Yale University
International Finance
Econ 724b. Spring 2005. Galina Hale

Lecture plan and reading list

Books

- M. Obstfeld and K. Rogoff "Foundations of International Macroeconomics," MIT Press, 1996 **(OR)** ***Required***
- Nelson C. Mark, "International Macroeconomics and Fianance," Blackwell Publishers, 2001 **(M)** ***Strongly recommended***
- M. Obstfeld and A. Taylor, "Global Capital Markets: Integration, Crisis and Growth". Cambridge University Press, 2004. **(OT)** ***Strongly recommended for the second half of the class.***
- L. Ljungqvist and T. Sargent "Recursive Macroeconomic Theory," MIT Press, 2000. ***Useful macro textbook***
- G.Grossman and K. Rogoff, eds., "Handbook of International Economics," vol. III. Amsterdam:North-Holland, 1995 **(HIE III)** ***Recommended***
- Frederick Van Der Ploeg, ed. "The Handbook of International Macroeconomics", Blackwell Economics Handbooks, 1994. **(HIM)** ***Recommended***
- Classens S., and K. Forbes, eds. "International Financial Contagion", Kluwer, 2001. **(CF)** *A collection of theoretical and empirical articles on contagion.*
- Glick, R., Moreno, R. and M.M.Spiegel, eds. "Financial Crises in Emerging Markets", Cambridge University Press, 2001. *A collection of theoretical, empirical and policy articles on recent financial crises in the emerging markets.*
- Agenor, P-r. et al. (eds.) "The Asian Financial Crisis", Cambridge University Press, 1999. *A collection of articles on theoretical, empirical and policy lessons from the Asian crisis, regarding crises, contagion, IMF.*
- Campbell, Loo, MacKinlay, The Econometrics of Financial Markets, Princeton University Press 1997. *You can find this book a useful reference if you write an empirical paper.*

January 11. Lecture 1.

Introduction

Balance of payments

- Krugman-Obstfeld 6th edition (!), chapter 12 pp. 307-319. *An undergraduate textbook that explains balance of payments clearly, with good examples.*
- Survey of current business, July 1999 p.61. *An official document introducing new balance of payments definitions .*

CA definition

Intertemporal approach to CA: 2-period small open economy

- OR chapter 1 pp.1-14, 23-31 ***Required***
- Obstfeld, M and K. Rogoff "Intetemporal Approach to current account", HIE III Ch. 34, also NBER WP 4893, October 1994.
- Obstfeld, M "International Macroeconomics: Beyond the Mandell-Fleming Model" IMF Staff Papers 47 (Special Issue, 2001), 1-39 *A review of the development of international macroeconomics in the recent years and introduction to new open economy macro.*
- Sachs, J (1982) "The current account in the macroeconomic adjustment process," Scandinavian Journal of Economics, *Intertemporal model of CA.*

January 13. Lecture 2.

Intertemporal approach to CA: 2-period small open economy (continued)

2-country world

- OR chapter 1 pp.23-31. ***Required***

A model with investment

- OR chapter 1 pp.14-23, 31-39, 45-53. ***Required***

January 18. Lecture 3.

Dynamic CA models: deterministic and stochastic

- OR chapter 2 pp 57-96 ***Required***
- Obstfeld, M. and K. Rogoff (1994) "The Intertemporal Approach to the Current Account" NBER W.P. No. 4893, October also in G.Grossman and K. Rogoff, eds., Handbook of International Economics, vol. 3. Amsterdam:North-Holland, 1995. *Introduces intertemporal approach to current account. Models and empirics are similar to those in chapters 1-3 of the book.*

Empirics on CA model

- OR chapter 2 pp 90-94 ***Required***
- Bergin, P and S. Sheffrin, "Interest Rates, Exchange Rates and Present Value Models of the Current Account," Economic-Journal; 110(463), April 2000, pages 535-58. ***Required.*** *Available for free in electronic format through Yale library* .
- Glick, Reuven and Kenneth Rogoff, "Global versus Country-Specific Productivity Shocks and the Current Account," Journal of Monetary Economics 35 (1995): 159-92. *A dynamic CA model with capital adjustment costs is presented and tested empirically. Available for free in electronic format through Yale library* .
- Gregory,-Allan-W.; Head,-Allen-C. "Common and Country-Specific Fluctuations in Productivity, Investment, and the Current Account," Journal-of-Monetary-Economics;44(3), December 1999, pages 423-51. *A test of a dynamic CA model where global and country-specific shocks are endogenously determined, results are consistent with the model. Available for free in electronic format through Yale library* .
- A. Kraay and J. Ventura, "Current Accounts in Debtor and Creditor Countries," Quarterly Journal of Economics, November 2000. *A model of CA with high investment risk and low diminishing returns illustrates the assertion that the CA response to the shocks is proportional to the share of foreign assets in total assets. Empirical analysis of industrialized countries supports this assertion. Their recent paper "* Current Accounts in the Long and Short Run *" distinguishes between short and long run, just as title suggests, in a similar empirical exercise.*

January 20. Lecture 4.

CA and policy issues: open-economy OGM

- OR chapter 3 pp.133-137, 156-161. ***Required***
- Buiter, W. (1981), "Time Preference, and Intergenerational Lending and Borrowing in an Overlapping Generations Model", Journal of Political Economy, 89, 4, 768-797. *A two-country OGM is aimed at explaining international capital movements by the differences in the rate of time preference. Available from JSTOR* .

- Tornell.A. and P. Lane (1994) "A Windfalls a Curse? A Non-Representative Agent Model of the Current Account and Fiscal Policy", NBER W.P. No.4839,August. *Representative-agent models predict positive correlation between temporary terms of trade shocks and current account. This is not supported by the data. Some explanation lies in fiscal policy effect of terms of trade and some in the lower return on windfall money. The model to illustrate this introduces fiscal decisions made by different groups of agents in a dynamic game setting. Model predictions are confirmed with some case studies.*
- Backus, D.K., P. Kehoe and F. Kydland (1993) "International Business Cycles: Theory and Evidence", NBER W.P. 4493, October. *Presents a two-country RBC (dynamic GE) model with trade, compares the predictions to the data on correlation of real variables across countries and variance of terms of trade. Model does not explain the data. Paper suggests some extensions that could potentially account for the discrepancies.*

