

International Macroeconomics Autumn 2012

Preliminary Syllabus

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Aim of the course:

The course wants to give an introduction to the main tools and models, as well as the main current research areas in International Macro. Wherever possible, I will try to link this to the policy debate, pre- and post-crisis.

After an introduction to the main issues, stylised facts and concepts, the course presents the standard International Business Cycle Model as a generalised version of the intertemporal approach to the current account and the main benchmark tool for international macroeconomic analysis. It uses this to analyse the role of frictions in international financial markets, before discussing in more detail currency crises and sovereign debt crises. Separate sections look at the emergence of global imbalances in current accounts and foreign asset holdings, at the economics of exchange rates, and at the post-2007 crisis. Depending on student interest, the course finishes with an international version of a micro-founded model of monetary policy, or a deeper look at international financial portfolio diversification and the home bias in equities puzzle.

The course evaluation is based on problem sets and a final exam, or a research paper if students prefer.

Course Website: *http://people.su.se/~tbroe/*

Course Organisation: 16 lectures, starting September 2012.

Office hours: Tuesday and Thursday after class am.

Assessment: Equally weighted: 1 graded problem set, and a research project.

Preliminary Course Outline

1. Introduction: Concepts, puzzles, stylised facts. And the crisis.

- Readings
 - * The 6 Major Puzzles in International Macro (Obstfeld and Rogoff 2000)

2. Comovement and transmission in a basic 2 country model

- The basic 2 country endowment economy with complete markets
- Empirical shortcomings: The consumption correlation and comovement puzzles
- Readings
 - * Baxter, Marianne, 1995, International trade and business cycles, in: Handbook of International Economics 3, (G. Grossman and K. Rogoff, eds.), December 1995.
 - Ravn, Morten O., (1997). "International business cycles in theory and in practice," Journal of International Money and Finance, Vol. 16(2), p. 255-283
 - Backus, David K and Kehoe, Patrick J and Kydland, Finn E, 1992. "International Real Business Cycles," Journal of Political Economy, Vol. 100(4), p. 745-75, August.

3. The 2 country model with multiple goods

- Bond trade in a small open economy: excess sensitivity, excess smoothness and the intertemporal theory of the CA
- The 2 country model with financial autarky and bond trade
- The role of preferences, persistence of shocks and investment
- Country-specific goods and the terms of trade
- Readings
 - Baxter, Marianne and Mario J. Crucini (1995). "Business Cycles and the Asset Structure of Foreign Trade", International Economic Review, Vol. 36, No. 4. (Nov.), pp. 821-854.
 - Martin Bodenstein, 2008. "Trade elasticity of substitution and equilibrium dynamics," International Finance Discussion Papers 934, Board of Governors of the Federal Reserve System (U.S.).
 - Cole, Harold L. and Obstfeld, Maurice, 1991. "Commodity trade and international risk sharing : How much do financial markets matter?," Journal of Monetary Economics, Vol. 28(1), p. 3-24, August.
 - ** Giancarlo Corsetti, Luca Dedola and Sylvain Leduc, 2008. "International Risk Sharing and the Transmission of Productivity Shocks," Review of Economic Studies, Blackwell Publishing, vol. 75(2), pages 443-473, 04.
 - ** Heathcote, Jonathan and Perri, Fabrizio, 2002. "Financial autarky and international business cycles," Journal of Monetary Economics, Elsevier, vol. 49(3), pages 601-627, April.

4. Endogenous asset market frictions

- Reasons for market incompleteness (within or across countries): Asymmetric information and limited contract enforcement
 - Gale, Douglas and Hellwig, Martin (1985). “Incentive-Compatible Debt Contracts: The One-Period Problem”, *Review of Economic Studies*, Vol. 52(4), 647-63.
 - Cole, Harold L and Kocherlakota, Narayana R (2001). “Efficient Allocations with Hidden Income and Hidden Storage,” *Review of Economic Studies* Vol. 68(3), pages 523-42.
 - Kehoe, Timothy J and Levine, David K (1993). “Debt-Constrained Asset Markets,” *Review of Economic Studies* Vol. 60(4), pages 865-88, October.
- The Bulow-Rogoff no-trade result
 - ** Bulow, Jeremy and Rogoff, Kenneth, 1989. ”Sovereign Debt: Is to Forgive to Forget?,” *American Economic Review*, American Economic Association, vol. 79(1), pages 43-50, March.
- Comovements with limited commitment and complete markets
 - Kehoe,Patrick J. and Fabrizio Perri, 2002. ”International Business Cycles with Endogenous Incomplete Markets,” *Econometrica* Vol. 70(3), pages 907-928, May.
- Small open economies with exogenous interest rates
 - ** Neumeyer, Pablo A. and Perri, Fabrizio, 2005. ”Business cycles in emerging economies: the role of interest rates,” *Journal of Monetary Economics*, Elsevier, vol. 52(2), pages 345-380, March.
- A small open economy with endogenous default risk
 - ** Arellano, Cristina (2008), ”Default Risk and Income Fluctuations in Emerging Economies,” *American Economic Review*, American Economic Association, vol. 98(3), pages 690-712, June.
- Other readings
 - Perri, Fabrizio (2008). ”Default and Enforcement Constraints”, in: *The New Palgrave Dictionary of Economics*, 2nd edition, edited by S. Durlauf and L. Blume, Palgrave Macmillan (Basingstoke and New York).

