Economics 8433: Multinational Firms and the Theory of International Trade

Department of Economics
University of Colorado
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The purpose of this course is study efforts to integrate multinational firms endogenously into the theory of international trade. About 2/3 of the course will consist of theory and numerical simulations, and about 1/3 a review of empirical estimation and tests of the theory. As part of the theory, we will be reviewing the more general literatures on trade-industrial-organization issues and strategic-trade policy.

The text for the course will be a draft manuscript, that will be published by the MIT press next year.

We will work through this manuscript, and other related articles. Here is the outline of the book. The first article after each chapter title is usually a paper of mine which was the foundation of the book. Generally, you will not be expected to look at this paper (reference given in parentheses) in addition to the draft book chapter.

Assessment for the course will consist of three take-home problem sets, plus some simple GAMS simulations.

You will also be asked to write a paper for the course, and present the paper in class. I will take a broad view of what the paper might entail, so that you can pursue your interests. The paper could be (a) a simple theoretical model, (b) a simple model coded into a GAMS simulation model, (c) an empirical paper, (d) a critical literature review on some sub-area involving multinationals (e.g., effects of taxes on multinational location, effects of multinationals on developing country productivity and wages).

Weighting:
- Problem set 1: 15%
- Problem set 2: 15%
- GAMS simulations: 25%
- Problem set 3: 15%
- Paper: 30%
MULTINATIONAL FIRMS AND THE THEORY OF INTERNATIONAL TRADE

James R. Markusen
MIT Press 2002

Part I: Technology, Costs, and Market Structure

Chapter 1: Stylized facts, basic concepts
(Markusen 1995 JEP, 1998 WE)


Chapter 2: A partial-equilibrium, single-firm model of plant location

Chapter 3: International duopoly with endogenous market structures
(Horstmann and Markusen 1992 JIE)


Chapter 4: Incumbency, preemption and persistence
(Horstmann and Markusen 1987 IER)


Chapter 5: A general-equilibrium oligopoly model of horizontal multinationals
(Markusen and Venables 1998 JIE)


Chapter 6: A general-equilibrium monopolistic-competition model of horizontal multinationals
(Markusen and Venables 2000 JIE)


**Chapter 7:** The knowledge-capital model  
(Markusen 1998 NBER working paper 6231)

Ekholm, Karolina and Rikard Forslid, "Trade and Location with Horizontal and Vertical Multi-Region Firms", working paper (1999).


**Chapter 8:** Extensions to the knowledge-capital model: trade versus affiliate production, factor price and welfare effects of trade and investment liberalization  
(Markusen 1998 NBER working paper 6231, Markusen and Venables 1997 RIE, 1999 Baldwin (ed))

Ekholm, Karolina and Rikard Forslid, "Trade and Location with Horizontal and Vertical Multi-Region Firms", working paper (1999).


**Chapter 9:** Trade in intermediate inputs and vertical multinational  
(Zhang and Markusen 1999 JDE)


Part II: Empirical Estimation and Testing

Chapter 10: Estimating the knowledge-capital model
(Carr, Markusen, and Maskus 2001 AER)


Chapter 11: Production for export versus local sale
(Markusen and Maskus 2001 Lipsey festschrift volume)

Blonigen, Bruce (2001), "In Search of Substitution between Foreign Production and Exports", Journal of International Economics 53, 81-104.


Chapter 12: Discriminating among alternative models of the multinational
(Markusen and Maskusen 1999 NBER working paper)


(part III references to follow later)

**Part III: Internalization**

**Chapter 13:** A reputation model
(Horstmann and Markusen 1987 CJE)

**Chapter 14:** A learning model
(Ethier and Markusen 1996 JIE, Markusen 2001 JIE)

**Chapter 15:** An information model
(Horstmann and Markusen 1996 IER)

**Technical Appendices**

**Preface to appendices**

**Appendix 1:** Stop avoiding inequalities and complementarity problems: A simple partial-equilibrium model illustrating the GAMS MCP solver

**Appendix 2:** Who's afraid of applied GE modelling? A general-equilibrium version of the problem in appendix 1 using the MCP solver

**Appendix 3:** Doing it the easy way: general-equilibrium problem of appendix 2 using MPS/GE

**Appendix 4:** Fun with sets and conditionals: GAMS program generating Figures 3.6 and 3.7

**Appendix 5:** How to stop worrying and love the computer: program generating Figures 5.1 and 5.2 using MPS/GE

**Appendix 6:** Chef's special for Dixit-Stiglitz lovers: program generating Figures 6.1 and 6.2 using MCP