

# Empirical Topics in International Economics

April 8, 2015

Instructor: Marc-Andreas Muendler  
Office: Economics 312  
Office hours: Thu 11:00a - 12:00n (or by appointment)  
Phone: (858) 534-4799  
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Class Time: TueThu 12:30p - 1:50p  
Classroom: Sequoyah 244  
Class Web Page: [econ.ucsd.edu/muendler/teach/15s/247](http://econ.ucsd.edu/muendler/teach/15s/247)

## 1 Course Objectives

This course examines empirical work in international trade and its theoretical foundations. On the theory side, the course considers the determinants of the trade pattern in goods and services, explanations of export-market participation and multinational activity at the firm level, as well as the interaction of international trade with the income distribution and commercial policy. The empirical part of the course presents tests of theories of international trade and international capital movements, and the analysis of their consequences for economic outcomes.

## 2 Prerequisites

Instructor's consent.

## 3 Readings

**Textbooks:** Feenstra (2004); Eaton and Kortum (2010);  
partly Bhagwati, Panagariya, and Srinivasan (1998)

**Readings:** See Class schedule and References.

The Eaton and Kortum textbook draft and readings are available through the class web page (see above). For each lecture, there are up to three types of readings. The *basic reading* is the textbook reference, or the classic article, on which a large part of the lecture notes will be based; you are *not* asked to write your weekly report on those. The *main* readings include original papers or book chapters, on which you are asked to write your weekly report; the main reading is a recent academic publication (rarely more than one) for you to understand and discuss. *Additional readings* are points of departure for related research questions; you may choose to write your weekly report on an additional reading.

Lecture slides are available for download from the course web page.

## 4 Paper reports

There are typically two lectures per week, and each lecture has designated *main readings* as well as *additional readings* on this syllabus (unless the additional reading is a survey article).

You are asked to send me *one* paper report by e-mail per week, starting in week 2, either on the readings of the Tuesday lecture or on the readings of the Thursday lecture. You can pick among the main and the additional readings for your report. Please paste your report into the *body of the e-mail*. No report is due for lectures 1 and 2. Starting with Lecture 3 on April 7, there are two lectures per week through May 28; one report is due for each of these eight weeks. Note that there is a special Monday lecture on May 18 but not Thursday lecture on May 21. On lecture days when the main readings are followed by the remark “jointly” the report for the main readings has to be based on all the (short) main readings,

Your report should be no longer than two (2) paragraphs and provide a summary of the paper’s main insights and lessons. For theoretical papers, and the occasional historic conceptual paper, the summary should describe the main hypothesis and building blocks of the model, recount the main steps of the reasoning in the derivation, and assess the novelty and generality of the model. For empirical papers, the summary should describe the main features of the data source, explain the empirical procedure and identification strategy, and assess the robustness and generality of the results. For each paper, the summary concludes with a brief assessment of the role and relevance of the paper in the literature.

The paper report e-mail is due *before* the respective class, at 12:00n of the day of class. For example, if you choose to review the main reading of the Tuesday lecture, then the report is due at 12:00n before the class on Tuesday.

## 5 Problem sets

Three problem sets will be distributed for the first three blocks of the quarter. The problem sets ask you derive key aspects of trade models that likely inform and discipline empirical work on related topics. Problem set 1 will cover Industry-level Trade Theory, problem set 2 Firm-level Trade Theory and problem set 3 Global Production. Each problem set is given out close to the beginning of the according topic block (April 7, April 23 and May 12) and due upon conclusion of the according topic block (April 21, May 7, May 28). Also see the Class Schedule for dates.

## 6 Project presentation

The last week of class will be devoted to student presentations. By yourself or in groups of two or three, you will choose a recent research paper at the frontier of research in international trade and use work of your own to replicate or go beyond the paper you present. For this purpose, you will propose a paper of your choice by Monday, May 25 at 5pm. In rare cases, I may ask you to select another paper by Wednesday, May 27. The paper presentation should explain the paper’s main insights in a style similar to a seminar and emphasize your own research work beyond the paper you present. Ideally, you will conclude with ideas for serious own follow-up research. The presentation should be based on slides.

## 7 Final exam

There will be a two-hour final exam on Monday, June 8.

## 8 Assessment

There are four components of assessment: eight paper reports (during weeks 2-9 of the quarter), three problem sets (throughout the first part of the quarter), the oral presentation (in week 9), and the final exam (during finals week). The final exam will count for 25 percent of the final letter grade; the paper reports, the problem sets, and the oral presentation also for 25 percent each. Strong class room participation throughout the quarter will be counted towards performance in the latter three categories.

