

Economics 267: Topics in International Trade Spring 2008

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Note: Please put Econ 267 in the subject line

Lecture: Tuesdays and Thursdays 1:15-3:05pm in the Bubble Room, Landau 225

Webpage: <http://coursework.stanford.edu>

Course Description

This course takes a firm-level approach to the study of international trade and investment. The class is structured around recent papers from the frontier of international trade research. We will first discuss firms' decision to export and link it to firm heterogeneity. We will then explore firms' decision to invest abroad and study different types of foreign direct investment. Next we will examine recent developments at the intersection of the theory of international trade and the theory of the firm, and analyze multinational and multiproduct firms. The last part of the course will focus on institutional frictions and their effects on trade patterns. All topics will be presented through both theoretical and empirical papers.

This course is targeted at second-year (and higher) Ph.D. students in economics. Students are expected to have completed first-year micro and macro theory courses, as well as an introductory graduate course in international trade.

Requirements

This course is meant to bring students up to date with current work in international trade and to prepare you for doing research in this or other related fields. The course assignments have accordingly been designed to help you learn to read papers critically, as well as to develop and execute your own independent research ideas. There will be no midterm or final exam.

1. Two referee reports, due April 22 and May 13, 30% of final grade

You must write two referee reports on papers from the syllabus which we have not discussed at great length in class. Please let me know at least a week in advance which paper you have chosen to write about. If you feel strongly about a paper that falls into the topics covered in class but is not on the reading list, you may write a report on that paper with my prior approval.

Each referee report should be 3-4 pages double spaced. The first paragraph(s) should summarize the paper for the editor and describe the main features of the paper and its contribution to the existing or subsequent literatures. The report should discuss the strengths and weaknesses of the paper, contrasting it to others in the literature as necessary. You should describe how the authors could address the weaknesses (if possible) and give your recommendations for changes that would strengthen or enhance the paper.

2. Project presentation (on June 3) and written project proposal (due June 9), 40% of final grade

You must prepare a brief presentation on a new project related to the topics in the course. You are by no means expected to present a finished draft, but rather an idea and a brief outline of how that idea could be worked out. The presentation will take place the last day of class, June 3, after which you will have a week to write up a 4-5 page-long proposal.

3. Class participation, 30% of final grade

You should read the paper(s) we will be discussing in class before coming to class. You don't have to have understood the paper in its entirety but should be familiar with its key elements and ideas. You are expected to participate in class discussion. Sometimes we will discuss a few empirical papers at a time and you may be asked to present a summary of one paper in class.

NOTE: If you are taking this class for credit/no credit, you have to complete either the two referee reports or the project presentation and written proposal. You are of course strongly encouraged to complete all assigned work, and are still expected to read assigned papers and actively participate in class discussions.

Tentative Schedule

1. April 1: Introduction and Basic Facts

Firm Heterogeneity and Trade

2. April 3: The Basic Model. Melitz (2003)

3. April 8: The Model with Multiple Sectors. Bernard, Redding and Schott (2007), Chaney (2008)

4. April 10: The Endogenous Mark-ups Model. Melitz and Ottaviano (2008), Bernard, Eaton, Jensen and Kortum (2003)

5. April 15: Firm Level Evidence I. Bernard, Jensen and Schott (2007), Bernard and Jensen (1995), Eaton, Kortum and Kramarz (2004a,b)

6. April 17: Firm Level Evidence II. Pavcnik (2002), Bernard, Jensen and Schott (2006), Dixit (1989a), Roberts and Tybout (1997)

7. April 22: Country Level Evidence. Helpman, Melitz and Rubinstein (2008), Baldwin and Harrigan (2007), Broda and Weinstein (2006), Hummels and Klenow (2005)

