

ECON 871 – Advanced Topics in International Economics

Fall 2016

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Lectures: Tuesdays and Thursdays 9:00 am – 10:50 am, Social Sciences 6116

Webpage: Learn@UW

Course Description

This course takes a theoretical and empirical approach to the study of international trade and investment. The class is structured around research papers, primarily recent contributions to the frontier of international trade research. We will first discuss core trade theories and empirical applications based on these theories. Next, we will turn to more recent theories that focus on the firm's decision to export, investigating the role of heterogeneity in firm productivity on patterns of trade. This will be followed by an exploration of multinational activity and investment abroad, including different types of foreign direct investment and theories of the multinational firm. The last part of the course will touch on recent developments evaluating the effects of trade openness on the domestic economy.

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.

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 **October 13th** and **November 10th**, 30% of final grade

You must write two referee reports. Your first report should be on a paper of your choice from the syllabus that we have not discussed at length in class. Please let me know a week in advance which paper you would like 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. Your second report should be on Gaubert, Cecile and Benjamin Faber (2016), "Tourism and Economic Development: Evidence from Mexico's Coastline."

Each referee report should be 2 pages double spaced. The first 1/2 page 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 other 2 1/2 pages 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. Class participation, 30% of final grade

You are expected to participate in class discussions and should read the paper(s) we will be discussing 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. Once or twice during the semester you will also be asked to present a paper from the syllabus in class (40-50 minutes). Also, during our last class on November 10th, you will be asked to present a brief, early proposal of the idea you plan to develop into your written project proposal (10-15 minutes).

3. Written project proposal (**due December 15th**), 40% of final grade

You must prepare a written proposal of 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. Project proposals are due December 15th.

NOTE: If you are taking this class for credit/no credit, you have to complete either the two referee reports or the written project 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.

NOTE: This class meets in two-hour sessions for ten weeks (**September 6th – November 10th**). One class (**Tuesday, November 8th**) will need to be rescheduled, date TBA.

Tentative Schedule

Technology, Factors, and Trade: Theory and Evidence

1. September 6: Introduction
2. September 8: Ricardian Model I. Dornbusch, Fischer, and Samuelson (1977), Eaton and Kortum (2002)
3. September 13: Ricardian Model II. Eaton and Kortum (2002), Donaldson (2010)
4. September 15: Ricardian Model III. Donaldson (2010)
5. September 20: Factor Endowment Models I. Trefler (1995), Artuc, Chaudhuri, and McLaren (2010)
6. September 22: Factor Endowment Models II and Monopolistic Competition I. Grossman and Maggi (2000), Krugman (1980), Bombardini, Gallipoli, and Pupato (2012)
7. September 27: Monopolistic Competition II. Melitz (2003), Chaney (2008), Arkolakis, Costinot, and Rodriguez-Clare (2012)

Firm Productivity and Trade: Firm Level Evidence

8. September 29: Productivity and Selection. Pavcnik (2002), De Loecker (2011)
9. October 4: Entry Dynamics. Morales, Sheu, and Zahler (2010)
10. October 6: Innovation. Aw, Roberts, and Xu (2011), Goldberg, Khandelwal, Pavcnik, Topalova (2010), Boler, Moxnes, and Ulltveit-Moe (2015)
11. October 11: Technology Upgrading. Bustos (2011), Atkin, et al (2015)
17. October 13: Technology Diffusion: Sampson (2015), Perla, Tonetti, and Waugh (2015), Allen, Bilir, and Tonetti (2016)

The Multinational Firm: Theory and Evidence

12. October 18: Innovation and Productivity Growth: Bilir and Morales (2015)
13. October 20: Multinational Firms with Horizontal, Vertical, and Mixed Firm Structures. Helpman (1984), Brainard (1997), Helpman, Melitz and Yeaple (2004),
14. October 25: Multinational Firms: Irarrazabal, Opromolla, and Moxnes (2013), Bilir, Chor, and Manova (2015)
15. October 27: Contractual Imperfections. Antràs (2003), Antràs (2005), Nunn and Trefler (2008), Antràs and Helpman (2004)
16. November 1: Intellectual Property Rights: Branstetter, Fisman, and Foley (2006), Bilir (2014)