## 9 Class Schedule

### I. Foundations

#### 1. Tue, March 31: Empirical Foundations

*Basic reading:* Eaton and Kortum (2010)/Ch. 2

*(Additional readings:* Bernard and Jensen 1995, Bernard, Jensen, Redding, and Schott 2007, Bernard, Jensen, and Schott 2009, Eaton, Kortum, and Kramarz 2004)

#### 2. Thu, April 2: Analytic Foundations and the Gravity Equation

*Basic readings:* Eaton and Kortum (2010)/Ch. 3, Feenstra (2004)/Ch. 5, Head and Mayer (2014)

*Main reading:* Anderson and van Wincoop (2003)

*(Additional readings:* Armington 1969, Anderson 1979, Anderson and van Wincoop 2004)

### II. Industry-level Trade Theory and Empirics

#### 3. Tue, April 7: Technology and Geography in the Global Economy

*Basic reading:* Eaton and Kortum (2010)/Ch. 4-6 (sections 4.1, 4.4, 5.1-5.4, 6.1-6.5)

*Main reading:* Eaton and Kortum (2002)

*(Additional readings:* Alvarez and Lucas 2007, Eaton, Kortum, and Kramarz 2011, Armenter and Koren 2014)

PROBLEM SET 1 OUT

#### 4. Thu, April 9: Classic Productivity Differences and Trade

*Basic readings:* Eaton and Kortum (2010)/Ch. 3, Feenstra (2004)/Ch. 1

*Main reading:* Dornbusch, Fischer, and Samuelson (1977)

*(Additional readings:* Eaton and Kortum 2012, Ricardo 1821, Obstfeld and Rogoff 1996/Ch. 4.5)

#### 5. Tue, April 14: Endowment Differences and Trade

*Basic readings:* Feenstra (2004)/Ch. 1-2, Bhagwati, Panagariya, and Srinivasan (1998)/Ch. 5-6

*Main reading:* Ohlin (1931)

*(Additional readings:* Schott 2004; Dornbusch, Fischer, and Samuelson 1980, Costinot and Vogel 2010)

#### 6. Thu, April 16: Many Goods, Many Factors and Evidence

*Basic readings:* Feenstra (2004)/Ch. 3, Bhagwati, Panagariya, and Srinivasan (1998)/Ch. 8

*Main reading:* Davis and Weinstein (2001)

*(Additional readings:* Leontief 1953, Trefler 1995, Bernhofen and Brown 2004, Romalis 2004)

#### 7. Tue, April 21: Trade Policy

*Basic readings:* Feenstra (2004)/Ch. 2-3, Bhagwati, Panagariya, and Srinivasan (1998)/Ch. 12, Maggi (2014)

*Main reading:* Broda, Limão, and Weinstein (2008)  
*(Additional reading:* Bergstrand and Egger 2013)  
PROBLEM SET 1 DUE

### III. Firm-level Trade Theory and Empirics

**8. Thu, April 23:** Monopolistic Competition and Increasing Returns

*Basic reading:* Bhagwati, Panagariya, and Srinivasan (1998)/Ch. 11

*Main reading:* Krugman (1980)

*(Additional readings:* Helpman and Krugman 1985/Ch. 6-9, Dixit and Stiglitz 1977, Broda and Weinstein 2006)

PROBLEM SET 2 OUT

**9. Tue, April 28:** Exporter Heterogeneity and the Size Distribution of Firms

*Main readings:* Axtell (2001), Eaton, Kortum, and Kramarz (2004), Bernard, Jensen, Redding, and Schott (2007), cumulatively

*(Additional readings:* Roberts and Tybout 1997, Clerides, Lach, and Tybout 1998, Gibrat 1931, Sutton 1997)

**10. Thu, April 30:** Intermission on Multidimensional Panel Data

*Main reading:* Abowd, Kramarz, and Woodcock (2008)

*(Additional readings:* Abowd, Kramarz, and Margolis 1999, Moreira 2009)

**11. Tue, May 5:** Heterogeneity with Fixed Costs of Exporting

*Basic readings:* Melitz (2003), Melitz and Redding (2014)

*Main reading:* Das, Roberts, and Tybout (2007)

*(Additional readings:* Melitz and Trefler 2012, Bernard, Redding, and Schott 2007, Chaney 2008)

**12. Thu, May 7:** Multi-product Firms

*Main reading:* Eckel and Neary (2010)