8. April 24: Multiproduct Firms. Bernard, Redding and Schott (2006 a,b)

Foreign Direct Investment

9. April 29: Horizontal FDI I. Brainard (1997), Markusen and Venables (2000),

10. May 1: Horizontal FDI II and Vertical FDI I. Helpman, Melitz and Yeaple (2004), Helpman (1984)

11. May 6: Vertical FDI II. Yeaple (2003 a,b), Hanson, Mataloni and Slaughter (2001)

Multinational Corporations

12. May 8: Firm Structure and Contractual Imperfection. Antras (2003)

13. May 13: Global Sourcing with Contractual Imperfection. Antras and Helpman (2004, 2008)

14. May 15: Evidence on the Property Rights Approach. Yeaple (2006), Nunn and Trefler (2008), Feenstra and Hanson (2005)

Trade, Institutional Frictions and Market Frictions

15. May 20: Credit Constraints and Trade. Manova (2007, 2008)

16. May 22: Credit Constraints and FDI. Antras, Desai and Foley (2007), Chor, Foley and Manova (2007), Desai, Foley and Forbes (2008)

17. May 27: Labor Market Rigidities. Helpman and Isthokhi (2007), Cunat and Melitz (2007)

18. May 29: Contract Enforcement. Nunn (2007), Acemoglu, Antras and Helpman (2008)

19. June 3: In-Class Presentations and General Discussion

Reading List

Starred articles (*) will be covered at length.

1 Firms and the Decision to Export

1.1 Theoretical Models with Firm Heterogeneity

- * Melitz, Marc (2003). "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity," *Econometrica*, 71(6), p.1695-1725.
 - * Bernard, Andrew, Stephen Redding and Peter Schott (2007). "Comparative Advantage and Heterogeneous Firms," *Review of Economic Studies* 74.
 - * Chaney, Thomas (2008). "Distorted Gravity: The Intensive and Extensive Margins of International Trade," *American Economic Review*, forthcoming.
 - * Melitz, Marc and Gianmarco Ottaviano (2008). "Market Size, Trade and Productivity," *Review of Economic Studies*, forthcoming.
 - * Bernard, Andrew, Jonathan Eaton, Bradford Jensen and Samuel Kortum (2003). "Plants and Productivity in International Trade," *American Economic Review*, 93(4), p.1268-1290.
- Arkolakis, Costas (2007). "Market Access Costs and the New Consumers Margin in International Trade," Yale University mimeo.

1.2 Empirical Evidence on Firm Heterogeneity

- * Bernard, Andrew, Bradford Jensen and Peter Schott (2007). "Importers, Exporters, and Multinationals: A Portrait of Firms in the U.S. that Trade Goods," Dartmouth Tuck mimeo.
 - * Bernard and Jensen (1995). "Exporters, Jobs and Wages in U.S. Manufacturing, 1976-1987," *Brookings Papers on Economic Activity: Microeconomics*.
 - * Eaton, Jonathan, Samuel Kortum and Francis Kramarz (2004a). "An Anatomy of International Trade: Evidence from French Firms," New York University mimeo.
 - * Eaton, Jonathan, Samuel Kortum and Francis Kramarz (2004b). "Dissecting Trade: Firms, Industries, and Export Destinations," *American Economic Review P&P*, 94, p.150-154.
 - * Helpman, Elhanan, Marc Melitz and Yona Rubinstein (2008). "Estimating Trade Flows: Trading Partners and Trading Volumes," *Quarterly Journal of Economics*, forthcoming.
 - * Broda, Christian and David Weinstein (2006). "Globalization and the Gains from Variety," *Quarterly Journal of Economics* 121(2).
 - * Hummels, David and Peter Klenow (2005). "The Variety and Quality of a Nation's Exports," *American Economic Review* 95, p.704-723.
- Baldwin, Richard and James Harrigan (2007). "Zeros, Quality and Space: Trade Theory and Trade Evidence," NBER Working Paper No. 13214.

Eaton, Jonathan, Marcela Eslava, Maurice Kugler and James Tybout (2008). "The Margins of Entry into Exports Markets: Evidence from Columbia," in E. Helpman, D. Marin and T. Verdier, eds., *The Organization of Firms in a Global Economy*, forthcoming, Harvard University Press.

Tybout, James (2001). "Plant- and Firm-level Evidence on the New Trade Theories," in E. Kwan Choi and James Harrigan, ed., *Handbook of International Trade*, Oxford: Basil-Blackwell, 2003, and NBER Working Paper No. 8418.

Costinot, Arnaud and Ivana Komunjer (2006). "What Goods Do Countries Trade? New Ricardian Predictions," UCSD mimeo.

