

Topics in International Trade and Growth, Spring 2021

Topics discussed in class include: Production Networks, Global value chains, Foreign Direct investment, Boundary of the firm and incomplete contracts, Trade and labor markets, Trade and Dynamics, Trade Policy

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Location: Remote only. This class meets Friday from 9:10 to 12:20pm on Zoom.

Remote format: I will aim for roughly 2:40min of lecture time per week. This will be roughly split in three parts. A pre-recorded lecture you should view in the days prior to the Friday meeting, a live lecture on Friday morning starting at 9:10am, and a second live lecture (often by a guest speaker) at 11am. In between there will be roughly an hour break. Note, we may adapt this schedule during the quarter.

Books (and online lectures)

Trade, macro, and IO, all have become quite demanding fields for the researcher. Many successful researchers are both good applied theorists and empiricists. It is also helpful to have 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]
- I recommend you watch this lecture by Michael Keane 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://www.youtube.com/watch?v=0hazaPBAYWE>

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>

Topics

1. Production Networks

Review articles of the literature:

Carvalho and Tahbaz-Salehi (2019): "Production Networks: A Primer," *Annual Review of Economics*

Bernard and Moxnes (2018): "Networks and Trade," *Annual Review of Economics*

Antras and Chor (2021): "Global Value Chains," WP

Closed economy macro:

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

Acemoglu, Carvalho, Ozdaglar, and Tahbaz-Salehi (2012): "The network origins of aggregate fluctuations," *Econometrica*

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

Baqae and Farhi (2019): "The Macroeconomic Impact of Microeconomic Shocks: Beyond Hulten's Theorem," *Econometrica*
Baqae and Farhi (2020): "Productivity and Misallocation in General Equilibrium," *Quarterly Journal of Economics*

Open economy macro:

Antras and De Gortari (2020): "On the Geography of Global Value Chains," *Econometrica*
Caliendo and Parro (2015): "Estimates of the Trade and Welfare Effects of NAFTA," *Review of Economic Studies*
Baqae and Farhi (2021): "Networks, Barriers, and Trade," WP

Endogenous networks (end. links, fixed measure of firms):

Eaton, Jinkins, Tybout, and Xu (2016): "Two-Sided Search in International Markets," WP
Oberfield (2018): "A Theory of Input-Output Architecture," *Econometrica*
Bernard, Moxnes, and Saito (2019): "Production Networks, Geography and Firm Performance," *Journal of Political Economy*
Lim (2018): "Endogenous Production Networks and the Business Cycle," WP
Dhyne, Kikkawa, Mogstad, and Tintelnot (2021): "Trade and Domestic Production Networks," *Review of Economic Studies*
Huneus (2018): "Production Network Dynamics and the Propagation of Shocks," WP
Bernard, Dhyne, Magerman, Manova, and Moxnes (2020): "The Origins of Firm Heterogeneity: A Production Network Approach," WP

Endogenous networks (end. links, fixed measure of firms):

Taschereau-Dumouchel (2020): "Cascades and Fluctuations in an Economy with an Endogenous Production Network," WP
Baqae (2018): "Cascading Failures in Production Networks," *Econometrica*

Empirics of shock propagation:

Acemoglu, Akcigit, and Kerr (2016): "Networks and the Macroeconomy: An Empirical Exploration," *NBER Macroeconomics Annual*
Barrot and Sauvagnat (2016): "Input Specificity and the Propagation of Idiosyncratic Shocks in Production," *Quarterly Journal of Economics*
Boehm, Flaaen, and Pandalai-Nayar (2019): "Input Linkages and the Transmission of Shocks: Firm-Level Evidence from the 2011 Tohoku Earthquake," *Review of Economics and Statistics*
Carvalho, Nirei, Saito, and Tahbaz-Salehi (2021): "Supply Chain Disruptions: Evidence from the Great East Japan Earthquake," *Quarterly Journal of Economics*

Other:

Kikkawa, Magerman, and Dhyne (2020): "Imperfect Competition in Firm-to-Firm Trade," WP
Eaton, Kortum, and Kramarz (2018): "Firm-to-Firm Trade: Imports, Exports and the Labor Market," WP

Johnson and Noguera (2012): "Accounting for Intermediates: Production Sharing and Trade in Value Added," *Journal of International Economics*

Johnson (2018): "Measuring Global Value Chains," *Annual Review of Economics*

2. Theories of the firm, Incomplete Contracts and Firms' Integration Strategies, Offshoring

Main Readings:

Gibbons (2005): "Four formal(izable) theories of the firm?" *Journal of Economic Behavior & Organization*

Grossman and Helpman (2002): "Integration versus outsourcing in industry equilibrium," *Quarterly Journal of Economics*

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

Antras, Fort, and Tintelnot (2017): "The Margins of Global Sourcing: Theory and Evidence from US Firms," *American Economic Review*

Additional Readings:

Antras and Helpman (2004): "Global Sourcing," *Journal of Political Economy*

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," *Journal of Political Economy*

Nunn (2007): "Relationship-Specificity, Incomplete Contracts and the Pattern of Trade," *Quarterly Journal of Economics*

Yi (2003): "Can Vertical Specialization Explain the Growth of World Trade?" *Journal of Political Economy*

Grossman and Rossi-Hansberg (2008): "Trading Tasks: A Simple Theory of Offshoring," *American Economic Review*

Rodriguez-Clare (2010): "Offshoring in a Ricardian World," *American Economic Journal: Macroeconomics*