Feldstein-Horioka puzzle and capital mobility

- OR chapter 3 pp 161-164 ***Required***
- M ch.1 pp.3-11 ***Required***, ch. 6 p.128-152.
- Martin Feldstein, Charles Horioka, "Domestic Saving and International Capital Flows," The Economic Journal, Vol. 90, No. 358. (Jun., 1980), pp.314-329. ***Required.*** *Available from JSTOR* .
- Frankel, J. (1992) "Measuring International Capital Mobility: A Review", American Economic Review, Papers and Proceedings, May. ***Required.*** *Available from JSTOR* .
- Taylor, A. (1996) "International Capital in History: The Savings-Investment Relationship", NBER W.P. No.5743, September. *Cross-section and time-series tests of capital mobility 1850-1992.*
- Baxter, M. and M. Crucini (1993) "Explaining Saving-Investment Correlations", June, American Economic Review 83(3). *The paper presents two-country SGE model that is consistent with Feldstein-Horioka results and capital mobility. Available from JSTOR* .
- Mendoza, E. (1991) "Real Business Cycles in a Small Open Economy", American Economic Review, September. *A model is consistent with Canadian data and predicts high investment-saving correlations. Available from JSTOR* .
- Cardia, E. (1991) "The Dynamics of a Small Open Economy in Response to Monetary, Fiscal, and Productivity Shocks", Journal of Monetary Economics, December 1991. *A small open economy model with technological, monetary and fiscal shocks is presented and simulated using data for US and Germany. Results confirm that saving-investment correlation could be due to technological shocks rather than lack of capital mobility. Available for free in electronic format through Yale library* .
- M. Obstfeld and K. Rogoff, "The Six Major Puzzles in International Macroeconomics: Is There a Common Cause?" NBER Working Paper 7777 (July 2000). *Six international macro puzzles are explained, to a various extent, by allowing for trade costs in goods trade. Puzzles are: home bias in trade, Feldstein-Horioka, home bias portfolio, consumption correlation, PPP, exchange rate disconnect.*
- Obstfeld, M. (1994) "International Capital Mobility in the 1990s", CEPR Discussion Paper No. 902, February; also in P. Kenen (ed.) "Understanding Interdependence: The Macroeconomics of the Open Economy, Princeton University Press," 1995. *Various measures of capital mobility are presented and brought to the data. CEPR paper is in MUDD library.*
- Cole H. and M. Obstfeld, "Commodity Trade and International Risk Sharing: How much do financial markets matter?" Journal of Monetary Economics 1991, 28: 3-24. *A model shows that if gains from international portfolio diversification are small (simulations show that they might be small for large industrialized countries), then small barriers to international capital flows might discourage large volume of international trade in capital, while the interest rate differentials will remain small. Available for free in electronic format through Yale library* .
- Blanchard, Olivier and Giavazzi, Francesco. (2002) "Current Account Deficits in the Euro Area. The End of the Feldstein Horioka Puzzle?" MIT department of Economics Working Paper Series, Working Paper 03-04, September 17, 2002. *Using a workhorse model and applying it to the intergration in Europe and then looking at panel data show that large CA deficits in Portugal and Greece are what we would expect. This shows that there is no longer FH puzzle.*

January 25. Lecture 5.

Exchange rates: stylized facts

- M. Obstfeld and K. Rogoff, "The Six Major Puzzles in International Macroeconomics: Is There a Common Cause?" NBER Working Paper 7777 (July 2000). ***Required*** *(only PPP and "disconnect" parts).*

The PPP puzzle - slow convergence and high volatility of real exchange rate

- OR sections 4.1-4.5 ***Required***
- M ch. 7 ***Required***
- Rogoff K. The Purchasing Power Parity Puzzle, Journal of Economic Literature 1996 ***Required***
- Engel, Charles [1999]. ``Accounting for Real Exchange Rate Changes," Journal of Political Economy 107, 507-38. *Available from JSTOR . A decomposition of the real exchange rate that separates relative prices of non-tradables. The paper then finds that the fluctuations in relative prices of non-tradable contribute almost nothing to the fluctuations of real exchange rate.*
- Engels C. and J. Rogers, "How wide is the border", AER 1996, 86:1112-1125. *Empirical paper that shows empirically with gravity regression that the trade across border between US and Canada is less than between the states within US and Canada, other things being equal.*

The Backus-Smith puzzle - low correlation between relative consumption and real exchange rate

- Backus, David K., and Gregor W. Smith, [1993]. ``Consumption and Real Exchange Rates in Dynamic Economies with Non-traded Goods," Journal of International Economics 35, 297-316. *Formulates Bachus-Smith puzzle: that correlation between relative consumption and real exchange rate is low or negative in time-series for the OECD countries.*
- Corcetti, Giancarlo, Luca Dedola and Sylvain Leduc "International Risk Sharing and the Transmission of Productivity Shocks", mimeo, 2003. *The paper retells the Bachus-Smith puzzle and presents the model that produces low correlation, due to incomplete markets and distribution costs (which are intrinsically non-tradable).*

The Mussa puzzle - real exchange rate depends on the nominal exchange rate regime

- Mussa Michael, "Nominal Exchange Rate Regimes and the behavior of the Real Exchange Rates: Evidence and implications" Carnegie-Rochester Series on Public Policy 25, 1986. ***Required***
- Mussa (1990)
- Lothian & Taylor (1997?) *Show that Mussa's finding is not always true.*

The exchange rate "disconnect" puzzle - exchange rate does not depend on fundamentals

- Meese, R. and K. Rogoff. "Empirical Exchange Rate Models of the Seventies: Do They Fit Out of Sample?" Journal of International Economics, Feb. 1983, pp. 3-24. ***Required***
- Bacchetta, Philippe and Eric van Wincoop (2002) "Can Information Dispersion Explaing the Exchange Rate Disconnect Puzzle?" April 2004. *A model that seems to solve "disconnect" puzzle using symmetric heterogeneous information dispersion.*
- Chinn M. e.a. (2003)

January 27. Lecture 6.

Monetary model of exchange rate determination

- OR 8.1, 8.2, 8.4.1 ***Required***
- M ch.4 ***Required***
- In continuous time: Obstfeld and Stockman, Exchange Rate Dynamics, chapter 18 in HIE II, section 2. ***Required***
- Lucas, R, "Interest Rates and Currency Prices in a Two Country World", Journal of Monetary Economics 10 (1982), 335-359. *Available for free in electronic format through Yale library* . ***Required***
- Alan C. Stockman, A Theory of Exchange Rate Determination Journal of Political Economy 88 (1980), 673-98. *A model of exchange rate determination that features deviations from PPP and correlation between exchange rate and terms of trade.*

February 1. Lecture 7.

Exchange Rate Stabilization

Target zones

- OR 8.5-8.7 ***Required***
- M, 10 ***Required***
- Krugman, Paul "Target Zones and Exchange Rate Dynamics", Quarterly Journal of Economics 106, Aug. 1991, 669-82. *Available from JSTOR* . ***Required***
- Svensson Lars "An Interpretation of Recent Research on Exchange Rate Target Zones", Journal of Economic Perspectives, 6(4), Fall 1992, 119-144. *A non-technical review of the pre-1992 target zone literature.*
- Pesenti Paolo "Exchange Rate Dynamics and Target Zones: an Introductory Survey" Yale University 1990.
- Obstfel, Maurice, Jay C. Shambaugh and Alan M. Taylor "Monetary Sovereignty, Exchange Rates, and Capital Controls: the Trilemma in the Interwar Period", *IMF Staff Papers (Special Issue 2004), forthcoming.*

Liquidity models

- Roubini, Nouriel, and Vittorio Grilli, Liquidity Models in Open Economies: Theory and Empirical Evidence European Economic Review, vol. 40, pp. 847-859, 1996, also NBER Working Paper No. 5313 (1995). ***Required***
- Obstfeld, Maurice, 1997, Open-Economy Macroeconomics: Developments in theory and policy, Scandinavian Journal of economics, vol. 100, #1, pp. 247-275, 1998, also NBER WP 6319, December ***Required***

February 3. Lecture 8.

