Javier Bianchi

# International Macroeconomics

**Overview:** This is a second-year Ph.D. course on International Macroeconomics. The purpose of the course is to (a) introduce a set of models and tools used in international macro (b) present a number of active research areas in the field. The course begins with a review of canonical dynamic equilibrium models and the intertemporal approach to the current account. We will then turn to study sudden stops in capital flows, sovereign default, and financial globalization. We will focus both on positive and normative aspects. That is, we will look at questions like: What are the features of international business cycles? What distinguishes business cycles in emerging markets from developed economies? What are the causes and consequences of sudden stop in capital flows? Are capital controls desirable? What are the macroeconomic and welfare implications of financial globalization?

**Requirements:** The course is graded based on problem sets, and a term paper. The term paper needs be broadly related to the subjects of the course. One strict requirement is that the paper involves the use of numerical methods. Topics for the term paper need to be submitted for approval in a two-page (maximum) outline before March 30.

Lectures: Monday-Wednesday 9:30-10:45 at SOC SCI 6322

Office hours: Wednesday 1:00-2:30 pm or by appointment

 ${\bf Contact} ~ {\rm javieribianchi@gmail.com}$ 

**Readings:** The structure of the course is based on journal articles. Below is an extensive reading list where I have marked those that are required for the course. Those willing to go deeper in International Macroeconomics should go over some of the other readings as well. There are also a few textbooks that can be helpful to follow up on theoretical and empirical topics:

Obstfeld, Maurice and K. Rogoff (1996) Foundations of Int<br/>nl. Macroeconomics, MIT Press.

Reinhart, Carmen M. and Kenneth Rogoff (2009). This Time is Different: Eight Centuries of Financial Folly, Princeton Univ. Press.

Uribe, Martin lecture notes:

http://www.columbia.edu/~mu2166/GIM/lecture\_notes.pdf

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

# 1. Real Business Cycles for Open Economies

## Required Readings:

Martin Uribe lecture notes, Chapters 2-4

Aguiar Mark and Gita Gopinath (2007) "Emerging Market Business Cycles: The Cycle is the Trend," JPE, 115(1).

Backus D., P. Kehoe and F. Kydland (1992) "International Real Business Cycles," JPE, 100: 745-775.

Mendoza Enrique (1991) "Real Business Cycles in a Small Open Economy," American Economic Review, 81(4).

# Additional Readings:

Backus, D. (1993) "Interpreting Comovements in the Trade Balance and the Terms of Trade," Journal of International Economics.

Backus, D. and G. Smith (1993) "Consumption and real exchange rates in dynamic economies with non-traded goods", Journal of International Economics 2003

Boz, Emine, Christian Daude, and Ceyhun Bora Durdu, (2011) "Emerging Market Business Cycles Revisited: Learning about the Trend," Forthcoming, JME.

Garcia Javier, Roberto Pancrazzi and Martin Uribe (2010) "Real Business Cycle in Open Economies," American Economic Review December 2010.

Karabarbounis, Loukas "Labor Wedges and Open Economy Puzzles", WP Chicago Booth, 2010

Schmitt-Grohe and M. Uribe (2003) "Closing Small Open Economy Models," JIE

Obstfeld and Rogoff "The Intertemporal Approach to the Current Account", Handbook of International Economics, Gene Grossman and Ken Rogoff, eds., North Holland.

Obstfeld and K. Rogoff (2000) "Six Puzzles in International Macroeconomics," NBER Macroannual. With comments by C. Engel.

### 2. Financial Frictions and Sudden Stops

#### Required readings:

Calvo, G.A. (1998) "Capital Flows and Capital-Market Crises: The Simple Economics of Sudden Stops," Journal of Applied Economics, v. 1, pp. 35-54.

Mendoza, Enrique G. (2010) "Sudden Stops, Financial Crises and Leverage," American Economic Review, 100(5): 1941-1966.

Bianchi, Javier (2011) "Efficient Bailouts?", NBER Working Paper.

#### Additional Readings:

Caballero, R. and A. Krishnamurthy (2001) "International and Domestic Collateral Constraints in a Model of Emerging Market Crises," Journal of Monetary Economics 2001.

Chang, R and. A. Velazco (2000): 'A Model of Financial Crises in Emerging Markets," Quarterly Journal of Economics, 116, 489-517.

Chari, P. Kehoe and E. McGrattan (2005) "Sudden Stops and Output Drops," American Economic Review P&P, 95.

Durdu, C.B., Mendoza, E. and Terrones, M. (2009) "Precautionary Demand for Foreign Assets in Sudden Stop Economies: An Assessment of the New Mercantilism," JDE.

