

**SYLLABUS**

**Course Description:**

We economists traditionally divide the general field of International Economics into two subfields: International Finance and International Trade. In this course we will ignore this division. We will start by studying models from International Trade — the Ricardian model, the Heckscher-Ohlin model, and variants of the New Trade Theory model of increasing returns and monopolistic competition. By emphasizing dynamic general equilibrium versions of these models, we will develop tools compatible with modern, general equilibrium macroeconomics. We will then use these sorts of models to address a number of topics, some of which are typically studied in International Finance courses. Specifically, we will try to answer the questions: (1) Why did static applied general equilibrium models of the North American Free Trade Agreement do such a poor job in predicting its impact on trade flows? (2) How can we best model real exchange rate fluctuations and the relationship of these fluctuations to international capital flows? (3) How can we use dynamic general equilibrium models to analyze the causes and consequences of international financial crises like those that afflicted Mexico in 1994-1995 and Argentina in 2001-2002?

**Readings:**

Copies of many of the readings will be available on the course web site:  
<http://www.econ.umn.edu/~tkehoe/classes/8401-04>.

There is no textbook for this course. A good textbook in international trade — which will be especially useful the first few weeks of the course for anyone who has not studied international trade previously — is

R. C. Feenstra, *Advanced International Trade: Theory and Evidence*. Princeton University Press, 2003.

The best textbook in open economy macroeconomics is

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

**Office Hours:**

Wednesday, 9:00 am - 11:00 am. (There is a sign-up sheet on my door.)

Walter W. Heller Hall 1168 625-1589. (Please do not call me at home; send me e-mail at [tkehoe@econ.umn.edu](mailto:tkehoe@econ.umn.edu).)

**Assignments:**

There will be four problem sets, a group project, and a final exam. All assignments must be completed in order to receive a final grade for the course.

**Grading:**

The mark for each problem set will be counted once and the mark for the group project and the mark for the exam will be counted twice, providing a total of eight marks. The lowest of these marks will be dropped and the remaining marks averaged. Notice that this means that, if the lowest grade is that of the group project or that of the exam, its weight will be halved, but it will not be completely dropped.

**Group Project:**

Students will form groups to work on projects. Each group will consist of two, three, or four students. Topics for projects will be related to empirical issues in international economics, such as empirical tests of the Heckscher-Ohlin model, or to issues of current policy relevance, such as the costs and benefits of dollarization. Each group will make a one hour presentation of its research at the end of the course.

**Late Policy:**

Any late assignment will be penalized 10 (out of 100) points for each class period it is late, up to a maximum of 40 points.

**Cooperation on Assignments:**

Students are permitted (and encouraged) to discuss the answers to problem sets together. Copying from another student's answers is not allowed.

**Guidelines for Defining Scholastic Dishonesty:**

The University Student Conduct Code defines scholastic dishonesty as follows:

*Scholastic Dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering, forging, or*

*misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis.*

Scholastic dishonesty includes, but is not limited to, the description above. It could also be said that scholastic dishonesty is any act that violates the rights of another student with respect to academic work or that involves misrepresentation of a student's own work. Also included would be cheating on assignments or examinations, inventing or falsifying research or other findings with the intent to deceive, submitting the same or substantially similar papers (or creative work) for more than one course without consent of all instructors concerned, depriving another of necessary course materials, and sabotaging another's work. (p. 13, CLA Classroom, Grading & Examination Procedures, 2004-2005.)

Penalties for scholastic dishonesty of any kind in any course will entail an "F" for the particular assignment/exam or the course. Please check <http://www.osai.umn.edu> for information on Student Academic Misconduct.

## **List of Topics and Readings:**

### **0. Traditional Trade Theory**

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

R. Dornbusch, S. Fischer, and P. A. Samuelson, "Heckscher-Ohlin Trade Theory with a Continuum of Goods," *Quarterly Journal of Economics*, 95 (1980), 203-224.

Feenstra, Chapters 1-3.

C. A. Wilson, "On the General Structure of Ricardian Models with a Continuum of Goods: Applications to Growth, Tariff Theory, and Technical Change," *Econometrica*, 48 (1980), 1675-1702.

### **1. Increasing Returns and Imperfect Competition**

Feenstra, Chapter 5.

E. Helpman, "Increasing Returns, Imperfect Markets, and Trade Theory," in R. W. Jones and J. P. Neary, editors, *Handbook of International Economics*, vol. 1. Amsterdam: North-Holland, 1984, 325-365.

E. Helpman and P. R. Krugman, *Market Structure and Foreign Trade: Increasing Returns, Imperfect Competition, and the International Economy*. MIT Press, 1985.

