

Firms, Products and Workers in International Trade

September 2, 2009

Instructor: Marc-Andreas Muendler
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Class Times and Rooms: Thu Sep 3, 13.45-15.15 (1-A) and 15.30-17.00 (1-B): PO43
Fri Sep 4, 09.00-10.20 (2-A) and 10.30-11.45 (2-B): PO43
Mon Sep 7, 10.00-11.20 (3-A) and 11.30-12.45 (3-B): 410
Mon Sep 14, 10.00-11.30 (4-A) and 11.45-13.00 (4-B): 410
Office hours: after class and Mon Sep 7, 13.00-15.00: room 410
Class Web Page: econ.ucsd.edu/muendler/teach/09f/intl

1 Course Objectives

This course examines the role of firms, their products and their workforces in international trade. The course starts out with a discussion of production and production factors in classic trade theory, which provides the general-equilibrium background for micro-founded models. To provide insight beyond balanced trade, the initial lectures will also present models with a non-zero current account. The course proceeds to present the setup and novel predictions of models with homogeneous and heterogeneous firms, considering both exogenous and endogenous firm-level productivity, and issues of technology adoption with endogenous productivity. These models provide important new implications for trade policy and empirical analysis of entry and exit, job creation and destruction. A final theory segment is dedicated to trade in tasks, which can affect workers of different skills in ways unforeseen by earlier trade theory, and to the adoption of products by firms, offering new insight into market entry and exit. The concluding segment discusses empirical evidence on trading firms, their products and workers and presents panel-data methods to analyze microeconomic data.

2 Prerequisites

Instructor's consent.

3 Readings

To cover a broad range of topics in a short time, some insights will only be highlighted, while other models will be presented in depth. The following readings will help you to deepen the highlighted insights and to revisit the in-depth models.

Textbooks: Feenstra (2004, ch. 1-5), Obstfeld and Rogoff (1996, ch. 1&4)

Readings: Dornbusch, Fischer and Samuelson (1977), Krugman (1980), Melitz (2003), Yeaple (2005), Chaney (2008), Grossman and Rossi-Hansberg (2008), Arkolakis and Muendler (2009); Bernard, Jensen, Redding and Schott (2007), Bernard, Jensen and Schott (2009); Abowd, Kramarz and Woodcock (2008)

Links to the readings will become available through the class web page.

4 Research Paper Proposal

A short research paper proposal is part of your course work. The proposal should be around four to eight pages in length. The proposal can take many forms: you can use a model from class, alter a crucial assumption, and show how it leads to different implications; you can take a model from class and propose a novel estimation procedure on available data sets; you can construct a little sample economy from scratch to address an overlooked issue and explore its effects; you can explore new data sources and document how previously unaddressed issues could be brought closer to an answer. The proposal includes a brief review of the related literature, and a sketch of a theoretical model along with its conjectured implications *or* a discussion of an available data set and an estimation procedure along with its identifying assumptions. A draft of the paper proposal is due on Friday, September 11, 5:00p (Central European Summer Time).

I will hold office hours to discuss an outline of your research proposal on September 7 after class and to discuss your graded research proposal on September 14 after class.

5 Assessment

Your grade will be based on a short research paper proposal, which is part of your course work.

If you wish to discuss an outline of your research proposal, please see me for office hours right after class on September 7.