Trade and the Domestic Economy

18. November 3: Structural Transformation. Bustos, Caprettini, Ponticelli (2016)
19. November 10: Labor Markets, Technology, and Productivity: Autor, Dorn, and Hanson (2013); Trade and the Domestic Environment: Shapiro and Walker (2015)
20. Date **TBA**: In-class research presentations

Reading List

Recommended textbooks:

- a) Dixit, Avinash and Victor Norman, *Theory of International Trade*, Cambridge University Press, 1980.
- b) Feenstra, Robert, *Advanced International Trade: Theory and Evidence*, Princeton University Press, 2004.
- c) Helpman, Elhanan and Paul Krugman, *Market Structure and Foreign Trade: Increasing Returns, Imperfect Competition, and the International Economy*, MIT Press, 1985.

Starred articles (*) will be covered at length.

1. Comparative Advantage, Gains from Trade, International Equilibrium and Ricardo

Dixit, Avinash and Victor Norman, Ch. 1, p. 1-8, Ch. 3, p. 65-85, Ch. 4, p. 93-96

Feenstra, Robert, Ch. 1, p. 1-4

* Dornbusch, Rudiger, Stanley Fischer, and Paul Samuelson (1977). "Comparative Advantage, Trade, and Payments in a Ricardian Model with a Continuum of Goods," *American Economic Review*

* Eaton, Jonathan and Samuel Kortum (2002). "Technology, Geography, and Trade," *Econometrica*

* Donaldson, Dave (2010). "Railroads of the Raj: Estimating the Impact of Transportation Infrastructure," *American Economic Review*, forthcoming

Deardorff, Alan (1980). "The General Validity of the Law of Comparative Advantage," *Journal of Political Economy*

Dixit, Avinash and Victor Norman (1986). "Gains from Trade without Lump-Sum Compensation," *Journal of International Economics*

2. Factor Endowment Models

A. Heckscher-Ohlin

Dixit, Avinash and Victor Norman, Ch. 1, p. 8-19, Ch. 2, Ch. 4 p. 96-102, 106-122

Feenstra, Robert, Ch. 1-4

* Trefler, Daniel (1995). "The Case of the Missing Trade and other Mysteries," *American Economic Review*

Jones, Ronald (1965). "The Structure of Simple General Equilibrium Models," *Journal of Political Economy*

Deardorff, Alan and Robert Staiger (1988). "An Interpretation of the Factor Content of Trade," *Journal of International Economics*

Davis, Donald and David Weinstein (2001). "An Account of Global Factor Trade," *American Economic Review*

Zhu, Susan and Daniel Trefler (2005). "Trade and Inequality in Developing Countries: A General Equilibrium Analysis," *Journal of International Economics*

B. Ricardo-Viner

Dixit, Avinash and Victor Norman, Ch. 4, p. 102-106, 122-125

Feenstra, Robert, p. 72-75

* Artuc, Erhan, Shubham Chaudhuri and John McLaren (2010). "Trade Shocks and Labor Adjustment: A Structural Empirical Approach," *American Economic Review*

Neary, Peter (1978). "Short-Run Capital Specificity and the Pure Theory of International Trade," *Economic Journal*

Matsuyama, Kiminori (1992). "A Simple Model of Sectoral Adjustment," *Review of Economic Studies*

Magee, Christopher, Carl Davidson and Steven Matusz, (2005). "Trade, Turnover and Tithing," *Journal of International Economics*

C. Variations

* Grossman, Gene and Giovanni Maggi (2000). "Diversity and Trade," *American Economic Review*

Ohnsorge, Franziska and Daniel Trefler, (2007). "Sorting it Out: International Trade and Protection with Heterogeneous Workers," *Journal of Political Economy*

* Bombardini, Gallipoli, and Pupato (2012), "Skill Dispersion and Trade Flows," *American Economic Review*

3. Monopolistic Competition and Trade

* Helpman, Elhanan and Paul Krugman, Ch. 6-11

* Krugman, Paul, (1980). "Scale Economies, Product Differentiation, and the Pattern of Trade," *American Economic Review*, p. 950-959

* Melitz, Marc (2003). "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity," *Econometrica*, 71(6), p. 1695-1725

