

**University of Notre Dame**  
**Department of Economics**

**Economics 70552 – International Macroeconomics**  
**Spring 2023**

**Instructor:** Prof. César Sosa-Padilla  
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Office hours: By appointment

**Lecture Hours:** MW 12:30pm-1:45pm  
**Lecture Room:** JNH B032

### **Background and Course Description**

The course is organized in two parts. Part I covers the building blocks of the real business cycle model applied to open economies. We then use this workhorse model and study the impact of interest rate shocks and terms-of-trade shocks, as well as the determinants of balance-of-payments crises. Part II is devoted to the study of financial frictions and international financial crises, with special emphasis on sovereign debt and default. Note that the course uses the optimization methods and builds on the asset pricing and business cycle models covered in the macroeconomics core courses from the 1st year of the Ph.D. program.

### **Textbooks and other reading materials**

The required readings will be a mix of journal articles, research papers and chapters from books. You will find links to some of these items on Sakai. Book chapters will come from:

Open Economy Macroeconomics. Martín Uribe and Stephanie Schmitt-Grohè. You can find materials and a link to buy the book in <http://www.columbia.edu/~mu2166>. I'll refer to this book as OEM.

Foundations of International Macroeconomics. Obstfeld and Rogoff. MIT Press, 1996.

Open Economy Macroeconomics in Developing Countries. Carlos Vegh. MIT Press, 2013.

Other (more specific) books that you may find useful are:

Debt Defaults and Lessons from a Decade of Crises. Sturzenegger and Zettelmeyer. MIT Press, 2006.

This Time is Different: Eight Centuries of Financial Folly. Reinhart and Rogoff. Princeton Press, 2009.

### **Communication**

I will mostly use e-mail to make announcements. I will also make announcements in class. I will send the slides before class via email as well.

Please email me if there is any confusion at any point.

## Tentative schedule and (some) readings

**Week 1.** Introduction and review of main stylized facts.

Readings: OEM chapter 1.

**Weeks 2 and 3.** Small Open Economy (SOE) - Endowment model

Readings: OEM chapter 2.

**Week 3.** Small Open Economy (SOE) - Adding Capital to the model

Readings: OEM chapter 3.

**Weeks 4 and 5.** SOE-RBC: workhorse model.

Readings: OEM chapters 4 and 5, Mendoza (1991), Schmitt-Grohé and Uribe (2003), Aguiar and Gopinath (2007), García-Cicco et al. (2010).

**Week 6** Tradables-NonTradables Model

Readings: OEM chapter 8.

**Week 7** Financial Frictions and Aggregate Instability

Readings: OEM chapter 12, Bianchi (2011)

**(Time-permitting)** Interest Rate Shocks

Readings: OEM chapter 6, Uribe and Yue (2006), Neumeyer and Perri (2005), Johri, Khan and Sosa-Padilla (2019) .

**Week 8.** Midterm Exam.

**Week 9.** Sovereign Debt and Financial Crises: Main stylized facts.

Readings: Reinhart and Rogoff (2009) chapters 2, 5, and 6, Sturzenegger and Zettelmeyer (2005) chapter 1, OEM chapter 13 (first part).

**Weeks 10–12** Sovereign Defaults: Main Theories (cont'd).

Readings: OEM chapter 13, Obstfeld and Rogoff (1996) chapter 6, Eaton and Gersovitz (1981), Arellano (2008), Aguiar and Gopinath (2006), Mendoza and Yue (2012).

**Week 13** Other Issues and Developments in the Sovereign Debt literature.

Readings: Hatchondo et al. (2011), Benjamin and Wright (2008), D'Erasmus (2011), Yue (2010), Sosa-Padilla (2012), Chatterjee and Eyigungor (2011), Arellano and Ramanarayanan (2008), Cuadra et al. (forthcoming), Gennaioli et al. (2010).

**Weeks 14 – 15** Student Presentations.

## Paper presentations

Each student will present a paper (either from the list below or a paper that we mutually agree on). Presentations should be done professionally, as if you were presenting your own research in a conference/seminar. Slides are expected to be well organized and to be legible. Tedious mathematical derivations should be left to a written summary/handout. The use of Latex/Beamer is highly encouraged.

