

Donald Davis
1038 IAB
212-854-4037

Fall 2009
Office Hours: Weds 1-2 PM
e-mail: drd28@columbia.edu

Columbia University
Department of Economics
Economics G6903: International Trade

This is a PhD level course in positive international trade – that is, understanding patterns and volumes of trade (not trade policy). The prerequisite is knowledge of the first year PhD economics core material. Familiarity with international trade at an undergraduate level is helpful, although not required.

The readings have been divided, with two ** indicating the most important, one * indicating the next most important, and no stars indicating that the reading is for pleasure or adventure!

I am revising the material in this course (always) and so you should expect revisions as we move along (which will be posted in an online version).

The course will have the following requirements:

- Three referee reports. Due by email by Friday noon of the 4th, 7th, and 10th weeks of the class. Details separately. (60 percent of the grade);
- An in-class midterm in the seventh meeting of the class (20 percent of the grade);
- A comprehensive final exam (20 percent of the grade).

Electronic Resources

Virtually all of the papers and resources listed here are downloadable online. The key sites are Google Scholar, Social Sciences Citation Index, and Econlit. Note that Google Scholar allows you to set preferences for Columbia University, so to retrieve a tremendous amount of the literature via e-link_@_columbia.

Of course, you should also visit the websites of the people whose work in an area you find most exciting.

Remember: “*It is false economy to stint on books.*” — Paul Samuelson

Strongly Recommended Books

Recent years have seen a wealth of excellent books directed at the PhD student and professional economists. Many are now available in inexpensive paper editions at outlets such as Amazon.com , Barnes & Noble.com , or BookFinder.com (and others).

Dixit, Avinash and Victor Norman *Theory of International Trade* Oxford U. Pr. 1980. (DN)
Feenstra, Robert C., *Advanced International Trade: Theory and Evidence*, Princeton U. Pr. 2004.
Fujita, M. Krugman, P., and Venables, A. *The Spatial Economy*, MIT Press (2001). (FKV)
Grossman, Gene and E. Helpman, *Innovation and Growth in the Global Economy*, 1991 MIT. (GH)
Helpman, Elhanan and Krugman, Paul, *Market Structure and Foreign Trade*, MIT 1985. (HK)

Leamer, E., ed., *International Economics* (Worth Series in Outstanding Contributions), Worth 2001. (L-ed.)

Recommended Books

- Richard Baldwin, Philippe Martin, Frederic Robert-Nicoud, Gianmarco Ottaviano, Rikard Forslid, *Economic Geography and Public Policy*, Princeton U. Pr., 2005.
- Bhagwati, Jagdish; Panagariya, Arvind; and Srinivasan, T.N. *Lectures on International Trade*, 2nd edition, MIT 1998. (BPS)
- Bhagwati, Jagdish ed. 2nd edition *International Trade: Selected Readings* MIT 1987. (B-ed)
- Choi, E.K. and James Harrigan, eds. *Handbook of International Trade*, Malden, MA: Blackwell, 2003.
- Davis, Donald R., *Notes on Competitive Trade Theory*
- Grossman, Gene, *Imperfect Competition and International Trade* MIT 1992. (G-ed)
- Grossman, Gene and Rogoff, Ken, eds. *Handbook of International Economics*, Volume 3 , Elsevier 1995. (HIE3)
- Jones, Ronald W. and Kenen, Peter, eds. *Handbook of International Economics*, Volume 1 , Elsevier 1984. (HIE)
- Markusen, J., *Multinational Firms and the Theory of International Trade*, Cambridge: MIT Pr. 2002.
- Rivera-Batiz, Luis A. and Oliva, Maria-Angels, *International Trade: Theory, Strategies, and Evidence*, Oxford U. Pr. 2003
- Wong, Kar Yiu, *International Trade in Goods and Factor Mobility*, MIT Pr. 1995.

I. Perfect Competition

A. Equilibrium in a Trading World and the Gains From Trade

- Davis, Donald R., Notes on Competitive Trade Theory, Ch. 2. See Notes .
- * Dixit, A. "Tax policy in open economies," *Handbook of Public Economics*, Volume 1, 1985, Pages 313-374.

B. Comparative Advantage

Theory

- ** DN. pp. 1-8 and "Mathematical Appendix."
- ** Costinot, A. "An Elementary Theory of Comparative Advantage," *Econometrica*, July 2009.
- Ethier, W. "Higher Dimensional Issues in Trade Theory," sections 1 and 2, HIE
- Deardorff, A., "The General Validity of the Law of Comparative Advantage," *JPE* 88 1980. Reprint in L-ed.