Mundell-Fleming (M-F) and Dornbusch-M-F and overshooting

- OR 9.2, 9.3 ***Required***
- M ch. 8 (*only pp. 185-194 & 200-203 are* ***required***)
- Marston, Richard, Stabilization policies in Open economies, Chapter 17 in HIE II. ***Required***
- Obstfeld and Stockman, Exchange Rate Dynamics, chapter 18 in HIE II, section 3. *Model of exchange rate overshooting in continuous time.*
- Dornbusch, Rudiger, Expectations and Exchange Rate Dynamics Journal of Political Economy, Vol. 24 (1976), pp. 1161-1176. *The original exchange rate overshooting paper.*
- Luis Felipe Cespedes, Roberto Chang,, Andres Velasco and .. Cespedes "IS-LM-BP in Pampas". *An application of Mundell-Fleming model to a resource-based economy.*
- Obstfeld (1985)

February 8. Lecture 9.

NOEM Basics

- Lane (2001) "The New Open Economy Macroeconomics: A Survey" Journal of International Economics, 2001. Working paper version is here. pp.1-42. ***Required***
- OR chapter 10. *The chapter is based on the "Redux" paper*
- Corsetti G. and P. Pesenti, " Welfare and macroeconomic interdependence", QJE May 2001 ***Required***
- Obstfeld, Maurice and Kenneth Rogoff "Exchange rate dynamics redux". ***Required***
- Cedric Tille. "The role of consumption substitutability in the international transmission of shocks" JIE, 2001 also Federal Reserve Bank of New York Staff Report 67 *This is a general framework comparing and contrasting the previous two contributions.*

- See also Brian Doyle's webpage on the new open macroeconomics, http://www.geocities.com/brian_m_doyle/open.html.

February 10. Lecture 10.

Closed vs. Open Economy

- Corsetti G. and P. Pesenti, "International Dimensions of Optimal Monetary Policy" NBER 8230. ***Required***
- Michael Woodford: Interest and Prices (handouts)
  "Price-Level Determination under Interest-Rate Rules," Chapter 2
  "A Neo-Wicksellian Framework for the Analysis of Monetary Policy," Chapter 4
  "Inflation Stabilization and Welfare," Chapter 6

February 15. Lecture 11.

International transmission

- Corsetti G. and P. Pesenti, " Welfare and macroeconomic interdependence", QJE ***Required.*** *Use older version with graphs from Corsetti's web site.*
- Corsetti G. and P. Pesenti, "International Dimensions of Optimal Monetary Policy" National Bureau of Economic Research Working Paper no. 8230. ***Required*** *Use new version from Corsetti's web site.*

International Policy coordination

- OR 9.5.5 . ***Required***
- OT chapter 5.
- Obstfeld and Rogoff "Global Implications.." QJE 2002, vol. 117 p. 503-36. ***Required***
- Benigno, Gianluca and Pierpaolo Benigno, "Price Stability in Open Economies", Review of Economic Studies 70, Oct. 2003.
- Canzoneri,-Matthew-B.; Henderson,-Dale-W., "Monetary policy in interdependent economies: A game-theoretic approach", MIT Press, 1991.
- Persson,-Torsten; Tabellini,-Guido, Double-Edged Incentives: Institutions and Policy Coordination in HIE III, pages 1973-2030.
- Rogoff K., Can International Monetary Policy Cooperation Be Counterproductive? Journal of International Economics;18(3-4), May 1985, pages 199-217.

February 17. Lecture 12.

Law of one price vs. local currency pricing: International transmission and open-economy policy trade-off

- Corsetti G. and P. Pesenti, "International Dimensions of Optimal Monetary Policy" NBER 8230. ***Required***
- Devereux, M. and C. Betts "Exchange Rate Dynamics in a Model of Pricing to Market", Journal of International Economics, 50, 1, 2000, 215-244.
- Michael Devereux and Charles Engel, Fixed vs. Floating Exchange Rates: how price setting affects the optimal choice of Exchange Rate Regime, 1998 (PDF format)
- Obsteld M. and K. Rogoff, "New Directions for Stochastic Open Economy Models", Journal of International Economics 50, Feb. 2000, 117-53, also NBER WP 7313. ***Required***
- Engel, Charles [2002]. ``Expenditure Switching and Exchange-Rate Policy," in Ben Bernanke and Kenneth Rogoff (eds.), NBER Macroeconomics Annual 2002, Cambridge, MA: MIT Press.

Nominal rigidities and endogenous international pricing

- Corsetti and Pesenti, "Self-validating Optimum Currency Areas" National Bureau of Economic Research Working Paper no. 8783.
- Bacchetta, Philippe, and Eric Van Wincoop [2000]. ``A Theory of Currency Denomination of International Trade," forthcoming in Journal of International Economics.
- Devereux, Michael B., and Charles Engel "Monetary Policy in the Open Economy Revisited: Price Setting and Exchange rate Flexibility", Review of Economic Studies 70, Oct. 2003. ***Required***

More open economy policy trade-off: sectoral shocks and nontraded goods

- Cumby et al. The Need for International Policy Coordination: What's Old, What's New, and What's Yet to Come?
- Tille, Cedric [2002], ``How Valuable is Exchange Rate Flexibility? Optimal Monetary Policy under Sectoral Shocks", Federal Reserve Bank of New York Staff Report 147, March.

February 22. Lecture 13.

Modeling International Price Discrimination

- Corsetti G. and Luca Dedola, "Macroeconomics of International Price discrimination", mimeo***. Required***

More evidence on deviations from the law of one price

- Goldberg, Pinelopi K., and Michael M. Knetter [1997]. ``Goods Prices and Exchange Rates: What Have We Learned?" Journal of Economic Literatur 35, 1243-1272. ***Required***
- Goldberg, Pinelopi K., and Frank Verboven [2001]. ``The Evolution of Price Dispersion in the European Car Market," Review of Economic Studies 68, 811-48.

Financial Frictions vs. goods market imperfections

- V. V. Chari, Patrick J. Kehoe, and Ellen R. McGrattan Can Sticky Price Models Generate Volatile and Persistent Real Exchange Rates? Review of Economic Studies 69, Aug. 2002
- Pierpaolo Benigno, Towards a simple approach to International Monetary Policy Coordination with Micro-foundations , Princeton University, 1998.

