

**Topics in International Economics (ECO2304H)**  
**Spring 2017**

**Instructor:**

Daniel Trefler

Class Website: [http://www.rotman.utoronto.ca/~dtrefler/files/Course\\_Materials.htm](http://www.rotman.utoronto.ca/~dtrefler/files/Course_Materials.htm)

Office Hours: Please see me immediately after the class or the tutorial. I am also happy to meet you by appointment in my office (Rotman 8064 – South Building)

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**Prerequisite:**

ECO2304 has ECO2300 as a pre-requisite.

The course is very suitable for both M.A. and Ph.D. students.

**Course Description:**

This course covers key topics of current interest (both to researchers and policy/media types). Topics covered include the new theories of (1) firm-level comparative advantage, (2) offshore outsourcing and multinational activities, and (3) the impact of international trade on domestic institutions. These theories and their empirical support will be carefully examined.

Each lecture will provide in-depth coverage of a key recent contribution; students will be expected to do the readings in advance. The educational goals of the course are: (1) to learn the above material, (2) to develop an ease with reading quickly through academic articles in the field, (3) to develop a clearer sense of what constitutes a good research topic, and (4) to bridge the gap between academic and policy work.

Trefler's teaching style is somewhat idiosyncratic. I teach through repetition of difficult concepts. Each week a key article will be assigned. Students are required to (1) answer a problem set dealing with mathematical preliminaries, (2) briefly read the article in advance of the lecture and submit a one-page summary, (3) attend a lecture about the article, (4) attend a tutorial to review the more technical aspects of the article, and (5) present to the class a related article that uses a similar framework.

**Components of course and schedule:**

- (15%) 5 problem sets on the Melitz model, the Melitz-Ottaviano model, the CES-Pareto model, the Eaton-Kortum model, and the Antras-Helpman model. These should be handwritten.
- (14%) Comments on 7 papers that are being taken up in class. E-mail them to me one hour before class (10:00 am), no exceptions. The comments will briefly summarize the paper and provide one or two brief insights in the form of a comment (favourable or critical) or a question about the paper. See the sample on the class website.
- (1%) Two brief creative research proposals.
- (25%) Mid-term test (during the Week 6 tutorial).
- (30%) 2 class presentations of published papers. Each presentation will be 20 minutes long and presented during the Friday tutorials. Each is worth 15%. M.A. students will be assigned easier papers.
- (15%) Group projects: The class will be divided into two groups and each will make a one-hour presentation on a topic to be chosen. The presentation will be during the tutorial of Week 11. Projects in the last two years were (1) Canada's Dutch Disease, (2) a proposal to reform Canada's agricultural marketing boards, and (3) the impact of international competition on mobile phone rates. Possible topics include:
  - Evaluating the benefits of FDI by state-owned enterprises e.g., the CNOOC-Nexen deal.
  - Explaining Canadian business's lagging investments in software development and purchases in terms of lack of foreign competition.

**Readings:**

- There is usually one required reading per week. Additional readings, not required, are listed with brackets [].

## Part I. Firm Heterogeneity and International Trade

### 1. Introduction: Love of Variety; Empirical Evidence on Firm Heterogeneity (Week 1)

- [Bernard, Andrew B., J. Bradford Jensen, Stephen J. Redding, and Peter K. Schott, “Firms in International Trade,” *Journal of Economic Perspectives*, Summer 2007, 21 (3), 105–130.]

**Tutorial (Week 1):** No tutorial.

### 2. The Melitz Model (Week 2)

- Melitz, Marc J., and Stephen J. Redding, “Heterogeneous Firms and Trade.” In *Handbook of International Trade*, edited by Elhanan Helpman, Gita Gopinath and Kenneth Rogoff. Amsterdam: Elsevier, 2014. (Available on Melitz’s website.)
- [Melitz, Marc J., “The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity,” *Econometrica*, November 2003, 71 (6), 1695–1725. Read the annotated version on the class website.]