*(Additional readings:* Arkolakis, Ganapati, and Muendler 2014, Bernard, Redding, and Schott 2011)

PROBLEM SET 2 DUE

### IV. Global Production

**13. Tue, May 12:** Offshoring and Trade in Intermediate Inputs

*Basic reading:* Feenstra (2004)/Ch. 4

*Main reading:* Koopman, Wang, and Wei (2014)

*(Additional readings:* Feenstra and Hanson 1999, Ebenstein, Harrison, McMillan, and Phillips 2014, Johnson and Noguera 2012)

PROBLEM SET 3 OUT

**14. Thu, May 14:** Trade in Tasks

*Main reading:* Grossman and Rossi-Hansberg (2008)

*(Additional readings:* Leamer and Storper 2001, Levy and Murnane 2004, Blinder 2009, Jensen and Kletzer 2010)

**15. Mon, May 18, 10:00a-11:20a (special date):** Horizontal Foreign Direct Investment

*Basic readings:* Feenstra (2004)/Ch. 11, Antràs and Yeaple (2014)

*Main reading:* Helpman, Melitz, and Yeaple (2004)

*(Additional readings:* Brainard 1997, Markusen and Venables 2000, Ekholm, Forslid, and Markusen 2007)

**16. Tue, May 19:** Firm Boundaries and Vertical Foreign Direct Investment

*Basic readings:* Feenstra (2004)/Ch. 11, Antràs and Yeaple (2014)

*Main reading:* Antràs (2003)

*(Additional readings:* Antràs and Helpman 2004, Hanson, Mataloni, and Slaughter 2005)

**Mon, May 25:** PROPOSAL FOR PAPER PRESENTATION DUE

## V. Local Impacts of Global Markets

**17. Tue, May 26:** Determinants and Consequences of Multinational Firm Activity

*Basic reading:* Feenstra (2004)/Ch. 11

*Main readings:* Carr, Markusen, and Maskus (2001), Blonigen, Davies, and Head (2003) and Carr, Markusen, and Maskus (2003), jointly

*(Additional reading:* Muendler and Becker 2010, Helpman 2006)

**18. Thu, May 28:** Trade and Labor-market Outcomes

*Main reading:* Autor, Dorn, and Hanson (2013)

*(Additional readings:* Harrison, McLaren, and McMillan 2011, Artuç, Chaudhuri, and McLaren (2010), Amiti and Davis (2011), Helpman, Itskhoki, and Redding (2010), Bazzi, Menezes-Filho, and Muendler 2014)

