

**DEPARTMENT OF ECONOMICS**  
**INTERNATIONAL MONETARY THEORY**  
Spring 2020

**Preliminary Syllabus**

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**Office Hours:** Tuesday, 1.00pm-2.00pm, and by appointment

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### **Goals**

Although traditionally the field of international economics was sub-divided into international finance and international trade, some of the most interesting contemporary research in international macroeconomics blends open economy macroeconomic inter-temporal general equilibrium models with explicit microeconomic and, especially, sectoral detail. The goal of this course is to motivate and initiate innovative graduate student research in this field. The course therefore complements lectures with student in-class presentations of significant research papers in the literature, and by asking students to complete an original research project in the form of a substantial research proposal. However, recognizing that many students have limited backgrounds in international macroeconomics, the lectures provide a foundation of knowledge and analysis of the core concepts and models so that the course is self-contained.

In the course readings and presentations, we will not attempt an exhaustive review of all international macroeconomic topics. We focus on a few core research areas that illustrate the origins and development of some of the most exciting directions of the field, and try to avoid replicating the content of other graduate courses you may take in the department. Within these core areas, both empirical and theoretical developments are studied. Some of the readings represent seminal contributions, some frontier research. Similarly, the reading lists for these topics are not at all exhaustive; in developing their research projects, students should use the citations and bibliographies of papers on the list to deepen their knowledge of the literature via Google Scholar.

### **Structure**

There is one, three hour and twenty minute class per week. In general, the first half of each class is lecture material that develops the core models and concepts of international macroeconomics, based largely on the instructor's own notes. Students are expected to complete any companion textbook readings independently.

The second half of each class we allocate to two student presentations of existing research papers (except in the final two weeks of the semester when students present a summary of their own research project). The goal of the presentations is to improve reading, comprehension, and communication skills and familiarize students with the methods, models, and results in the established core and at the brink of this research field. Students submit their

presentations to the instructor via email. The presentations constitute graded written assignments for the course.

Finally, students develop an original research project during the semester, developed along similar lines as a doctoral dissertation proposal; it should contain the motivation, goals, and marginal contribution of a planned research project, a proposed structure of the project, and preliminary if incomplete results. The papers are due by the final examination date and students present them in class during weeks 14 and 15 of the course. The research paper cannot be the same as that submitted to another class, in this or any other semester.

### **Tips on Preparing for the Presentations**

Communication of results is an essential component of economic research. Many economists prefer attending conferences, workshops, and seminars to reading working papers and journal articles as a way of picking up ideas. The fundamental ingredient in a good presentation is preparation. Try to practice the presentation more than once. When you are preparing slides, make sure that the font is large enough to be readable, especially in tables of data (numbers) and in the labeling of figures where this is often neglected. Since time is precious to you in your presentation, you should think carefully about how you want spend it.

Long introductions are almost always a bad idea. What the audience usually wants to learn during the introduction is the question that you or the author whose work you are presenting intend to answer, why the question and the answer are important, and, probably, what your or the author's answer is going to be. In general, audiences do not like research presentations to be mysterious. Surprise endings are fine for novels and films, but usually not for economic research. You will learn a lot in preparing for your presentations. You can also learn a lot at the class from the other presentations.

### **Pre-requisites**

The pre-requisites for this class are ECONOMICS 602 and ECONOMICS 605.

### **Textbooks**

The course does not follow any textbook. However, students may draw on and are expected to read specific chapters on the reading list from the following books:

*Open Economic Macroeconomics* (2017) by Martin Uribe and Stephanie Schmitt-Grohe, Princeton University Press

*Foundations of International Macroeconomics* (1996) by Maurice Obstfeld and Kenneth Rogoff, MIT Press: Cambridge

### **Evaluation**

Your final grade in the class will be determined as the following weighted average of your work throughout the semester:

1. In-class presentations of papers in the literature (40%)
2. Written research paper in international macroeconomics (50%)
3. Class presentation of the written research paper in weeks 14 and 15 (10%)

## Statement on Academic Conduct and Support Systems

### Academic Conduct:

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, “Behavior Violating University Standards” [policy.usc.edu/scampus-part-b](http://policy.usc.edu/scampus-part-b). Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct, [policy.usc.edu/scientific-misconduct](http://policy.usc.edu/scientific-misconduct).

