

International Trade

Fall Term 2020

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Office hours: by appointment

Evaluation:

The first part of the course will be structured as a lecture. Depending on the number of students, the second part will be organized as a reading group, where we will discuss papers at the research frontier. Students will be evaluated according to problem sets/mid-term exam (60%), presentations (40%).

Textbooks:

No single textbook covers the course adequately. Some useful references for parts of the course are:

Dixit, A.K. and V. Norman (1980): *Theory of International Trade*, Cambridge University Press. **(DN)**

Feenstra, R.C. (2015): *Advanced International Trade: Theory and Evidence*, 2nd edition, Princeton University Press. **(F)**

Helpman, E. and P.R. Krugman (1985): *Market Structure and Foreign Trade*, MIT Press. **(HK)**

Topics will be covered in the lectures, except for topics that are marked with **. These will not be covered in the lectures, unless we advance faster than expected. Topics 11-13 will be covered by presentations, depending on the students' interest. Papers marked with # are particularly well suited for presentations/discussion in class.

****Topic 1. Gains from Trade****

Bernhofen, D.M. and J.C. Brown (2005): "An Empirical Assessment of the Comparative Advantage Gains from Trade," *American Economic Review*, Vol. 95 (1).

Bhagwati, J. and T. Srinivasan (1983): *Lectures on International Trade*, MIT Press, Chapter 14.

DN: Chapter 3.

F: Chapter 6.

****Topic 2. Comparative Advantage****

Bernhofen, D.M. and J.C. Brown (2004): "A Direct Test of the Theory of Comparative Advantage: The Case of Japan," *Journal of Political Economy*, 112: 48-67.

Deardorff, A. (1980): "The General Validity of the Law of Comparative Advantage," *Journal of Political Economy*, Dec., 88(5), 941-957.

DN: Chapter 4.

Topic 3. Technological Differences: The Ricardian Model

Caliendo, L. and F. Parro (2014): "The Trade and Welfare Effects of NAFTA," *The Review of Economic Studies*, (2015) 82 (1): 1-44.

* Costinot, A. (2009): "An Elementary Theory of Comparative Advantage," *Econometrica*, 77, 4, 1165–1192.

* Costinot, A., D. Donaldson, and I. Komunjer (2012): "What Goods Do Countries Trade? A Quantitative Exploration of Ricardo's Ideas," *Review of Economic Studies*, 79(2), 581-608.

* Dornbusch, R., S. Fischer and P. Samuelson (1977): "Comparative Advantage, Trade, and Payments in a Ricardian Model with a Continuum of Goods," *American Economic Review*, December.

* Eaton, J. and S. Kortum (2002): "Technology, Geography, and Trade," *Econometrica*, 70, 1741-1779.

Fadinger, H. and P. Fleiss (2011): "Trade and Sectoral Productivity," *Economic Journal*, 121(554), 958-989.

Topic 4. Relative Factor Endowment Differences: The Heckscher-Ohlin Model

Bowen H., E. Leamer and L. Sveikauskas (1987): "Multicountry, Multifactor Tests of the Factor Abundance Theory," *American Economic Review*, Dec., 77(5), 791-809.

* Davis D., and D. Weinstein. (2001): "An Account of Global Factor Trade." *American Economic Review* 91, no. 5 (2001): 1423–53.

* Dornbusch, R., S. Fischer, and P.A. Samuelson (1980): "Heckscher-Ohlin Trade Theory with a Continuum of Goods," *Quarterly Journal of Economics*, 95, 203-224.

Fadinger, H. (2011): "Productivity Differences in an Interdependent World," *Journal of International Economics* 84 (2), 221-232.

*F: Chapter 2.

*HK1: Chapter 1.

Morrow, Peter M. (2010): "Ricardian-Heckscher-Ohlin Comparative Advantage: Theory and Evidence." *Journal of International Economics* 82 (2), 137–51.

* Romalis, J. (2004): "Factor Proportions and the Structure of Commodity Trade," *American Economic Review*, 94(1), pp. 67-97.

* Trefler, D. (1993): "International Factor Price Differences: Leontief Was Right!" *Journal of Political Economy*, Dec., 101(6), 961-987.