Data

- ** Bernhofen, Daniel M; Brown, John C, "A Direct Test of the Theory of Comparative Advantage: The Case of Japan," *Journal of Political Economy*, vol. 112, no. 1, Part 1 Feb. 2004, pp. 48-67
- * Davis, Donald R; Weinstein, David E, "What Role for Empirics in International Trade?" Bertil Ohlin: A centennial celebration (1899-1999). 2002, pp. 363-87

C. An Exchange Economy

- ** Jones, Ronald W. and Peter Neary, "The Positive Theory of International Trade," in HIE Section 2.1

D. Ricardo

- ** Dornbusch, Fischer, and Samuelson “Comparative Advantage, Trade and Payments in a Ricardian Model with a Continuum of Goods.” *AER*, (67) 1977
- Jones, R. and P. Neary, “The Positive Theory of International Trade,” HIE Section 2.2
- Jones, Ronald “Technical Progress and Real Incomes in a Ricardian Trade Model,” in Jones, Ronald, *International Trade: Essays in Theory*, North-Holland 1979.
- DN pp. 36-38.
- Ruffin, RJ, “The Missing Link: The Ricardian Approach to the Factor Endowments Theory of Trade”, *The American Economic Review*, 1988.

E. Heckscher-Ohlin

Theory

- * DN pp. 1-19, 85-86, 93-122, 133-137.
- ** HK1 Ch. 1.
- * Feenstra, Ch. 1
- Rivera-Batiz and Oliva, Ch. 1
- * Jones, R.W. “The Structure of Simple General Equilibrium Models.” *JPE* 73 Dec. 1965, 557-72. Reprint in L-ed.
- * Jones, R. and P. Neary, “The Positive Theory of International Trade,” HIE Section 2.3
- Davis, D. “Critical Evidence on Comparative Advantage? North-North Trade in a Multilateral World” *Journal of Political Economy*, vol. 105, no. 5, October 1997, pp. 1051-60
- * Mussa, M. “The Two-Sector Model in terms of its Dual,” in B-ed
- Ethier, W. “Higher Dimensional Issues in Trade Theory.” in HIE.

Data

- Bowen, Leamer and Sveikauskas, “Multicountry, Multifactor Tests of the Factor Abundance Theory,” *American Economic Review* 77:5, 1987, 791-809. Reprint in L-ed.
- ** Davis, Donald R; Weinstein, David E, “An Account of Global Factor Trade,” *American Economic Review*, vol. 91, no. 5, December 2001, pp. 1423-53
- ** Davis, Donald R; Weinstein, David E, “The Factor Content of Trade,” National Bureau of Economic Research, Inc, NBER Working Papers: 8637, 2001, also in Choi, E.K. and James Harrigan, eds. *Handbook of International Trade*, Malden, MA: Blackwell, 2003.
- * Harrigan, James, “Technology, Factor Supplies, and International Specialization: Estimating the Neoclassical Model,” *American Economic Review*, vol. 87, no. 4, September 1997, pp. 475-94
- **Trefler, Daniel, “The Case of the Missing Trade and Other Mysteries,” *American Economic Review*, vol. 85, no. 5, December 1995, pp. 1029-46. Reprint in L-ed.
- ** Feenstra Chs. 2-3
- Davis, Donald R; Weinstein, David E, et al, “Using International and Japanese Regional Data to Determine When the Factor Abundance Theory of Trade Works,” *American Economic Review*, vol. 87, no. 3, June 1997, pp. 421-46
- Leamer, E., Chs. 2 and 6 in *Sources of International Comparative Advantage: Theory and Evidence* MIT 1984.
- Rivera-Batiz and Oliva, Ch. 3
- Trefler, Daniel, “International Factor Price Differences: Leontief Was Right!” *Journal of Political Economy*, vol. 101, no. 6, December 1993, pp. 961-87

F. Specific Factors (Ricardo-Viner) Model

- * DN pp. 38-43, 122-125.

- ** Jones, R. and P. Neary, "The Positive Theory of International Trade," HIE Section 2.4
- * Neary, J.P. "Short Run Capital Specificity and the Pure Theory of International Trade" L-ed.