Helpman, Elhanan, (1981). "International Trade in the Presence of Product Differentiation, Economies of Scale, and Imperfect Competition: A Chamberlin-Heckscher-Ohlin Approach," *Journal of International Economics*

Krugman, Paul, "Increasing Returns, Imperfect Competition and the Positive Theory of International Trade," in Grossman and Rogoff, Ch. 24

Krugman, Paul, (1979). "Increasing Returns, Monopolistic Competition, and International Trade," *Journal of International Economics*

4. Firms and the Decision to Export: 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*, 98(4)

Melitz, Marc and Gianmarco Ottaviano (2008). "Market Size, Trade and Productivity," *Review of Economic Studies*, 75, p. 295-316

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, Arnaud Costinot, and Andres Rodriguez-Clare (2012). "New Trade Models, Same Old Gains?" *American Economic Review* 102(1).
Sampson, Thomas (2015). "Dynamic Selection: An Idea Flows Theory of Trade and Growth," *Quarterly Journal of Economics*, forthcoming

5. Empirical Evidence on Firm Heterogeneity

* Eaton, Jonathan, Samuel Kortum and Francis Kramarz (2011). "An Anatomy of International Trade: Evidence from French Firms," *Econometrica*, 79(5).
* Eaton, Jonathan, Samuel Kortum and Francis Kramarz (2004). "Dissecting Trade: Firms, Industries, and Export Destinations," *American Economic Review P&P*, 94, p. 150-154
* Arkolakis, Costas (2010). "Market Access Costs and the New Consumers Margin in International Trade," *Journal of Political Economy*, 118(6), p. 1151-1199
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*
Helpman, Elhanan, Marc Melitz and Yona Rubinstein (2008). "Estimating Trade Flows: Trading Partners and Trading Volumes," *Quarterly Journal of Economics*, 123(2), p. 441-487
Broda, Christian and David Weinstein (2006). "Globalization and the Gains from Variety," *Quarterly Journal of Economics* 121(2)
* Morales, Eduardo, Gloria Sheu, Andres Zahler (2010). "Gravity and Extended Gravity: A Structural Model of Export Entry," Columbia University mimeo
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 (2011). "Zeros, Quality and Space: Trade Theory and Trade Evidence," *American Economic Journal: Microeconomics*, 3, p. 60-88
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, Dave Donaldson, and Ivana Komunjer (2012). "What Goods Do Countries Trade? New Ricardian Predictions," *Review of Economic Studies*, 79(2).
Allen, Treb (2014). "Information Frictions in Trade" *Econometrica*.

6. Trade Liberalization and Wage Inequality

Bernard, Andrew, Bradford Jensen and Peter Schott (2006). "Trade Costs, Firms and Productivity," *Journal of Monetary Economics*, 53(5), p. 917-937
Verhoogen, Eric (2008). "Trade, Quality Upgrading and Wage Inequality in the Mexican Manufacturing Sector: Theory and Evidence from an Exchange-Rate Shock," *Quarterly Journal of Economics*, 123(2), p. 489-530
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
Helpman, Elhanan, Oleg Itskhoki, Marc Muendler, Stephen Yeaple (2013). "Trade and
Inequality: From Theory to Estimation," mimeo

7. 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)

8. Multi-Product Firms

Bernard, Andrew, Stephen Redding and Peter Schott (2010). "Multi-Product Firms and Product
Switching," *American Economic Review*, 100 (1), p. 70-97
Bernard, Andrew, Stephen Redding and Peter Schott (2011). "Multi-Product Firms and Trade
Liberalization," *Quarterly Journal of Economics*
Arkolakis, Costas and Marc Muendler (2011). "The Extensive Margin of Exporting Goods: A
Firm-Level Analysis," UCSD mimeo

9. 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 (2007). "Contracts and Technology
Adoption," *American Economic Review* 97(3), p. 916-943
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, *Review of Economic Studies*, 74(3)
Levchenko, Andrei (2007). "International Trade and Institutional Change,"
Costinot, Arnaud (2006). "On the Origins of Comparative Advantage," University of San Diego
mimeo

10. Trade and Labor Market Frictions

Helpman, Elhanan and Oleg Itskhoki (2010). "Labor Market Rigidities, Trade and Unemployment," *Review of Economic Studies*, 77(3), p. 1100-1137

Cuñat, Alejandro and Marc Melitz (2007). "Volatility, Labor Market Flexibility and Comparative Advantage," *Journal of the European Economic Association*, forthcoming.