1.3 Learning by Exporting

De Loecker, Jan (2007). "Do Exports Generate Higher Productivity? Evidence from Slovenia," *Journal of International Economics*, 73.

Bernard, Andrew and Bradford Jensen (1999). "Exceptional Exporter Performance: Cause, Effect, or Both?" *Journal of International Economics*, 47(1), p.1-25.

Aw, B.Y., S. Chung and M.J. Roberts (2000). "Productivity and Turnover in the Export Market: Micro-level Evidence from the Republic of Korea and Taiwan(China)," *World Bank Economic Review*, 14(1), p.65-90.

Clerides, S., S. Lach and J. Tybout (1998). "Is Learning by Exporting Important? Micro-dynamic Evidence from Colombia, Mexico, and Morocco," *Quarterly Journal of Economics*, 113 (3), p.903-47.

1.4 Trade Liberalization and Wage Inequality

* Pavcnik, Nina (2002). "Trade Liberalization, Exit, and Productivity Improvements: Evidence from Chilean Plants," *The Review of Economic Studies*, 69, January, p.245-76.

* Bernard, Andrew, Bradford Jensen and Peter Schott (2006). "Trade Costs, Firms and Productivity," *Journal of Monetary Economics*, 53(5), p.917-937.

Verhoogen, Eric (2004). "Trade, Quality Upgrading and Wage Inequality in the Mexican Manufacturing Sector: Theory and Evidence from an Exchange-Rate Shock," Columbia University mimeo.

Bustos, Paula (2006). "Rising Wage Inequality in the Argentinean Manufacturing Sector: The Impact of Trade and Foreign Investment on Technology and Skill Upgrading," CREI mimeo.

Muendler, Marc (2004). "Trade, Technology and Productivity: A Study of Brazilian Manufacturers, 1968-1998," UCSD mimeo.

Yeaple, Stephen (2005). "A Simple Model of Firm Heterogeneity, International Trade, and Wages," *Journal of International Economics*, 65(1), p.1-20.

1.5 The Relevance of Sunk Costs

* Roberts, Mark and James Tybout (1997). "The Decision to Export in Colombia: An Empirical Model of Entry with Sunk Costs," *American Economic Review*, 87(4), p.545-564.

* Dixit, Avinash (1989a). "Entry and Exit Decision under Uncertainty," *Journal of Political Economy*, 97(3), p.620-638.

Dixit, Avinash (1989b). "Hysteresis, Import Penetration, and Exchange Rate Pass-Through," *Quarterly Journal of Economics*, 104(2), p.205-228.

Das, Mita, Mark Roberts and James Tybout (2007). "Market Entry Costs, Producer Heterogeneity and Export Dynamics," *Econometrica*, 75(3).

Bernard A. and J. B. Jensen (2004). "Why Some Firms Export," *The Review of Economics and Statistics*, 86(2).

1.6 Multi-Product Firms

* Bernard, Andrew, Stephen Redding and Peter Schott (2006a). "Multi-Product Firms and Product Switching," Dartmouth Tuck mimeo.

* Bernard, Andrew, Stephen Redding and Peter Schott (2006b). "Multi-Product Firms and Trade Liberalization," Dartmouth Tuck mimeo.

Bernard, Andrew, Stephen Redding and Peter Schott (2006c). "Products and Productivity," Dartmouth Tuck mimeo.

Arkolakis, Costas and Marc Muendler (2007). "The Extensive Margin of Exporting Goods: A Firm-Level Analysis," UCSD mimeo.

2 Firms and the Decision to Invest Abroad

2.1 Horizontal FDI and the Proximity-Concentration Hypothesis

* Brainard, Lael (1997). "An Empirical Assessment of the Proximity-Concentration Trade-off Between Multinational Sales and Trade," *American Economic Review*, 87(4), p.520-544.

* Markusen, James and Anthony Venables (2000). "The Theory of Endowment, Intra-industry and Multi-national Trade," *Journal of International Economics*, 52, p.209-234.

* Helpman, Elhanan, Marc Melitz, and Stephen Yeaple (2004). "Exports versus FDI with Heterogeneous Firms," *American Economic Review*, 94(1), p.300-316.