### Support Systems:

*Counseling and Mental Health - (213) 740-9355 – 24/7 on call*

[studenthealth.usc.edu/counseling](http://studenthealth.usc.edu/counseling) Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

*National Suicide Prevention Lifeline - 1 (800) 273-8255 – 24/7 on call*

[suicidepreventionlifeline.org](http://suicidepreventionlifeline.org) Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

*Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-9355(WELL), press “0” after hours – 24/7 on call*

[studenthealth.usc.edu/sexual-assault](http://studenthealth.usc.edu/sexual-assault) Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

*Office of Equity and Diversity (OED) - (213) 740-5086 | Title IX – (213) 821-8298*

[equity.usc.edu](http://equity.usc.edu), [titleix.usc.edu](http://titleix.usc.edu) Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

*Reporting Incidents of Bias or Harassment - (213) 740-5086 or (213) 821-8298*

[usc-advocate.symphlicity.com/care\\_report](http://usc-advocate.symphlicity.com/care_report) Avenue to report incidents of bias, hate crimes, and microaggressions to the Office of Equity and Diversity | Title IX for appropriate investigation, supportive measures, and response.

*The Office of Disability Services and Programs - (213) 740-0776*

[dsp.usc.edu](http://dsp.usc.edu) Support and accommodations for students with disabilities. Services include assistance in providing readers/notetakers/interpreters, special accommodations for test taking needs, assistance with architectural barriers, assistive technology, and support for individual needs.

*USC Campus Support and Intervention - (213) 821-4710*

[campussupport.usc.edu](http://campussupport.usc.edu) Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

*Diversity at USC - (213) 740-2101*

[diversity.usc.edu](http://diversity.usc.edu) Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

*USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call*

[dps.usc.edu](http://dps.usc.edu), [emergency.usc.edu](http://emergency.usc.edu) Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

*USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call*

[dps.usc.edu](http://dps.usc.edu) Non-emergency assistance or information.

*Office of the Ombuds - (213) 821-9556 (UPC) / (323-442-0382 (HSC)*

[ombuds.usc.edu](http://ombuds.usc.edu) A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

## **COURSE OUTLINE AND READINGS**

### **1. Introduction to International Macroeconomics**

- i) Data, facts, and puzzles in international macroeconomics
- ii) Measuring openness
- iii) Modeling choices: small open economy vs. multi-country and other issues

**Readings:** Uribe and Schmitt-Grohe, chapter 1

Obstfeld, M. and K. Rogoff (2000) "The Six Major Puzzles in International Macroeconomics: Is There a Common Cause?" NBER Macroeconomics Annual, **15**, 339-412.

Engel, C. (2000) "Comments on Obstfeld and Rogoff's "The Six Major Puzzles in International Macroeconomics: Is There a Common Cause?" " NBER WP#7818.

Mussa, M. (1986) "Nominal Exchange Rate Regimes and the Behavior of Real Exchange Rates," *Carnegie-Rochester Series on Public Policy* **25** 117-214.

Eaton, J., S. Kortum, and B. Neiman (2016) “Obstfeld and Rogoff’s International Macro Puzzles: A Quantitative Assessment,” *mimeo*.

## 2. Intertemporal Current Account Determination

- i) Small open economy pure endowment model
- ii) Small open economy with endogenous production and investment
- iii) Two-country model
- iv) Stochastic endowment and production models

**Readings:** Obstfeld and Rogoff, chapters 1, 2, and 3  
Uribe and Schmitt-Grohe, chapters 2 and 3

## 3. International Capital Flows, Development, and Growth

- i) The Lucas paradox
- ii) Reconciling capital flows with relative income data
- iii) Capital account liberalization and economic development

**Readings:**

Lucas, R.E. Jr. (1990) “Why Doesn’t Capital Flow from Rich to Poor Countries?” *American Economic Review* **80(2)** 92-96.

Kehoe, T.J. (1995) “What Happened in Mexico in 1994-1995?” in P.J. Kehoe and T.J. Kehoe, eds., *Modeling North American Integration* (1995) Kluwer Academic Publishers, 131-147.

Chari, V.V., P. Kehoe, and E.R. McGrattan (1996) “The Poverty of Nations: A Quantitative Exploration,” Federal Reserve Bank of Minneapolis Staff Report 204 and NBER Working Paper 5414.

Kehoe, T.J. (1995) “What Happened in Mexico in 1994-1995?” in P.J. Kehoe and T.J. Kehoe, eds., *Modeling North American Integration* (1995) Kluwer Academic Publishers, 131-147.

Levine, R. (2002) “International Financial Liberalization and Economic Growth,” *Review of International Economics* **9(4)** 688-702.