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 (2011). "Good Jobs, Bad Jobs, and Trade Liberalization," *Journal of International Economics*

11. Horizontal FDI and the Proximity-Concentration Hypothesis

* Helpman, Elhanan and Paul Krugman, Ch. 12-14

* 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

Tintelnot, Felix (2015). "Global Production with Export Platforms" mimeo.

12. 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

* Ramondo, Natalia and Andres Rodriguez-Clare (2010). "Trade, Multinational Production, and the Gains from Openness," mimeo

* Arkolakis, Costas, Natalia Ramondo, Andres Rodriguez-Clare, Stephen Yeaple (2012). "Innovation and Production in the Global Economy," mimeo

* Hanson, Gordon, Raymond Mataloni and Matthew Slaughter (2005). "Vertical Production

Networks in Multinational Firms," *Review of Economics and Statistics*, 87(4), p. 664-678.
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
Bilir and Morales (2015), "The Impact of Innovation in the Multinational Firm," mimeo
Antràs, Pol, Teresa Fort, and Felix Tintelnot (2015) "The Margins of Global Sourcing: Theory and Evidence from U.S. Firms," mimeo.

13. 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 (2005). "Incomplete Contracts and the Product Cycle," *American Economic Review*, 95(4), p. 1054-1073
* 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). "Offshoring, 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
Bernard, Andrew, Jensen, Bradford, Redding, Stephen, and Peter Schott (2010). "Intra-firm Trade and Product Contractibility." *American Economic Review P&P*, 100(2), p. 444-448.
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

14. Multinationals and Institutional Frictions: Intellectual Property

* Branstetter, Lee, Raymond Fisman and Fritz Foley (2006). "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

- * Bilir, Kamran (2014). "Patent Laws, Product Lifecycle Lengths, and Multinational Activity," *American Economic Review*
- Javorcik, Beata (2004). "The Composition of Foreign Direct Investment and Protection of Intellectual Property Rights: Evidence from Transition Economies," *European Economic Review*, 48, p. 39-62
- Branstetter, Lee, Raymond Fisman, Fritz Foley, Kamal Saggi (2011). "Does Intellectual Property Rights Reform Spur Industrial Development?" *Journal of International Economics*, 83(1), p. 27-36

15. Trade, FDI, and Capital Market Frictions

- Manova, Kalina (2013). "Credit Constraints, Heterogeneous Firms and International Trade," *Review of Economic Studies*
- Antràs, Pol, Mihir Desai, and Fritz Foley (2007). "Multinational Firms, FDI Flows and Imperfect Capital Markets," *Quarterly Journal of Economics*, 124(3), p. 1171-1219
- * Bilir, Kamran, Davin Chor, and Kalina Manova (2013). "Multinational Activity and Host Country Financial Development," mimeo
- Desai, Mihir, Fritz Foley and Kristin Forbes (2007). "Financial Constraints and Growth: Multinational and Local; Firm Responses to Currency Depreciations," *Review of Financial Studies*, 21(6), p. 2857-2888
- Manova, Kalina (2008). "Credit Constraints, Equity Market Liberalizations and International Trade," *Journal of International Economics*, 76, p. 33-47
- Antràs, Pol and Ricardo Caballero (2009). "Trade and Capital Flows: A Financial Frictions Perspective," *Journal of Political Economy*, 117(4), p. 701-744
- Chesnokova, Tatyana (2007). "Immiserizing Deindustrialization: A Dynamic Trade Model with Credit Constraints," *Journal of International Economics*
- 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 Illinois at Urbana-Champaign 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