5. Heterogeneous Countries, Capital Flows, and Pre-Crisis Global Imbalances

- Why doesn't capital flow to poor countries?
 - Gertler, M. and K. Rogoff, 1990. “North-South Lending and Endogenous Domestic Capital Market Inefficiencies,” *Journal of Monetary Economics*, Oct vol. 26(2), 245-266
 - Lucas R., ”Why Doesnt Capital Flow from Rich to Poor Countries?” *American Economic Review*, May 1990, 80(2), 92-96.

- Is financial opening good for emerging economies?
 - Gourinchas P-O. and O. Jeanne, "Capital Flows to Developing Countries: the Allocation Puzzle", mimeo UCB, June 2009.
 - Gourinchas P-O. and O. Jeanne, "The Elusive Gains from International Financial Integration," *Review of Economic Studies*, Jul 2006, 73(3), 715-41.
 - M Ayhan Kose, Eswar Prasad, Kenneth Rogoff and Shang-Jin Wei, 2009. "Financial Globalization: A Reappraisal," *IMF Staff Papers*, Palgrave Macmillan, vol. 56(1), pages 8-62, April.
 - Obstfeld, M., "International Finance and Growth in Developing Countries: What Have we Learned?", *World Bank Commission on Growth and Development*, WP No 34, 2008.
- What explains the global imbalances in capital flows pre-2007?
 - ** Caballero, Ricardo J., Emmanuel Farhi and Pierre-Olivier Gourinchas (2008). "An Equilibrium Model of 'Global Imbalances' and Low Interest Rates", *American Economic Review* Vol. 98 No. 1 (March), 358-99.
 - ** Fogli, Alessandra and Fabrizio Perri (2006). "The "Great Moderation" and the US External Imbalance", *Monetary and Economic Studies* Vol 26 (December), 209-225.
 - ** Mendoza Enrique G., Vincenzo Quadrini and Jose-Victor Rios-Rull (2009). "Financial Integration, Financial Deepness and Global Imbalances", *Journal of Political Economy* Vol. 117 No.3, 371-416.
- Do capital flow imbalances matter in a monetary union?
 - Francesco Giavazzi and Luigi Spaventa, 2011. "Why the current account may matter in a monetary union. Lesson from the financial crisis in the Euro area, *CEPR Discussion Paper* No. 8008.
- Gross vs. Net Capital Flows vs. Valuation Effects
 - Broner, Fernando A, Didier, Tatiana, Erce, Aitor and Schmukler, Sergio, 2011. "Gross Capital Flows: Dynamics and Crises," *CEPR Discussion Papers* 8591.
 - Gourinchas, P-O and H. Rey, "From World Banker to World Venture Capitalist: US External Adjustment and The Exorbitant Privilege," in "G7 Current Account Imbalances: Sustainability and Adjustment," R. Clarida ed., 2007.
 - Gourinchas P-O. and and H. Rey, "International Financial Adjustment", *Journal of Political Economy*, August 2007, 115(4).
 - Obstfeld, M. *Financial Flows, Financial Crises, and Global Imbalances*, *CEPR Discussion Paper* No. 8611.