PROBLEM SET 3 DUE

**Fri, May 29:** SCHEDULE OF STUDENT PRESENTATIONS OUT

**Tue, June 2:** STUDENT PRESENTATIONS

**Thu, June 4:** STUDENT PRESENTATIONS

PROBLEM SET 3 DUE

**Mon, June 8:** FINAL EXAM 11:30am-1:30pm

## References

- ABOWD, J. M., F. KRAMARZ, AND D. N. MARGOLIS (1999): "High Wage Workers and High Wage Firms," *Econometrica*, 67(2), 251–333.
- ABOWD, J. M., F. KRAMARZ, AND S. WOODCOCK (2008): "Econometric Analyses of Linked Employer-Employee Data," in *The econometrics of panel data*, ed. by L. Mátyás, and P. Sevestre, vol. 46 of *Advanced Studies in Theoretical and Applied Econometrics*, chap. 22, pp. 727–760. Springer, Berlin.
- ALVAREZ, F., AND R. E. J. LUCAS (2007): "General Equilibrium Analysis of the Eaton-Kortum Model of International Trade," *Journal of Monetary Economics*, 54(6), 1726–68.
- AMITI, M., AND D. R. DAVIS (2011): "Trade, Firms, and Wages: Theory and Evidence," *Review of Economic Studies*, 79(1), 1–36.
- ANDERSON, J. E. (1979): "A Theoretical Foundation for the Gravity Equation," *American Economic Review*, 69(1), 106–16.
- ANDERSON, J. E., AND E. VAN WINCOOP (2003): "Gravity with Gravitas: A Solution to the Border Puzzle," *American Economic Review*, 93(1), 170–92.
- (2004): "Trade Costs," *Journal of Economic Literature*, 42(3), 691–751.
- 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), 552–580.
- ANTRÀS, P., AND S. R. YEAPLE (2014): "Multinational Firms and the Structure of International Trade," in *Handbook of International Economics*, ed. by E. Helpman, K. Rogoff, and G. Gopinath, vol. 4, chap. 2, pp. 55–130. Elsevier, Amsterdam.
- ARKOLAKIS, C., S. GANAPATI, AND M.-A. MUENDLER (2014): "The Extensive Margin of Exporting Products: A Firm-level Analysis," University of California, San Diego, unpublished manuscript (earlier version *NBER Working Paper*, 16641).
- ARMENTER, R., AND M. KOREN (2014): "A Balls-and-Bins Model of Trade," *American Economic Review*, 104(7), 2127–51.
- ARMINGTON, P. S. (1969): "A Theory of Demand for Products Distinguished by Place of Production," *International Monetary Fund Staff Papers*, 16(1), 159–178.
- ARTUÇ, E., S. CHAUDHURI, AND J. MCLAREN (2010): "Trade Shocks and Labor Adjustment: A Structural Empirical Approach," *American Economic Review*, 100(3), 1008–1045.
- AUTOR, D. H., D. DORN, AND G. H. HANSON (2013): "The China Syndrome: Local Labor Market Effects of Import Competition in the United States," *American Economic Review*, 103(6), 2121–68.
- AXTELL, R. L. (2001): "Zipf Distribution of U.S. Firm Sizes," *Science*, 293(5536), 1818–20.
- BAZZI, S., N. A. MENEZES-FILHO, AND M.-A. MUENDLER (2014): "Labor Reallocation in Response to Trade Reform," University of California, San Diego, unpublished manuscript.
- BERGSTRAND, J. H., AND P. EGGER (2013): "What Determines BITs?," *Journal of International Economics*, 90(1), 107–22.
- BERNARD, A. B., AND J. B. JENSEN (1995): "Exporters, Jobs, and Wages in U.S. Manufacturing: 1976-1987," *Brookings Papers on Economic Activity: Microeconomics*, 1995(1), 67–112.
- BERNARD, A. B., J. B. JENSEN, S. J. REDDING, AND P. K. SCHOTT (2007): "Firms in International Trade," *Journal of Economic Perspectives*, 21(3), 105–30.
- BERNARD, A. B., J. B. JENSEN, AND P. K. SCHOTT (2009): "Importers, Exporters, and Multinationals: A Portrait of Firms in the U.S. that Trade Goods," in *Producer Dynamics: New Evidence from Micro Data*, ed. by T. Dunne, J. B. Jensen, and M. J. Roberts, vol. 68 of *Studies in Income and Wealth*, chap. 14, pp. 513–552. University of Chicago Press, Chicago.
- BERNARD, A. B., S. J. REDDING, AND P. K. SCHOTT (2007): "Comparative Advantage and Heterogeneous Firms," *Review of Economic Studies*, 74(1), 31–66.
- (2011): "Multiproduct Firms and Trade Liberalization," *Quarterly Journal of Economics*, 126(3), 1271–1318.
- 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(1), 48–67.
- BHAGWATI, J. N., A. PANAGARIYA, AND T. N. SRINIVASAN (1998): *Lectures on International Trade*. MIT Press, Cambridge, Massachusetts, 2nd edn.
- BLINDER, A. S. (2009): "How Many U.S. Jobs Might Be Offshorable?," *World Economics*, 10(2), 41–78.
- BLONIGEN, B. A., R. B. DAVIES, AND K. HEAD (2003): "Estimating the Knowledge-Capital Model of the Multinational Enterprise: Comment," *American Economic Review*, 93(3), 980–994.
- BRAINARD, S. L. (1997): "An Empirical Assessment of the Proximity-Concentration Trade-off between Multinational Sales and Trade," *American Economic Review*, 87(4), 520–544.

