



INTERNATIONAL TRADE THEORY
J.F. Francois
TI541, **Tinbergen Institute**,
Erasmus University Rotterdam, Fall 2005.

Prof. Dr. J.F. (Joe) Francois

office: H8-18: secretary (Anna Kok): H8-01 email: kok @ few.eur.nl

my email: francois @ few.eur.nl

my homepage: <http://www.intereconomics.com/francois>

COURSE DESCRIPTION:

This course covers the theory of trade and multinational production for Mphil and PhD students. Emphasis is on both basic theory and application. The goal is to gain a working knowledge of standard analytical tools, and a familiarity with current research topics in trade and the real side of international economic policy. This includes dual general equilibrium theory, commercial policy and regional integration, theories of industrial location and agglomeration, trade and the distribution of income, trade and accumulation/growth, and theories of foreign investment. It also includes the recent empirical literature on testing this body of theory (policy determination, trade and FDI flows, firm-level evidence on productivity and openness, openness and inequality).

LITERATURE:

Required

Readings in Trade and Development Theory, a collection of supplementary course readings (available through the secretariat in H8-01), Tinbergen Institute 2005. This includes articles, book chapters, working papers, etc.

Recommended

J.N. Bhagwati, A. Panagariya, and T.N. Srinivasan, *Lectures on International Trade*, second edition, MIT Press, 1998. (BPS in the reader. Some of this is required reading).

A Dixit and V. Norman, *Theory of International Trade*, Cambridge University Press: Cambridge, 1980. (DN in the reader. Some of this is required reading).

A Woodland, *International Trade and Resource Allocation*, N. Holland: Amsterdam, 1982.

E. Leamer, *Sources of International Comparative Advantage*, MIT Press: Cambridge, 1984.

Other Recommended Resources

H. Varian, *Microeconomic Analysis*, Norton: New York, 1984.

E. Silberberg, *The Structure of Economics*, McGraw Hill: New York, 1990.

R.C. Feenstra, *Advanced International Trade: Theory and Evidence*, Princeton University Press: Princeton, 2003, ISBN: 0-691-11410-2.

GRADING

Examination: Yes, there will be an examination.

Exercises: There will also be a set of applied exercises. Problem sets will be posted on the course homepage.



READINGS IN INTERNATIONAL TRADE THEORY

J.F. Francois

TI541, **Tinbergen Institute**,
Erasmus University Rotterdam, Fall 2005.

COURSE READINGS:

PART 1

Basic Theoretical Models:

- Perfect competition and patterns of trade
- Imperfect competition and trade
- Dynamics and trade
- MNEs and FDI theory

Preliminaries

D&N mathematical appendix

Building
Blocks

Dual GE models and such

D&N chapters 2,3,4,5

E. Helpman and P. Krugman, "The Factor Proportions Theory," in Helpman and Krugman, *Market structure and foreign trade*, MIT Press: Cambridge, 1985, CHAPTER 1.

The workhorse 2x2 models

Caves, R.E. and R.W. Jones, "The Specific Factors Model of Production," supplement to Chapter 6 of *World Trade and Payments*. Little, Brown, 1985.

Caves, R.E. and R.W. Jones, "The Two-Sector Heckscher-Ohlin Model," supplement to Chapter 7 of *World Trade and Payments*. Little, Brown, 1985.

Jones, R.W., "The Structure of Simple General Equilibrium Models," *Journal of Political Economy* 73 (December 1965), 557-572.

Higher dimensions

Deardorff, A.V., "Weak Links in the Chain of Comparative Advantage," *Journal of International Economics* 9 (May 1979), 197-209.

Dornbusch, R., S. Fischer and P. Samuelson, "Comparative Advantage, Trade, and Patterns in a Ricardian Model with a Continuum of Goods," *American Economic Review*, 67(5), December 1977: 823-839.

Two-way trade and scale

J. de Melo and S. Robinson, "Product Differentiation of Foreign Trade in Computable General Equilibrium Models," *Journal of International Economics* 27 (1989), 47-67.

J. Francois and D. Nelson, "A Geometry of Specialization," *the Economic Journal*, July 2002, 649-678.

Scale
Economies,
Market
Structure,
and
Specialization

BPS 11, 30

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

Markusen, J.R., "Trade and the Gains from Trade with Imperfect Competition," *Journal of International Economics*, (November 1981), 531-551.

