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EC872
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Gasson 307

Office Hours: TTh 2:00-3:00
Carney 147

THE OPEN ECONOMY AND INTERNATIONAL FINANCE

This is an introductory course in open-economy macroeconomics and international finance. The course is designed to be a first encounter with issues and models that are central to international economics.

The course requirements are: one mid-term, to be held in class on Thursday, February 29; a final exam on the date determined by the university; and the presentation in class of a term paper that you write.

The term paper will be a survey of the empirical evidence related to one of the issues listed below. Each term paper and class presentation will have three main sections. The first section will contain a brief review of the relevant theory. The second section will provide a comprehensive review of the relevant empirical evidence. The third section will describe unanswered questions and areas for further research.

The term paper is due no later than one week prior to its presentation in class. At that time it must be distributed to the other members of the class.

The term paper topics and dates of their presentation in class are:

- Does the U.S. current account behave as theory tells us it should? (Tuesday, April 2)
- Is currency market intervention effective? (Tuesday, April 9)
- Are capital markets integrated? (Thursday, April 11)
- Do floating exchange rates provide insulation and stability? (Tuesday, April 16)
- Do target zones behave as theory suggests? (Thursday, April 18)
- Is Europe an optimal currency area? (Tuesday, April 23)
- Should governments target the real exchange rate? (Thursday, April 25)
- Should governments use the nominal exchange rate to stabilize inflation? (Tuesday, April 30)

Each presentation should last one hour, and will be held at the regular class time. (If there are fewer than eight students, we will dispense with two of the topics and change the dates of the presentations.)

Your grade will be based on the midterm, the class presentation, the term paper, and the final exam. Each will receive equal weight.

Reading List

What follows is a list of relevant articles and chapters. I will mention in class which of the articles are more important. However, you should endeavor to read as many of these articles as possible, especially those readings that are relevant to your presentation.

1. Simple Accounting Relations

Dornbusch (1980), "Some Basic Relations," in *Open Economy Macroeconomics*, Basic Books

Helmets (1988), "National Accounting Identities," in Dornbusch and Helmers (eds.), *The Open Economy: Tools for Policymakers in Developing Countries*.

2. Static open economy models

2.1 Static models at full employment

Dornbusch, Fischer and Samuelson (1977), "Comparative Advantage, Trade and Payments in a Ricardian Model with a Continuum of Goods," *American Economic Review*, 67(5), 823-839.

*Dornbusch, R. (1973). "Currency Depreciation, Hoarding and Relative Prices," *Journal of Political Economy* 81, 891-915.

*Dornbusch, R. (1973). "Money, Devaluation and Nontraded Goods," *American Economic Review* 63, 871-80.

Dornbusch, R. (1980) *Open Economy Macroeconomics*, Ch. 7.

Dornbusch and Mussa (1975), "Consumption, Real Balances and the Hoarding Function," *International Economic Review*, 16(2), 415-421.

Dornbusch, R. (1975). "Alternative Price Stabilization Rules and the Effects of Exchange Rate Changes," *Manchester School of Economics and Social Studies* 43, 275-92.

Mussa, Michael (1978). "Dynamic Adjustment in the Heckscher-Ohlin-Samuelson Model," *Journal of Political Economy* 86(5), 775-91

Salter, W. (1960) "Internal and External Balance," *Economic Record*

Swan, T. (1960) "Economic Control in a Dependent Economy," *Economic Record*

Dornbusch, R. (1974) "Real and Monetary Aspects of the Effects of Exchange Rates Changes," in Robert Aliber, ed., *National Monetary Policies and the International Financial System*, Chicago: University of Chicago Press.

2.2 Keynesian Considerations and the Mundell-Fleming Model

*Frenkel and Razin (1987), "The Mundell-Fleming Model a Quarter Century Later: a Unified Exposition," *IMF Staff Papers*

Dornbusch and Giovannini (1990), "Monetary Policy in the Open Economy," in Friedman and Hahn (eds), *Handbook of Monetary Economics*.

*Dornbusch (1976), "Expectations and Exchange Rate Dynamics," *Journal of Political Economy*

Obstfeld, Maurice and Rogoff, Kenneth (1984). "Exchange rate dynamics with sluggish prices under alternative price-adjustment rules." *International Economic Review* 25, 159-74

Gavin, Michael (1992). "Monetary Policy, Exchange Rates, and Investment in a Keynesian Economy." *Journal of International Money and Finance*.