For each presentation day there will be 2 presentations. Each presenter will have 35 minutes to motivate the paper (putting it in context), present the research question(s) and explain the main results. Questions are welcomed and encouraged during the presentation. Each non-presenting student is expected to read the papers and to participate in the class with questions and comments.

Here is a preliminary list of papers to choose from. They will be assigned on a first-come first-served basis:

- Ernesto Talvi, Carlos A. Végh, “Tax base variability and procyclical fiscal policy in developing countries.” *Journal of Development Economics*, Volume 78, Issue 1, (2005): 156-190.
- Bianchi, Javier, Ottonello, Pablo and Presno, Ignacio. “Fiscal Stimulus under Sovereign Risk”. Forthcoming *JPE*.
- Mendoza, Enrique G., “Sudden Stops, Financial Crises and Leverage.” *American Economic Review*, Dec. 2010.
- Castillo-Martinez, Laura, “Sudden Stops, Productivity, and the Exchange Rate.” Mimeo.
- Bocola, Luigi. “The Pass-Through of Sovereign Risk.” *Journal of Political Economy*, Volume 124, Number 4, August 2016.
- Moretti, Matias. “The Asymmetric Pass-Through of Sovereign Risk.” Manuscript, WB, 2021.
- Chaumont, Gaston. “Sovereign Debt, Default Risk, and the Liquidity of Government Bonds.” Manuscript, Rochester, 2020.
- Croce, M. , Jahan-Parvar, M. R., and Rosen, S. (2022). “SONOMA: a Small Open ecoNOmy for MAcrofinance.” FRB working paper. <https://www.federalreserve.gov/econres/ifdp/files/ifdp1349.pdf>.
- Fernández-Villaverde, Jesus, Pablo Guerron-Quintana, Juan F. Rubio-Ramirez, and Martin Uribe. “Risk matters: The real effects of volatility shocks.” *American Economic Review* 101, no. 6 (2011): 2530-61.

## Paper proposal

Each student has to submit a proposal for an **original** paper idea by the end of the term. A draft of the proposal is due the last day of classes. The final proposal is due at the end of the term (date to be agreed upon in class).

The ideal proposal is 5–10 pages long and has:

- a well-defined idea and research, and
- a short literature review, and
- a preliminary data exploration (if applicable), and
- a sketch of a model to be used in answering the research question.

All students are encouraged to visit the instructor office hours to discuss their paper proposal ideas. Please do this early on.

### Assessment and Grading Scheme

1. The assessment will be based one midterm exam, a paper presentation, a paper discussion , a research proposal and class participation. There will be no cumulative final exam.
2. The midterm exam is scheduled for September 28th (pandemic-related events *may* push us to change this date).
3. Your grade for the course will be calculated as follows:

Item	Weight
Overall class participation and engagement	10%
Paper presentation	20%
Exam	35%
Research proposal	35%

### Guidelines and Expectations

Students are expected to come to class and to participate in various ways in the lectures: either by asking questions, by pointing out errors on the slides, or by answering questions I ask during lectures.

Most of the time, I will deliver my lectures using slides. The slides will be posted on the course website after classes (and if I can, even before classes). Occasionally, I will use the blackboard/whiteboard to cover additional material. The slides are not lecture notes. They mainly provide an outline of what will be discussed in class.

A reading schedule is outlined in this syllabus (see above). Students are assumed to have read the material ahead of the lectures. Students should NOT expect me to talk about every single textbook/paper page. The lectures will focus on the most important and challenging parts of the material. More basic material will be left for the students to study on their own. I will refer to this more basic material in the lectures, hence the need to read ahead to understand the lectures.

### Honor Code

Students are expected to understand and abide by the principles and procedures set forth in the University of Notre Dame Academic Code of Honor (<http://honorcode.nd.edu>) and uphold the pledge that “As a member of the Notre Dame community, I will not participate in or tolerate academic dishonesty.”