P. R. Krugman, "Increasing Returns, Monopolistic Competition, and International Trade," *Journal of International Economics*, 9 (1979), 469–479.

J. Markusen, "Explaining the Volume of Trade: An Eclectic Approach," *American Economic Review*, 76 (1986), 1002-1011.

## **2. Dynamic Trade**

C. Bajona and T. J. Kehoe, "On Dynamic Heckscher-Ohlin Models I: General Framework and Overlapping Generations," University of Minnesota, 2004.

C. Bajona and T. J. Kehoe, "On Dynamic Heckscher-Ohlin Models II: Infinitely-Lived Consumers," University of Minnesota, 2004.

G. M. Grossman and E. Helpman, *Innovation and Growth in the Global Economy*. MIT Press, 1991.

Obstfeld and Rogoff, Chapters 4 and 5.

H. Uzawa, "Optimal Growth in a Two-Sector Model of Capital Accumulation," *Review of Economic Studies*, 31 (1964), 1-24.

J. Ventura, "Growth and Interdependence," *Quarterly Journal of Economics*, 112 (1997), 57-84.

A. Young, "Learning by Doing and the Dynamic Effect of International Trade," *Quarterly Journal of Economics*, 106 (1991), 369-406.

## **3. Applied General Equilibrium Analysis of Trade Policy**

Feenstra, Chapter 6.

Francois, J. F. and C. R. Shiells, editors, *Modeling Trade Policy: Applied General Equilibrium Assessments of North American Free Trade*, New York: Cambridge University Press, 1994.

P. J. Kehoe and T. J. Kehoe, "Capturing NAFTA's Impact with Applied General Equilibrium Models," *Federal Reserve Bank of Minneapolis Quarterly Review*, 18:2 (1994), 17-34.

P. J. Kehoe and T. J. Kehoe, "A Primer on Static Applied General Equilibrium Models," *Federal Reserve Bank of Minneapolis Quarterly Review*, 18:2 (1994), 2-16.

T. J. Kehoe, "An Evaluation of the Performance of Applied General Equilibrium Models of the Impact of NAFTA," University of Minnesota, 2003.

J. Romalis, "NAFTA's and CUSFTA's Impact on North American Trade," University of Chicago, 2002.

D. Trefler, "The Long and Short of the Canada-U.S. Free Trade Agreement," University of Toronto, 2001.

#### **4. Empirical Evidence**

D. K. Backus, P. J. Kehoe and T. J. Kehoe, "In Search of Scale Effects in Trade and Growth," *Journal of Economic Theory*, 58 (1992), 377-409.

S. L. Baier and J. H. Bergstrand, "The Growth of World Trade: Tariffs, Transport Costs, and Income Similarity," *Journal of International Economics*, 53 (2001), 1-27.

R. Bergoeing and T. J. Kehoe, "Trade Theory and Trade Facts," Federal Reserve Bank of Minneapolis, Staff Report 284, 2003.

A. V. Deardorff, "Testing Trade Theories and Predicting Trade Flows," in R. W. Jones and P. B. Kenen, editors, *Handbook of International Economics*, vol. 1, North-Holland, 1984, 467-517.

D. Hummels and P. J. Klenow, "The Variety and Quality of a Nation's Exports," Purdue University and Federal Reserve Bank of Minneapolis, 2002.

D. Hummels and J. Levinsohn, "Monopolistic Competition and International Trade: Reconsidering the Evidence," *Quarterly Journal of Economics*, 110 (1995), 799-836.

T. J. Kehoe and K. J. Ruhl, "How Important is the New Goods Margin in International Trade?" University of Minnesota, 2002.

K.-M. Yi, "Can Vertical Specialization Explain the Growth of World Trade?" *Journal of Political Economy*, 111 (2003), 52-102.

#### **5. Real Exchange Rates**

G. Alessandria, "International Relative Price Volatility and Intranational Price Dispersion," Ohio State University, 2001.

R. Bems and K. Jonsson, "Trade Deficits in the Baltic States: How Long Will the Party Last?" Stockholm School of Economics, 2003.

C. M. Betts and M. B. Devereux, "Exchange Rate Dynamics in a Model of Pricing-to-Market," *Journal of International Economics*, 50 (2000), 215-244.

C. M. Betts and T. J. Kehoe, "Real Exchange Rate Movements and the Relative Price of Nontraded Goods," University of Minnesota and University of Southern California, 2002.

C. M. Betts and T. J. Kehoe, "Tradability of Goods and Real Exchange Rate Fluctuations," University of Minnesota and University of Southern California, 2001.