G. Unemployment and Factor Markets

- ** Burstein, Ariel and Jon Vogel, "Globalization, Technology and the Skill Premium, WP August 2009.
- ** Costinot, Arnaud and Jon Vogel, "Matching and Inequality in the World Economy," WP 2008.
- ** Davidson, Carl, L. Martin, and S. Matusz, "Trade and Search Generated Unemployment," Journal of International Economics, Journal of International Economics 48 (1999) 271–299.
- ** Davis, Donald R. "Does European Unemployment Prop Up American Wages?" American Economic Review, vol. 88, no. 3, June 1998, pp. 478-94. Reprint in L-ed.
- * Davis, Donald R. and James Harrigan, "Good Jobs, Bad Jobs, and Trade Liberalization," NBER Working Paper No. 13139, May 2007.
- * Helpman, Elhanan and Oleg Itskhoki, "Labor Market Rigidities, Trade, and Unemployment," NBER WP 13365, 2007.
- * Eric Verhoogen, "Trade, Quality Upgrading and Wage Inequality in the Mexican Manufacturing Sector." Columbia University Working Paper, Feb. 2007.
- * Yeaple, Stephen Ross; "A Simple Model of Firm Heterogeneity, International Trade, and Wages" Journal of International Economics, January 2005, v. 65, iss. 1, pp. 1-20

H. Immigration

- * Borjas, George J, "The Labor Demand Curve Is Downward Sloping: Reexamining the Impact of Immigration on the Labor Market," Quarterly Journal of Economics, vol. 118, no. 4, November 2003, pp. 1335-74
- * Card, David, "The Impact of the Mariel Boatlift on the Miami Labor Market," Industrial and Labor Relations Review, vol. 43, no. 2, January 1990, pp. 245-57
- * Davis, Donald R; Weinstein, David E, "Technological Superiority and the Losses from Migration," National Bureau of Economic Research, Inc, NBER Working Papers: 8971, 2002
- Hatton, T. and Williamson, J., The Age of Mass Migration, U. of Chicago Pr. 1998.
- Hendricks, Lutz, "How Important Is Human Capital for Development? Evidence from Immigrant Earnings," American Economic Review, vol. 92, no. 1, March 2002, pp. 198-219
- Mishra, Prachi, "Emigration and Wages in Source Countries: Evidence From Mexico," Journal of Development Economics, 2007
- Lant Pritchett, "Boom Towns and Ghost Countries: Geography and Population Mobility" Brookings Trade Forum 2006.
- Lant Pritchett, Let Their People Come: Breaking the Gridlock on Global Labor Mobility, Center for Global Development, 2006.
- Rivera-Batiz and Oliva, Ch. 5.1-5.4
- Stalker, Peter, The Work of Strangers: A Survey of International Labour Migration, Geneva: ILO, 1994.

I. External Increasing Returns

- * Bhagwati, Panagariya, and Srinivasan, Section 1 of Chapter 11 (Economies of Scale) of **new Lectures on International Trade**.

II. Imperfect Competition Theory (static)

A. Monopoly

BPS Chapters

B. Monopolistic Competition

- * Krugman, Paul "Increasing Returns, Monopolistic Competition and International Trade," JIE 9 1979, Reprint in L-ed.
- ** HK1 Chs. 7-8, 9.5, 10.4, 11.4.
- Bhagwati, Panagariya, and Srinivasan, Section 2 of Chapter 11 (Economies of Scale) of new Lectures on International Trade.
- Krugman, P., "Growth, Trade and Income Distribution Under Increasing Returns," mimeo 1984. DN Ch. 9.
- Ethier, W. "National and International Returns to Scale in the Modern Theory of International Trade" AER 72 June 1982. Also in G-ed
- HK1 Chs. 6, 9-11.
- * Davis, D. "Intraindustry Trade: A Heckscher-Ohlin-Ricardo Approach." Journal of International Economics, vol. 39, no. 3-4, November 1995, pp. 201-26
- Rivera-Batiz and Oliva, Ch. 2.
- ** Broda, Christian; Weinstein, David E.; "Globalization and the Gains from Variety" *Quarterly Journal of Economics*, May 2006, v. 121, iss. 2, pp. 541-85
- * David Hummels & Peter J. Klenow, 2005. "The Variety and Quality of a Nation's Exports," *American Economic Review*, American Economic Association, vol. 95(3), pages 704-723, June.
- * Feenstra, Robert C, 1994. "New Product Varieties and the Measurement of International Prices," *American Economic Review*, American Economic Association, vol. 84(1), pages 157-77, March.

C. Oligopoly

- * Brander, James, "Strategic Trade Policy," NBER # 5020, Feb. 1995.
- ** Brander, James and Krugman, Paul "A Reciprocal Dumping Model of International Trade" Reprint in L-ed.
- ** HK1 Ch. 5
- Bhagwati, Panagariya, and Srinivasan, Section 2 of Chapter 11 of new Lectures on International Trade.
- Markusen, J. "Trade and Gains From Trade with Imperfect Competition," JIE 11 1981, also in G-ed.