6. Crises I: Classical Models

- Three “Generations” of Classical Crisis Models
 - (a) 1st Generation: Inconsistent Policies leads to speculative attacks
 - Krugman, Paul(1979), A Model of Balance-of-Payments Crises, *Journal of Money, Credit and Banking* 11, 311-325.
 - (b) 2nd Generation: Multiple equilibria and self-fulfilling crises
 - Diamond, Douglas W. and Dybvig, Phillip H. “Bank Runs, Deposit Insurance, and Liquidity”, *QJE* Vol 91, no. 3, pp. 401-19.
 - * Obstfeld, Maurice, 1996. ”Models of currency crises with self-fulfilling features,” *European Economic Review*, Elsevier, vol. 40(3-5), pages 1037-1047, April.
 - (c) 3rd Generation: Incentive problems in cross-border investment and the 1997 Asian crisis
 - Corsetti, Giancarlo, Pesenti, Paolo and Roubini, Nouriel, 1999. “Paper tigers?: A model of the Asian crisis,” *European Economic Review*, Elsevier, vol. 43(7), pages 1211-1236, June.
 - Krugman, Paul, “WHAT HAPPENED TO ASIA?”, at: <http://web.mit.edu/krugma>
 - Young, Alwyn, 1995. “The Tyranny of Numbers: Confronting the Statistical Realities of the East Asian Growth Experience,” *QJE* 1995.
- Other readings
 - Morris, Stephen and Shin, Hyun Song, 1998. ”Unique Equilibrium in a Model of Self-Fulfilling Currency Attacks,” *American Economic Review*, American Economic Association, vol. 88(3), pages 587-97, June.

7. Crises II: Models with financial linkages between countries

- Financial linkages and the post-2007 crisis
 - Perri, Fabrizio and Vincenzo Quadrini (2010). “International Recessions”, mimeo. (see www.fabrizioperrin.net)
 - Kollmann, Robert, Enders, Zeno and Müller, Gernot J.(2011). “Global banking and international business cycles,” *European Economic Review*, Elsevier, vol. 55(3), pages 407-426, April.
 - Dedola, Luca and Giovanni Lombardo (2011). *Financial Frictions, Financial Integration and the International Propagation of Shocks*, mimeo.
 - Michael B. Devereux and James Yetman (2010). *Leverage Constraints and the International Transmission of Shocks*, Federal Reserve Bank of Dallas Globalization and Monetary Policy Institute Working Paper No. 45.
 - Eric van Wincoop, 2011. ”International Contagion Through Leveraged Financial Institutions,” NBER Working Papers 17686.

8. Crises III: Sovereign Debt Crises with self-fulfilling features

- * Cole, Harold L and Kehoe, Timothy J, 2000. "Self-Fulfilling Debt Crises," Review of Economic Studies, Wiley Blackwell, vol. 67(1), pages 91-116, January.
- ALESINA, A., PRATI, A. and TABELLINI, G (1990), Public Confidence and Debt Management: A Model and a Case Study of Italy, in R. Dornbusch and M. Draghi, (eds.), Public Debt Management: Theory and History (Cambridge: Cambridge University Press), 94118.
- CALVO, G. A. (1988), Servicing the Public Debt: The Role of Expectations, American Economic Review, 78, 647661.
- Patrick Bolton and Olivier Jeanne, 2011. "Sovereign Default Risk and Bank Fragility in Financially Integrated Economies," NBER Working Papers 16899, National Bureau of Economic Research, Inc.

9. Diversification of country portfolios and the home bias puzzle

- Home bias in equities: evidence
- Home bias in consumption and home bias in portfolios
- The role of preferences, investment and trade costs
- Readings:
 - Coeurdacier, N. (2009), Do trade costs in goods market lead to home bias in equities?, Journal of International Economics, 77, p 86-100.
 - van Wincoop, Eric and Francis E. Warnock, 2006. "Is Home Bias in Assets Related to Home Bias in Goods?," NBER Working Papers 12728.
 - Coeurdacier, Nicolas, Robert Kollmann and Philippe Martin, 2009. "International portfolios, capital accumulation and foreign assets dynamics," Globalization and Monetary Policy Institute Working Paper 27, Federal Reserve Bank of Dallas.

10. Exchange rate determination

- UIP and overshooting
- PPP and the law of one price
- Readings
 - Dornbusch, Rudiger (1976), "Expectations and Exchange Rate Dynamics," Journal of Political Economy 84 (December): 1161-76.
 - Burstein, Ariel, Martin Eichenbaum and Sergio Rebelo (2005). "Large Devaluations and the Real Exchange Rate," Journal of Political Economy, University of Chicago Press, vol. 113(4), pages 742-784, August.
 - V. V. Chari, Patrick J. Kehoe, Ellen R. McGrattan, "Can Sticky Price Models Generate Volatile and Persistent Real Exchange Rates?," The Review of Economic Studies, Vol. 69, No. 3 (Jul., 2002), pp. 533-563.

- Taylor, A. and M. Taylor (2004), The Purchasing Power Parity Debate, *Journal of Economic Perspectives* 18 (4), 135-158.