- BRODA, C., N. LIMÃO, AND D. E. WEINSTEIN (2008): "Optimal Tariffs and Market Power: The Evidence," *American Economic Review*, 98(5), 2032–65.
- BRODA, C., AND D. E. WEINSTEIN (2006): "Globalization and the Gains from Variety," *Quarterly Journal of Economics*, 121(2), 541–85.
- CARR, D. L., J. R. MARKUSEN, AND K. E. MASKUS (2001): "Estimating the Knowledge-Capital Model of the Multinational Enterprise," *American Economic Review*, 91(3), 693–708.
- (2003): "Estimating the Knowledge-Capital Model of the Multinational Enterprise: Reply," *American Economic Review*, 93(3), 995–1001.
- CHANEY, T. (2008): "Distorted Gravity: The Intensive and Extensive Margins of International Trade," *American Economic Review*, 98(4), 1707–21.
- CLERIDES, S. K., S. LACH, AND J. R. TYBOUT (1998): "Is Learning by Exporting Important? Micro-dynamic Evidence from Colombia, Mexico, and Morocco," *Quarterly Journal of Economics*, 113(3), 903–47.
- COSTINOT, A., AND J. VOGEL (2010): "Matching and Inequality in the World Economy," *Journal of Political Economy*, 118(4), 747–86.
- DAS, S., M. J. ROBERTS, AND J. R. TYBOUT (2007): "Market Entry Costs, Producer Heterogeneity, and Export Dynamics," *Econometrica*, 75(3), 837–873.
- DAVIS, D. R., AND D. E. WEINSTEIN (2001): "An Account of Global Factor Trade," *American Economic Review*, 91(5), 1423–53.
- DIXIT, A. K., AND J. E. STIGLITZ (1977): "Monopolistic Competition and Optimum Product Diversity," *American Economic Review*, 67(3), 297–308.
- DORNBUSCH, R., S. FISCHER, AND P. A. SAMUELSON (1977): "Comparative Advantage, Trade, and Payments in a Ricardian Model with a Continuum of Goods," *American Economic Review*, 67(5), 823–39.
- (1980): "Heckscher-Ohlin Trade Theory with a Continuum of Goods," *Quarterly Journal of Economics*, 95(2), 203–24.
- EATON, J., AND S. KORTUM (2002): "Technology, Geography, and Trade," *Econometrica*, 70(5), 1741–79.
- (2010): "Technology in the Global Economy: A Framework for Quantitative Analysis," University of Chicago, unpublished manuscript.
- (2012): "Putting Ricardo to Work," *Journal of Economic Perspectives*, 26(2), 65–90.
- EATON, J., S. KORTUM, AND F. KRAMARZ (2004): "Dissecting Trade: Firms, Industries, and Export Destinations," *American Economic Review: Papers and Proceedings*, 94(2), 150–54.
- (2011): "An Anatomy of International Trade: Evidence from French Firms," *Econometrica*, 79(5), 1453–98.
- EBENSTEIN, A., A. HARRISON, M. MCMILLAN, AND S. PHILLIPS (2014): "Estimating the Impact of Trade and Offshoring on American Workers using the Current Population Surveys," *Review of Economics and Statistics*, 96(4), 581–95.
- ECKEL, C., AND J. P. NEARY (2010): "Multi-Product Firms and Flexible Manufacturing in the Global Economy," *Review of Economic Studies*, 77(1), 188–217.
- EKHOLM, K., R. FORSLID, AND J. R. MARKUSEN (2007): "Export-Platform Foreign Direct Investment," *Journal of the European Economic Association*, 5(4), 776–795.
- FEENSTRA, R. C. (2004): *Advanced international trade: Theory and evidence*. Princeton University, Princeton, New Jersey.