6 Class Schedule

- 1-A. Thu, Sep 3: Production, Labor and Capital in Classic Theory:** The principle of comparative advantage (Feenstra 2004, ch. 1); balanced trade, intertemporal trade and the current account (Obstfeld and Rogoff 1996, ch. 1); Ricardian trade theory and the Dornbusch-Fischer-Samuelson model (Dornbusch et al. 1977)
- 1-B. Thu, Sep 3: Production, Labor and Capital in Classic Theory:** Heckscher-Ohlin trade theory (Feenstra 2004, ch. 1-3), and a Heckscher-Ohlin model with an open current account (Obstfeld and Rogoff 1996, ch. 4)
- 2-A. Fri, Sep 4: Firms and Workers in Recent Theory:** Intra-industry trade (Krugman 1980); the gravity equation (Feenstra 2004, ch. 5); the Melitz model setup (Melitz 2003)
- 2-B. Fri, Sep 4: Firms and Workers in Recent Theory:** The Melitz model equilibrium (Melitz 2003, Chaney 2008); technology adoption, workers and ex-post heterogeneity (Yeaple 2005)
- 3-A. Mon, Sep 7: Firms, Tasks and Products in Recent Theory:** Offshoring and trade in intermediate goods (Feenstra 2004, ch. 4); trade in tasks (Grossman and Rossi-Hansberg 2008)
- 3-B. Mon, Sep 7: Firms, Tasks and Products in Recent Theory:** Product adoption (Arkolakis and Muendler 2009)
- 4-A. Mon, Sep 14: Microdata Empirics in International Trade:** The firm size distribution (Axtell 2001); characteristics of exporters, importers and multinational firms (Bernard et al. 2007, 2009)
- 4-B. Mon, Sep 14: Microdata Empirics in International Trade:** Estimation of multiple fixed effects (Abowd et al. 2008)

References

- Abowd, John M., Francis Kramarz, and Simon Woodcock**, "Econometric Analyses of Linked Employer-Employee Data," in László Mátyás and Patrick Sevestre, eds., *The econometrics of panel data*, Vol. 46 of *Advanced Studies in Theoretical and Applied Econometrics*, Berlin: Springer, 2008, chapter 22, pp. 727–760.
- Arkolakis, Costas and Marc-Andreas Muendler**, "The Extensive Margin of Exporting Goods: A Firm-level Analysis," February 2009. University of California, San Diego, unpublished manuscript (URL econ.ucsd.edu/muendler).
- Axtell, Robert L.**, "Zipf Distribution of U.S. Firm Sizes," *Science*, September 2001, 293 (5536), 1818–20.
- Bernard, Andrew B., J. Bradford Jensen, and Peter K. Schott**, "Importers, Exporters, and Multinationals: A Portrait of Firms in the U.S. that Trade Goods," in Timothy Dunne, J. Bradford Jensen, and Mark J. Roberts, eds., *Producer Dynamics: New Evidence from Micro Data*, Vol. 68 of *Studies in Income and Wealth*, Chicago: University of Chicago Press, May 2009, chapter 14, pp. 513–552.
- , —, **Stephen J. Redding, and Peter K. Schott**, "Firms in International Trade," *Journal of Economic Perspectives*, Summer 2007, 21 (3), 105–30.
- Chaney, Thomas**, "Distorted Gravity: The Intensive and Extensive Margins of International Trade," *American Economic Review*, September 2008, 98 (4), 1707–21.
- Dornbusch, Rudiger, Stanley Fischer, and Paul A. Samuelson**, "Comparative Advantage, Trade, and Payments in a Ricardian Model with a Continuum of Goods," *American Economic Review*, December 1977, 67 (5), 823–39.
- Feenstra, Robert C.**, *Advanced International Trade: Theory and Evidence*, Princeton and Oxford: Princeton University Press, 2004.
- Grossman, Gene M. and Esteban Rossi-Hansberg**, "Trading Tasks: A Simple Theory of Offshoring," *American Economic Review*, December 2008, 98 (5), 1978–97.
- Krugman, Paul R.**, "Scale Economies, Product Differentiation, and the Pattern of Trade," *American Economic Review*, 1980, 70 (4), 950–59.
- Melitz, Marc J.**, "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity," *Econometrica*, November 2003, 71 (6), 1695–1725.
- Obstfeld, Maurice and Kenneth Rogoff**, *Foundations of international macroeconomics*, Cambridge, MA and London: MIT Press, 1996.
- Yeaple, Stephen Ross**, "A Simple Model of Firm Heterogeneity, International Trade, and Wages," *Journal of International Economics*, January 2005, 65 (1), 1–20.