11. Money and policy

- Brief Recap: The Mundell Fleming Model
- Policy in a simple 2 country GE economy with money
- The importance of local vs. producer currency pricing
- Readings
 - * Corsetti, Giancarlo (2008). “New Open Economy Macroeconomics”, in: *The New Palgrave Dictionary of Economics*, 2nd edition, edited by S. Durlauf and L. Blume, Palgrave Macmillan (Basingstoke and New York).
 - Corsetti, Giancarlo and Paolo Pesenti, 2005. ”The Simple Geometry of Transmission and Stabilization in Closed and Open Economies,” NBER Working Papers 11341
 - Obstfeld, Maurice and Rogoff, Kenneth, 1996. *Foundations of International Macroeconomics*. Chapter 10.
 - Obstfeld, Maurice and Rogoff, Kenneth 1995. Exchange rate dynamics redux. *Journal of Political Economics* 102, 624-660.
 - Devereux and Engel (2003). “Monetary Policy in the Open Economy Revisited: Exchange Rate Flexibility and Price Setting Behavior,” and Appendix (with Michael B.), *Review of Economic Studies* 70, 765-783.

* = Required reading for everyone. ** = Required reading: choose 1 of those suggested for the session.

General References:

1. Blogs

- Vox EU// <http://www.voxeu.org>
- Project Syndicate
(Op-Eds by Ken Rogoff, Jo Stiglitz, Brad DeLong, Barry Eichengreen, et al)
- Brad De Long on International Economics
<http://www.project-syndicate.org> http://delong.typepad.com/sdj/international_finance/
- The Economist Magazine's View Exchange
<http://www.economist.com/blogs/freeexchange>
- Paul Krugman at the NYT
<http://krugman.blogs.nytimes.com>
- Simon Wren-Lewis at Oxford
<http://mainlymacro.blogspot.com>

2. Textbooks

- Obstfeld, Maurice and Kenneth S. Rogoff, Foundations of International Macroeconomics, MIT Press 1996.

3. History

- Barry Eichengreen and Nathan Sussman, "The International Monetary System in the (Very) Long Run, IMF Working Paper No. 00/43.
Also: www.imf.org/external/pubs/ft/wp/2000/wp0043.pdf

4. Web Resources including lecture notes of other courses

- <http://www.rgemonitor.com/>
- <http://www.voxeu.org/>
- Lecture notes Morten Ravn, EUI: <http://www.eui.eu/Personal/Ravn/>
- Lecture notes Fabrizio Perri, Minnesota: <http://www.fperri.net/teaching/trade/trade08.htm>
- Lecture notes Doireann Fitzgerald, Stanford: <http://economics.stanford.edu/files/econ>

5. Articles

- Arellano, Cristina (2008), "Default Risk and Income Fluctuations in Emerging Economies," American Economic Review, American Economic Association, vol. 98(3), pages 690-712, June.
- Backus, David K, Kehoe, Patrick J and Kydland, Finn E, 1992. "International Real Business Cycles," Journal of Political Economy, University of Chicago Press, vol. 100(4), pages 745-75, August.

- Backus, David K and Kehoe, Patrick J and Kydland, Finn E, 1994. "Dynamics of the Trade Balance and the Terms of Trade: The J-Curve?," American Economic Review, American Economic Association, vol. 84(1), pages 84-103, March.
- David K. Backus and Patrick J. Kehoe and Finn E. Kydland, 1993. "International business cycles: theory vs. evidence," Quarterly Review, Federal Reserve Bank of Minneapolis, issue Fall, pages 14-29.
- Baxter M. and U. Jerman, "The international diversification puzzle is worse than you think", American Economic Review, March 1997, 87(1).
- Baxter, Marianne and Mario J. Crucini (1995). "Business Cycles and the Asset Structure of Foreign Trade", International Economic Review, Vol. 36, No. 4. (Nov.), pp. 821-854.
- Baxter, Marianne, 1995, International trade and business cycles, in: Handbook of International Economics 3, (G. Grossman and K. Rogoff, eds.), December 1995.
- Benigno, Pierpaolo, 2009. "New-Keynesian Economics: An AS-AD View," NBER Working Papers 14824.
- Martin Bodenstein, 2008. "Trade elasticity of substitution and equilibrium dynamics," International Finance Discussion Papers 934, Board of Governors of the Federal Reserve System (U.S.).
- Christian Broda and David E. Weinstein, 2008. "Understanding International Price Differences Using Barcode Data," NBER Working Papers 14017.
- Burstein, Ariel and Martin Eichenbaum and Sergio Rebelo (2005). "Large Devaluations and the Real Exchange Rate," Journal of Political Economy, University of Chicago Press, vol. 113(4), pages 742-784, August.
- Burstein, Ariel and Eichenbaum, Martin and Rebelo, Sergio, 2006. "The importance of nontradable goods' prices in cyclical real exchange rate fluctuations," Japan and the World Economy, Elsevier, vol. 18(3), pages 247-253, August.
- Chari, V. V., Patrick J. Kehoe and Ellen R. McGrattan, "Can Sticky Price Models Generate Volatile and Persistent Real Exchange Rates?," The Review of Economic Studies, Vol. 69, No. 3 (Jul., 2002), pp. 533-563.
- * Coeurdacier, N. (2009), Do trade costs in goods market lead to home bias in equities?, Journal of International Economics, 77, p 86-100.
- Coeurdacier, Nicolas, Robert Kollmann and Philippe Martin, 2009. "International portfolios, capital accumulation and foreign assets dynamics," Globalization and Monetary Policy Institute Working Paper 27, Federal Reserve Bank of Dallas.