*Trefler, D. (1995): "The Case of the Missing Trade and Other Mysteries," *American Economic Review*, Dec., 85(5), 1029-1046.

Schott, Peter K. (2003) "One Size Fits All? Heckscher-Ohlin Specialization in Global Production." *American Economic Review* 93 (3), 686–708.

Topic 5. New Trade Theory

Brander, J.A. and P.R. Krugman (1983): "A "Reciprocal Dumping" Model of International Trade," *Journal of International Economics*, 15, 313-321.

Hanson, G. and C. Xiang (2004): "The Home Market Effect and Bilateral Trade Patterns," *American Economic Review*, 94 (4), pp. 1108-1129.

HK1: Chapters 5-11.

Hummels, D. and Levinsohn, J. (1995): "Monopolistic Competition and International Trade: Reconsidering the Evidence," *Quarterly Journal of Economics*, 110(3), 799-836.

* Krugman, P.R. (1979): "Increasing Returns, Monopolistic Competition, and International Trade," *Journal of International Economics*, November 9 (4), 469-479.

* Krugman, P.R. (1980): "Scale Economies, Product Differentiation, and the Pattern of Trade," *American Economic Review* 70, 950-959.

Topic 6. Heterogeneous Firm Models

Arkolakis, C., A. Costinot, and A. Rodríguez-Clare (2012): “New Trade Models, Same Old Gains?” *American Economic Review*, 102 (1), 94-130.

Bernard, A.B., J. Eaton, J.B. Jensen, and S. Kortum (2003): “Plants and Productivity in International Trade,” *American Economic Review*, 93(4), 1268-1290.

* Bernard, Jensen, et al. (2007): “Firms in International Trade,” *Journal of Economic Perspectives* 21, 3, 105–130.

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

Bernard, Andrew B., Stephen J. Redding, and Peter K. Schott (2007): “Comparative Advantage and Heterogeneous Firms,” *Review of Economic Studies*, 73, 31-66.

* Bernard, Andrew B., Stephen J. Redding, and Peter K. Schott (2011): “Multiproduct Firms and Trade Liberalization,” *Quarterly Journal of Economics*, 126 (3): 1271-1318.

Bernard, A., E. Dhyne, G. Magerman, K. Manova, and A. Moxnes (2018): “The Origins of Firm Heterogeneity: A Production Network Approach”, mimeo

Eaton, Kortum,, Kramarz. (2011): “An Anatomy of International Trade: Evidence from French Firms.” *Econometrica*, 79 (5), 1453–1498.

Hottman, Colin, Stephen Redding and David Weinstein (2016): “Quantifying the Sources of Firm Heterogeneity”, *Quarterly Journal of Economics*, 131(3), 1291-1364-

Lileeva, A. and D. Trefler (2010). "Improved Access to Foreign Markets Raises Plant-Level Productivity...For Some Plants." *Quarterly Journal of Economics*, 125 (3): 1051-1099.

* Melitz, M.J. (2003): “The Impact of Trade on Intra-industry Reallocations and Aggregate Industry Productivity,” *Econometrica*, 71: 1695-1725.

* Melitz, M.J. and G.I. Ottaviano (2008): “Market Size, Trade, and Productivity,” *Review of Economic Studies*, 75, 295-316.

* Melitz M. and S. Redding (2014) “Heterogeneous Firms and Trade” in *Handbook of International Economics*, G .Gopinath, E.Helpman and K.Rogoff eds., Elsevier.

* Trefler, D. (2004): “The Long and Short of the Canada-U.S. Free Trade Agreement,” *American Economic Review*, 94, 870-895.

Topic 7: Gravity and Trade Costs

Atkin, D. and D. Donaldson (2015) "[Who's Getting Globalized? The Size and Implications of Intranational Trade Costs](#)", mimeo

Anderson, James E, and Van Wincoop (2004), "[Trade Costs](#)." *Journal of Economic Literature* 42, 691–751.

Chaney, T. (2008): "Distorted Gravity: The Intensive and Extensive Margins of International Trade," *American Economic Review*, 98, 4, 1707-21.

