

Topics in International Trade and Growth, Winter 2017

This course discusses topics in international trade and growth. Topics discussed in class include: Foreign Direct investment, Quantitative models of foreign production, Incomplete contracting, Offshoring, Trade and growth, Economic geography and internal trade, Why do firms sell more at home than abroad?, Trade and labor markets

Instructor: Felix Tintelnot

Office: Saieh Hall 323

Email: tintelnot@uchicago.edu

Office hours: Wednesday 1:00-2:30pm or email for an appointment

Teaching Assistant: Ken Kikkawa

Email: ayumukikkawa@uchicago.edu

Office hours: email for an appointment

Books

Trade, macro, and IO, all have become quite demanding fields for the researcher. Many successful researchers are both good applied theorists and empiricists and have also a good understanding of computational methods.

For a second year PhD student interested in International Trade I recommend the following books:

Computational stuff:

- Judd (1998): Numerical Methods in Economics, MIT press
- Miranda and Faeckler (2002): Applied Computational Economics and Finance, MIT press [**highly recommended** for second year PhD students; it requires very little initial knowledge and takes you quite far]

Industrial Organization:

- Train (2009): Discrete Choice Methods with Simulation, Cambridge University press [**highly recommended**]
- Anderson, De Palma, and Thisse (1992): Discrete Choice Theory of Product Differentiation, MIT press

Statistics / Distributions:

- Kotz and Nadarajah (2000): Extreme Value Distributions: Theory and Applications, ICP
- Feller (1986): An Introduction to Probability Theory and Its Applications, Vol. I & II, Wiley

Econometrics:

- Cameron and Trivedi (2005): *Microeconometrics: Methods and Applications*, Cambridge University Press
- Hayashi (2000): *Econometrics*, Princeton University Press

Trade:

- Antras (2015): *Global Production: Firms, Contracts, and Trade Structure*
- Feenstra (2015): *Advanced International Trade*, Princeton University Press
- Helpman (2011): *Understanding Global Trade*
- See also the excellent lecture notes by Allen and Arkolakis:
<http://www.econ.yale.edu/~ka265/teaching/GradTrade/notes/ClassNotes.pdf>

Online lecture

Michael Keane gave an excellent lecture on practical issues in structural estimation at UChicago in November 2015. There are many very important suggestions contained in his lecture. Following these can save you months of your research time. They also help to ensure that you produce a good piece of research: <https://bfi.uchicago.edu/video/practical-issues-structural-estimation>

Topics

1. Counterfactual Predictions in simple trade models

Main Readings:

Dekle, Eaton, and Kortum (2008): "Global Rebalancing with Gravity: Measuring the Burden of Adjustment," *NBER WP*

Adao, Costinot, and Donaldson (2016): "Nonparametric Counterfactual Predictions in Neoclassical Models of International Trade," *American Economic Review*

Additional Readings:

(Empirics)

Berry, Levinson, and Pakes (1995): "Automobile Prices in Market Equilibrium," *Econometrica*

Berry and Haile (2015): "Identification in Differentiated Product Markets," *NBER WP*

(Theory)

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

2. Multinational Firms: An introduction

Main Readings:

Antras and Yeaple (2014): "Multinational Firms and the Structure of International Trade,"
Handbook of International Economics, Volume 4

Additional Readings:

Ramondo, Rodriguez-Clare, and Tintelnot (2015): "Multinational Production: Data and Stylized Facts," *AER P&P*

Navaretti and Venables: Multinational Firms in the World Economy

3. Horizontal FDI

Main Readings:

Brainard (1997): "An Empirical Assessment of the Proximity-Concentration Trade-off Between Multinational Sales and Trade," *AER*

Helpman, Melitz, and Yeaple (2004): "Export Versus FDI with Heterogeneous Firms," *AER*

Additional Readings:

Yeaple (2009): "Firm heterogeneity and the structure of U.S. multinational activity," *JIE*

Nocke and Yeaple (2008): "An Assignment Theory of Foreign Direct Investment," *ReStud*

Irrazabal, Moxnes, Opromolla (2013): "The Margins of Multinational Production and the Role of Intrafirm Trade," *JPE*

Keller and Yeaple (2013): "The Gravity of Knowledge," *AER*

4. Vertical FDI

Main Readings:

Helpman (1984): "A Simple Theory of International Trade with Multinational Corporations," *JPE*

Alfaro and Charlton (2009): "Intra-industry Foreign Direct Investment," *AER*

Ramondo, Ruhl, and Rappaport (2016): "Intrafirm Trade and Vertical Fragmentation in U.S. Multinational Corporations," *JIE*

5. Incomplete Contracts and Firms' Integration Strategies

Main Readings:

Grossman and Helpman (2002): "Integration versus outsourcing in industry equilibrium," *QJE*

Pol Antras (2003): "Firms, Contracts, and Trade Structure," *Quarterly Journal of Economics*

Antras and Helpman (2004): "Global Sourcing," *JPE*

Additional Readings:

Antras (2015): "Global Production: Firms, Contracts, and Trade Structure," *Princeton University Press*

Coase (1937): "The Nature of the Firms," *Economica*

Williamson (1985): "The Economic Institutions of Capitalism," Monograph
Grossman and Hart (1986): "The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration," *JPE*
Antras and Chor (2013): "Organizing the global value chain," *Econometrica*
Nunn (2007): "Relationship-Specificity, Incomplete Contracts and the Pattern of Trade," *QJE*

6. Multi-country models of trade and multinational production

Main Readings:

Ramondo and Rodriguez-Clare (2013): "Trade, Multinational Production, and the Gains from Openness," *JPE*
Arkolakis, Ramondo, Rodriguez-Clare, and Yeaple (2014): "Innovation and Production in the Global Economy," Working Paper
Tintelnot (2016): "Global Production with Export Platforms," *Quarterly Journal of Economics*

Additional Readings:

Head and Mayer (2015): "Brands in Motion: How frictions shape multinational production," Working Paper
Burstein and Monge (2009): "Foreign Know-How, Firm Control, and the Income of Developing Countries," *QJE*

7. Multinational firms – Various topics (spillovers, production costs across plants within the firm, relation between local and foreign plants, etc)

Main Readings:

Greenstone, Hornbeck, and Moretti (2010): "Identifying Agglomeration Spillovers: Evidence from Winners and Losers of Large Plant Openings," *JPE*
Giroud (2013): "Proximity and investment: Evidence from plant-level data," *QJE*
Aitken and Harrison (1999): "Do Domestic Firms Benefit from Direct Foreign Investment? Evidence from Venezuela," *AER*
Javorcik (2004): "Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In Search of Spillovers Through Backward Linkages," *AER*

Additional Readings:

Bilir and Morales (2015): "The Impact of Innovation in the Multinational Firm," Working Paper
Bloom, Schankermann, and Van Reenen (2013): "Identifying technology spillovers and product market rivalry," *Econometrica*
Muendler and Becker (2010): "Margins of multinational labor substitution," *AER*

8. Offshoring

Main Readings:

Yi (2003): "Can Vertical Specialization Explain the Growth of World Trade?" *JPE*
Grossman and Rossi-Hansberg (2008): "Trading Tasks: A Simple Theory of Offshoring," *AER*

Antras, Fort, and Tintelnot (2014): "The Margins of Global Sourcing," Working Paper

Additional Readings:

Rodriguez-Clare (2010): "Offshoring in a Ricardian World," *AEJ Macro*

Grossman and Rossi-Hansberg (2012): "Task Trade between Similar countries," *Econometrica*

Blaum, Peters, and Lelarge (2015): "The Gains from Input Trade in Firm-Based Models of Importing," Working Paper

9. Economic Geography and internal trade

Main Readings:

Allen and Arkolakis (2014): "Trade and the Topography of the Spatial Economy," *QJE*

Desmet and Rossi-Hansberg (2014): "Spatial Development," *AER*

Ahlfeldt, Redding, Sturm, and Wolf (2015): "The Economics of Density: Evidence from the Berlin Wall," *Econometrica*

Additional Readings:

Rossi-Hansberg (2005): "A Spatial Theory of Trade," *AER*

Krugman (1991): "Increasing Returns and Economic Geography," *JPE*

10. Trade and Labor market effects

Main Readings:

Goldberg and Pavcnik (2007): "Distributional Effects of Globalization in Developing Countries," *Journal of Economic Literature*

Autor, Dorn, and Hanson (2013): "The China Syndrome: Local Labor Market Effects of Import Competition in the United States," *AER*

David Hummels, Rasmus Jørgensen, Jakob Munch, and Chong Xiang (2014): "The Wage Effects of Offshoring: Evidence from Danish Matched Worker-Firm Data," *AER*

Additional Readings:

Autor, Dorn, Hanson, and Song (2014): "Trade Adjustment: Worker-level Evidence," *QJE*

Acemoglu, Autor, Dorn, and Hanson (2014): "Import Competition and the Great U.S. Employment Sag of the 2000s," *Journal of Labor Economics*

Rob Feenstra (2007), Globalization and its Impact on Labor, Global Economy Lecture, lecture available [here](#)

Cosar, Guner, and Tybout (2015): "Firm Dynamics, Job Turnover, and Wage Distributions in an Open Economy," accepted at *American Economic Review*

Cosar (2013): "Adjusting to Trade Liberalization: Reallocation and Labor Market Policies," Working Paper

Dix-Carneiro (2014): Trade Liberalization and Labor Market Dynamics," *Econometrica*

Helpman and Itskhoki (2010): "Labor market rigidities, trade and unemployment," *ReStud*

Helpman, Itskhoki, and Redding (2010): "Inequality and unemployment in a global economy", *Econometrica*

Helpman, Itskhoki, Muendler, and Redding (2015): "Trade and Inequality: From Theory to Estimation," Working Paper

11. Home Market Advantage and Border effects

Main Readings:

Cosar, Grieco, Li, and Tintelnot (2015): "What Drives Home Market Advantage?" Working Paper

Bronnenberg, Dube, and Gentzkow (2012): "The Evolution of Brand Preferences: Evidence from Consumer Migration," *AER*

Additional Readings:

McCallum (1995): "National Borders Matter: Canada-U.S. Regional Trade Patterns," *AER*

Yi (2010): "Can Multistage Production Explain the Home Bias in Trade?" *AER*

Atkin (2013): "Trade, Tastes and Nutrition in India," *AER*

Bronnenberg, Dhar, and Dube (2008): "Brand History, Geography, and the Persistence of Brand Shares," *JPE*

Cosar, Grieco, and Tintelnot (2015): "Borders, Geography, and Oligopoly: Evidence from the Wind Turbine Industry," *ReStat*

12. Trade, Search, and Networks

Eaton, Jinkins, Tybout, and Xu (2016): "Two Sided Search in International Markets," WP

Bernard, Moxnes, and Saito (2016): "Production Networks, Geography and Firm Performance," WP

Eaton, Kortum, and Kramarz (2016): "Firm-to-Firm Trade: Imports, Exports and the Labor Market," WP

Gabaix (2011): "The Granular Origins of Aggregate Fluctuations," *Econometrica*

Acemoglu, Carvalho, Ozdaglar, and Tahbaz-Salehi: "The network origins of aggregate fluctuations," *Econometrica*

Hulten (1978): "Growth Accounting With Intermediate Inputs," *Review of Economic Studies*

13. Trade Dynamics

Eaton, Kortum, Neiman, and Romalis (2016): "Trade and the Global Recession," *American Economic Review*

Alessandria, Kaboski, and Midrigan (2013): "US Trade and Inventory Dynamics," *American Economic Review*

Gaubert and Itskhoki (2016): "Granular Comparative Advantage," WP

Di Giovanni, Levchenko, and Mejean (2014): "Firms, Destinations, and Aggregate Fluctuations," *Econometrica*

14. Trade and Growth

Grossman and Helpman (1991): "Innovation and Growth in the Global Economy," MIT press
Grossman and Helpman (1995): "Technology and Trade", *Handbook of International Economics*
Frankel and Romer (1999): "Does Trade Cause Growth?" *American Economics Review*
Keller (2001): "International Technology Diffusion," *NBER WP*
Lucas (2009): "Trade and the Diffusion of the Industrial Revolution," *AEJ Macroeconomics*
Sampson (2015): "Dynamic Selection: An Idea Flows Theory of Entry, Trade and Growth," *QJE*
Buera and Oberfield (2015): "The Global Diffusion of Ideas," Working Paper
Perla, Tonetti, and Waugh (2015): "Equilibrium Technology Diffusion, Trade, and Growth," Working Paper

15. Trade Finance

Kalina Manova (2013): "Credit Constraints, Heterogeneous Firms, and International Trade," *ReStud*
Antras and Foley (2015): "Poultry in Motion: A Study of International Trade Finance Practices," *JPE*

Assignments

1. Referee report: (due Friday after week 4, January 27)

Write a referee report on one of the following papers by candidates on this year's job market. Your report should include: a summary of the main features of the paper; a description of its contribution to the literature; its main strengths and weaknesses; and your recommendations to improve it. See also the sample of 2 referee reports on chalk for an example of how to write such a report.

1. Sharat Ganapati: "The Modern Wholesaler: Global Sourcing, Domestic Distribution, and Scale Economics"
2. Meredith Startz: "The Value of Face-to-face: Search and Contracting Problems in Nigerian Trade"
3. Matthew Grant: "Why Special Economic Zones? Using Trade Policy to Discriminate Across Importers"
4. Magyari Ildiko: "Firm Reorganization, Chinese Imports, and US Manufacturing Employment"
5. Ernest Liu: "Industrial Policies and Economic Development" (note: this paper is more development than trade, however related to some of the network papers we will talk about in class)

2. Empirical project (first part due after week 6 [February 14], second part due beginning of finals week [March 14])

I am providing you with a data set on cross-country trade and MP flows, as well as determinants of the standard gravity trade and MP barriers (such as distance, language, and contiguity). The class is going to be split into three groups. Each group is given one particular economic model, and needs to try to calibrate the parameters of the model such that they best fit the observable data.

The three economic models are:

- (i) Tintelnot (2015) (but with no fixed costs of establishing foreign plants)
- (ii) Arkolakis e.a. (2014) (with exogenous entry)
- (iii) Ramondo and Rodriguez-Clare (2013)

The first part is to code up the model and solve for the equilibrium of the model for a fixed (arbitrary) set of parameters. This part is due after week 6.

The second part is then to estimate the model's parameters. This part is due at the beginning of final's week.

3. Research proposal: (due Friday at the end of finals week [March 17])

Write a research proposal on a topic in international economics or economic growth. Expected length of the proposal is 4-7 pages. Please include a bibliography. You can add an Appendix if you want to display additional figures / results / etc.