- Cole, Harold L. and Obstfeld, Maurice, 1991. "Commodity trade and international risk sharing : How much do financial markets matter?," *Journal of Monetary Economics*, Elsevier, vol. 28(1), pages 3-24, August.
- Corsetti, Giancarlo and Paolo Pesenti, 2005. "The Simple Geometry of Transmission and Stabilization in Closed and Open Economies," NBER Working Papers 11341.
- Devereux, Michael and Charles Engel "Monetary Policy in the Open Economy Revisited: Exchange Rate Flexibility and Price Setting Behavior," and Appendix (with Michael B.), *Review of Economic Studies* 70, October 2003, 765-783.
- Dornbusch, Rudiger (1976), "Expectations and Exchange Rate Dynamics," *Journal of Political Economy* 84 (December): 1161-76.
- Feldstein, Martin and Horioka, Charles, 1980. "Domestic Saving and International Capital Flows," *Economic Journal*, Royal Economic Society, vol. 90(358), pages 314-29, June.
- Engel, Charles and Rogers, John H, 1996. "How Wide Is the Border?," *American Economic Review*, American Economic Association, vol. 86(5), pages 1112-25, December.
- Charles Engel, 1999. "Accounting for U.S. Real Exchange Rate Changes," *Journal of Political Economy*, University of Chicago Press, vol. 107(3), pages 507-538, June.
- French, Kenneth R and Poterba, James M, 1991. "Investor Diversification and International Equity Markets," *American Economic Review*, American Economic Association, vol. 81(2), pages 222-26, May.
- Heathcote, Jonathan and Perri, Fabrizio, 2002. "Financial autarky and international business cycles," *Journal of Monetary Economics*, Elsevier, vol. 49(3), pages 601-627, April.
- Imbs, Jean, Haroon Mumtaz, Morten Ravn and Hlne Rey, (2005). "PPP Strikes Back: Aggregation and the Real Exchange Rate," *The Quarterly Journal of Economics*, MIT Press, vol. 120(1), pages 1-43, January.
- Krugman, Paul R. "A Model of Balance-of-Payments Crises," *Journal of Money, Credit and Banking* 11 (August 1979): 311-25.
- Lucas, Robert E. (1982), Interest Rates and Currency Prices in a Two-Country World, *Journal of Monetary Economics* 10, 335-60.
- Morris, Stephen and Shin, Hyun Song, 1998. "Unique Equilibrium in a Model of Self-Fulfilling Currency Attacks," *American Economic Review*, American Economic Association, vol. 88(3), pages 587-97, June.
- Obstfeld, Maurice, 1996. "Models of currency crises with self-fulfilling features," *European Economic Review*, Elsevier, vol. 40(3-5), pages 1037-1047, April.

- Maurice Obstfeld and Kenneth Rogoff, 2001. "The Six Major Puzzles in International Macroeconomics: Is There a Common Cause?", in: NBER Macroeconomics Annual 2000, Volume 15, pages 339-412.
- Perri, Fabrizio (2008). "Default and Enforcement Constraints", in: The New Palgrave Dictionary of Economics, 2nd edition, edited by S. Durlauf and L. Blume, Palgrave Macmillan (Basingstoke and New York).
- Ravn, Morten O., 1997. "International business cycles in theory and in practice," Journal of International Money and Finance, Elsevier, vol. 16(2), pages 255-283, April.
- * Taylor, A. and M. Taylor (2004), The Purchasing Power Parity Debate, Journal of Economic Perspectives 18 (4), 135-158.
- van Wincoop, Eric and Francis E. Warnock, 2006. "Is Home Bias in Assets Related to Home Bias in Goods?," NBER Working Papers 12728.