C. M. Betts and T. J. Kehoe, "U.S. Real Exchange Rate Fluctuations and Relative Price Fluctuations," University of Minnesota and University of Southern California, 2003.

V. V. Chari, P. J. Kehoe, and E. R. McGrattan, "Can Sticky Price Models Generate Volatile and Persistent Real Exchange Rates?" *Review of Economic Studies*, 69 (2002), 533-563.

M. Crucini, C. Telmer, and M. Zachariadis "Understanding European Real Exchange Rates," Vanderbilt University, unpublished manuscript, 2001.

C. Engel, "Accounting for U.S. Real Exchange Rate Changes," *Journal of Political Economy*, 107 (1999), 507-538.

G. Fernandez de Cordoba and T. J. Kehoe, "Capital Flows and Real Exchange Rate Fluctuations Following Spain's Entry into the European Community," *Journal of International Economics*, 51 (2000), 49-78.

J. Imbs, H. Mumtaz, M. O. Ravn, and H. Rey, "PPP Strikes Back: Aggregation and the Real Exchange Rate," NBER Working Paper 9372, 2002.

Obstfeld and Rogoff, Chapters 8, 9, 10.

S. Rebelo and C. A. Vegh, "Real Effects of Exchange Rate-Based Stabilization: An Analysis of Competing Theories," in B. S. Bernanke and J. J. Rotemberg, editors, *NBER Macroeconomics Annual 1995*. The MIT Press, 1995, 125-174.

A. C. Stockman and L. L. Tesar, "Tastes and Technology in a Two-Country Model of the Business Cycle: Explaining International Comovements," *American Economic Review*, 85 (1995), 168-185.

## **6. Capital Flows and Crises**

R. Bergoeing, P. J. Kehoe, T. J. Kehoe, and R. Soto, "A Decade Lost and Found: Mexico and Chile in the 1980s," *Review of Economic Dynamics*, 5 (2002), 166-205.

G. A. Calvo, A. Izquierdo, and E. Telvi, "Sudden Stops, the Real Exchange Rate, and Fiscal Sustainability: Argentina's Lessons," Inter-American Development Bank, 2002.

V. V. Chari and P. J. Kehoe, "Hot Money," Federal Reserve Bank of Minneapolis, Staff Report 228, 2003.

H. L. Cole and T. J. Kehoe, "Self-Fulfilling Debt Crises," *Review of Economic Studies*, 67 (2000), 91-116.

H. L. Cole and T. J. Kehoe, "A Self-Fulfilling Model of Mexico's 1994-95 Debt Crisis," *Journal of International Economics*, 41 (1996), 309-330.

A. De la Torre, A. E. Levy Yeyati, and S. L. Schmukler, "Argentina's Financial Crisis: Floating Money, Sinking Banking," World Bank, 2002.

J. M. Da Rocha, E. L. Giménez, and F. X. Lores (2002), "Devaluation Beliefs and the Argentinian Debt Crisis," Universidade de Vigo, 2002.

T. J. Kehoe, "Comments on Krugman," in Ben S. Bernanke and Julio J. Rotemberg, editors, *NBER Macroeconomics Annual 1996*, MIT Press, 1996, 378-392.

T. J. Kehoe, "What Can We Learn from the Current Crisis in Argentina?" *Scottish Journal of Political Economy*, 50 (2003), 609-633.

T. J. Kehoe and K. J. Ruhl, "Recent Great Depressions: Aggregate Growth in New Zealand and Switzerland 1973-2000," *New Zealand Economic Papers*, 37 (2003), 5-40.

P. R. Krugman, "A Model of Balance of Payments Crises," *Journal of Money Credit and Banking*, 11 (1979), 311-325.

P. R. Krugman, "Are Currency Crises Self-Fulfilling?" in B. S. Bernanke and J. J. Rotemberg, editors, *NBER Macroeconomics Annual 1996*. The MIT Press, 1996, 345-378.

M. Obstfeld, "Models of Currency Crises with Self-Fulfilling Features," *European Economic Review*, 40 (1996), 1037-1048.

Obstfeld and Rogoff, Chapters 5, 6, 7.

Perry, G. and L. Servin, "The Anatomy of a Crisis: Why Was Argentina Special and What Can We Learn from It?" World Bank, 2002.

**Please note: I will take the material in topic 0 for granted, reviewing some of it selectively throughout the course. We will cover topics 1 and 2 and some of topic 4 for sure. We will not have time to do all of topics 3, 4, 5, and 6. I hope to cover at least two of these four topics.**