**Tutorial (Week 2):** Detailed review of Melitz (2003)

### 3. Empirics: Testing Theories; Causal Impacts of Exporting on Productivity (Week 3)

- Melitz, Marc J., and Daniel Trefler “Gains From Trade When Firms Matter,” *Journal of Economic Perspectives*, 26(2) (Spring 2012):91–118.
- [Lileeva, Alla and Daniel Trefler, “Improved Access to Foreign Markets Raises Plant-Level Productivity ... for Some Plants,” *Quarterly Journal of Economics*, August 2010, CXXV (3), 1051–1072 and 1082-1087.]
- [The class webpage has a document that lists gains from trade with identical firms. We will not discuss this, but you may find it useful.]

**Tutorial (Week 3):** Student presentations (Round 1)

### 4. A Variable Markup Model (Week 4)

- Melitz, Marc J. and Giancarlo I. P. Ottaviano, “Market Size, Trade, and Productivity,” *Review of Economic Studies*, 2008, 75 (1). Read the annotated version on the class website.

**Tutorial (Week 4):** Detailed review of Melitz and Ottaviano (2008).

### 5. Ricardian Models (Week 5)

- Eaton, Jonathan and Samuel Kortum, “Technology, Geography, and Trade,” *Econometrica*, September 2002, 75 (5), 1741–1779. Read the annotated version on the class website.
- [Bernard, Andrew B. and Jonathan Eaton, Bradford Jensen, and Samuel Kortum, “Plants and Productivity in International Trade,” *American Economic Review*, September 2003,

93 (4), 1268–1290.]

**Tutorial (Week 5):** Student presentations continued.

**6. Ricardian Models (continued); Gravity Equations (time permitting) (Week 6)**

- [Head, Keith, and Thierry Mayer, “Gravity Equations: Workhorse, Toolkit, and Cookbook.” In *Handbook of International Trade*, edited by Elhanan Helpman, Gita Gopinath and Kenneth Rogoff. Amsterdam: Elsevier, forthcoming.]

**Tutorial (Week 6):** TEST!

## **Part II. Multinationals, Offshore Outsourcing, and Incomplete Contracts**

**7. Introduction; Models with Complete Contracts (Week 7)**

- Antràs, Pol, *Global Production: Firms, Contracts and Trade Structure*, Princeton University Press, 2016. Read pages 3–27 and 169–174.

**Tutorial (Week 7):** No tutorial.

**8. Multinationals and the Theory of the Firm – Incomplete Contracts (Weeks 7-8)**

- Antràs, Pol and Elhanan Helpman, “Global Sourcing,” *Journal of Political Economy*, 2004, 112, 552–580. Read the annotated version on the class website.
- [Antràs, Pol, “Firms, Contracts, and Trade Structure,” *Quarterly Journal of Economics*, November 2003, 118 (4), 1375–1418.]

**Tutorial (Week 8):** No tutorial

**9. Multinationals and the Theory of the Firm (Continued); Domestic Institutions as a Source of Comparative Advantage (Week 9) **Note: Replaced with lecture by Peter Morrow****

- Antràs, Pol, *Global Production: Firms, Contracts and Trade Structure*, Princeton University Press, 2016. Read pages 217–234 and 255–261.

**Tutorial (Week 9):** Student Presentations (round 2)

## **Part III. Other Topics (Weeks 10-12)**

**10. International Trade and Domestic Institutions (Week 10) **Note: Class rescheduled****

- Nunn, Nathan, and Daniel Trefler, “Domestic Institutions as a Source of Comparative Advantage,” forthcoming, *Handbook of International Trade* edited by Gopinath, Helpman and Rogoff (especially sections 1,2, and 5).