Fernandez-Villaverde, J., Guerro, P., Rubio-Ramirez, J. and Uribe, (2010) "Risk Matters: The Real Effects of Volatility Shocks," American Economic Review Forthcoming.

Gertler, Mark, Simon Gilchrist, and Fabio Natalucci (2007) "External constraints on monetary policy and the financial accelerator," Journal of Money, Credit and Banking.

Kehoe and Ruhl (2009) "Sudden Stops, Sectoral Reallocations, and the Real Exchange Rate", JDE 2009

Gruss Bertrand and K. Mertens (2010) "Regime switching interest rates and fluctuations in emerging markets". Mimeo, Cornell

Neumeyer and Perri (2005) "Business Cycles in Emerging Economies: the Role of Interest Rates," Journal of Monetary Economics, 52/2, 345-380.

Mendoza, E. and M. Terrones (2008) "An Anatomy of Credit Booms: Evidence From Macro Aggregates and Micro Data," Board of Governors of the Federal Reserve, International Finance Disc. Paper, 2008-936.

Mendoza, E. and K. Smith (2006) "Quantitative Implications of a Debt-Deflation Theory of Sudden Stops and Asset Prices," JIE.

Schneider, Martin and Aaron Tornell (2004) "Balance sheet effects, bailout guarantees and financial crises," Review of Economic Studies, 71(3).

Uribe Martin and V. Yue (2006) "Country Spreads and Emerging Countries: Who Drives Whom?," Journal of International Economics, 69, 6-36.

### 3. Regulation of Capital Flows

#### Required Readings:

Bianchi, Javier (2011) "Overborrowing and Systemic Externalities in the Business Cycle", *American Economic Review*, December 2011, 101(7), 3400-3426

Schmitt-Grohe S. and M. Uribe (2012) "Prudential Policy For Peggers", NBER Working Papepr

#### Additional Readings:

Amador M. and M. Aguiar (2011) "Fiscal Policy in Debt Constrained Economies", Mimeo Stanford

Aoki, K., G. Benigno and N. Kiyotaki, "Adjusting to Capital Account Liberalizations," Mimeo, Princeton, April 2006.

Bianchi, Javier and Enrique Mendoza (2010) "Overborrowing, Financial Crises and Macro-Prudential Policy", NBER Working Paper

Bianchi Javier (2010) "Credit Externalities: Macroeconomic Effects and Policy Implications", American Economic Review Papers and Proceedings.

Bianchi Javier, Emine Boz and Enrique Mendoza (2011) "Macro-prudential Policy in a Fisherian Model of Financial Innovation", IMF Economic Review

Broner Fernando and Ventura (2010) "Rethinking the Effects of Financial Liberalization," Mimeo, CREI.

Caballero, R., and A. Krishnamurthy (2003) "Excessive dollar debt: Financial development and underinsurance," The Journal of Finance, 58(2), 867-893.

Costinot A, Guido Lorenzoni and Ivan Werning "Theory of Optimal Capital Controls", NBER WP

Castiglionesi, F., F. Feriozzi, and G. Lorenzoni (2010) "Financial Integration and Liquidity Crises," Manuscript, Tilburg University, Tilburg.

Farhi, Emmanuel and Ivan Werning (2012) "Dealing with the Trilemma: Optimal Capital Controls with Fixed Exchange Rates", NBER WP

Farhi, Emmanuel and Ivan Werning (2012) "Fiscal Unions", NBER WP

Jeanne, O. "Debt maturity and the international financial architecture", American Economic Review

Jeanne, O., A. Korinek "Excessive volatility in capital flows: A pigouvian taxation approach", American Economic Review Papers and Proceedings.

Jeske, K. (2006) "Private International Debt with Risk of Repudiation," Journal of Political Economy, 114, 576-593.

Tirole, J., 2003. "Inefficient Foreign Borrowing: A Dual- and Common-Agency Perspective", American Economic Review Papers and Proceedings.

Uribe, M. (2006) "Individual Versus Aggregate Collateral Constraints and the Overborrowing Syndrome," Mimeo, Duke.

Wright, M. (2006): "Private capital flows, capital controls, and default," Journal of International Economics, 69(1), 120-149.

### 4. Sovereign Debt & Default

#### Required Readings:

1. Aguiar, Mark and Manuel Amador "Sovereign Debt", Handbook on International Economics, forthcoming

Arellano, C. (2008) "Default Risk and Income Fluctuations in Emerging Economies," American Economic Review.