International spillovers and the new open economy macro

- Obstfeld and Rogoff: Do We Really Need a New International Monetary Compact? PDF (671 K)
- Michael Devereux and Charles Engel. "Monetary Policy in the Open Economy Revisited: Price Setting and Exchange Rate Flexibiity"

February 24. Lecture 14.

Empirical performance of NOEMs

- M, 9.
- Lane, Philip, "The New Open Economy Macroeconomics: A Survey," Journal of International Economics 54, Aug. 2001, 235-66. Working paper version is here. pp.43-59. ***Required***
- Bergin, Paul R. "Putting the 'new Open Economy Macroeconomics' to a test", Journal of International Economics 60(1), Mayy 2003, 3-34. *A careful empirical analysis of empirical performance of NOEM. Small open economy case.*

- Bergin, Paul R. "How Well Can the New Open Economy Macroeconomics Explain the Exchange Rate and Current Account?", mimeo. *A two-country version of the JIE paper exercise.*

March 1. Lecture 15.

International asset trade: theory

- OR chapter 5 pp.270-279,285-289,300-304. ***Required*** (I assume you are familiar with asset pricing - pp. 306-317)
- OT chapter 1. ***Strongly recommended***
- H. Cole, "Financial Structure and International Trade," *International Economic Revie*w, May 1988. *A two-country, two-period model with random productivity shocks and three different financial systems. Available from JSTOR*
- P. Martin and H. Rey, " Financial Supermarkets: Size Matters for Asset Trade , *European Economic Review*, Volume (44) 7, June 2000, pp. 1327-1350. *A two-country model with uncertainty, transaction costs and endogenous set of assets. Results show that markets tend to be inefficiently incomplete.*
- L. Svensson, "Trade in Risky Assets," American Economic Review, June 1988. *A model of trade in risky assets based on a theory of comparative advantage. Available from JSTOR*
- Adler, M. and B. Dumas (1983) "International Portfolio Choice and Corporation Finance: A Synthesis", Journal of Finance, June. *A survey article paralleling corporate finance literature to the international finance. Available from JSTOR*
- Obstfeld, Maurice, "Risk-Taking, Global Diversification and Growth, " American Economic Review 84 (December 1994), 1310-1329. *A model of global portfolio diversification that shows the link between financial openness and economic growth. Calibration shows that international portfolio diversification can lead to substantial welfare improvement. Available from JSTOR .*
- K. Froot and J. Stein, "Exchange Rates and Foreign Direct Investment: An Imperfect Capital Markets Approach," Quarterly Journal of Economics, November 1991. *Most models do not draw a relationship between capital flows and exchange rates, yet FDI and exchange rates appear to be highly correlated. The model explains how exchange rate movements, through their effects on wealth and thus demand for investment, can affect FDI. Available from JSTOR .*
- M. Gertler and K. Rogoff, "North-South Lending and Endogenous Domestic Capital Market Inefficiencies," Journal of Monetary Economics, October 1990. *Open economy model of intertemporal trade under asymmetric information with endogenous capital market imperfections. Available for free in electronic format through Yale library .*

March 3. Midterm.

March 22. Lecture 16.

International asset trade: empirical analysis. Puzzles and measures of risk-sharing

- OR chapter 5, pp.329-332. ***Required***
- Obstfeld and Rogoff "Six major puzzles." See above. ***Required***
- OT Part One.
- Van Wincoop "How Big are Potential Gains from International Risk Sharing?" Journal of international Economics, 47, 1999, 109-135. *A model is presented that could be used to calculate gains from risk-sharing depending on the underlying parameters. The results for the realistic values of parameters suggest that gains could be quite large for OECD countries. Available for free in electronic format through Yale library .* ***Required.***
- Dumas, B. "Partial versus General Equilibrium Models of the International Capital Market", NBER W.P. No.4446, September; also HIM Chapter 10. *A paper discusses relative merits of testing empirically GE models and PE (CAPM-type) models of international capital markets. An international CAPM is proposed and tested. Basic GE models are tested as well.*
- Gian Maria Milesi-Ferretti and Phil Lane, "The External Wealth of Nations: Measures of Foreign Assets and Liabilities for Industrial and Developing Nations" , Journal of International Economics 55, December 2001, 263-294.

Earlier draft available as CEPR Discussion Paper No. 2231 , September 1999. *This paper constructs estimates of the stock of foreign assets and liabilities for a sample of 67 industrial and developing countries.*

- R. Shiller and S. Athanasoulis (1995) "World Income Components: Measuring and Exploiting International Risk Sharing Opportunities", NBER W.P. No. 5095, April. Published in AER (2001) *Principal-components method is used to identify empirically risk-sharing opportunities and suggest capital market instruments that would allow for this risk-sharing.*
- Stockman, A. and L. Tesar (1995) "Tastes and Technology in a Two-Country Model of the Business Cycle: Explaining International Comovements", American Economic Review March. *A TNT RBC model with technology and taste shocks that fits the data much better than open economy RBC models ignoring non-tradable sector. Paper shows that both technological and taste shocks are necessary to explain stylized facts. Available from JSTOR .*

Consumption correlation puzzle

- OR chapter 5, pp.290-292, 323-325 ***Required***
- Backus, D.K., P. Kehoe and F. Kydland (1992) "International Real Business Cycles", Journal of Political Economy, August. *The paper presents a two-country RBC model and documents the discrepancies between theory and data. In the data outputs are more correlated across countries than consumption, the theory, however, predicts the opposite. Available from JSTOR .*
- Lewis, K., "What Can Explain the Apparent Lack of International Consumption Risk-Sharing? " Journal of Political Economy 104 (April 1996): 267-297. *Nonseparabilities in the utility function and capital restrictions together provide an explanation to the consumption correlation puzzle, but neither one is sufficient by itself to explain the puzzle. Available from JSTOR*
- Obstfeld, M. (1993) "Are Industrial Country Consumption Risks Globally Diversified ?", NBER W. P. No. 4308, March; also in L. Leiderman and A. Razin (eds.) Capital Mobility, Cambridge University Press, 1994. *A model of international consumption co-movements with possibly incomplete capital markets is developed and tested empirically. The results show that the seven largest industrial countries show a trend of increasing coherence between domestic and world consumption.*
- Kollman (1996)
- Ambler, Cardia, Zimmerman (2002)

Portfolio home bias puzzle

- Lewis, K., (1995) "Puzzles in International Financial Markets," HIE III, chapter 37. *A survey of potential explanations of "predictable excess return puzzle" and the "portfolio home bias" puzzle.* ***Required*** *pp. 1950-1966.*
- Bottazzi,-Laura; Pesenti,-Paolo; van-Wincoop,-Eric, "Wages, Profits and the International Portfolio Puzzle", European-Economic-Review;40(2), February 1996, pages 219-54. *A VAR model that allows for the fluctuations in real return on capital and real wages applied to OECD countries explains 30% of portfolio home bias puzzle. Available for free in electronic format through Yale library .*
- Baxter,-Marianne; Jermann,-Urban-J.; King,-Robert-G., "Nontraded Goods, Nontraded Factors, and International Non-diversification". Journal-of-International-Economics;44(2), April 1998, pages 211-29. *A model showing that non-tradable production and consumption cannot explain portfolio home bias puzzle Available for free in electronic format through Yale library .*
- Tesar, L. and I. Werner (1992) "Home Bias and the Globalization of Securities Markets", NBER W.P. No.4218, November. Also in Journal of International Money and Finance, vol 14, no. 4, pp 467-492, 1995. *The paper investigates long-term cross-border capital flows in industrialized countries and (first?) documents portfolio home bias puzzle.*
- Jermann (2002)
- Portes, Rey, Oh (2001)
- Ahearne, Griever, Warnock (2000)
- Rowland, Tesar (1998)
- Pesenti, Van Wincoop (1996)
- Boileau (1996)
- Pakko (1994)
- Lane, Milesi-Firetti

March 24. Lecture 17.

