

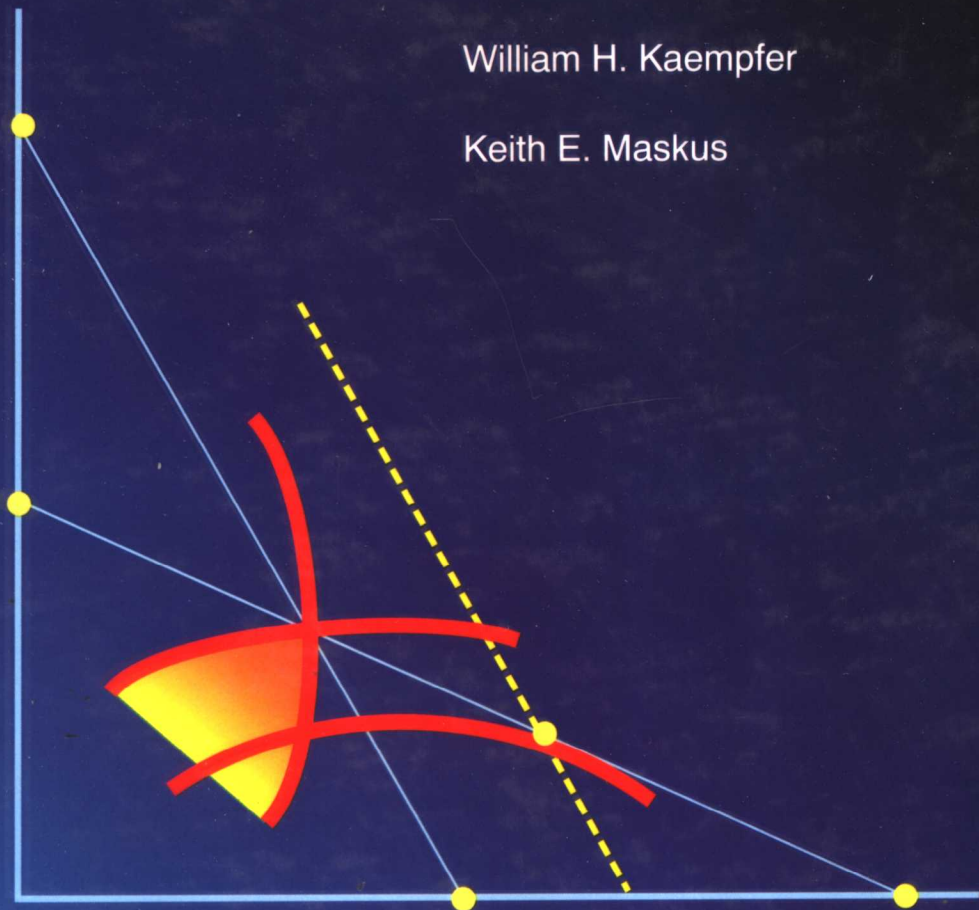
international trade theory and evidence

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INTERNATIONAL TRADE

Theory and Evidence

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Boston, Massachusetts Burr Ridge, Illinois
Dubuque, Iowa Madison, Wisconsin New York, New York
San Francisco, California St. Louis, Missouri

This book was set in New Century Schoolbook by Publication Services, Inc.
The editors were Scott D. Stratford and Lucille H. Sutton;
the production supervisor was Louise Karam.
The cover was designed by Joseph Gillians.
Project supervision was done by Publication Services, Inc.

McGraw-Hill

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INTERNATIONAL TRADE Theory and Evidence

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This book is printed on acid-free paper.

10 11 12 13 14 15 16 17 18 19 BKM BKM 0 9 8 7 6 5 4 3 2 1

ISBN 0-07-040447-X

Library of Congress Cataloging-in-Publication Data

International trade: theory and evidence / James R. Markusen ... [et al.].—International ed.

p. cm.

Includes bibliographical references and index.

ISBN 0-07-040447-X

1. International trade. I. Markusen, James R., (date).

HF1379.I5848 1995

382—dc20

94-24782

INTERNATIONAL EDITION

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When ordering this title, use ISBN 0-07-113509-X.

ABOUT THE AUTHORS

James R. Markusen was raised in Minneapolis and earned his B.A. and Ph.D. degrees in economics from Boston College. He spent 18 years in Canada at the University of Western Ontario, interspersed with visiting appointments in Ghana, Australia, New Zealand, and Israel. In addition, he has lectured and studied in a number of other countries including Ireland, Sweden, England, Mexico, Spain, Norway, and Fiji.

