INTERNATIONAL TRADE **T. J. KEHOE**
UNIVERSITAT AUTÒNOMA DE BARCELONA **SPRING 2014**

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.

Topics, questions, and references:

1. The New Trade Theory and its Applications

Questions:

1. Why has merchandise trade grown so much faster than manufacturing output?

2. Why did the applied general equilibrium models used to analyze the impact of NAFTA fail to predict which sectors would have the largest increases in trade?

Readings:

R. Bergoeing and T. J. Kehoe, “Trade Theory and Trade Facts,” Federal Reserve Bank of Minneapolis, 2003.

T. J. Kehoe, “An Evaluation of the Performance of Applied General Equilibrium Models of the Impact of NAFTA,” in T. J. Kehoe, T. N. Srinivasan, and J. Whalley, editors, *Frontiers in*

Applied General Equilibrium Modeling: Essays in Honor of Herbert Scarf, Cambridge University Press, 2005, 341–77.

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, C. Polo, and F. Sancho, "An Evaluation of the Performance of an Applied General Equilibrium Model of the Spanish Economy," *Economic Theory*, 6 (1995), 115–141.

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

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

2. Trade Models with Heterogeneous Firms

Questions:

3. From which products does the growth in exports come after trade liberalization, from products with large exports volumes before the liberalization or from those with small export volumes?

4. 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," *American Economic Review* 98 (2008), 1707–1721.

J. Eaton, S. Kortum, and F. Kramarz, "An Anatomy of International Trade: Evidence from French Firms," *Econometrica*, 79 (2011), 1453–1498.

T. J. Kehoe, J. M. Rossbach, and K. J. Ruhl, "Using the New Products Margin to Predict the Industry-Level Impact of Trade Reform," Federal Reserve Bank of Minneapolis, 2013.

T. J. Kehoe and K. J. Ruhl, "How Important is the New Goods Margin in International Trade?" *Journal of Political Economy*, 121 (2013), 358–392

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.

3. Trade and Growth

Questions:

5. Do standard models of trade predict that trade liberalization will increase growth rates?

6. 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?" *Review of Economic Dynamics*, 11 (2008), 804–819.

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.