The logic of currency crises: an introduction on first vs. second generation models

- OR 8.4, 8.6, 49.5.4 ***Required***
- M, 11 ***Required***
- Obstfeld, Maurice, The Logic of Currency Crises in Barry Eichengreen, Jeffry Frieden, and Jurgen von Hagen, eds., Monetary and Fiscal Policy in an Integrated Europe (New York: Springer), pp. 63-90. ***Required***
- Cavallari, Lilia and Corsetti, G "Shadow Rates and Multiple equilibria in the Theory of Currency Crises" Journal of International Economics 51.
- Salant, Stephen W., and Dale W. Henderson, "Market Anticipations of Government Policies and the Price of Gold," Journal of Political Economy, Vol. 86 (1978), pp.627-648.
- Krugman, Paul, "A Model of Balance of Payment Crisis," Journal of Money, Credit and Banking, Vol. 11 (1979), pp. 311-325. *The classic paper on the first generation of currency crises model.*
- Flood, R. and P. Garber (1984) "Collapsing Exchange Rate Regimes: Some Linear Examples", Journal of International Economics. *A refinement of the Krugman's model - the version that is now in the textbooks.*
- Jeanne, Olivier, "Currency Crises: A Perspective on Recent Theoretical Developments", Princeton Special Papers in International Economics 20, 2000.
- Blanco, H. and P. Garber, " Recurrent Devaluation and Speculative Attacks on the Mexican, Journal of Political Economy, 1986.
- Kenneth A. Froot and Maurice Obstfeld, Stochastic Process Switching: Some Simple Solutions Econometrica, 59 (January 1991), 241-250.
- Guimaraes, Bernardo "Market expectations and currency crises: theory and empirics": pdf, October 2004.

The coordination problem in the theory of currency crises

- Maurice Obstfeld, Rational and Self-Fulfilling Balance-of-Payments Crises American Economic Review 76, No. 1 March 1986, 72-81. ***Required***.
- Obstfeld, Maurice, "Models of Currency Crisis with Self-Fulfilling Features", European Economic Review 40, April 1996, 1037-47.
- Obstfeld, Maurice, 1997, Open-Economy Macroeconomics: Developments in theory and policy, NBER WP 6319, December.
- Dasgupta A., Corsetti G, S. Morris and H. S. Shin, "Does one Soros make a difference? The role of a large trader in currency crises", mimeo, Yale University 1999.
- Morris, S. and H.S. Shin "Unique Equilibrium in a Model of Self-Fulfilling Currency Attacks", American Economic Review 88, June 1998, 587-97.
- Morris, S and H.S. Shin "The CNBC Effect: Welfare Effects of Public Information", American Economic Review 92(5), December 2002, also Cowles Foundation Discussion Paper No. 1312, July 2001. *A model showing that private information can lead to ambiguous effects of increased public disclosure.*
- Morris, S and B. Guimaraes, "Risk and Wealth in a Model of Self-Fulfilling Currency Crises", CFDP *Importance of risk aversion and endogenous expectations.*
- Rigobon, R. (1998) "Informational Speculative Attacks: Good News is No News," mimeo, Sloan School of Management, MIT. *A model where investors have imperfect (but the same) information about fundamentals that leads to over-investment and then learning leads to over-reaction.*

March 29. Lecture 18.

International financial crises

- Rodrik, D. and A. Velasco (1999), "Short Term Capital Flows"NBER Working Paper 7364. *Theoretical and empirical analysis of short-term debt as a crisis predictor. The authors also offer a policy implications as well as some discussion of capital controls.*

- Allen F. and D. Gale (2000), "Comparative Financial Systems: A Survey," Section 8. *An application of comparative financial system analysis to the financial crises, including international ones.*
- G. Corsetti and B. Mackowiak "Nominal Debt and the Dynamics of Currency Crises", forthcoming JIE.
- Calvo, Guillermo "Capital Flows and Capital-Market Crises: The Simple Economics of Sudden Stops", Journal of Applied Economics 1, Nov. 1998, 35-54.