Markusen's principal interests are in the field of international trade. His research for the last 10 years has concentrated on multinational corporations and the industrial-organization approach to trade theory. He has worked both on theoretical models and on numerical, applied general-equilibrium models. This latter work empirically estimates the production and location effects of various government policies, including reductions in trade barriers, and the imposition of environmental controls. He has published widely in such journals as *The American Economic Review*, *The International Economic Review*, *the Journal of Political Economy*, and *The Journal of International Economics*.

Markusen is a research associate of the National Bureau of Economic Research and has recently completed a National Science Foundation grant to study the effects of trade and environmental policies on plant location decisions. A dedicated bicyclist and skier, Professor Markusen moved to the University of Colorado, Boulder, in July 1990.

James R. Melvin was raised on a farm in southern Manitoba and completed an undergraduate science degree at the University of Manitoba. He received his M.A. degree at the University of Alberta, then attended the University of Minnesota, where he earned his Ph.D. in economics in 1966. He took a job as faculty member at the University of Western Ontario, where he remained for 24 years, including a five-year stint as department chairperson. He moved to the University of Waterloo in 1990, where he also is chair of the economics department. He has been a visiting professor at the

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Melvin's main areas of research have been international trade theory and regional economics, focussing on the determinants of trade and extensions of the basic trade model. He has published important articles on trade in intermediate goods, increasing returns to scale, and, more recently, on demand conditions in trade and trade in services. His papers have appeared in such journals as *The American Economic Review*, *The Journal of Political Economy*, and *The Quarterly Journal of Economics*. He has also completed funded research projects for the Ontario Economic Council, the Economic Council of Canada, and the U.S. Treasury Department.

Jim is a committed amateur naturalist who enjoys planting trees, identifying native plant and animal species, and improving the natural environment at his cottage property on Lake Huron.

William H. Kaempfer earned his B.A. from The College of Wooster in Ohio and his Ph.D. from Duke University. His initial academic appointment was at the University of Washington in Seattle. He moved to the University of Colorado, Boulder, in August 1981, where he teaches international trade and financial theory and economic theory. Kaempfer has been a visiting professor at the Claremont Colleges and also has lectured in Indonesia, among other places.

Professor Kaempfer's primary research interests are in public-choice theory as applied to international trade policy. His research largely has been devoted to the political determinants of the choice of trade policies by self-interested government actors, one important example being his work on the choice of economic sanctions applied to South Africa. He has also written extensively about various effects of different trade policies under alternative market structures, and the endogeneity of trade policy. His articles have appeared in such journals as *The American Economic Review*, *The Quarterly Journal of Economics*, *The World Economy*, and *International Organization*.

Professor Kaempfer is an ardent naturalist, conservationist, and bird-watcher who will travel anywhere if the visit promises to increase the length of his bird lifelist.

Keith E. Maskus earned his B.A. from Knox College in Illinois and his Ph.D. from the University of Michigan, Ann Arbor. He came directly from graduate school to the faculty at the University of Colorado, Boulder, in August 1981. He teaches international trade theory, economic theory, and econometrics. He has lectured in Indonesia, the Republic of Korea, Japan, the United Kingdom, and Belgium, among other countries. He has been a visiting research scholar at the Federal Reserve Bank of Kansas City and at the U.S. Department of State, where he served as chief trade economist.

Maskus' main research interests are in the empirical determination of the sources of comparative advantage and in the economics of international technology policies, including intellectual property rights. He has published numerous papers on the Uruguay Round negotiations among the world's nations covering issues such as investment regulations, patent policies, and services trade. His articles have appeared in such journals as *The Journal of International Economics*, *The Review of Economics and Statistics*, and *The World Economy*. He is currently completing a research grant from the National Science Foundation to study the effects of international patent policies on foreign trade flows.

Professor Maskus is a frequent participant at meetings of the National Bureau of Economic Research. He enjoys bicycling, hiking, and playing tennis. He gets additional exercise by running regressions and jumping to conclusions.

PREFACE

This book is intended primarily for a conventional one-semester or one-quarter course in international trade for undergraduate economics majors. It is most suitable for a course with a one-semester intermediate-microeconomics prerequisite, but we have not assumed that students will have had such a course. The book is not well suited to a course which covers both international trade and finance in one semester or quarter, and not well suited to a course for non-majors. The book also serves as a background text in graduate courses, giving students the basic theory before they plunge into journal articles.