- [Acemoglu, Daron, Simon Johnson, and James A. Robinson, “The Rise of Europe: Atlantic Trade, Institutional Change and Economic Growth,” *American Economic Review*, June 2005, 95 (3), 546–579.]
- [Puga, Diego and Daniel Trefler, “The Dynamics of International Trade, Income Distribution and Domestic Institutions: A Death in Venice,” *Quarterly Journal of Economics*, May 2014, 129 (2), 753–821.]
- [Greif, Avner Greif, “History Lessons: The Birth of Impersonal Exchange: The Community Responsibility System and Impartial Justice,” *Journal of Economic Perspectives*, 2006, 20 (2):221–236.]
- [Dippel, Christian, Avner Grief and Daniel Trefler, “The Rents from Trade: Wages and Coercion in the Post-Abolition British Caribbean.” *NBER Working Paper*, January 2014, but read updated version on my website.]

**Tutorial (Week 10):** Student Presentations (round 2 continued)

### **11. Trade and Innovation (Week 11)**

- No readings

**Tutorial (Week 11):** No tutorial.

### **12. Presentation of Group Projects (Week 12)**

- No readings

**Tutorial (Week 12):** No tutorial.

## Deliverables

Summaries of assigned readings and creative research proposals are due by e-mail one hour before class. No exceptions!

### Week 1: Introduction

- No tutorial this week.
- CES problem set assigned. Due by 10:00 am on the Monday of Week 2.
- Read Melitz (see the annotated version on the website) and write a one-page summary. Due by 10:00 am on the Tuesday of Week 2.

### Week 2: The Melitz Model

- Tutorial this week on Melitz.
- Read Melitz and Trefler and write a one-page summary. Due by 10:00 am on the Tuesday of Week 3.
- Pareto-Melitz problem set assigned. Due by 10:00 am on the Monday of Week 3.
- In class assignment of student paper presentations (round 1). Presentations will be during the tutorials of Weeks 3 and 5.
  1. Bernard, Andrew B. and Stephen J. Redding, and Peter K. Schott, "Comparative Advantage and Heterogeneous Firms Comparative Advantage and Heterogeneous Firms," *Review of Economic Studies*, January 2007, 74 (1), 31–66.
  2. Chaney, Thomas, "Distorted Gravity: The Intensive and Extensive Margins of International Trade," *American Economic Review*, September 2008, 98 (4), 1707–21.
  3. Baldwin, Richard and James Harrigan, "Zeros, Quality, and Space: Trade Theory and Trade Evidence," *American Economic Journal: Microeconomics*, May 2011.
  4. Helpman, Elhanan, Marc Melitz, and Yona Rubinstein, "Estimating Trade Flows: Trading Partners and Trading Volumes," *Quarterly Journal of Economics*, May 2008, 123 (2), 441–487.
  5. Arkolakis, Costas, "Market Penetration Costs and the New Consumers Margin in International Trade," *Journal of Political Economy*, forthcoming.
  6. Daniel Trefler, "The Long and Short of the Canada-U.S. Free Trade Agreement." *American Economics Review* 94 (September 2004): 870-895.
  7. [Eaton, Jonathan and Samuel Kortum and Francis Kramarz, "An Anatomy of International Trade: Evidence from French Firms," *Econometrica*, September 2011, 79 (5), 1453–1498. (Hard)]
  8. [Bernard, Andrew B., Stephen J. Redding, and Peter K. Schott, "Multi-Product Firms and Trade Liberalization, *Quarterly Journal of Economics*, forthcoming. (Hard)]
  9. [Fieler, Ana Cecilia, "Nonhomotheticity and Bilateral Trade: Evidence and a Quantitative Explanation," *Econometrica*, July 2011:1969–1101. (Need to know Eaton-Kortum)]

### Week 3: Empirics

- Tutorial this week on student presentations (round 1).
- Melitz-Ottaviano problem set assigned. Due by 10:00 am on the Monday of Week 4.
- Read Melitz and Ottaviano (see the annotated version on the website) and write a one-page summary. Due by 10:00 am on the Tuesday of Week 4.

### Week 4: The Melitz-Ottaviano Model

- Tutorial this week Melitz-Ottaviano.
- Eaton-Kortum problem set assigned. Due by 10:00 am on the Monday of Week 5.
- Read Eaton and Kortum (see the annotated version on the website) and write a one-page summary. Due by 10:00 am on the Tuesday of Week 5.