16. Organization of Production Within Firms

- Antràs, Pol and Estaban Rossi-Hansberg, (2009). "Organizations and Trade," *Annual Review*
- Antràs, Pol, Luis Garicano and Esteban Rossi-Hansberg (2006). "Offshoring in a Knowledge Economy," *Quarterly Journal of Economics*, 121(1), p. 31-77
- Garicano, Luis and Esteban Rossi-Hansberg (2004). "Inequality and the Organization of Knowledge," *American Economic Review* P&P, 94(2), p. 197-202
- Garicano, Luis and Esteban Rossi-Hansberg (2006). "Organization and Inequality in a Knowledge Economy," *Quarterly Journal of Economics*, 121(4), p. 1383-1435
- Grossman, Gene and Esteban Rossi-Hansberg (2008). "Trading Tasks: A Simple Theory of Offshoring," *American Economic Review*, 98(5), p. 1978-1997
- Costinot, Arnaud (2009). "On the Origins of Comparative Advantage," *Journal of International Economics*, 77, p. 255-264

Costinot, Arnaud, Jonathan Vogel, and Su Wang (2011). "An Elementary Theory of Global Supply Chains," *Review of Economic Studies*

Antràs, Pol, and Davin Chor (2013). "Organizing the Global Value Chain," *Econometrica*.

Alfaro, Laura, Pol Antràs, Davin Chor, and Paula Conconi (2015). "Internalizing Global Value Chains: A Firm-Level Analysis" mimeo.

17. Trade and Productivity

- * Aw, Bee Yan, Mark Roberts, and Daniel Xu (2011). "R&D Investment, Exporting, and the Evolution of Firm Productivity," *American Economic Review*, 101(4), p. 1312-1344
- * Pavcnik, Nina (2002). "Trade Liberalization, Exit, and Productivity Improvements: Evidence from Chilean Plants," *The Review of Economic Studies*, 69, p. 245-76
- * De Loecker, Jan (2011). "Product Differentiation, Multiproduct Firms, and Estimating the Impact of Trade Liberalization on Productivity," *Econometrica*, 79(5), p. 1407-1451.
- 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
- 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
- De Loecker, Jan, Penny Goldberg, and Amit Khandelwal (2012). "Prices, Markups, and Trade Reform," Yale University mimeo.
- * Goldberg, Penny, Amit Khandelwal, Nina Pavcnik, and Petia Topalova (2010). "Imported Intermediate Inputs and Domestic Product Growth: Evidence from India," *Quarterly Journal of Economics*, 125(4), p. 1727-67.
- * Boler, Moxnes, and Ulltveit-Moe (2015), "R&D, International Sourcing and the Joint Impact on Firm Performance," *American Economic Review*
- * Bustos, Paula (2011). "Trade Liberalization, Exports, and Technology Upgrading: Evidence on the Impact of MERCOSUR on Argentinian Firms," *American Economic Review*
- * Atkin, Khandelwal, and Osman (2015), "Exporting and Firm Performance: Evidence from a Randomized Trial," mimeo

18. Trade and Structural Transformation

- * Bustos, Caprettini, Ponticelli (2016), "Agricultural Productivity and Structural Transformation. Evidence from Brazil," *American Economic Review*, forthcoming
- Fajgelbaum and Redding (2015), "External Integration, Structural Transformation and Economic Development: Evidence from Argentina 1870-1914," mimeo

19. Domestic Effects of Import Competition

- * Bloom, Draca, Van Reenen (2015), "Trade Induced Technical Change? The Impact of Chinese Imports on innovation, IT and Productivity," *American Economic Review*
- * Autor, Dorn, and Hanson (2013), "The China Syndrome: Local Labor Market Effects of Import Competition in the United States," *American Economic Review*
- Dix-Carneiro, Rafael and Brian Kovak (2015). "Trade Reform and Regional Dynamics: Evidence from 25 Years of Brazilian Matched Employer-Employee Data," mimeo.

Kovak, Brian (2013). "Regional Effects of Trade Reform: What is the Correct Measure of Liberalization?" *American Economic Review*

20. Internal Trade Costs and Spatial Frictions: Theory and Evidence

Allen, Treb and Costas Arkolakis (2014). "Trade and the Topography of the Spatial Economy," *Quarterly Journal of Economics*.

Gaubert, Cecile (2015). "Firm Sorting and Agglomeration," mimeo.

Davis, Donald and Jonathan Dingel (2013). "A Spatial Knowledge Economy," mimeo.

Davis, Donald and Jonathan Dingel (2015). "The Comparative Advantage of Cities," mimeo.

Atkin, David and Dave Donaldson (2015). "Who's Getting Globalized? The Size and Implications of Intranational Trade Costs," mimeo.