Our interest in producing such a book was born from the frustration derived from the fact that virtually all alternative texts are simplified versions of what most instructors would prefer for a semester course in trade for economics majors. Competing books are tightly clustered in the center of a linear Hotelling-Lancaster characteristic space, trying to be suitable for combined trade-and-finance courses for non-majors at one end of the spectrum, to trade-only courses for majors at the other end. We are entering at the upper end of the characteristic line, hoping to carve out that market niche.

Having defined the market, we should quickly indicate the analytical level of the book lest we scare off the faint of heart. The analytical exposition is largely in terms of geometry, with the necessary tools being developed up front in Chapters 2–4. Relatively simple algebra is used, and when more advanced methods are applied, we are careful to place the material in sections that can be skipped without loss of continuity. The use of calculus is quite minimal, even in the more advanced sections.

Indeed, the book uses few analytical methods more advanced than competing texts. What distinguishes the book is partly its analytical approach, but more importantly the breadth and depth of its coverage. We have tried to maintain a uniform level of analysis throughout the book, and the same basic “tool kit” developed in Chapters 2–4 is used over and over to avoid the

costs of developing and learning new analytical constructions for each new topic. Our perception of standard texts is that they tend to treat one topic on a fairly formal level, such as the Heckscher-Ohlin model, and then resort to anecdotes about other topics, such as the industrial-organization approach to trade. Our analysis of the Heckscher-Ohlin model is not more advanced than that found in the more advanced of the competing texts, but our analysis of other equally important topics maintains approximately the same level and depth of presentation.

This new book is a much revised version of an old Markusen and Melvin text. The book has been greatly strengthened by the addition of two new authors, Bill Kaempfer and Keith Maskus. Maskus is widely known and respected for his papers on empirical trade and policy issues. He brings strengths that are complementary to those of the original theory-oriented authors, and has improved the book both in its coverage of empirical evidence and in its exposition of the subtleties of modern trade policy. Kaempfer has written extensively on the political economy of trade policy, ranging from analyses of sanctions to the choice of policy instruments, and determinants of the pattern of protection. It is essential that trade theory texts move on from simply analyzing the effects on tariffs and quotas to analyzing why they arise in equilibrium. Kaempfer's efforts also have strengthened the book.

Key features of the book are as follows:

1. Part 1 of the book (Chapters 1–5) introduces the microeconomic foundations of the theory, and develops almost all of the tools which are used subsequently. By popular demand, offer curves are avoided in favor of excess demand curves. Offer curves are covered in an appendix. Chapter 5 analyzes the gains from trade, laying a foundation which is used repeatedly throughout the book.
2. Part 2 (Chapters 6–14) develops the positive theory of trade and considers empirical tests of those theories. Our world view is that many things cause trade, and each deserves an analysis in isolation from the others. Accordingly, Part 2 follows a methodology in which two economies are identical in every respect except one. These “bases for trade” include differences in technology, differences in relative factor endowments, government policies including taxes and subsidies, imperfect competition, scale economies, and demand factors, such as non-identical and non-homogeneous preferences and preferences for diversity.
3. Part 3 (Chapters 15–20) turns to trade policy, considering the various consequences of tariffs, quotas, and voluntary export restraints. In line with current research interests, a major chapter is devoted to strategic trade policy. Two other “non-traditional” chapters include one on the political economy of trade policy and one on administered protection. The

former analyzes ways to endogenize protection, while the latter discusses institutions, rules, contingent protection, and major features of trade law and surrounding controversies.

4. Part 4 (Chapters 21–23) reverts to positive theory, analyzing ~~major issues~~, multinational firms, and growth. These chapters incorporate a great deal of research undertaken since the old Markusen and Melvin book was drafted almost a decade ago.

Thanks are due to many individuals. Our editor, Scott Stratford at McGraw-Hill, put a great deal of effort into the project, and in particular organized the most thorough and constructive set of reviews we have ever seen. We thus wish to express great appreciation to those reviewers for their significant contributions to the book. Ex post facto, we learned that they were James Cassing, University of Pittsburgh; Eric Fisher, The Ohio State University; Craig Schulman, University of Arkansas; and Nicolas Schmitt, Simon Fraser University. Carsten Kowalczyk read several chapters and gave us a number of valuable suggestions. If readers find something particularly objectionable about the book, there is a good chance that one of these five pointed it out, and for one reason or another we did not make the change. Veta Hartman, Jim Markusen's administrative assistant, ably performed many departmental functions so that he had time to work on the manuscript. Laura Langhoff composed all of the figures in electronic medium, rendering the ruler and flex-curve additional obsolete parts of trade theory.

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