| | |
|--|---|
| | <p>Panagariya, A., "Variable Returns to Scale in Production and Patterns of Specialization," <i>American Economic Review</i> 71:1 (1981), 221-230.</p> <p>Markusen, J.R., "Micro-foundations of external scale economies," <i>Canadian Journal of Economics</i> XXIII:3 (1990), 495-508.</p> <p>Krugman, P., "Scale Economies, Product Differentiation, and the Pattern of Trade," <i>American Economic Review</i> 70 (December 1980), 950-959.</p> <p>Ethier, W.J., "National and International Returns to Scale in the Modern Theory of International Trade," <i>American Economic Review</i> 72 (June 1982), 950-959.</p> <p>Francois, J.F. "Global Production and Trade: Factor Migration and Commercial Policy with International Returns to Scale," <i>International Economic Review</i> 1995.</p> <p>Neary, J.P., "Of hype and hyperbolas: Introducing the new economic geography", <i>Journal of Economic Literature</i>, 39:2, June 2001, 536-561.</p> <p>Melitz, M., "The Impact of Intra-Industry Reallocations and Aggregate Industrial Productivity," <i>Econometrica</i>, November 2003, 1695-1725.</p> |
| <p>Capital Accumulation and Growth in Open Economies</p> | <p>BPS chapters 36,37</p> <p>Atsumi, H., "The Long-Run Offer Function and a Dynamic Theory of International Trade," <i>Journal of International Economics</i> 1 (1971), 267-299.</p> <p>Bhagwati, J. "Immiserizing Growth: A Geometrical Note," <i>Review of Economic Studies</i> (June 1956).</p> <p>Deardorff, A.V. "Rich and Poor Countries in Neoclassical Trade and Growth," <i>the Economic Journal</i>, vol 111, April 2001: 277-294.</p> <p>Fischer, S. and J.A. Frenkel, "Investment, the Two-Sector Model, and Trade in Debt and Capital Goods," <i>Journal of International Economics</i> 2 (August 1972), 211-233.</p> <p>Grossman, G.A. and E. Helpman, "Product Development and International Trade," <i>Journal of Political Economy</i> 97 (December 1989), 1261-1283.</p> <p>Manning, R. and J. Markusen, "National Product Functions in Comparative Steady-State Analysis," <i>International Economic Review</i> 32 (August 1991), 613-624.</p> |
| <p>FDI and Multinational Enterprises</p> | <p>Ethier, W.J. "The Multinational Firm," <i>The Quarterly Journal of Economics</i>, 101(4), November 1986: 805-834.</p> <p>Helpman, E. "Multinational Corporations and Trade Structure," <i>Review of Economic Studies</i>, LII, 1985: 443-457.</p> <p>Helpman, E., "A Simple Theory of International Trade with Multinational Corporations," <i>The Journal of Political Economy</i>, June 1984, 92(3): 451-471.</p> <p>Krugman, P. "The 'New Theories' of International Trade and the Multinational Enterprise," in C.P. Kindleberger and D.B. Audretsch eds., <i>The Multinational Corporation in the 1980s</i>, MIT Press:Cambridge, 1983.</p> <p>Markusen, J.R., "The Boundaries of Multinational Enterprise and the Theory of International Trade," <i>Journal of Economic Perspectives</i>, 9(2) Spring 1995: 169-189.</p> <p>Markusen, J.R. and A.J. Venables, "Multinational Firms and the New Trade Theory," <i>Journal of International Economics</i>, 46, 1988: 183-203.</p> |



READINGS IN INTERNATIONAL TRADE

J.F. Francois

TI541, **Tinbergen Institute**,
Erasmus University Rotterdam, Fall 2005.

COURSE READINGS:

PART 2

Trade and Competition Policies in Open Economics

- Political economy of tariffs
- Regional integration and preferential trade arrangements
- Open economy competition policy

Trade Policy

Political economy of tariff rate determination:

Hillman, A.L., "Declining Industries and Political-Support Protectionist Motives," *American Economic Review*, vol 72(5), December 1982.

Mayer, W., "Endogenous Tariff Formation," *American Economic Review*, vol 74(5), December 1984: 970-985.

Fernandez, R. and D. Rodrik, "Resistance to Reform: Status Quo Bias in the Presence of Individual-Specific Uncertainty," *The American Economic Review*, vol 81(5), December 1991: 1146-1155.

Hall, H.K and D. Nelson, "Institutional Structure in the Political Economy of Protection: Legislated vs. Administered Protection," *Economics and Politics*, vol 4(1): 61-77.

Hillman, A.L. and H.W. Ursprung, "Multinational Firms, Political Competition, and International Trade Policy," *International Economic Review*, 32(2), May 1993: 347-363.

Grossman, G. and E. Helpman, "Protection for Sale," *American Economic Review*, 84(4), September 1994: 833-850.

Yang, C.C., "Endogenous Tariff Formation Under Representative Democracy: A Probabilistic Voting Model," *American Economic Review*, vol 85(4), September 1995: 956-963.

Mitra, D., "Endogenous Lobby Formation and Endogenous Protection: A Long-Run Model of Trade Policy Determination," *The American Economic Review*, vol 89(5), December 1999: 1116-1134.

Francois, J. and H. Rojas-Romagosa, "Equity, Welfare, and the Setting of Trade Policy in General Equilibrium," Tinbergen Institute mimeo (2005).

Regional integration and preferential trade arrangements

Bhagwati, J. and A. Panagariya, "Preferential Trading Areas and Multilateralism -- Strangers, Friends, or Foes?" Chapter 1 in *The Economics of Preferential Trade Arrangements*, Bhagwati and Panagariya eds., American Enterprise Institute: Washington (1996).