Donaldson, Dave (2015). "Railroads of the Raj: Estimating the Impact of Transportation Infrastructure." *American Economic Review*.

Head, K., and T. Mayer (2014), "Gravity Equations: Workhorse, Toolkit, and Cookbook", chapter 3 in Gopinath, G, E. Helpman and K. Rogoff (eds), vol. 4 of the *Handbook of International Economics*, Elsevier: 131-195.

Helpman, Melitz, Rubinstein. "Estimating Trade Flows: Trading Partners and Trading Volumes." *Quarterly Journal of Economics* 123, 2 (2008): 441–87.

Hummels, David (2007), "Transportation Costs and International Trade in the Second Era of Globalization." *Journal of Economic Perspectives* 21 (3), 131–54.

Topic 8. Multinationals, FDI and Firm Organization

Alfaro, Laura, Pol Antràs, Davin Chor, and Paola Conconi (2018): "Internalizing Global Value Chains: A Firm-Level Analysis," *Journal of Political Economy*

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

* Antràs, P. And E. Helpman (2004): "Global Sourcing," *Journal of Political Economy*, 112 (3).

*Antràs, Pol, and Stephen R Yeaple (2014) "Multinational Firms and the Structure of International Trade." In *Handbook of International Economics*, 4:55-130

Antràs, P., and E. Rossi-Hansberg (2009) "Organizations and Trade." *Annual Review of Economics* 1, no. 1 (2009): 43–64. (NBER Working Paper no. 14262)

Brainard, S.L. (1993): "A Simple Theory of Multinational Corporations and Trade with a Trade-Off Between Proximity and Concentration," *NBER Working Paper* #4269.

* Brainard, S.L. (1997): “An Empirical Assessment of the Proximity-Concentration Trade-off between Multinational Sales and Trade,” *American Economic Review*, 87(4), 520-44.

Chor, D. and L. Ma (2020): Contracting Frictions in Global Sourcing: Implications for Welfare, mimeo

Helpman, E. (1984): “A Simple Theory of International Trade with Multinational Corporations,” *Journal of Political Economy*, 451-71.

* Helpman, E., M.J. Melitz and S. Yeaple (2004): “Export versus FDI with Heterogeneous Firms,” *American Economic Review*, 94: 300-316.

Nocke, V., and S. Yeaple (2008) "An Assignment Theory of Foreign Direct Investment." *Review of Economic Studies* 75 (2), 529–57.

*Nunn, N. and D. Trefler (2007): “The Boundaries of the Multinational Firm: An Empirical Analysis,” in Helpman E., Marin D., Verdier T. (Eds.), *The Organization of Firms in a Global Economy*, Harvard University Press, 55-83.

Tintelnot, Felix (2016): “Global Production with Export Platforms”, *Quarterly Journal of Economics*

Topic 9: Trade, Offshoring, and Inequality

Acemoglu, D. and D. H. Autor (2011): “Skills, Tasks and Technologies: Implications for Employment and Earnings,” *Handbook of Labor Economics* Volume 4, Orley Ashenfelter and David E. Card (eds.), Amsterdam: Elsevier.

* Autor, D., D. Dorn, and G. Hanson (2013): “The China Syndrome: Local Labor Market Effects of Import Competition in the United States,” *American Economic Review* 103 (6), 2121–2168.

David Autor, David Dorn, Gordon Hanson, and Jae Song (2014): “Trade Adjustment: Worker Level Evidence,” *Quarterly Journal of Economics*, 129(4), 1799–1860.

Burstein, A. and J. Vogel (2016): “International Trade, Technology and the Skill Premium,” *Journal of Political Economy*.

*Carluccio J., A. Cunat, H. Fadinger and C. Fons-Rosen (2019): “Offshoring and Skill-Upgrading in French Manufacturing,” *Journal of International Economics*

Feenstra R., and G. Hanson. (1999): "The Impact of Outsourcing and High-Technology Capital on Wages: Estimates For The United States, 1979–1990." *The Quarterly Journal of Economics* 114 (3), 907–40.

