates in general equilibrium
- B. Balance-of-Payments Crises in general equilibrium
- C. Effects of a temporary currency peg

6 Financial Amplification and Public Debt in Global Financial Crises

(Presentation slides, *Rev. of Econ. Dyn.* 2020, *Handbook of Macro Chapter 2016*, *Manchester School* 2017)

- A. Stylized facts of Credit Booms and Sudden Stops
- B. Borrowing Constraints and Fisherian Amplification
- C. Macprudential financial regulation
- D. Public debt sustainability (the debt Crisis of the United States)

Additional video material

“House of Cards” (Not the Netflix show, but an entertaining/informative CNBC documentary about the U.S. housing crash, for sale in AppleTV under CNBC Originals)

“Too Big to Fail” (Nice account of the U.S. crisis in 2008-09, HBO movie based on Andrew Sorkin’s book, <https://www.hbo.com/movies/too-big-to-fail>)

“The Big Short” (Movie providing a nice account of the period leading up to the U.S. 2008 crash, based on the book by Michael Lewis, available in Netflix)

Selected Optional Readings for Policy Essays

David Driscoll, “What Is the International Monetary Fund?” Revised September 1998, Paul Krugman, “The Confidence Game,” *New Republic*, October 5, 1998.

Jeffrey Sachs, “Global Capitalism: Making it Work,” *Economist*; and “IMF is a Power Unto Itself,” *NY Times*, December 11, 1997.

Enrique Mendoza, “Why Should Emerging Economies Give Up National Currencies: A Case for ‘Institutions Substitution’,” NBER WP 8950, 2002, Nat. Bureau of Economic Research.

IMF, “A Guide to Progress in Strengthening the Architecture of the International Financial System,” April 28, 1999.

Barry Eichengreen, Toward a New International Financial Architecture: A Practical Post-Asia Agenda (Institute for International Economics, 1999).

Robert E. Rubin, “Reform of the International Financial Architecture: Weighing Risks”, *Vital Speeches of the Day*, New York, May 15, 1999, 65(5), pg. 445.

Martin Feldstein, “A Self-Help Guide for Emerging Markets,” *Foreign Affairs* 78, No. 2 (March/April, 1999), pp. 93-110.

Barry Eichengreen and Michael Mussa, “Capital Account Liberalization and the IMF,” Finance and Development (December 1998).

IMF, Chapter IV: Exchange Rate Arrangements and Economic Performance in Developing Countries, *World Economic Outlook* 1997.

IMF, *World Economic Outlook: International Financial Contagion*, May 1999

IMF, *World Economic Outlook and International Capital Markets: Interim Assessment*, December 1998.

Timothy Lane, *et al.* IMF-Supported Programs in Indonesia, Korea, and Thailand: A Preliminary Assessment, at <http://www.imf.org/external/pubs/ft/op/op178/index.htm>

I. Fisher, “The Debt-Deflation Theory of Great Depressions,” *Econometrica*, 1933

J. Sachs and S. Radelet, "The East Asian Financial Crisis: Diagnosis, Remedies, Prospects," *Brookings Papers on Economic Activity*, 1998(1), pp. 1 – 74; "On their feet again", *The Economist*, August 21, 1999.

G. Calvo, "The Russian Virus: Contagion When Wall Street is the Carrier", 1999.

G. Calvo and E. Mendoza, "Globalization, Contagion, and the Volatility of Capital Flows", in Capital Inflows to Emerging Markets, ed. by S. Edwards, NBER, Cambridge MA 1999

G. Calvo and E. Mendoza, "Petty Crime and Cruel Punishment: Lessons from the Mexican Debacle," American Economic Review, Papers & Proceedings, May 1996.

Paul Krugman, The Return of Depression Economics, Norton, 1999, Chapter 9.

Paul Krugman, "Saving Asia: It's Time to Get Radical," Fortune, September 1998.

Michael Lewis, The Big Short, Norton 2010

Carmen Reinhart and Kenneth Rogoff, This Time Is Different: Eight Centuries of Financial Folly, Princeton U. Press, 2011

Nicolas Dunbar, *Inventing Money*, Wiley, 2000.