2.3 Special Topic: The Effects of a Devaluation

- Krugman and Taylor (1991), "Contractionary Effects of a Devaluation," *Journal of International Economics*.
- Edwards, S. (1988), *Exchange-Rate Misalignment in Developing Countries*, Baltimore: Johns Hopkins University Press.
- Edwards, S. (1986). "Are Devaluations Contractionary?" *Review of Economics and Statistics*.
- Frenkel and others (1980), "A Synthesis of Monetary and Keynesian Approaches to Short Run Balance of Payments Theory," *Economic Journal* 90, 582-592.
- Calvo, G. (1981). "Devaluation: Levels versus Rates." *Journal of International Economics* 11, 165-172.
- Dornbusch, R. (1973) "Money, Devaluation and Nontraded Goods," *American Economic Review*.

2.4 Special Topic: Capital Surges and the Sterilization Problem

- Obstfeld, M. (1983). "Exchange Rates, Sterilization and the Sterilization Problem," *European Economic Review*
- Obstfeld, M. (1982). "Can We Sterilize? Theory and Evidence." *American Economic Review Papers and Proceedings* 72, 45-50.
- Cumby, R. and M. Obstfeld (1983). "Capital Mobility and the Scope for Sterilization: Mexico in the 1970s." in P. Aspe Armella et al. (eds) *Financial Policies and the World Capital Market: the Problem of Latin American Countries*. Chicago: University of Chicago Press.
- Argy, Victor and Pentti Kouri. (1974) "Sterilization and the Volatility in International Reserves," in Robert Aliber (ed) *National Monetary Policies and the International Financial System*, Chicago: University of Chicago Press.
- Calvo, G., Leonardo Leiderman and Carmen Reinhart (1993). "Capital Inflows and Real Exchange Rate Appreciation in Latin America: The Role of External Factors." *IMF Staff Papers* 40, 103-51.
- Calvo, G., Leonardo Leiderman and Carmen Reinhart (1993). "The Capital Inflows Problem: Concepts and Issues." IMF

3. Intertemporal Considerations

3.1 The one-good model and productivity shocks

- *Blanchard, O. (1983). "Debt and the Current Account Deficit in Brazil," in Pedro Aspe Armella et al. (eds) *Financial Policies and the World Capital Market: the Problem of Latin American Countries*. Chicago: University of Chicago Press.
- Glick and Rogoff
- Sachs (1982) "The Current Account in the Macroeconomic Adjustment Process," *Scandinavian Journal of Economics*,
- *Sachs (1981) "The Current Account and Macroeconomic Adjustment in the 1970s," *Brookings Papers on Economics Activity*

3.2 Terms of trade shocks in the two-good model without investment

- *Obstfeld (1982), "Aggregate Spending and the Terms of Trade: is there a Laursen-Metzler Effect?" *Quarterly Journal of Economics*.
- Svensson and Razin (1983), "The Terms of Trade and the Current Account: the Harberger-Laursen-Metzler Effect," *Journal of Political Economy*,
- Persson and Svensson (1985) "Current Account Dynamics and the Terms of Trade: Harberger-Laursen-Metzler Two Generations Later," *Journal of Political Economy*, 93(1), 43-65.
- Gavin, Michael (1990) "Structural Adjustment to a Terms of Trade Disturbance: The Role of Relative Prices," *Journal of International Economics* 28(3), 217-243.

3.3 Terms of trade shocks in the two-good model with investment

- Sen, Partha and Stephen Turnovsky (1989). "Deterioration of the Terms of Trade and Capital Accumulation: A Reexamination of the Laursen-Metzler Effect." *Journal of International Economics* 26(3), 227-70.
- *Murphy, Robert G. (1989) "The Terms of Trade, Investment, and the Current Account," *Journal of International Economic Integration* 7(1), 58-79

3.4 Adjustment in the dependent economy model

- Brock (1988), "Investment, the Current Account, and the Relative Price of Nontraded Goods in a Small, Open Economy," *Journal of International Economics* 24(3), 235-53.
- *Murphy, Robert G. (1986) "Productivity Shocks, Non-Traded Goods and Optimal Capital Accumulation," *European Economic Review* 30(5), 1081-1095
- Dornbusch, R. (1983). "Real Interest Rates, Home Goods, and Optimal External Borrowing." *Journal of Political Economy*.