Markusen, James (1984). "Multinationals, Multi-Plant Economies, and the Gains from Trade," *Journal of International Economics*, 16, p.205-226.

Markusen, James (1995). "The Boundaries of Multinational Enterprises and the Theory of International Trade," *Journal of Economic Perspectives*, 9(2), p.169-189.

Markusen, James and Anthony Venables (1998). "Multinational Firms and the New Trade Theory," *Journal of International Economics*, 46(2), p.183-203.

Markusen, James (2002). "Multinational Firms and the Theory of International Trade, Cambridge, MA, MIT Press.

Ramondo, Natalia (2007). "Size, Geography, and Multinational Production," University of Texas at Austin mimeo.

2.2 Vertical FDI

* Helpman, Elhanan (1984). "A Simple Theory of International Trade with Multinational Corporations," *Journal of Political Economy*, 92(3), p.451-471.

* Yeaple, Stephen (2003a). "The Role of Skill Endowments in the Structure of U.S. Outward FDI," *Review of Economics and Statistics*, August, 85(3), p.726-734.

* Yeaple, Stephen (2003b). "The Complex Integration Strategies of Multinationals and Cross Country Dependencies in the Structure of FDI," *Journal of International Economics*, 60, p.293-314.

* Hanson, Gordon, Raymond Mataloni and Matthew Slaughter (2001). "Expansion Strategies of U.S. Multinational Firms," in Dani Rodrik and Susan Collins, eds., *Brookings Trade Forum 2001*, pp. 245-282.

Antràs, Pol, Luis Garicano and Esteban Rossi-Hansberg (2006). "Offshoring in a Knowledge Economy," *Quarterly Journal of Economics*, 121(1), p.31-77.

Helpman, Elhanan and Paul Krugman (1985). *Market Structure and Foreign Trade*, Cambridge, MA: MIT Press. Chapter 12.

Carr, David, James Markusen and Keith Maskus (2001). "Estimating the Knowledge-Capital Model of the Multinational Enterprise," *American Economic Review*, 91(3), p.693-708.

Yi, Kei-Mu (2003). "Can Vertical Specialization Explain the Growth of World Trade?" *Journal of Political Economy*, 111(1), p.52-102.

3 The Boundaries of the Multinational Firm

* Antràs, Pol (2003). "Firms, Contracts, and Trade Structure," *Quarterly Journal of Economics*, 118(4), p.1375-1418.

* Antràs, Pol and Elhanan Helpman (2004). "Global Sourcing," *Journal of Political Economy*, 112, p.552-580.

* Antràs, Pol and Elhanan Helpman (2008). "Contractual Frictions and Global Sourcing," forthcoming in E. Helpman, D. Marin, and T. Verdier (eds.), *The Organization of Firms in a Global Economy*, Harvard University Press.

* Yeaple, Stephen (2006). "Foreign Direct Investment, and the Structure of U.S. Trade," *Journal of the European Economic Association*, 4, p.602-611.

* Nunn, Nathan and Daniel Trefler (2008). "The Boundaries of the Multinational Firm: An Empirical Analysis," forthcoming in E. Helpman, D. Marin, and T. Verdier (eds.), *The Organization of Firms in a Global Economy*, Harvard University Press.

* Feenstra, Robert C. and Gordon H. Hanson (2005). "Ownership and Control in Outsourcing to China: Estimating the Property-Rights Theory of the Firm," *Quarterly Journal of Economics*, 120(2), p.729-761.

Branstetter, Lee, Raymond Fisman and Fritz Foley. "Do Stronger Intellectual Property Rights Increase International Technology Transfer? Empirical Evidence from U.S. Firm-Level Panel Data." *Quarterly Journal of Economics*, 121(1), p. 321-349

Helpman, Elhanan (2006). "Trade, FDI and the Organization of Firms," *Journal of Economic Literature*, 44, p.589-630.

McLaren, John (2000). "Globalization and Vertical Structure," *American Economic Review* 90(5), p.1239-1254.

Grossman, Gene and Elhanan Helpman (2002). "Integration vs. Outsourcing in Industry Equilibrium," *Quarterly Journal of Economics*, 117(1), p.85-120.