### Week 5: The Eaton-Kortum Model

- Tutorial this week on student presentations (round 1 continued).

### Week 6: The Eaton-Kortum Model (continued) and the Gravity Model

- Tutorial this week: **TEST!**

### Reading Week!

- Read Antràs quickly.
- Creative writing assignment. Due by 10:00 am on the Tuesday of Week 7.

### Week 7: Trade with Incomplete Contracts

- No tutorial this week.
- Antras problem set assigned. Due by 10:00 am on the Monday of Week 8.
- Read Antras and Helpman (JPE, 2004) and write a one-page summary. Due by 10:00 am on the Tuesday of Week 8.
- Think about group project proposals and be prepared to make suggestions during the week 7 class.
- In class assignment of student paper presentations (round 2). Presentations will be during the tutorials of Weeks 9 and 10.
  1. Ramondo, Natalia, and Andres Rodriguez-Clare, "Trade, Multinational Production, and the Gains from Openness," *Journal of Political Economy*, April 2013, 121 (2).
  2. Helpman, Elhanan, Marc J. Melitz, and Stephen R. Yeaple, "Export versus FDI with Heterogeneous Firms," *American Economic Review*, 2004, 94 (1), 300–316.
  3. Antràs, Pol and Elhanan Helpman, "Contractual Frictions and Global Sourcing," in Elhanan Helpman, Dalia Marin, and Thierry Verdier, eds., *The Organization of Firms in the Global Economy*, Cambridge, MA: Harvard University Press, 2008, pp. 9–54.
  4. Johnson, Robert C. and Guillermo Noguera, "Accounting for Intermediates: Production Sharing and Trade in Value Added," *Journal of International Economics*, March 2012, 86 (2), 224-236.
  5. Sutton, John and Daniel Trefler, "Deductions from the Export Basket: Capabilities, Wealth and Trade." Forthcoming, *Journal of Political Economy*.

6. Antràs, Pol, Mihir Desai and C. Fritz Foley, Multinational Firms, “FDI Flows and Imperfect Capital Markets,” *Quarterly Journal of Economics*, August 2009, 124 (3), 1171-1219.
7. Manova, Kalina, “Credit Constraints, Heterogeneous Firms, and International Trade,” Working Paper 14531, National Bureau of Economic Research, December 2008. (hard).
8. Autor, David H., David Dorn, and Gordon H. Hanson, “Local Labor Market Effects of Import Competition in the United States,” *American Economic Review*, 2013.
- Other papers of interest:
  1. Helpman, Elhanan, “A Simple Theory of International Trade with Multinational Corporations,” *Journal of Political Economy*, June 1984, 92 (3), 451–471.
  2. Markusen, James R. and Anthony J. Venables, “The Theory of Endowment, Intra-Industry and Multinational Trade,” *Journal of International Economics*, December 2000, 52 (2), 209–234. (hard)
  3. Antràs, Pol, and Davin Chor, “Organizing the Global Value Chain,” *Econometrica*, 2013, 81 (6), 2127–2204.
  4. Costinot, Arnaud, and Jon Vogel, “Matching and Inequality in the World Economy,” *Journal of Political Economy*, 2010, 118 (4), 661–676.
  5. Fort, Teresa, “Technology and Production Fragmentation: Domestic versus Foreign Sourcing,” Working Paper, Tuck School of Business, December 2015.

Week 8: Trade with Incomplete Contracts (continued)

- **Group project proposals assigned. Projects will be presented in the class of Week 12.**
- Read Antràs. Write a one-page summary due by 10:00 am on the Tuesday of Week 9.

Week 9: Trade with Incomplete Contracts (continued); The Impact of Institutions on Trade

- Tutorial this week on student presentations (round 2).

Week 10: The Impact of Trade on Institutions

- Tutorial this week on student presentations (round 2 continued).
- Write a one-page creative research proposal. Due by 10:00 am on the Tuesday of Week 11.

Week 11: Trade and Innovation

- Nothing due. Work on group projects.

Week 12: Group Projects Presented.

- No tutorial this week.