*Grossman, Gene M, and E. Rossi-Hansberg (2008): "Trading Tasks: A Simple Theory of Offshoring." *American Economic Review* 98 (5), 1978–97.

Hsieh, Chang-Tai, and Woo (2005): "The Impact of Outsourcing to China on Hong Kong's Labor Market." *American Economic Review* 95 (5), 1673–87.

*Hummels, D., R. Jørgensen, J. Munch, and C. Xiang (2014): "The Wage Effects of Offshoring: Evidence from Danish Matched Worker-Firm Data." *American Economic Review*, 104(6): 1597-1629.

Topic 10: Production Function Estimation, Measuring Productivity and Markups

Akerberg, D., G. Frazer, and K. Caves (2015): Identification Properties of Recent Production Function Estimators," *Econometrica* 83(6).

Edmond, Midrigan, Xu (2019): How costly are markups?, mimeo.

Chris Edmond and Virgiliu Midrigan, Daniel Xu (2015): "Competition, Markups, and the Gains from International Trade", *American Economic Review*.

Halpern, L., M. Koren and A. Szeidl (2015): Imported Inputs and Productivity, *American Economic Review* 105 (12) .

Levinsohn, J., and A. Petrin (2003): Estimating Production Functions Using Inputs to Control for Unobservables," *Review of Economic Studies*,70(2), 317-341.

De Loecker, J. (2011): Product Differentiation, Multi-Product Firms and Estimating Trade Liberalization on Productivity," *Econometrica* 79(5), 1407-1451.

De Loecker, J. and F. Warczinsky (2012); "Markups and Firm-level Export Status, " *American Economic Review* 102 (6).

De Loecker, J., J. Eeckhout and G. Unger, (2020) "The Rise of Market Power and the Macroeconomic Implications", *Quarterly Journal of Economics*, 135 (2) 561–644

Olley, G. S., and A. Pakes (1996): The dynamics of productivity in the telecommunications equipment industry," *Econometrica*, 64(6).

Pavcnik, N. (2002): Trade Liberalization, Exit, and Productivity Improvement: Evidence from Chilean Plants," *Review of Economic Studies*, 69(1), 245-76.

Wooldridge, J., (2009): On estimating firm-level production functions using proxy variables to control for unobservables, *Economics Letters*, 104(3).

Topic 11: Importing and global value chains

Antràs, P., L. Garicano, et al. (2006): "Offshoring in a Knowledge Economy," *The Quarterly Journal of Economics* 121 (1), 31–77.

Antràs, P., T. Fort and F. Tintelnot (2017): "The Margins of Global Sourcing: Theory and Evidence from U.S. Firms", *American Economic Review* .

Antràs, Pol, and Alonso de Gortari (2020): "[On the Geography of Global Value Chains](#)," *Econometrica*

Joaquin Blaum, Claire Lelarge, and Michael Peters (2018), "The Gains from Input Trade with Heterogeneous Importers", *AEJ macro*.

Costinot, A., J. Vogel, et al. (2013): "An Elementary Theory of Global Supply Chains." *Review of Economic Studies* 80, 109–44.

E. Dhyne, K. Kikkawa, and M. Mogstadt, F. Tintelnot (2017): "Trade and Domestic Production Networks", mimeo

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

Rodriguez-Clare, A. (2010): "Offshoring in a Ricardian World." *American Economic Journal: Macroeconomics* 2 (2), 227–58.

Yi, K. (2003): "Can Vertical Specialization Explain the Growth of World Trade?" *Journal of Political Economy* 111 (1), 52–102.

Topic 12: Trade Policy

Brander, J.A. and B.J. Spencer (1984): "Export Subsidies and International Market Share Rivalry," *Journal of International Economics*, 18: 83-100.

Blanchard, E., C. Bown and R. Johnson (2017): "Global Value Chains and Trade Policy," mimeo.

*Broda, C., N. Limão, and D.E. Weinstein (2007): "Optimal Tariffs and Market Power: The Evidence," *American Economic Review*

#Caliendo, L. and F. Parro (2019): "The Quantitative Effects of Trade Policy on Industrial and Labor Reallocation", mimeo.

