INTERNATIONAL
TRADE
THEORY
AND POLICY

Chacholiades

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# INTERNATIONAL TRADE THEORY AND POLICY

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Foreword by Harry G. Johnson

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#### INTERNATIONAL TRADE THEORY AND POLICY

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### **FOREWORD**

There has long been a need for a systematic introduction to the modern pure theory of international trade that would take the student through a careful introduction to the tools of analysis and the main logical propositions into the application of the theory to practical problems of international economic policy. Too often, the student who has learned sophisticated analytical techniques in his price theory course is thrown back in his trade theory course into a morass of strange concepts and problems—such as absolute versus comparative advantage, or why free trade that theoretically benefits everyone should be one of the most unpopular of policy proposals—which could be understood and solved easily if only the appropriate price theory tools were applied and their use understood. Trade theory should be part and parcel of price theory, distinguished only by the fact that other countries form part of the natural opportunities and natural constraints—that a country confronts in its efforts to bend nature to its desire to produce utility-yielding goods and services; but its exposition is often confused by the attachment of its expositors to obsolete problems and obsolete analytical techniques.

The great virtue of the present volume by Miltiades Chacholiades is that it concentrates on the analytical issues and techniques, and expounds them in a careful and straightforward fashion that should enable students to grasp them and hold them once-and-for-all in their intellectual bag of tools. The book is a workmanly exposition of what the student needs to know, pitched at a level that requires sustained application but no feats of imagination to follow. It does not attempt to deal with major issues of current economic policy, though students and their instructors using it should have little difficulty in applying its analysis to current policy problems. Nevertheless, it does deal with several issues of keen

contemporary interest, such as the relation between economic growth and international trade, the effects of trade on social and individual welfare, and the effects of various taxes on international trade, all of which figure prominently in recent discussions of American international economic policy.

The book may seem a trifle abstract and austere to those who would like easy answers to complex problems phrased in facile literary form and buttressed by the insertion of bite-sized chunks of theoretical analysis. But the purpose of any good book in economics, as Lord Keynes once remarked, is not to provide answers but to provide a way of thinking about the problem; and this objective is better served by a rigorous exposition of existing theory—at the appropriate level of difficulty and comprehension—than by a literary exposition that plays down the analytical apparatus and plays up the policy conclusions (which may well be wrong, or wrong in certain possible circumstances). Professor Chacholiades has followed the former course; he may not—in fact, does not—provide obvious answers to all the problems that society throws upon the area of international trade theory and policy; but neither does he provide soft answers that will not stand up to criticism. What he provides is the tools needed to arrive at answers that the economist can live by; and if the reader takes the trouble to master the tools, he should be able to arrive at answers that he can conscientiously defend.

This revised edition should meet the requirements of students even better than the previous edition, since the author has incorporated material on empirical evidence (including a new chapter on the Leontief paradox and its explanation), intermediate goods, domestic distortions and the theory of noneconomic objectives, and customs unions.

Harry G. Johnson University of Chicago

# **PREFACE**

The aim of International Trade Theory and Policy is to present in a logical and sufficiently systematic manner those principles and tools of trade theory and policy which every serious student of international economics ought to know. Students and instructors can easily supplement it with other readings on current policy problems.

The present book provides a smooth transition from price theory to trade theory so that the reader who has mastered the principles and techniques of elementary price theory will not get the feeling that trade theory is a totally different and strange field. Quick reviews of relevant price-theory tools are provided where necessary. In addition, the development of the subject matter is honest, rigorous, up to date, and, at the same time, pitched at the appropriate level to serve the needs of advanced undergraduates and first-year graduates as well as the needs of the general economist.

In an effort to communicate with the masses of students, the exposition does not make use of advanced mathematical techniques. It relies rather heavily on geometry which, in addition to being simpler, is often more flexible than mathematical analysis. Nevertheless, several appendices (and sections) have been added to deal with more advanced material. These appendices (and sections) may be omitted without interrupting the continuity of the book. Hopefully, this will insure maximum flexibility in the book's use. All theorems are proved with great care, and all assumptions are stated and explained clearly. Although it is presumed that the student has some acquaintance with the tools and principles of elementary price theory, acquaintance with elementary calculus, though desirable, is not absolutely necessary.

The book is divided into seven parts. Part one is a simple overview of the

book. Part two (chapters 2 and 3), dealing with the classical theory, is the simplest. It is nevertheless an important part of the book and should not be ignored. for in addition to providing an explanation of what the classical theory really is, it serves as a general introduction to the pure theory of trade and thus facilitates the understanding of the rest of the book. Parts three and four cover essential material which should be read before parts five to seven are read. Nevertheless, chapter 4, "Opportunity Cost," which offers a quick review of some of the tools and principles of price theory, may be omitted by those whose background in price theory is rather strong. In addition, chapter 7, "Increasing Returns," may be omitted on a first reading without interrupting the continuity of the book. After parts two to four are read, part five, "Economic Growth and Trade," can be taken up either before or after parts six and seven. Chapter 14, "Growth in a Simple Open Economy," which is more advanced than the rest of the book, can be omitted without interrupting the continuity of the book. Finally, although parts six and seven can be taken up in any order after parts two to four are read, it is recommended that part six be read before part seven.

Selected bibliographies are provided at the end of each chapter. No attempt was made to provide exhaustive bibliographies.

It should be noted that the last section of chapter 5, "Neoclassical Demonstration of Comparative Advantage," is a revised version of the author's *Metroeconomica* paper "Multiple Pre-Trade Equilibria and the Theory of Comparative Advantage." Similarly, chapter 7, "Increasing Returns," is an expanded version of the author's *Southern Economic Journal* paper "Increasing Returns and Comparative Advantage." I wish to thank the editors of both *Metroeconomica* and *Southern Economic Journal* for their permission to reproduce the above papers.

This book does not aim to push forward the frontiers of international economic analysis. Any new results which may be noticed are mere by-products of the more important aim of careful and systematic exposition.

My indebtedness to other economists is very great. To my former teachers, Robert L. Bishop, Charles P. Kindleberger, Paul A. Samuelson, and Robert M. Solow, I owe a special debt of gratitude for the knowledge and inspiration they gave me during my graduate years (1962–65) at M.I.T. Special thanks are due to Alan V. Deardorff and Heidermarie Sherman whose comments and suggestions were invaluable in improving the final product. Also, I am happy to acknowledge the influence of numerous authors of books and journal articles. Unfortunately, I cannot make specific acknowledgments (beyond those in the text itself), partly because the list would be too long and partly because I find it difficult to identify each idea I have with the source from which it came. Above all I am infinitely indebted and grateful to Professor Harry G. Johnson who made numerous invaluable suggestions and criticisms of my *Pure Theory of International Trade* (Aldine Publishing Co., 1973) which formed the basis for the present book.

Any remaining deficiencies are mine. Further, I wish to thank Stephen Dietrich, the Economics Editor of the McGraw-Hill Book Company, for his

assistance in preparing the manuscript and for expediting the publication process. I would like to thank Marilyn King for making my job a lot easier with her efficient preparation of a lengthy and technical manuscript, and June Shipley and Fred Horne who helped her. Thanks are also due to Carlos Nunes for his assistance in compiling the indexes.

Miltiades Chacholiades

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