3.5 Special Topic: The Feldstein-Horioka Paradox

- Feldstein and Horioka (1980), "Domestic Savings and International Capital Flows," *Economic Journal* 90
- Harberger (1980), "Vignettes on the World Capital Market," *American Economic Review, Papers and Proceedings*, 331-337.
- Baxter and Crucini (1993), "Explaining Savings-Investment Correlations," *American Economic Review*
- Obstfeld (1986), "Capital Mobility in the World Economy: Theory and Measurement," *Carnegie-Rochester Conference Series on Public Policy* 24, 55-104.
- Tesar (1991), "Savings, Investment and International Capital Flows," *Journal of International Economics* 31, 55-78.
- Murphy, Robert G. (1984) "Capital Mobility and the Relationship Between Saving and Investment Rates in OECD Countries." *Journal of International Money and Finance*

4. Alternative Exchange Rate Regimes

4.1 Traditional Views

- *Obstfeld, Maurice "Floating Exchange Rates: Experience and Prospects," *Brookings Papers on Economic Activity*, 2:1985.
- Helpman, Elhanan "An Exploration in the Theory of Exchange Rate Regimes," *Journal of Political Economy*, 1981, vol. 89, no. 51.
- *Fischer, Stanley, "Stability and Exchange Rate Systems in a Monetarist Model of the Balance of Payments," in Robert Aliber, ed., *The Political Economy of Monetary Reform* (London: MacMillan Press, Ltd., 1977), pp. 59-73.
- Johnson, Harry, "The Case for Flexible Exchange Rates, 1969," *Federal Reserve Bank of St. Louis Review*, (June 1969) pp. 12-24.
- Mundell, Robert, "The Monetary Dynamics of International Adjustment under Fixed and Flexible Exchange Rates," *Quarterly Journal of Economics*, May 1960, pp. 227-257.
- Tower, Edward and Mark Courtney, "Exchange Rate Flexibility and Macro-Economic Stability," *Review of Economics and Statistics* (May 1974) pp. 215-24.

4.2 Fixed Exchange Rate Regimes and Speculative Attacks

- *Dornbusch, Rudiger (1987), "Collapsing Exchange Rate Regimes," *Journal of Development Economics* 27, 71-83.
- *Obstfeld, Maurice, "Rational and Self-Fulfilling Balance of Payments Crises," *American Economic Review*, March 1986.
- *Krugman, Paul "A Model of Balance-of-Payments Crises," *Journal of Money, Credit and Banking*, 1979.
- Flood, Robert and Peter Garber, "Collapsing Exchange Rate Regimes: Some Linear Examples," *Journal of International Economics*, 1984.
- Tornell, Aaron and Andres Velasco, "Are Balance of Payments Crises Rational?", mimeo.

4.3 Flexible Exchange-Rate Regimes, Pass-Through and Hysteresis

- *Dixit, Avinash, "Hysteresis, Import Penetration and Exchange Rate Pass-Through," *Quarterly Journal of Economics*, May 1989.
- Baldwin, Robert "Hysteresis in Import Prices: The Beachhead Effect," *American Economic Review* 78, September 1988, pp. 773-85.
- Baldwin, Robert "Reinterpreting the Failure of Foreign Exchange Market Efficiency Tests: Small Transaction Costs, Big Hysteresis Bands," mimeo.

4.4 Target Zones

- *Krugman, Paul "Target Zones and Exchange Rate Dynamics," *Quarterly Journal of Economics*, August 1991.
- Flood, Robert and Peter Garber "The Linkage Between Speculative Attack and Target Zone Models of Exchange Rates," *Quarterly Journal of Economics*, November 1991.
- *Bertola, Guiseppe and Lars Svensson, "Stochastic Devaluation Risk and the Empirical Fit of Target Zone Models," *Review of Economic Studies*, v. 60, 1993.

4.5 Optimal Currency Areas

- *Mundell, Robert, "A Theory of Optimal Currency Areas," *American Economic Review*, November 1961.
- McKinnon, R.
- *Casella, Alessandra, "Participation in a Currency Union," *American Economic Review*, September 1992.

- Canzoneri, Matthew and Carol Ann Rogers, "Is the European Community and Optimal Currency Area? Optimal Taxation Versus the Cost of Multiple Currencies," *American Economic Review*, June 1990.
- Weil, Phillipe (1991). "Currency Competition and the Transition to Monetary Union: currency competition and the evolution of multi-currency regions." Ch. 10 in Giovannini, A. and C. Mayer (eds.), *European Financial Integration*, Cambridge Univ. Press, pp. 290-302.