A. Campolmi, H. Fadinger, C. Forlati (2014): „Trade Policy: Home Market Effect versus Terms-of-Trade Externality,“ *Journal of International Economics* 93 (1), 92-107

A. Campolmi, H. Fadinger, C. Forlati (2018): „Trade and Domestic Policies in Models with Monopolistic Competition,“ *mimeo*

F: Chapters 6-8.

Felbermayr, Gabriel, Jung, Benjamin and Larch, Mario (2013): "Optimal tariffs, retaliation, and the welfare loss from tariff wars in the Melitz model," *Journal of International Economics*, 89(1), 13-25.

*Grossman, G. and Helpman, E. (1994): "Protection for Sale," *American Economic Review*, 84(4), 833-50.

HK2: Several chapters.

*Ossa, R. (2011): "A New Trade Theory of GATT/WTO Negotiations", *Journal of Political Economy*, 119(1):122-152.

Ossa, R. (2014): "Trade Wars and Trade Talks with Data," *American Economic Review* 104(12): 4104-46, December 2014

*Staiger R. W. and K. Bagwell (1999): "An Economic Theory of GATT," *American Economic Review*, 89 (1), 215-248.

Venables, A. J. (1987): "Trade and Trade Policy with Differentiated Products: A Chamberlinian-Ricardian Model," *Economic Journal*, 97 (387), 700-717.

Topic 13 : Trade Dynamics with Heterogeneous Firms

Alessandria, G and H. Choi (2007) "Do Sunk Costs of Exporting Matter for Net Export Dynamics?", *Quarterly Journal of Economics*, pp. 289-336.

Alfaro, L., A. Cunat, H. Fadinger and Yanping Liu (2018): "The Real Exchange Rate, Innovation and Productivity", NBER Working Paper No. 24633.

Aw, Bee Yan, Mark Roberts and Daniel Yi Xu (2011): "R&D Investment, Exporting, and Productivity Dynamics", *American Economic Review*.

Bøler, Esther Ann, Andreas Moxnes and Karen Helene Ulltveit-Moe (2015): "R&D, International Sourcing, and the Joint Impact on Firm Performance." *American Economic Review*, 105(12):3704-39.

Das, S., M. Roberts and J. Tybout (2007): "Market Entry Costs, Producer Heterogeneity and Export Dynamics, *Econometrica*

Roberts, M. and James Tybout (1997): "The Decision to Export in Colombia: An Empirical Model of Entry with Sunk Costs." *American Economic Review* 87, (4) 545–64.

Roberts, M., X. Fan, D Xu and S. Zhang: (2018): "The Role of Firm Factors in Demand, Cost, and Export Market Selection for Chinese Footwear Producers", *Review of Economic Studies*

Rule, K. and J. Willis (2017): “New Exporter Dynamics”, *International Economic Review*

Topic 14: Trade and Labor Markets.

#Caliendo, L.m M. Dvorkin and F. Parro (2019) “Trade and Labor Market Dynamics: General Equilibrium Analysis of the China Trade Shock”, *Econometrica*, 87(3): 741–835.

Coşar AK, N Guner, J Tybout (2016): “Firm dynamics, job turnover, and wage distributions in an open economy,” *American Economic Review* 106 (3), 625-663

Cuñat, A. and M.J. Melitz (2007): “Volatility, Labor Market Flexibility, and the Pattern of Comparative Advantage,” NBER Working Paper #13062.

Dix-Carneiro, R. (2014): “Trade Liberalization and Labor Market Dynamics,” *Econometrica*, 82 (3).

Felbermayr, Gabriel and Prat, Julien and Schmerer, Hans-Jörg (2011): "Globalization and labor market outcomes: Wage bargaining, search frictions, and firm heterogeneity," *Journal of Economic Theory*, 146(1), 39-73.

Helpman, E., and O. Itskhoki (2010): “Labour Market Rigidities, Trade and Unemployment,” *Review of Economic Studies* 77: 1100-1137.

Helpman, E., O. Itskhoki, M. Muendler and S. Redding (2016): “Trade and Inequality: From Theory to Estimation,” *Review of Economic Studies*.