**At certain points in the course it may make good sense to modify the course content described above. The instructor reserves the right to modify elements of the course and will notify students accordingly (in class and post any changes Sakai).**

## References

- Aguiar, Mark and Gita Gopinath**, “Defaultable debt, interest rates and the current account,” *Journal of International Economics*, 2006, 69, 64–83.
- **and** —, “Emerging markets business cycles: the cycle is the trend,” *Journal of Political Economy*, 2007, 115 (1), 69–102.
- Arellano, Cristina**, “Default Risk and Income Fluctuations in Emerging Economies,” *American Economic Review*, 2008, 98(3), 690–712.
- **and Ananth Ramanarayanan**, “Default and the Maturity Structure in Sovereign Bonds,” 2008. Mimeo, University of Minnesota.
- Benjamin, David and Mark L. J. Wright**, “Recovery Before Redemption? A Theory of Delays in Sovereign Debt Renegotiations,” 2008. manuscript.
- Bianchi, J.**, “Overborrowing and Systemic Externalities in the Business Cycle,” *American Economic Review*, 2011, 101 (7), 1024–1044.
- Chatterjee, S. and B. Eyigungor**, “Maturity, Indebtedness and Default Risk,” 2011. Federal Reserve Bank of Philadelphia Working Paper 11-33.
- Cuadra, Gabriel, Juan M. Sanchez, and Horacio Sapriza**, “Fiscal policy and default risk in emerging markets,” *Review of Economic Dynamics*, forthcoming. doi:10.1016/j.red.2009.07.002.
- D’Erasmo, Pablo**, “Government Reputation and Debt Repayment,” 2011. Manuscript, University of Maryland.
- Eaton, Jonathan and Mark Gersovitz**, “Debt with potential repudiation: theoretical and empirical analysis,” *Review of Economic Studies*, 1981, 48, 289–309.
- García-Cicco, Javier, Roberto Pancrazi, and Martín Uribe**, “Real Business Cycles in Emerging Countries?,” *The American Economic Review*, 2010, 100 (5), 2510–2531.
- Gennaioli, Nicola, Alberto Martin, and Stefano Rossi**, “Sovereign Default, Domestic Banks and Financial Institutions,” 2010. Working Paper, CREI.
- Hatchondo, Juan Carlos, Leonardo Martinez, and César Sosa-Padilla**, “Debt dilution and sovereign default risk,” 2011. manuscript, University of Maryland.
- Johri, Alok, Shahed Khan, and César Sosa-Padilla**, “Interest Rate Uncertainty and Sovereign Default Risk,” 2019. Mimeo, University of Notre Dame.
- Mendoza, E.G.**, “Real business cycles in a small open economy,” *The American Economic Review*, 1991, pp. 797–818.
- Mendoza, Enrique and Vivian Yue**, “A General Equilibrium Model of Sovereign Default and Business Cycles,” *Quarterly Journal of Economics*, 2012. Manuscript, New York University.
- Neumeyer, Pablo. and Fabrizio Perri**, “Business cycles in emerging economies: the role of interest rates,” *Journal of Monetary Economics*, 2005, 52, 345–380.
- Obstfeld, M. and K.S. Rogoff**, *Foundations of international macroeconomics*, The MIT Press, 1996.
- Reinhart, Carmen M. and Kenneth S. Rogoff**, *This Time is Different*, Princeton Press, 2009.
- Schmitt-Grohé, Stephanie. and Martín Uribe**, “Closing small open economy models,” *Journal of International Economics*, 2003, 61, 163–185.
- Sosa-Padilla, Cesar**, “Sovereign Defaults and Banking Crises,” 2012. Working Paper. McMaster University.
- Sturzenegger, Federico and Jeromin Zettelmeyer**, *Debt Defaults and Lessons from a Decade of Crises*, MIT Press, 2005.
- Uribe, Martín and Vivian Yue**, “Country spreads and emerging countries: Who drives whom?,” *Journal of International Economics*, 2006, 69, 6–36.
- Yue, Vivian**, “Sovereign default and debt renegotiation,” *Journal of International Economics*, 2010, 80, 176–187.