Henry, P.B. (2003) “Capital Account Liberalization, the Cost of Capital, and Economic Growth,” *American Economic Review* **93(2)** 91-96.

Aizenmann, J., Y. Jinjarak, and D. Park (2013) “Capital Flows and Economic Growth in the Era of Financial Integration and Crisis, 1990-2010,” *Open Economies Review* **24** 371-396.

Henry, P.B. (2003) "Capital Account Liberalization, the Cost of Capital, and Economic Growth," *American Economic Review* **93(2)** 91-96.

#### 4. Two-Sector Models and International Relative Prices

- i) Two-sector models of terms of trade determination
- ii) Two-sector models of real exchange rate determination
- iii) Real exchange rates, sectoral reallocation, and capital flows

**Readings:** Obstfeld and Rogoff, chapter 4  
Uribe and Schmitt-Grohe, chapters 7 and 8

Fernandez de Cordoba, G. and T. J. Kehoe, "Capital Flows and Real Exchange Rate Fluctuations Following Spain's Entry into the European Community," *Journal of International Economics*, 51 (2000), 49-78.

Kehoe, T.J. and K. J. Ruhl (2008) "Are Shocks to the Terms of Trade Shocks to Productivity?" *Review of Economic Dynamics* **11** 804–819.

Kehoe, T.J. and K. J. Ruhl (2009) "Sudden Stops, Sectoral Reallocations, and the Real Exchange Rate," *Journal of Development Economics* **89** 235–249.

#### 5. Structural Change in the Open Economy

- i) Structural change and growth, data and facts
- ii) A canonical model of structural change
- iii) The role of international trade for structural change

**Readings:** Herrendorf, B., R. Rogerson, and A. Valentinyi (2014) "Growth and Structural Transformation," in *Handbook of Economic Growth*, v.2, eds. P. Aghion and S. Durlauf, 855-941

Betts, C., R. Giri, and R. Verma (2017) "Trade, Reform, and Structural Transformation in South Korea", *IMF Economic Review* **65(4)** 745-791

Echevarria, C. (2008) "International Trade and the Sectoral Composition of Production." *Review of Economic Dynamics* **11** 192-206

Kehoe, T.J., K. Ruhl, and J.B. Steinberg (2018) "Global Imbalances and Structural Change in the United States," *Journal of Political Economy* **126(2)** 761-796

Mastuyama, K. (2009) "Structural Change in an Interdependent World: A Global View of Manufacturing Decline," *Journal of the European Economic Association* **7** 478-486.

Stokey, N. (2001) "A Quantitative Model of the Industrial Revolution." *Carnegie-Rochester Conference Series on Public Policy* **55** 55-109

Uy, T., K-M. Yi, and J. Zhang (2013) "Structural Transformation in an Open Economy," *Journal of Monetary Economics* **60(6)** 667-682

## 6. International Real Business Cycles

- i) International business cycle data: emerging vs. advanced economies
- ii) Real business cycle models for small open economies
- iii) Real business cycle models for large open economies

**Readings:** Uribe and Schmitt-Grohe, chapters 1 and 4

Backus, D. K. and P.J. Kehoe (1992) "International evidence on the historical properties of business cycles," *American Economic Review* **82** 864-888.

Baxter, M. and A.C. Stockman (1989) "Business cycles and the exchange-rate regime: some international evidence," *Journal of monetary Economics* **23(3)** 377-400.

Cooley, T. and E.C. Prescott (1995) "Economic growth and business cycles," in T. Cooley, ed., *Frontiers of Business Cycle Research* Princeton University Press.

Backus, D., P.J. Kehoe, and F. Kydland (1992) "International Real Business Cycles," *Journal of Political Economy* **100** 745-775.

Mendoza, E.G. (1991) "Real Business Cycles in a Small Open Economy," *American Economic Review* **81** 797-818.

Mendoza, E. G. (1995) "The terms of trade, the real exchange rate, and economic fluctuations", *International Economic Review* **36(1)** 101-137.

Heathcote, J. and F. Perri (2013) "Assessing international efficiency," NBER Technical Report 18956.

Imbs, J. (2010) "The first global recession in decades", *IMF Economic Review* **58(2)** 327-354.

M. Aguiar, and G. Gopinath (2007), "Emerging Market Business Cycles: The Cycle is the Trend," *Journal of Political Economy* **115** 69-102.

Garcia-Cicco, J., R. Pancazi, and M. Uribe (2010) "Real Business Cycles in Emerging Countries?" *American Economic Review* **100** 2510-2531.