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

Blaum, Peters, and Lelarge (2018): "The Gains from Input Trade in Firm-Based Models of Importing," *American Economic Journal: Macroeconomics*

3. Multinational Production and Multinational Firms:

Introduction:

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

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

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

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

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

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

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

Navaretti and Venables: Multinational Firms in the World Economy

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

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

Burstein and Monge (2009): "Foreign Know-How, Firm Control, and the Income of Developing Countries," *Quarterly Journal of Economics*

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

Keller and Yeaple (2013): "The Gravity of Knowledge," *American Economic Review*

Multi-country models of trade and multinational production:

Ramondo and Rodriguez-Clare (2013): "Trade, Multinational Production, and the Gains from Openness," *Journal of Political Economy*

Arkolakis, Ramondo, Rodriguez-Clare, and Yeaple (2018): "Innovation and Production in the Global Economy," *American Economic Review*

Tintelnot (2017): "Global Production with Export Platforms," *Quarterly Journal of Economics*

Miscellaneous topics: Barriers to knowledge transfers, Spillovers:

Greenstone, Hornbeck, and Moretti (2010): "Identifying Agglomeration Spillovers: Evidence from Winners and Losers of Large Plant Openings," *Journal of Political Economy*

Giroud (2013): "Proximity and investment: Evidence from plant-level data," *Quarterly Journal of Economics*

Aitken and Harrison (1999): "Do Domestic Firms Benefit from Direct Foreign Investment? Evidence from Venezuela," *American Economic Review*

Javorcik (2004): "Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In Search of Spillovers Through Backward Linkages," *American Economic Review*

Bilir and Morales (2020): "Innovation in the Global Firm," *Journal of Political Economy*

Bloom, Schankermann, and Van Reenen (2013): "Identifying technology spillovers and product market rivalry," *Econometrica*

Muendler and Becker (2010): "Margins of multinational labor substitution," *American Economic Review*

4. 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," *American Economic Review*

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

Lorenzo Caliendo, Maximilian Dvorkin, and Fernando Parro (2019): "Trade and Labor Market Dynamics: General Equilibrium Analysis of the China Trade Shock," *Econometrica*

Additional Readings:

Autor, Dorn, Hanson, and Song (2014): "Trade Adjustment: Worker-level Evidence," *Quarterly Journal of Economics*

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 (2016): "Firm Dynamics, Job Turnover, and Wage Distributions in an Open Economy," *American Economic Review*

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

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

Helpman and Itskhoki (2010): "Labor market rigidities, trade and unemployment," *Review of Economic Studies*

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

Helpman, Itskhoki, Muendler, and Redding (2017): "Trade and Inequality: From Theory to Estimation," *Review of Economic Studies*

5. 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*

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

Ravikumar, Santacreu, Sposi (2019): "Capital accumulation and dynamic gains from trade," *Journal of International Economics*

6. Trade Policy

Main Readings:

Bagwell and Staiger (1999): "An Economic Theory of GATT," *Journal of Political Economy*
Costinot, Rodriguez-Clare, and Werning (2020): "Micro to Macro: Optimal Trade Policy with Firm Heterogeneity," *Econometrica*

Costinot and Werning (2019): "Lerner Symmetry: A Modern Treatment," *American Economic Review: Insights*

Costinot, Donaldson, Vogel, and Werning (2015): "Comparative Advantage and Optimal Trade Policy," *Quarterly Journal of Economics*

Ossa (2014): "Trade Wars and Trade Talks with Data," *American Economic Review*

Lashkaripour (2021): "The Cost of a Global Tariff War: A Sufficient Statistics Approach," *Journal of International Economics*

Handley and Limao (2017): "Policy Uncertainty, Trade, and Welfare: Theory and Evidence for China and the U.S." *American Economic Review*

Recent US Trade Conflicts:

Amiti, Redding, and Weinstein (2019): "The Impact of the 2018 Tariffs on Prices and Welfare," *Journal of Economic Perspectives*

Fajgelbaum, Goldberg, Kennedy, and Khandelwal (2020): "The Return to Protectionism," *Quarterly Journal of Economics*

Flaaen, Hortaçsu, and Tintelnot (2020): "The Production Relocation and Price Effects of US Trade Policy: The Case of Washing Machines," *American Economic Review*

Cavallo, Gopinath, Neiman, and Tang (2021): "Tariff Pass-Through at the Border and at the Store: Evidence from US Trade Policy," *American Economic Review: Insights*

Assignments

1. Referee report: (due Friday after week 3, April 16).

20% of grade

Write a referee report on one of the following papers. 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 Canvas for an example of how to write such a report.

1. Panigrahi (2021): "Endogenous Spatial Production Networks: Quantitative Implications for Trade and Productivity," WP ([link](#))
2. Huneus, Kroft, and Lim (2021): "Earnings Inequality in Production Networks," WP ([link](#))

3. Zavala (2020): "Unfair Trade?Market Power in Agricultural Value Chains," WP ([link](#))
4. Dhingra and Tenreyro (2020): "The Rise of Agribusinesses and its Distributional Consequences," WP ([link](#))

2. Empirical project on production networks (*first part (question 1.) due after week 4 [April 23], questions (2-4) due after week 8 [May 21]*) 40% of grade

See separate file.

3. Research proposal: (due Tuesday of finals week [June 1]) 30% of grade

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.

4. Participation in class 10% of grade