

**SYLLABUS**

**Outline:**

The New Trade Theory models developed in the late 1970s and 1980s were successful in accounting for the large volume of trade among countries with similar endowments of factors and similar technology and in accounting for the large fraction of this trade that is intraindustry trade. When these models were put into practice in the multisectoral applied general equilibrium models used to analyze the impact of the North American Free Trade Agreement, however, they failed miserably in predicting the increase in trade that has occurred in North America and the distribution of this increase across sectors. Some recent research has shown that models with dynamics and models with heterogeneous firms that make export decisions can do a better job than the simple New Trade Theory models in accounting for the data.

Following the empirical work of researchers like Roberts and Tybout and the theoretical work of researchers like Melitz, economists have focused on models with fixed costs of exporting from one country to another. These sorts of models have been very successful in accounting for some dimensions of the data, but unsuccessful in others. In particular, such models have not been able to account for the large increases in measured aggregate productivity in some countries that have undergone significant trade liberalization. In addition, such models have not been able to account for the large numbers of firms that export small quantities of goods from one country to another. Furthermore, such models have not been able to account for the large increases in exports following trade liberalization by firms that have exported small amounts before the liberalization.

The past two decades have witnessed both a surge in flows of capital to developing countries and the emergence of new sorts of international financial crises. We study one of these crises in detail — that in Mexico in 1994–95. In particular, we explore the insights to be gained from — and the difficulties involved in — using dynamic stochastic general equilibrium models to analyze the causes and consequences of these crises. We extend the model used to analyze the crisis in Mexico to study the financial crises currently occurring in the Euro Zone.

**Assignments and exam:**

There will be two problem sets, each of which will include analytical problems that follow the models covered in the lectures and data exercises. The final exam will be composed of questions based on the analytical problems in the problem sets.

**Grade:**

Each problem set will count for 25 percent of the final grade and the exam will count for 50 percent.

## **Topics, questions, and references:**

### **1. Trade Models with Heterogeneous Firms**

#### **Questions:**

1. Which goods are exported more after trade liberalization, those with large exports volumes before the liberalization or those with small export volumes?
2. Why is the distribution of exporters in an industry so different from the overall distribution of firms?

#### **Readings:**

T. Chaney, “Distorted Gravity: Heterogeneous Firms, Market Structure, and the Geography of International Trade,” University of Chicago, 2005.

J. Eaton, S. Kortum, and F. Kramarz, “An Anatomy of International Trade: Evidence from French Firms,” University of Minnesota, 2005.

T. J. Kehoe and K. J. Ruhl, “How Important is the New Goods Margin in International Trade?” Federal Reserve Bank of Minneapolis, 2009.

M. J. Melitz, “The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity,” *Econometrica*, 71 (2003), 1695-1725.

K. J. Ruhl, “Solving the Elasticity Puzzle in International Economics,” University of Texas at Austin, 2008.

### **2. Trade and Growth**

#### **Questions:**

3. Do standard models of trade predict that trade liberalization will increase growth rates?
4. How do the concepts of productivity used by researchers in the theoretical literature on international trade compare with the concepts used by researchers in the empirical literature?

#### **Readings:**

C. Bajona and T. J. Kehoe, “Trade, Growth, and Convergence in a Dynamic Heckscher-Ohlin Model,” *Review of Economic Dynamics*, 13 (2010), 487–513.

M. J. Gibson, “Trade Liberalization, Reallocation, and Productivity,” University of Minnesota, 2006.

T. J. Kehoe and K. J. Ruhl, “Are Shocks to the Terms of Trade Shocks to Productivity?” Federal Reserve Bank of Minneapolis, 2007.

M. Roberts and R. Tybout, “The Decision to Export in Colombia : An Empirical Model of Entry with Sunk Costs.” *American Economic Review*, 87 (1997), 545-564.

F. Rodriguez and D. Rodrik, “Trade Policy and Economic Growth: A Skeptic's Guide to the Cross-National Evidence,” in B. Bernanke and K. Rogoff, editors, *Macroeconomics Annual 2000*, MIT Press, 2001, 261-325.

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

### **3. Real Exchange Rates and Crises**

#### **Questions:**

5. Is the distinction between traded and nontraded goods accounting for real exchange rate fluctuations?
6. How far can a standard model with traded and nontraded goods go in accounting for the changes in relative prices and quantities observed in developing countries after a sudden stop in capital flows as, for example, in the Mexican Crisis of 1994-95?

#### **Readings:**

C. M. Betts and T. J. Kehoe, “Real Exchange Rate Movements and the Relative Price of Nontraded Goods,” Federal Reserve Bank of Minneapolis Staff Report 415.

C. M. Betts and T. J. Kehoe, “U.S. Real Exchange Rate Fluctuations and Relative Price Fluctuations,” *Journal of Monetary Economics*, 53 (2006), 1297-1326.

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.

T. J. Kehoe and K. J. Ruhl, “Sudden Stops, Sectoral Reallocations, and the Real Exchange Rate,” *Journal of Development Economics*, 89 (2009), 235–249.

### **4. Self-Fulfilling Crises**

#### **Questions:**

7. Can we construct a dynamic stochastic general equilibrium model in which financial crises are driven by self-fulfilling expectations on the part of investors?

8. What role did the maturity of Mexican government debt play in the 1994–95 financial crisis?
9. Can we model the current financial crises in Europe as self-fulfilling crises?

**Readings:**

C. Chamley and B. Pinto (2011), “Why Official Bailouts Tend Not to Work: An Example Motivated by Greece 2010,” *The Economists’ Voice*, 8.

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

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

J. C. Conesa and T. J. Kehoe (2012), “Gambling for Redemption and Self-Fulfilling Debt Crises,” Federal Reserve Bank of Minneapolis.

T. J. Kehoe (1995), “What Happened in Mexico in 1994–95?” in P. J. Kehoe and T. J. Kehoe, editors, *Modeling North American Economic Integration*, Kluwer Academic Publishers, 131–47.