Bianchi, Javier, J. Hatchondo, and L. Martinez (2012) "International Reserves and Rollover Risk", NBER Working Paper

Eaton, Jonathan, and Mark Gersovitz, (1981) "Debt with Potential Repudiation: Theoretical and Empirical Analysis," Review of Economic Studies, v. XLVIII, 289-309.

### Additional Readings:

Aguiar, M. and G. Gopinath (2006) "Defaultable Debt and Current Account Sustainability," JIE.

Aguiar, M., Manuel Amador, Emmanuel Farhi, and Gita Gopinath "Crisis and Commitment:Inflation Credibility and the Vulnerability to Sovereign Debt Crises"

Aguiar, Mark, Manuel Amador (2011) "Growth in the Shadow of Expropriation", QJE

Aguiar, Mark, Manuel Amador and Gita Gopinath (2009), "Investment Cycles and Sovereign Debt Overhang," Review of Economic Studies 76(1), pp. 1-31

Atkeson, Andrew (1991) "International Lending with Moral Hazard and Risk of Repudiation," Econometrica 59(4), pp. 1069-1089.

Alfaro L. and Kanczuk F. (2007) "Optimal Reserve Management and Sovereign Debt," JIE.

Arellano Cristina and Yan Bai (2012), "Linkages Across Sovereign Debt Markets", Mimeo, Minneapolis Fed

Arellano Cristina and Ananth Ramanarayanan (2010) "Default and the maturity structure in sovereign bonds", Mimeo UMN

Chatterjee, S. and Eyigungor, B. (2009). 'Maturity, Indebtedness and Default Risk'. Federal Reserve Bank of Philadelphia Working Paper 09-02.

Cole, H.L. and T. Kehoe (1996) "A Self-Fulfilling Model of Mexico's 1994-95 Debt Crisis," Journal of International Economics, 41, 309-30,

Cuadra, G. and H. Sapriza, 2007, "Fiscal Policy and Default Risk in Emerging Markets," Bank of Mexico.

Hatchondo, J. C. and L. Martinez, (2009), 'Long-duration bonds and sovereign defaults'. Journal of International Economics, volume 79, 117-125.

Hatchondo, J. C. L. Martinez, and Sosa Padilla (2011), "Debt dilution and sovereign default risk", Mimeo Indiana University

Hatchondo, J. C., L. Martinez, L. and H. Sapriza (2009), "Quantitative properties of sovereign default models: solution methods matter", Review of Economic Dynamics 2010

D'Erasmo, Pablo (2009) "Government Reputation and Debt Repayment in Emerging Economies," Mimeo, University of Maryland.

Mendoza, E. and Z. V. Yue (2008) "A Solution to the Default Risk-Business Cycle Disconnect," Mimeo, University of Maryland.

Park, J (2012) "Contagion of Sovereign Default Risk: The Role of Two Financial Frictions", Mimeo Wisconsin

Roch F, and Harald Uhlig (2012), "The Dynamics of Sovereign Debt Crises and Bailouts", mimeo, University of Chicago

Z. V. Yue, (2007) "Sovereign Default and Debt Renegotiation," JIE.

## 5. International Business Cycles, Global Imbalances, & Heterogeneous Agents

### Required Readings:

Mendoza E., V. Quadrini and V. Rios-Rull (2009) "Financial Integration, Financial Development and Global Imbalances," JPE 117(3).

Quadrini Vincenzo and Fabrizio Perri (2011) "International recessions", Mimeo, USC.

## Additional Readings:

Caballero, R., E. Farhi, and P.O. Gourinchas (2008) "An Equilibrium Model of 'Global Imbalances' and Low Interest Rates," American Economic Review 98: 358-393.

Kaminsky, Carmen Reinhart and Carols Vegh (2003) "The Unholy Trinity of Financial Contagion," Journal of Economic Perspectives, 17, no. 4, Fall, 99-118.

Kehoe, Patrick and Perri, Fabrizio (2002) "International Business Cycles with Endogenous Incomplete Markets," Econometrica, vol 70(3), 907-928.

Mendoza, E. and V. Quadrini (2010) "Financial Globalization, Financial Crises and Contagion," Journal of Monetary Economics, forthcoming.

Mendoza, E., V. Quadrini, and J. V. Rios-Rull (2009) "On the Welfare Implications of Financial Globalization without Financial Development," International Seminar on Macroeconomics Annual, R. Clarida & F. G Giavazzi, eds.

Pavlova and Rigobon (2011) "International Macro-Finance," Encyclopedia of Financial Globalization.