Bhagwati, J., Greenaway, D. and A. Panagariya, "Trading Preferentially: Theory and Policy," *The Economic Journal* 108(July 1998), 1128-1148.

Bhagwati, J. and A. Panagariya, "Regionalism versus Multilateralism," *American Economic Review* 86(2): 82-87.

Kemp, M. and H. Wan Jr., "An Elementary Proposition Concerning the Formation of Customs Unions," in *Three Topics in the Theory of International Trade: Distribution, Welfare, and Uncertainty*, North-Holland: Amsterdam, (1976).

| | |
|------------------------------|---|
| | <p>Levy, P., "A Political-Economic Analysis of Free-Trade Agreements," <i>American Economic Review</i> 87(4), (September 1997), 506-519.</p> <p>Wonnacott, P. and R. Wonnacott, "Is Unilateral Tariff Reduction Preferable to a Customs Union? The Curious Case of the Missing Foreign Tariffs," <i>American Economic Review</i> 71(4), (September 1981), 704-714.</p> <p>Wooton, I., "Preferential Trading Agreements: An Investigation," <i>Journal of International Economics</i> 21 (1986), 81-97.</p> <p>Syropoulos, C., "On Tariff Preferences and Delegation Decisions in Customs Unions: A Heckscher-Ohlin Approach," <i>the Economic Journal</i>, vol 112, July 2002: 625-648.</p> |
| Trade and Competition Policy | <p>Acquier, A. and R. Caves, "Monopolistic Export Industries, Trade Taxes, and Optimal Competition Policy," <i>the Economic Journal</i>, vol 89, 1979: 559-581.</p> <p>Head, K. and J. Ries, "International Mergers and Welfare Under Decentralized Competition Policy," <i>The Canadian Journal of Economics</i>, vol 30(4b), November 1997: 1104-1123.</p> <p>Horn, H. and J. Levinsohn, "Merger Policies and Trade Liberalization," <i>the Economic Journal</i>, vol 111, April 2001: 244-276.</p> <p>J.F. Francois. and H. Horn. "National and International Competition Policy," Tinbergen Institute discussion paper (current version 2005).</p> <p>J.F. Francois and I. Wooton. "Market Structure in Services and Market Access in Goods," Tinbergen Institute and CEPR discussion paper (current version 2005).</p> <p>Weinstein, D.E., "Competition and Unilateral Dumping," <i>Journal of International Economics</i>, 32, 1992: 379-388.</p> |



READINGS IN INTERNATIONAL TRADE

J.F. Francois

TI541, **Tinbergen Institute**,
Erasmus University Rotterdam, Fall 2005.

COURSE READINGS:

PART 3

Testing the Implications of Trade Theory

- Empirical testing of political economy models
- Linking trade and FDI to wage inequality
- Testing the new theory of MNEs and FDI

Empirical Implications and Testing of Trade Theories

Political economy

Finger, J.M., H.K. Hall and D. Nelson, "The Political Economy of Administered Protection," *American Economic Review*, vol 72(3): 452-466.

Imai, S. H. Katayama and K. Krishna, "Is Protection Really for Sale? A Critique of the Common Approach in Testing the G-H Model," paper presented at the European Trade Study Group annual conference, Dublin September 2005.

Trefler, D. "Trade Liberalization and the Theory of Endogenous Protection: An Econometric Study of U.S. Import Policy," *Journal of Political Economy*, vol 101(1), February 1993: 138-160.

Wages/inequality

R. Feenstra and G. Hanson, "Global Production Sharing and Rising Inequality: A Survey of Trade and Wages," in Choi E.K. and J. Harrigan (eds.) *Handbook of International Trade*, Blackwell: Malden, MA, 146-185.

Francois, J.F., K. Grier and D. Nelson, "Globalization, Roundaboutness, and Relative Wages," CEPR/Tinbergen Institute discussion paper, 2004.

Francois, J.F. and D. Nelson, "Trade, Technology, and Wages: General Equilibrium Mechanics," *The Economic Journal* 108 (September 1998), 1483-1499.

Trade/MNE theory testing

Anderson, J.E. "A Theoretical Foundation for the Gravity Equation," *The American Economic Review*, vol 69(1), March 1979: 106-116.

R. Feenstra, J. Markusen, and A.K. Rose, "Using the Gravity Model to Differentiate Among Alternative Theories of Trade" *Canadian Journal of Economics*, 2001.

E.J. Balistreri and R. H. Hillberry "Trade frictions and welfare in the gravity model: How much of the iceberg melts?", U.S. International Trade Commission working paper, 2001.

Head, K. and T. Mayer, "The Empirics of Agglomeration and Trade," CEPR discussion paper, July 2003.

Head, K. and J. Ries, "Increasing Returns Versus National Product Differentiation as an Explanation for the Pattern of U.S.-Canada Trade," *The American Economic Review*, vol 91(4), September 2001: 858-876.

Carr, D.L., J.R. Markusen and K.E. Maskus, "Estimating the Knowledge-Capital Model of the Multinational Enterprise," *The American Economic Review*, vol 91(3): 693-708.