International financial crises: theory

- Romer, D. "Advanced Macroeconomics" 2nd edition (!), pp.576-582. ***Required***
- Corsetti, G., P. Pesenti, and N. Roubini (1999), "Paper Tigers? A Model of the Asian Crisis," European Economic Review 43, 1211-1236. *With the goal of providing an interpretive scheme of the events in Southeast Asia since the summer of 1997, this paper develops a model of financial and currency crises focused on moral hazard as the common source of overinvestment, excessive external borrowing, and current account deficits in an economy with a poorly supervised and regulated financial sector. Available for free in electronic format through Yale library .* ***Required.***
- OR chapter 6, pp.407-416. *Moral hazard in international lending.*
- Calvo, G. (1988) "Servicing the Public Debt: The Role of Expectations" The American Economic Review, 78(4), September, pp.647-661. *A model of debt repudiation shows multiple equilibria in a Barro-Gordon-type no-precommitment framework. Available from JSTOR .*
- Cole H. and P.Kehoe "Self-Fulfilling Debt Crises" Review of Economic Studies 67(1), January 2000, pages 91-116, also Federal Reserve Bank of Minneapolis Quarterly Review , July, 1998. *A model of financial crises resulting from the loss of confidence in the government. Importantly, even thought the crises of this type are self-fulfilling, they can only occur if country fundamentals are in a certain range.*
- Chang, R. and A. Velasco (1999) ″ Liquidity Crises in Emerging Markets: Theory and Policy " NBER Macroeconomics Annual, 11-58, MIT Press **also** NBER WP7272, March. *A model that explains financial crises by international illiquidity. The paper also formulates policy implications.*
- Allen F and D Gale, Financial Fragility , May 2001, mimeo, New York University *A model of financial crises in which under certain conditions only crises equilibria are robust.*
- Detragiache, E. (1999), " Bank Fragility and International Capital Mobility ," IMF Working Paper 99/113. *A model showing that bank runs are more likely the more is the economy open to international capital. Impact of financial liberalization on depositors and on the economy as a whole is ambiguous in the model.*
- Aghion, Ph., Ph. Bacchetta, et A. Banerjee (2000), "Capital Markets and the Instability of Open Economies ," Working Paper, Studienzentrum Gerzensee. **also** CEPR DP 2083. *An open economy dynamic TNT model that shows that economies can be financially unstable at the intermediate level of financial development. For those economies financial liberalization could be destabilizing. FDI, however, may not be destabilizing.*
- Caballero R. J. and A. Krishnamurthy (2000), "International and Domestic Collateral Constraint in a Model of Emerging Market Crises," NBER Working Paper No 7971. *A model of financial crises emphasizing the importance of domestic and international borrowing constraints.*
- Schneider, M. and A. Tornell (2000), "Balance Sheet Effects, Bailout Guarantees and Financial Crises," NBER Working Paper 8060. *A model with imperfect contract enforceability and bailout guarantees explains both pre-crisis lending booms and self-fulfilling twin crises.*
- Kumhof M. Balance of Payments Crises: the Role of Short Term Debt , mimeo, Stanford University, 2001. *A model demonstrating that a stock of short-term domestic bond used by Central Banks as liquidity instrument can lead to a bond market bearing the largest impact of the balance of payments crisis.*
- Gale D. Understanding Financial Crises , September 2000, mimeo, New York University. *A survey article with detailed description of the* Allen, F. and D. Gale (1998) "Optimal Financial Crises", Journal of Finance, 53(4), 1245-1284 *model in which financial crises are driven by fundamentals. In this model bank runs can be first-best efficient, however, if they are costly, central bank intervention can be Pareto-improving.*
- Chari, V.V. and P. Kehoe (2000), " Financial Crises as Herds ," Federal Reserve Bank of Minneapolis Working Paper 600, March. *A model of herd behavior with endogenous order of moves and continuous investment decision. Herds are robust to information-sharing. This model can be readily applied to international lending behavior.*
- Chari, V.V. and Patrick Kehoe, "Hot Money" Journal of Political Economy 111, Dec. 2003, 1262-92.
- Allen F. and D. Gale: Optimal Currency Crises, mimeo .pdf
- Goldstein I and A Pauzner, Demand Deposit Contracts and the Probability of Bank Runs pdf (143k)

March 31. Lecture 19.

International financial crises: evidence

- Dornbusch, R. (2001), "A Primer on Emerging Market Crises," NBER Working Paper No.8326. *A summary of what we know about emerging market financial crises.* ***Required.***
- Demirguc-Kunt, A. and E. Detragiache (1998), " The Determinants of Banking Crises: Evidence from Developing and Developed Countries ," IMF Staff Papers, Vol. 45, No. 1, 81-109. *An empirical analysis of the macroeconomic determinants of banking crises 1980-1994.*
- Bordo, M., B. Eichengreen, D. Klingebiel, and M.S. Martinez-Peria (2001) " Is the crisis problem growing more severe? " Economic Policy IV.B. *Looking at 120 years of the world financial history, the authors find that crises became more frequent since 1973, but not necessarily more severe.*
- Berg, A. and C. Pattillo (1999), " Are Currency Crises Predictable? A Test ," IMF Staff Papers, Vol. 46, No. 2, 107-138. *An ex-post analysis of whether pre-1997 models could have helped us predict Asian crisis. Improvements to those are suggested along with conclusion that predictive power is still limited.*
- Goldstein, M., G. Kaminski, and C. Reinhart (2001), "Assessing Financial Vulnerability: An Early Warning System for Emerging Markets ", Institute for International Economics. *A comprehensive study on forecasting currency and banking crises.*
- Kaminsky, G. and C. Reinhart (1999), "The Twin Crises: The Causes of Banking and Balance-of-Payments Problems," American Economic Review, Vol. 89, No. 3, 473-500. *Analysis of the interplay between problems in the banking sector and currency crisis.*

April 5. Lecture 20.

International financial contagion:

- Dornbusch, R., Y.C. Park, and S. Claessens (2000), " Contagion: Understanding How It Spreads ," The World Bank Research Observer 15, 177-97 **also** in CF, chapter 2. *A survey of theory, evidence and policy literature on contagion.* ***Required***

International financia contagion: theory

- Calvo, G. (1999) " Contagion In Emerging Markets: when *Wall Street* is a carrier (Technical Supplement to "Understanding the Russian Virus") ," May 2, 1999. *A model showing that learning costs could lead to investors herd behavior and thus contagion.* ***Required***
- Allen, F. and D. Gale (2000) " Financial Contagion " Journal of Political Economy, 108, p. 1-33. *A model shows that when inter-regional claim structure is incomplete, a small liquidity preference shock can cause contagion in equilibrium.* ***Required***
- Calvo G. A. and E.G. Mendoza (2000), "Rational Contagion and the Globalization of Securities Markets, Journal of International Economics, 51(1), June 2000, pages 79-113. *A model shows that globalization of capital markets leads to larger herd behavior and thus contagion. Available for free in electronic format through the Yale library .*

International financial contagion: empirical challenges

- Forbes, K. and Rigobon, R, (2001) "Measuring Contagion: Conceptual and Empirical Issues," CP, Chapter 3. *A paper draws a difference between contagion and interdependence, provides a strict definition of contagion and discusses common shortfalls in empirical analysis of contagion.* ***Required***
- Corsetti, Pericoli and Sbracia. *"* Correlation Analysis of Financial Contagion: what you should know before running a test ," Yale Growth Center Discussion Paper 822, April 2001. *A paper suggests a factor-model approach to test for contagion based on distinguishing between country-specific and global or regional shocks.*
- Rigobon, R. "Contagion How to measure it?," NBER Working Paper No. W8118, 2001. *A paper shows the sources of bias in common contagion tests and proposes two new tests. Analysis reveals the variables that affect shock propagation.*

… and evidence

- Eichengreen,-Barry; Rose,-Andrew-K.; Wyplosz,-Charles, Contagious Currency Crises, NBER Working Paper No. 5681 (1996). *Using the 30-year data span, empirical analysis shows that contagion exists between trade-related countries, not between similar in macroeconomic way countries.* ***Required***
- DeGregorio, J. and R. Valdes, "Crisis Transmission: Evidence fomr the Debt, Tequila and Asian Flu Crises", CF chapter 5, 2001. *Measuring different transmission channels, authors compare contagion following three different crises. They also find that debt composition and exchange rate flexibility, but not capital controls affect a country's vulnerability to contagion.* ***Required***
- Glick, R. and A.K Rose (1999), " Contagion and Trade: Why are Currency Crises Regional, " Journal of International Money and Finance 18, No.4, 603-617. Using data for five different currency crises (in 1971, 1973, 1992, 1994, and 1997) the paper shows that currency crises affect clusters of countries tied together by international trade.
- Baig, T., and I. Goldfajn (1999) "Financial Market Contagion in the Asian Crisis," IMF Staff Papers 46(2), June. *Analyzing the impacts of own and cross-border news, authors find contagion in currency and equity markets.*
- Van Rijckeghem, C and B. Weder (1999), "Financial Contagion: Spillovers Through Banking Centers," mimeo. *An empirical analysis of emerging markets shows that shifts in bank lending ca explain contagion from Mexico and Asia, but not Russia.*

April 7. Lecture 21.