Chang, R. and A. Fernández (2013) "On the sources of aggregate fluctuations in emerging economies", *International Economic Review* **54(4)** 1265-1293.

Justiniano, A. and B. Preston (2010) "Can structural small open-economy models account for the influence of foreign disturbances?" *Journal of International Economics* **81(1)** 61-74.

## 7. Real and Nominal Exchange Rates

- i) Exchange rate data and exchange rate puzzles
- ii) Monetary models of real and nominal exchange rate determination
- ii) New open economy macroeconomics

**Readings:** Obstfeld and Rogoff, chapters 4, 5, 8, and 9  
Uribe and Schmitt-Grohe, chapters 8 and 9

Mussa, M. (1986) "Nominal Exchange Rate Regimes and the Behavior of Real Exchange Rates," *Carnegie-Rochester Series on Public Policy* **25** 117-214.

Baxter, M., and A.C. Stockman (1989) "Business Cycles and the Exchange Rate Regime: Some International Evidence," *Journal of Monetary Economics* **23** 377-400.

Engel, C. and K. West (2005), "Exchange Rates and Fundamentals." *Journal of Political Economy* **113(3)** 485-517.

Engel, C., N.C. Mark, and K.D. West (2007), "Exchange Rate Models Are Not as Bad as You Think," *NBER Macroeconomics Annual* 381-441.

C. Engel and J. Rogers (1996) "How Wide is the Border?" *American Economic Review* **86** 1112-1125.

C. Engel (1999) "Accounting for US Real Exchange Rate Changes", *Journal of Political Economy*, **107**, 507-538.

Betts, C. and T. Kehoe (2008) "Real Exchange Rate Movements and the Relative Price of Non-Traded Goods", NBER WP# 14437

Betts, C. and T. Kehoe (2006) "US Real Exchange Rate Fluctuations and Relative Price Fluctuations," *Journal of Monetary Economics* **53** 1297-1326.



Crucini, M., C. Telmer, and M. Zachariadis (2005) "Understanding European Real Exchange Rates," *American Economic Review* **95** 724-738.

Lucas, R.E. Jr. (1982) "Interest Rates and Currency Prices in a Two-Country World," *Journal of Monetary Economics* **10** 335-360.

Obstfeld, M. and K. Rogoff (1995) "Exchange Rate Dynamics Redux," *Journal of Political Economy* **103** 624-660.

Betts, C. and M. Devereux (2000) "Exchange Rate Dynamics in a Model of Pricing-to-Market," *Journal of International Economics* **50** 215-244.

Chari, V. V., P.J. Kehoe, and E.R. McGrattan, (2002) "Can Sticky Price Models Generate Volatile and Persistent Real Exchange Rates?" *Review of Economic Studies* **69** 533-63.

Devereux, M.B., and C. Engel (2003) "Monetary Policy in the Open Economy Revisited: Price Setting and Exchange-Rate Flexibility," *Review of Economic Studies* **70** 765-83.

Corsetti, G., L. Dedola, and S. Leduc (2010) "Optimal Monetary Policy in Open Economies," in *Handbook of Monetary Economics* v.3 eds. B. Friedman and M. Woodford.

Benigno, G., and P. Benigno (2009) "Exchange Rate Determination under Interest Rate Rules," *Journal of International Money and Finance* **27(6)** 971-993.

## 8. More on International Pricing and Exchange Rate Pass-through

**Readings:** Atkeson, A. and A. Burstein (2008) "Trade Costs, Pricing to Market, and International Relative Prices," *American Economic Review* **98(5)** 1998-2031

Goldberg, L. and C. Tille (2005) "Vehicle Currency Use in International Trade," NBER Working Paper 11127.

Gopinath, G., and O. Itskhoki (2008) "Frequency of Price Adjustment and Pass-through," NBER Working Paper 14200

Gopinath, G., and R. Rigobon (2008) "Sticky Borders," *Quarterly Journal of Economics* **123(2)** 531-575.

Gopinath, G., O. Itskhoki, and R. Rigobon (2007) "Currency Choice and Exchange-rate Pass-through," NBER Working Paper 13432.

Hellerstein, R. (2008) “Who Bears the Cost of a Change in the Exchange Rate? Pass-through Accounting for the Case of Beer,” *Journal of International Economics* **76(1)** 14-32

Goldberg, G. and R. Hellerstein (2013) “A Structural Approach to Identifying the Sources of Local Currency Price Stability”, *Review of Economic Studies* **80(1)** 175-210