D. Firms and Trade

- ** Pol Antras's notes for Ec 2535 at Harvard. See Antras Lectures .
- ** Antras, Pol, "Firms, Contracts, and Trade Structure," *Quarterly Journal of Economics*, vol. 118, no. 4, November 2003, pp. 1375-1418
- * Bernard, Andrew B; Redding, Stephen; Schott, Peter K, "Comparative Advantage and Heterogeneous Firms," National Bureau of Economic Research, Inc, NBER Working Papers: 10668, 2004
- * Chaney, Thomas, "Distorted Gravity: The Intensive and Extensive Margins of International Trade," forthcoming, *American Economic Review*.
- ** Melitz, Marc J, "The Impact of Trade on Intra-industry Reallocations and Aggregate Industry Productivity," *Econometrica*, vol. 71, no. 6, November 2003, pp. 1695-1725.
- * Melitz, MJ and GIP Ottaviano, "Market Size, Trade, and Productivity", *Review of Economic Studies*, 2008.
- Arkolakis, Costas, "Market Penetration Costs and the New Consumers Margin in International Trade," NBER WP 14214, August 2008.
- Manova, K. and Z. Zhang, "Export Prices and Heterogeneous Firm Models," WP 2009.
- * Sethupathy, Guru "Offshoring, Wages, and Employment: Theory and Evidence", WP 2009.

E. Multinational Corporations

- ** Feenstra, Ch. 11
- ** HK1 Chs. 12.1-12.4, 13.1-13.3
- * Markusen, J., *Multinational Firms and the Theory of International Trade*, Cambridge: MIT Pr. 2002. Chs. 2-4, 13.
- Markusen, J. "The Boundaries of Multinational Enterprises and the Theory of International Trade," *JEP*, Spring 1995.
- * J. Markusen and A. Venables (2000), "The Theory of Endowment, Intra-industry and Multi-national Trade", *JIE*, 209-234
- * Brainard, S. Lael, "An Empirical Assessment of the Proximity-Concentration Trade-off between Multinational Sales and Trade," *American Economic Review*, vol. 87, no. 4, September 1997, pp. 520-44
- * Helpman, E. "A Simple Theory of International Trade with Multinational Corporations," *JPE* 92 No. 3 1984. Also in B-ed.
- * Helpman, Elhanan; "Trade, FDI, and the Organization of Firms" *Journal of Economic Literature*, September 2006, v. 44, iss. 3, pp. 589-630.

III. Economic Geography

A. Gravity and the Volume of Trade

- ** Anderson, James E; van Wincoop, Eric, "Gravity with Gravitas: A Solution to the Border Puzzle," *American Economic Review*, vol. 93, no. 1, March 2003, pp. 170-92
- * Anderson, James E; van Wincoop, Eric, "Trade Costs," *Journal of Economic Literature*, vol. 42, no. 3, September 2004, pp. 691-751
- Richard Baldwin and James Harrigan; "Zeros, Quality and Space: Trade Theory and Trade Evidence", Working Paper, 2007.
- ** Eaton, Jonathan; Kortum, Samuel, "Technology, Geography, and Trade," *Econometrica*, vol. 70, no. 5, September 2002, pp. 1741-79
- ** Feenstra Ch. 5
- * Harrigan, James, "Specialization and the Volume of Trade: Do the Data Obey the Laws?" in Choi, E.K. and James Harrigan, eds., *Handbook of International Trade*, Malden, MA: Blackwell, 2003.
- Helpman, E. "Imperfect Competition and International Trade: Evidence From Fourteen Industrialized Countries," *Journal of the Japanese and International Economies*, 1 (1987): 62-81.
- * Hummels, D. and Klenow, P., "The Variety and Quality of a Nation's Exports," *AER*, June 2005.
- *Krugman, P., "Growing World Trade: Causes and Consequences," *Brookings Papers on Economic Activity*, vol. 0, no. 1, 1995, pp. 327-62
- * Schott, Peter K, "Across-Product versus Within-Product Specialization in International Trade," *Quarterly Journal of Economics*, vol. 119, no. 2, May 2004, pp. 647-78
- ** Yi, Kei-Mu, "Can Vertical Specialization Explain the Growth of World Trade?" *Journal of Political Economy*, vol. 111, no. 1, February 2003, pp. 52-102

B. Economic Geography

Theory

- * Krugman, Paul, "Scale Economies, Product Differentiation, and the Pattern of Trade," *AER* 70 Dec. 1980 950-959. Also in G-ed.
- * Krugman, Paul, "Increasing Returns and Economic Geography," *JPE* 99:3, 1991, pp. 483-499. Reprint in L-ed.
- * Krugman and Venables, "Globalization and the Inequality of Nations," *QJE*, Nov. 1995.
- ** Fujita, Krugman and Venables Chapters 4,5, 14
- Krugman, P., *Geography and Trade*, Cambridge: MIT Pr. 1992.
- Fujita, M. and Thisse, J. *Economics of Agglomeration*, Cambridge U. Pr., 2002.