Desai, Mihir, Fritz Foley and James Hines (2004). "Foreign Direct Investment in a World of Multiple Taxes," *Journal of Public Economics*, 88(12), p.2727-2744.

4 Trade, Institutional Frictions and Market Frictions

4.1 Trade and Capital Market Frictions

* Manova, Kalina (2007). "Credit Constraints, Heterogeneous Firms and International Trade," Stanford University mimeo.

* Antràs, Pol, Mihir Desai, and Fritz Foley (2007). "Multinational Firms, FDI Flows and Imperfect Capital Markets," Harvard University mimeo.

* Chor, Davin, Fritz Foley and Kalina Manova (2007). "MNC Activity and Host Country Financial Development," Stanford University mimeo.

* Desai, Mihir, Fritz Foley and Kristin Forbes (2006). "Financial Constraints and Growth: Multinational and Local; Firm Responses to Currency Depreciations," *Review of Financial Studies*, forthcoming.

Manova, Kalina (2008). "Credit Constraints, Equity Market Liberalizations and International Trade," *Journal of International Economics*, forthcoming.

Antràs, Pol and Ricardo Caballero (2007). "Trade and Capital Flows: A Financial Frictions Perspective," Harvard University mimeo.

Chesnokova, Tatyana (2007). "Immiserizing Deindustrialization: A Dynamic Trade Model with Credit Constraints," *Journal of International Economics*, forthcoming.

Ju, Jiandong and Shang-Jin Wei (2006). "Endowment Versus Finance: A Wooden Barrel Theory of International Trade," CEPR Discussion Paper 5109.

Wynne, José (2005). "Wealth as a Determinant of Comparative Advantage," *American Economic Review*, 2005, 95(1), p.226-254.

Becker, Bo and Robin Greenwood (2007). "Financial Development, Fixed Costs and International Trade," University of Ullinois at Urbana-Chapmaign mimeo.

Do, Quy-Toan and Andrei Levchenko (2007). "Comparative Advantage, Demand for External Finance, and Financial Development," *Journal of Financial Economics*, 86(3), p.796-834.

4.2 Trade and Labor Market Frictions

* Helpman, Elhanan and Oleg Itskhoki (2007). "Labor Market Rigidities, Trade and Unemployment," Harvard University mimeo.

* Cuñat, Alejandro and Marc Melitz (2007). "Volatility, Labor Market Flexibility and Comparative Advantage," NBER Working Paper #13062.

Davidson, Carl, Lawrence Martin and Steven Matusz (1999). "Trade and Search Generated Unemployment," *Journal of International Economics* 48, p.271-299.

Davis, Donald (1998). "Does European Unemployment Prop Up American Wages? National Labor Markets and Global Trade," *American Economic Review* 88, p.478-494.

Davis, Donald and James Harrigan (2007). "Good Jobs, Bad Jobs, and Trade Liberalization," Columbia University mimeo.

4.3 Trade and Imperfect Contract Enforceability

* Nunn, Nathan (2007). "Relationship-Specificity, Incomplete Contracts, and the Pattern of Trade," *Quarterly Journal of Economics*, 122(2), p.569-600.

* Acemoglu, Daron, Pol Antràs and Elhanan Helpman (2005). "Contracts and Technology Adoption," *American Economic Review* 97(3), p.916-943.

Antràs, Pol (2005). "Incomplete Contracts and the Product Cycle," *American Economic Review*, 95(4), p.1054-1073.

Berkowitz, Daniel, Johannes Moenius and Katharina Pistor (2006). "Trade, Law and Product Complexity," *Review of Economics and Statistics*, 88(2), p.363-373.

Levchenko, Andrei (2007). "Institutional Quality and International Trade," *Review of Economic Studies*, 74(3), p.791-819.

Levchenko, Andrei (2007). "International Trade and Institutional Change," University of Chicago GSB mimeo.

Chor, Davin (2007). "Unpacking Sources of Comparative Advantage: A Quantitative Approach," Singapore Management University mimeo.

Costinot, Arnaud (2006). "On the Origins of Comparative Advantage," University of San Diego mimeo.