Financial stability and the choice of an exchange rate regime

- OR 9.4, 9.5.1-9.5.3 ***Required.***
- Milton Friedman, "The Case for Flexible Exchange Rates," in Essays in Positive Economics, University of Chicago Press, 1951. ***Required.***
- Calvo, G.A., Mishkin, F.S. (2003) "The Mirage of Exchange Rate Regimes for Emerging Market Countries," NBER 9808, June 2003. *Argue that the exchange rate regime per se is of the second order, we should focus on institutions that create those regimes.*
- Céspedes, L.F., R. Chang, and A. Velasco (2000), "Balance Sheets and Exchange Rate Policy," NBER WP 7840. *A model that allows to compare the effects of the external shocks under fixed and flexible exchange rates in the presence of balance sheet effects.*
- Roubini, N. (2001) " Should Argentina Dollarize or Float? The Pros and Cons of Alternative Exchange Rate Regimes and their Implications for Domestic and Foreign Debt Restructuring/Reduction, " mimeo, Stern School of Business, New York University, 2001. *Reflections on the alternatives Argentina had in December 2001 with conclusion that Argentina is not ready for dollarizatioin, so it should float and engage in inflation targeting.*
- Svensson, L.E.O. (1993) "Fixed Exchange Rates as a Means of Price Stability: What Have We Learned ?", NBER W.P. No. 4504, October **also** European Economic Review, vol. 38, no. 1, pp. 447-468, January 1994: EEA Alfred Marshall Lecture. *Building on the experience of the ERM crisis and Nordic countries experience, an argument suggests that fixed exchange rates are not a solution to domestic price stability problem.*
- Obstfeld, M. and K. Rogoff (1995) "The Mirage of Fixed Exchange Rates", NBER W.P. No.5191, July **also** Journal of Economic Perspectives, Fall 1995, Volume 9, #4, pp. 73-96. *A paper draws on the experience of the ERM, Nordic and Mexican crises and on the existing theoretical and empirical literature to argue that fixed exchange rate regime is becoming too costly to maintain with increased international capital mobility.*
- Tornell, A. and A. Velasco (1995) "Fixed versus Flexible Exchange Rates: Which Provides More Fiscal Discipline ?", NBER W.P. No.5108. *A model shows that since the costs of "bad behavior" under fixed exchange rates is far away, while under flexible exchange rates it is immediate, flexible rates impose more discipline on the governments that are impatient.*
- Chang and Velasco, (1998) "Financial Fragility and The Exchange Rate Regime," NBER WP 6469. *This paper proposes a model that can be used to compare equilibria under different exchange rate regimes and with different frictions. Lender of last resort, dollarized deposits, international borrowing are considered.*
- Cukierman, A., Goldstein, I., Spiegel, Y. (2002) "The Choice of Exchange Rate Regime and Speculative Attacks," Paper prepared for International Seminar, University of California - Berkeley. Now forthcoming as: July 2004, Forthcoming in: **Journal of the European Economic Association**. *A model, incorporating fixed peg, free float and target zone as a policy option. Looking then for the optimal one.*

Credibility and fear of floating

- OT chapter 6
- Persson and Tabellini, 1997, "Political Economics and Macroeconomic Policy ", NBER WP 6329, December.
- Yeyati, E.-L. and F. Struzenegger (2000) " Classifying Exchange Rate Regimes: Deeds vs. Words, " mimeo, Universidad Torcuate di Tella. *De facto classification of the exchange rate regime (quite different from IMF de-jure one). There is actually a spreadsheet at the end for all countries 1974-2000.*
- Stanley Fischer " Exchange Rate Regimes: Is the Bipolar View Correct? " January 6, 2001. *A lecture on bipolar view of exchange rate regime and fear of floating.*
- Guillermo Calvo and Carmen Reinhart "Fear of Floating ," NBER WP 7993, November 2000. *An empirical analysis of the exchange rate behavior documents fear of floating.*
- Hausman, R., U. Panizza, and E. Stein (2000), " Why Do Countries Float the Way They Float? " mimeo, Inter-American Development Bank. *An empirical analysis of the exchange rates shows that developing countries float differently than developed countries.*
- Reinhart and Rogoff (2004) The Modern History of Exchange Rate Arrangements: A Reinterpretation QJE. *New classification of exchange rate regime. Important innovation: introduction of "free falling" regime as separate from free float.*

April 12. Lecture 22.

Sovereign borrowers: theory

- OR chapter 6 pp.349-363, 379-392 ***Required***
- Eaton, J. and R. Fernandez (1995) "Sovereign Debt", NBER W.P. No. 5131, May; also Chapter 39 in HIE III. ***Required.***
- Kletzer, K. (1994) "Sovereign Immunity and International Lending", HIM Chapter 13. *A survey of three models of sovereign borrowing that provide a framework for game-theoretical models.*
- A. Atkeson, "International Lending with Moral Hazard and Risk of Repudiation," Econometrica, July 1991. *Optimal contract in the presence of moral hazard and risk of repudiation leads to a capital outflow in the bad state of nature, thus not allowing for the first-best risk-sharing. Available from JSTOR .*
- J. Bulow and K. Rogoff, "A Constant Recontracting Model of Sovereign Debt," Journal of Political Economy, February 1989. *A bargaining model of sovereign debt renegotiations. Available from JSTOR .*
- Eaton and Engers, "Sanctions," Journal of Political Economy, October 1992. *A game-theory model that could be used to model debt repayment problem. Available from JSTOR .*

Debt repurchase debate

- OR chapter 6 pp.392-401 ***Required***
- J. Bulow,. and K. Rogoff (1988) "The Buyback Boondoggle", Brookings Papers on Economic Activity, No.2. *A model of debt repurchase and the analysis of the Bolivian buy-back. Available from JSTOR . With comments by R. Dornbush.*
- Sachs, J. (1988) "Comprehensive Debt Retirement: The Bolivian Example", Brookings Papers on Economic Activity, No.2. *Basically a critical comment on Bulow and Rogoff paper in the same issue. With comment (response?) by Bulow and Rogoff. Available from JSTOR .*
- Bulow J. and K.Rogoff (1991) "Sovereign Debt Repurchases: No Cure for Overhang", Quarterly Journal of Economics, 106(4), November. *A model that could be used to calculate upper and lower bounds on the country gain from the debt buyback. Applied to Mexico 1990 deal. Main result is that benefits are at best small, but could also be negative. Available from JSTOR .*