5. Macroeconomic stability in the open economy

5.1 Real vs. Nominal Exchange Rate Targetting

- Dornbusch, R. (1982) "PPP Exchange Rates and Macroeconomic Stability," *Journal of Political Economy*.
- Adams, C. and D. Gros (1986), "The Consequences of Real Exchange Rate Rules for Inflation: Some Illustrative Examples," *IMF Staff Papers* 33, 439-476.
- Lizondo, S. (1993) "Real Exchange Rate Targetting Under Imperfect Asset Substitutability," *IMF Staff Papers* 40, 829-851.
- Montiel, P. and J. Ostry (1991) "Macroeconomic Implications of Real Exchange Rate Targetting in Developing Countries," *IMF Staff Papers* 38, 871-900
- Montiel, P. and J. Ostry (1992) "Real Exchange Rate Targetting under Capital Controls: Can Money Provide a Nominal Anchor?" *IMF Staff Papers* 39, 58-78.
- Calvo, G., C. Reinhart and C. Vegh (1994) "Targeting the Real Exchange Rate: Theory and Evidence," *Journal of Development Economics*.

5.2 Inflation Stabilization in Open Economies

- Matsuyama, Kiminori, "On Exchange Rate Stabilization," *Journal of Economic Dynamics and Control*, v. 15, 1991
- *Vegh, Carlos, "Stopping High Inflation: An Analytical Overview," *IMF Staff Papers*, September 1992.
- Drazen, A. and E. Helpman (1987) "Stabilization with Exchange Rate Management," *Quarterly Journal of Economics*, 835-855.
- Canavan, C. and M. Tommasi (1995). "Why Do Stabilization Plans Include Exchange Rate Targets?" Boston College.
- Bruno, M. (1991). "High Inflation and the Nominal Anchors of an Open Economy," *Princeton Essays in International Finance*.
- Calvo, G. and C. Vegh (1994). "Inflation Stabilization and Nominal Anchors," *Contemporary Economic Policy*.
- Tornell, A. and A. Velasco (1995). "Money-Based versus Exchange-Rate-Based Stabilization with Endogenous Fiscal Policy," C.V. Starr Center for Applied Economics, New York University.
- Obstfeld, M. (1985). "The Capital Inflows Problem Revisited: A Stylized Model of Southern Cone Disinflation." *Review of Economic Studies* LII, 605-625.
- Sachs, J. (1987) "The Bolivian Hyperinflation and Stabilization," *American Economic Review* 77, 279-83

5.3 Stabilization in the Presence of Currency Substitution

- *Calvo, Guillermo and C.A. Rodriguez, "A Model of Exchange Rate Determination under Currency Substitution and Rational Expectations," *Journal of Political Economy*, v. 85, 1977.

Vegh, Carlos, "The Optimal Inflation Tax in the Presence of Currency Substitution,"
Journal of Monetary Economics, v. 24, 1989.

Liviatan, N. "Monetary Expansion and Real Exchange Rate Dynamics," *Journal of Political Economy*, 1981.

Lecture Sequence

1. Introduction and Basic Relations
2. The price-specie flow mechanism in three popular models of the open economy:
Introduction
3. The price-specie flow mechanism in three popular models of the open economy:
Conclusion
4. Capital Mobility and the Mundell-Fleming Model: the case of Fixed Exchange Rates
(OEM Ch. 10)
5. Capital Mobility and the Mundell-Fleming Model: the case of Flexible Exchange
Rates (OEM Ch. 11)
6. Rational Investment and Savings in the Open Economy: The one-good model of the
current account
7. Rational Savings and Terms of Trade Shock: The two-goods model of the current
account and the Laursen-Metzler Effect
Obstfeld
8. Terms of Trade Shocks with Rational Savings and Investment
9. Intertemporal adjustment in the dependent economy model
10. Basic comparison of fixed and floating rate regimes
Fischer: Keynesian and monetarist model
11. Speculative attacks: The Krugman benchmark model
Dornbusch, JDE
12. Speculative attacks: the Obstfeld extension
Obstfeld
13. Flexible exchange rates and hysteresis
Dixit
14. Target Zones
Krugman
15. Convergence to monetary union
Weil
16. Real exchange rate targetting
Adams and Gros or Calvo, Reinhart, and Vegh
17. Inflation Stabilization
Vegh
18. Stabilization with currency substitution
Calvo-Rodriguez