- * Chs. 2-8 in Richard Baldwin, Philippe Martin, Frederic Robert-Nicoud, Gianmarco Ottaviano, Rikard Forslid, Economic Geography and Public Policy, Princeton U. Pr., 2005.
Rivera-Batiz and Oliva, Ch. 4
Data
- ** Davis, Donald R; Weinstein, David E, "Bones, Bombs, and Break Points: The Geography of Economic Activity," American Economic Review, vol. 92, no. 5, December 2002, pp. 1269-89
Davis, Donald R; Weinstein, David E, "A Search for Multiple Equilibria in Urban Industrial Structure," Journal of Regional Science, 2008.
- * Davis, Donald R; Weinstein, David E, "Economic Geography and Regional Production Structure: An Empirical Investigation," European Economic Review, vol. 43, no. 2, February 1999, pp. 379-407
- ** Hanson, G., Xiang, C. "The Home Market Effect and Bilateral Trade Patterns," American Economic Review, September 2004, 94: 1108-1129
- Head, K., Mayer, T. The Empirics of Agglomeration and Trade , Handbook of Regional and Urban Economics, vol. 4, 2004.
- Overman, H., Redding, S., and Venables, A.J. "The Economic Geography of Trade, Production and Income: A Survey of Empirics", in Choi, E.K. and James Harrigan, eds. Handbook of International Trade, Malden, MA: Blackwell, 2003.
- * Rappaport, Jordan; Sachs, Jeffrey D, "The United States as a Coastal Nation," Journal of Economic Growth, vol. 8, no. 1, March 2003, pp. 5-46
- Redding, Stephen and Anthony Venables, "Economic Geography and International Inequality," Journal of International Economics, 2004.

IV. Trade and Growth

A. Perfectly Competitive Framework

- * Lucas, Robert "On the Mechanics of Economic Development," Journal of Monetary Economics 22, July 1988. (Model of learning by doing).
- * Young, Alwyn, "Learning by Doing and the Dynamic Effects of International Trade," QJE 106 May 1991.
- Findlay, Ronald, "Capital, Trade and the Rate of Interest," Chapter 2 in Factor Proportions, Trade and Growth, Cambridge: MIT Pr., 1995.
- Findlay, Ronald and H. Kierzkowski, "International Trade and Human Capital: A Simple General Equilibrium Model," JPE 1983.
- ** Ventura, J. "Growth and Interdependence," Quarterly Journal of Economics, vol. 112, no. 1, February 1997, pp. 57-84
- Stiglitz, J. "Factor Price Equalization in a Dynamic Economy," JPE 1970.
- * Acemoglu, Daron and Ventura, Jaume, "The World Income Distribution," Quarterly Journal of Economics, Vol. 117, No. 2 (May, 2002), pp. 659-694.

B. Research and Development

- ** GH Chs. 3, 6, 13.
- ** Krugman, P., "A Model Of Innovation, Technology Transfer, and the World Distribution of Income," JPE 87 1979.
- * Rivera Batiz, Luis A. and Paul Romer, "Economic Integration and Endogenous Growth," QJE 106 May 1991, and in G-ed.
- Demidova, Svetlana and Andres Rodriguez-Clare, "Trade Policy under Firm-Level Heterogeneity in a Small Economy," WP 2008.
- Khandelwal, Amit, "The Long and Short (of) Quality Ladders," mimeo 2009.

C. Empirics

Estevadeordal, Antoni and Alan M. Taylor, "Is the Washington Consensus Dead? Growth, Openness, and the Great Liberalization, 1970s-2000s, NBER WP 14264, August 2008.

Feenstra Ch. 10

Feyrer, James, "Trade and Income – Exploiting Time Series in Geography," Working Paper. 2009.

** Frankel, Jeffrey A; Romer, David, "Does Trade Cause Growth?" *American Economic Review*, vol. 89, no. 3, June 1999, pp. 379-99

Gancia, Gina and Fabrizio Zilibotti, "Technological Change and the Wealth of Nations," *Annual Review of Economics*, 2009:1.

Rivera-Batiz and Oliva Ch. 6

Rodriguez F, Rodrik D., "Trade policy and economic growth: A skeptic's guide to the cross-national evidence," *NBER Macroeconomics Annual* 15: 261+ 2001