- FEENSTRA, R. C., AND G. H. HANSON (1999): "The Impact of Outsourcing and High-Technology Capital on Wages: Estimates for the United States, 1979-1990," *Quarterly Journal of Economics*, 114(3), 907-40.
- GIBRAT, R. (1931): *Les inégalités économiques. Applications: Aux inégalités des richesses, a la concentration des entreprises, aux populations des villes, aux statistiques des familles, etc., d'une loi nouvelle: La loi de l'effect proportionnel*. Librairie du Recueil Sirey, Paris.
- GROSSMAN, G. M., AND E. ROSSI-HANSBERG (2008): "Trading Tasks: A Simple Theory of Offshoring," *American Economic Review*, 98(5), 1978-97.
- HANSON, G. H., R. J. MATALONI, AND M. J. SLAUGHTER (2005): "Vertical Production Networks in Multinational Firms," *Review of Economics and Statistics*, 87(4), 664-678.
- HARRISON, A., J. MCLAREN, AND M. MCMILLAN (2011): "Recent Perspectives on Trade and Inequality," *Annual Review of Economics*, 3(1), 261-89.
- HEAD, K., AND T. MAYER (2014): "Gravity Equations: Workhorse, Toolkit, and Cookbook," in *Handbook of International Economics*, ed. by E. Helpman, K. Rogoff, and G. Gopinath, vol. 4, chap. 3, p. 131-195. Elsevier, Amsterdam.
- HELPMAN, E. (2006): "Trade, FDI, and the Organization of Firms," *Journal of Economic Literature*, 44(3), 589-630.
- HELPMAN, E., O. ITSKHOKI, AND S. REDDING (2010): "Inequality and Unemployment in a Global Economy," *Econometrica*, 78(4), 1239-1283.
- HELPMAN, E., AND P. KRUGMAN (1985): *Market Structure and Foreign Trade: Increasing Returns, Imperfect Competition, and the International Economy*. MIT Press, Cambridge, Massachusetts.
- HELPMAN, E., M. J. MELITZ, AND S. R. YEAPLE (2004): "Export versus FDI with Heterogeneous Firms," *American Economic Review*, 94(1), 300-316.
- JENSEN, J. B., AND L. G. KLETZER (2010): "Measuring Tradable Services and the Task Content of Offshorable Services Jobs," in *Labor in the New Economy*, ed. by K. G. Abraham, J. R. Spletzer, and M. J. Harper, no. 71 in *Studies in Income and Wealth*, chap. 8, pp. 309-35. University of Chicago Press, Chicago and London.
- JOHNSON, R. C., AND G. NOGUERA (2012): "Accounting for Intermediates: Production Sharing and Trade in Value Added," *Journal of International Economics*, 86(2), 224-36.
- KOOPMAN, R., Z. WANG, AND S. J. WEI (2014): "Tracing Value-Added and Double Counting in Gross Exports," *American Economic Review*, 104(2), 459-94.
- KRUGMAN, P. R. (1980): "Scale Economies, Product Differentiation, and the Pattern of Trade," *American Economic Review*, 70(5), 950-59.
- LEAMER, E. E., AND M. STORPER (2001): "The Economic Geography of the Internet Age," *Journal of International Business Studies*, 32(4), 641-65.
- LEONTIEF, W. (1953): "Domestic Production and Foreign Trade; The American Capital Position Re-Examined," *Proceedings of the American Philosophical Society*, 97(4), 332-349.
- LEVY, F., AND R. J. MURNANE (2004): *The New Division of Labor*. Princeton University Press, Princeton.
- MAGGI, G. (2014): "International Trade Agreements," in *Handbook of International Economics*, ed. by E. Helpman, K. Rogoff, and G. Gopinath, vol. 4, chap. 6, pp. 317-390. Elsevier, Amsterdam.
- MARKUSEN, J. R., AND A. J. VENABLES (2000): "The Theory of Endowment, Intra-industry and Multi-national Trade," *Journal of International Economics*, 52(2), 209-234.
- MELITZ, M. J. (2003): "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity," *Econometrica*, 71(6), 1695-1725.



- MELITZ, M. J., AND S. J. REDDING (2014): "Heterogeneous Firms and Trade," in *Handbook of International Economics*, ed. by E. Helpman, K. Rogoff, and G. Gopinath, vol. 4, chap. 1, pp. 1–54. Elsevier, Amsterdam.
- MELITZ, M. J., AND D. TREFLER (2012): "Gains from Trade When Firms Matter," *Journal of Economic Perspectives*, 26(2), 91–118.
- MOREIRA, M. J. (2009): "A Maximum Likelihood Method for the Incidental Parameter Problem," *Annals of Statistics*, 37(6A), 3660–3696.
- MUENDLER, M.-A., AND S. O. BECKER (2010): "Margins of Multinational Labor Substitution," *American Economic Review*, 100(5), 1999–2030.
- OBSTFELD, M., AND K. ROGOFF (1996): *Foundations of international macroeconomics*. MIT Press, Cambridge, Mass. and London.
- OHLIN, B. (1931): *Interregional and International Trade*, vol. 39 of *Harvard Economic Studies*. Harvard University, Cambridge, 2nd (1952) edn., Chapter 6, pp. 91–113.
- RICARDO, D. (1821): *On the Principles of Political Economy and Taxation*. John Murray, London, 3rd edn.
- ROBERTS, M. J., AND J. R. TYBOUT (1997): "The Decision to Export in Colombia: An Empirical Model of Entry with Sunk Costs," *American Economic Review*, 87(4), 545–64.
- ROMALIS, J. (2004): "Factor Proportions and the Structure of Commodity Trade," *American Economic Review*, 94(1), 67–97.
- SCHOTT, P. K. (2004): "Across-Product versus Within-Product Specialization in International Trade," *Quarterly Journal of Economics*, 119(2), 647–78.
- SUTTON, J. (1997): "Gibrat's Legacy," *Journal of Economic Literature*, 35(1), 40–59.
- TREFLER, D. (1995): "The Case of the Missing Trade and Other Mysteries," *American Economic Review*, 85(5), 1029–46.