Reputation and repayment debate

- OR chapter 6 pp.363-369,375-379 ***Required***
- J. Eaton and M. Gersovitz, "Debt with Potential Repudiation: Theoretical and Empirical Analysis," Review of Economic Studies, April 1981. *An early model where reputation motives provide incentives to repay, although first-best amount of lending is not sustainable. Available from JSTOR .*
- J. Bulow and K. Rogoff, "Sovereign Debt: Is to Forgive to Forget?" American Economic Review, March 1989. *A paper that first challenged the idea that reputation is the main motive for the sovereigns to repay their debt. Available from JSTOR .*

- Cole and Kehoe "The Role of Institutions in Reputation Models of Sovereign Debt" Journal of Monetary Economics, February 1995. *Presents the model that shows that depending on institutions reputation might or might not be a sufficient motive for sovereign debt repayment. Available for free in electronic format through the Yale library .*
- Cole H. and P.Kehoe " Reviving Reputation Models of International Debt " Federal Reserve Bank of Minneapolis Quarterly Review (Winter 1997) *A model shows that if reputation matters not only for debt relationships, but for other relationships as well, those can help reputation effects support large amount of borrowing.*

Sovereign borrowers: policy

- Sachs " The International Lender of Last Resort: What are the alternatives ?", FRB Boston conference speech, June 1999. With an extensive comment by Jeff Frankel . *A debate over the IMF role as a lender of last resort.*
- Schwarz S.L. (2000) "Sovereign Debt Restructuring: A bankruptcy Reorganization Approach", Cornell Law Review, 85(4), May. *Written by a law professor, this paper provides a great review of the debt restructuring problem and proposes sovereign bankruptcy procedure based on Chapters 11 and 9 of US bankruptcy law.*
- Anne Krueger, Preventing and Resolving Financial Crises: The Role of Sovereign Debt Restructuring **,** Latin American Meeting of the Econometric Society, São Paolo, Brazil, July 26, 2002. *Latest(as of 8/22/02) in a series of her speeches about the sovereign debt restructuring procedure considered by IMF.*
- Dooley, M. (2000) "Can Output Losses Following International Financial Crises be Avoided?" NBER WP 7531. *Costly debt rescheduling is modeled as an incentive to repay the debt by being incorporated in the debt contract. This leads to costly rescheduling if crisis is unavoidable. This friction creates a role for international financial intermediary - the IMF.* **Also** Dooley, M. and S.Verma (2001) "Rescue packages and output losses following crises", NBER WP 8315. *Presents a more extended model.*

April 14. Lecture 23.

International financial architecture

- Edwards, S. (2000) "Capital Flows, Real Exchange Rates, and Capital Controls; Some Latin American Experiences" in S. Edwards, ed. Capital Flows and the Emerging Economies; Theory, Evidence and Controversies, 197-246, University of Chicago Press also NBER WP 6800, 1998. *A paper provides analysis of Latin American experience with capital flows over past 20 years including the effects of the exchange rate regime, capital controls and banks as financial intermediaries.*
- Kenneth Rogoff, "International Institutions for Reducing Global Financial Instability," Journal Of Economic Perspectives, 13(4), 1999 **also** NBER WP 7265. *An analysis of various proposals to reform global financial architecture. Interesting suggestions to eliminate the debt-instrument bias.*
- Little, J.S. and G.P. Olivei (1999) " Why the interest in reforming the international monetary system ?" New England Economic Review, Sept/Oct, 53-84. *An overview of what needs to be reformed and suggestions for a reform.*
- Goldstein, M. (2001), " An Evaluation of Proposals to Reform the International Financial Architecture ," mimeo, presented at the NBER conference on Management of Currency Crises. *Analysis of various proposals with concentration on the problem of currency mismatch and suggestion how to address it.*
- Rodrik, D. (2000) " Governing the Global Economy: Does One Architectural Style Fit All ?" Dessarolo Economico, vol.40. *The paper argues that we know little about developing countries and questions whether international capital mobility is an appropriate goal for the reform of the international financial architecture.*
- Jeanne O., " Debt Maturity and the global financial architecture " CEPR DP 2520, August 2000. *A model endogenizes the maturity structure of foreign debt and analyzes the welfare effects of LLR, capital controls and creditor coordination.*

Preventing financial crises

- Frankel J. and N. Roubini "The Role of Industrial Country Policies in Emerging Market Crises", NBER WP 8634, 2001. *Analysis of how developed countries can help prevent emerging market crises and the proposal to reform the IMF. High-Leveraged Institutions should improve risk assessment and reduce leverage.*
- Jeanne O. and C. Wyplosz, "The international lender of last resort: how large is large enough?" NBER WP 8381, July 2001. *A model considers how LLR can prevent self-fulfilling currency and banking crises. It considers two alternative LLR arrangements, both of which involve a powerful international organization.*

Minimizing costs of financial crises

- Roubini N. " Bail-in, Burden Sharing and Private Sector Involvement in Crisis Resolution ," September 2000. *A (lengthy) analysis of the effectiveness of private sector involvement in crisis resolution.*

Capital controls: theory

- Grilli, V. and N. Roubini (1993) "Liquidity, Capital Controls and Exchange Rates", Journal of International Money and Finance, 1993. *A cash-in-advance model showing that capital controls (tax on foreign asset acquisitions) can appreciate the exchange rate. Available for free in electronic format through the Yale library .*
- Bartolini, L. and A. Drazen (1996) "Capital Account Liberalization as a Signal", NBER W.P. No 5725, August. *A model showing that liberalizing capital outflow can send a favorable signal.*
- Stockman, A. and A. Hernandez (1988) "Exchange Controls, Capital Controls, and International Financial Markets", American Economic Review 78(3). *A general equilibrium rational expectation model addresses the effects of capital controls: they lower welfare, reduce trade and affect exchange rates. Available from JSTOR .*

Capital controls: evidence

- Dooley, M. (1995) "A Survey of Academic Literature on Controls over International Capital Transactions", NBER W.P. No.5352, November. *A survey of the literature before 1995.The paper concludes that there is not evidence that capital controls improve welfare.*
- Montiel and Reinhart, (1999) "Do capital controls and macroeconomic policies influence the volume and composition of capital flows? Evidence from the 1990s, Journal of International Money and Finance, 18 , pp.619-635. *An empirical analysis of the developing countries shows that sterilized interventions tend to increase the share of short-term and portfolio flows. Capital controls are found not to affect the overall volume of capital inflows, but to increase the share of FDI and decrease the share of short-term flows.*
- De Gregorio, J., S. Edwards, and R. Valdés (2000) "Controls on Capital Inflows: Do They Work?" NBER Working Paper 7645. *Empirical analysis shows that unremunerated reserve requirements do not have much effect, except by shifting the capital flow composition towards longer maturity.*
- Edwards, S. (1999) "How Effective are Capital Controls?" Journal of Economic Perspectives, 13 (4), 65-84 **also** NBER WP 7413. *A historical and GARCH analysis of Chilean type capital controls shows that they have little effects except for lengthening maturity of foreign debt.*

Last two lectures are reserved for catching up or student presentations or both.