
Giancarlo Gandolfo

International Economics I

The Pure Theory of International Trade

Second, Revised Edition



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Giancarlo Gandolfo

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The Pure Theory of International Trade

Second, Revised Edition

With 85 Figures

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Giancarlo Gatti

International Economics I

The Pure Theory of International Trade

Second, Revised Edition

With 25 Figures

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Preface to the Second Edition

*To the memory of my father
Edgardo Gandolfo*

This new edition may be considered both a continuation of the first edition, but has been updated and enriched. It includes new material, the work of colleagues and students, and my use of the new theory and the introduction of new topics and the expansion of existing ones. In addition to the new material, there is of course the standard set of revisions: a better explanation of several difficult points, the updating of the institutional material and of the references, and the correction of misprints.

The main innovations in Vol. I are the 'new' protectionism and the 'new' trade theories. The new protectionism was already briefly mentioned (under the title 'other impediments to free trade') in the previous edition, but the increasing importance of these forms of protectionism and the emergence of the 'political economy' of protectionism required a new and deeper treatment (see section 1.9). A chapter was already devoted to the new trade theory (Chapter 6), but the increasing importance of (models of) trade based on increasing returns, imperfect competition, cross-hauling, etc., suggested a complete revision of the chapter to give a detailed treatment of such developments.

More innovations are contained in Vol. II, perhaps reflecting the fact that international monetary economics, more than trade theory, is in a state of flux. The frequent use, in this volume and in international monetary economics writing in general, of the various interest-rate parity conditions and related topics (efficiency of the foreign exchange market, capital mobility and asset substitutability, etc.) suggested the detailed and unified exposition in the new section 10.7. The treatment of exchange-rate determination has been expanded: it now includes simultaneous models and a review of empirical studies. A new chapter (Chapter 19) has been introduced to cover the theory and practice of monetary integration, including the European Monetary System (previously dealt with in Chapter 18) and the prospective European Monetary Union. The previous Chapter 19 (now Chapter 20) has been completely revised and rewritten: this is also reflected in the new title. It now includes, amongst others, important topics such as international capital transfers, international policy coordination, proposals for the management of exchange rates (target zones, etc.).

I owe helpful comments to Giuseppe De Angelis, Daniela Fedorci, Jorge Hopenhayn, Pierluigi Padoa-Schioppa, Giovanni Paladini, Yang Qian, Luca Rossi, Laura Sabatini, Karl-Ludwig Sauterthimer. I am particularly indebted to Francesco

Preface to the Second Edition

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Sanna Randaccio, who has made very useful suggestions as regards the new parts and has read the whole first edition with painstaking care, spotting many points that needed clarification. None of the persons mentioned has any responsibility for possible deficiencies that might remain.

University of Rome "La Sapienza"
February 1994

Giancarlo Gandolfo

Preface to the First Edition

There is no lack of good international economics textbooks ranging from the elementary to the advanced, so that an additional drop in this ocean calls for an explanation. In the present writer's opinion, there seems still to be room for a textbook which can be used in both undergraduate and graduate courses, and which contains a wide range of topics, including those usually omitted from other textbooks. These are the intentions behind the present book, which is an outcrop from undergraduate and graduate courses in international economics that the author has been holding at the University of Rome since 1974, and from his on-going research work in this field. Accordingly the work is organized as two-books-in-one by distributing the material between text and appendices.

The treatment in the body of this book is directed to undergraduate students and is mainly confined to graphic analysis and to some elementary algebra, but it is assumed that the reader will have a good knowledge of basic microeconomics and macroeconomics (so that the usual review material on production functions, indifference curves, standard Keynesian model, etc., etc. has been omitted). Each chapter is followed by an appendix in which the treatment is mainly mathematical, and where (i) the topics explained in the text are treated at a level suitable for advanced undergraduate or first-year graduate students and (ii) generalizations and/or topics not treated in the text (including some of those at the frontiers of research) are formally examined.

The appendices can be read independently of the text and can, therefore, also be used by students who already know "graphic" international economics and want to learn something about its mathematical counterpart. Of course the connections between text and appendices are carefully indicated, so that the latter can be used as mathematical appendices by the student who has mastered the text, and the text can be used as a literary and graphic exposition of the results derived mathematically in the appendices by the student who has mastered these. The appendices require a working knowledge of calculus, matrix algebra, optimization methods, and dynamic analysis for stability purposes.

The traditional distinction between the pure theory of international trade and international monetary theory is maintained; note that, although trade theory is treated (in Book I) before turning to international monetary theory (in Book II), there is enough independence in the two parts to make it possible for a teacher who so prefers to deal with international monetary matters before trade matters. In any case, one chapter briefly indicates the problems that arise when one tries to integrate these two branches of international economics, a topic which is usually

omitted from comparable textbooks. Other topics treated here which are seldom present — at least not simultaneously present — in international economics textbooks include: international trade under uncertainty; illegal transactions in international trade (a theory of smuggling); Dutch disease and de-industrialization; neo-Ricardian versus orthodox theories of international trade; imported intermediate goods in the multiplier mechanism; international transmission of perturbations in n -country models; the new Cambridge school of economic policy; integration between portfolio and macroeconomic equilibrium under fixed and flexible exchange rates; the inflation-devaluation vicious circle; etc. The bibliographies appended to each chapter, though far from exhaustive, may seem unduly long for a textbook, but they have been compiled to serve a double purpose. They aim to help all those who wish to read the original sources (both classic and very recent) to find these: in fact, many (though not all) items in these lists are quoted throughout. And secondly they can be a teaching aid insofar as they can help the teacher to prepare selected reading lists.

International economics — and especially international monetary theory — is in a state of flux. The author has tried to give a balanced treatment of the various approaches, in the belief that they all have something to teach us. This undogmatic and eclectic presentation will, it is hoped, have the advantage of serving a wider audience than the believers in one specific creed, thus leaving the reader free to form a personal opinion and to choose an approach without ignoring the others. The book is mainly analytical, and no detailed description of the international monetary system and of its evolution over time has been included. This is a deliberate omission, made for various reasons. A single chapter on this topic would not suffice and, furthermore, it would quickly become obsolete, given the rapid succession of events occurring in our time. The student interested in these matters would do best to read one of the several good books available of the institutional-descriptive type.

It should however be stressed that this decision does not at all mean that the real world has been excluded. Firstly, the author has given a very brief treatment of the key events of the international monetary system since the second world war, so as to provide the minimum amount of information necessary to set the theoretical problems against their institutional and historical background. Thus, for example, when dealing with optimum currency areas a treatment of the EMS (European Monetary System) is included, and when dealing with the issue of fixed versus flexible exchange rates, a concise evaluation of the experience of the managed float is given. Secondly, the results of empirical tests of some of the theories of international trade and finance are briefly discussed. However, by stressing the analytical aspects, the author hopes to give the student the tools for an understanding of facts and policies — tools that will survive the circumstances of the passing day.

In writing this textbook I have been fortunate enough to benefit from comments, criticism, and suggestions coming from all levels. The students of my international economics courses, who served as guinea pigs in my testing of this material throughout the years, performed their task admirably well by indicating unclear points and suggesting amendments, and they even survived the experiment!

Colleagues who have been using my lecture notes in other universities were kind enough to let me know their own reactions as well as those of their students. I am particularly indebted to Flavio Casprini, with whom I have discussed this work in detail ever since the preparatory planning phase down to a close scrutiny of the final version. I am also very grateful to Pietro Carlo Padoan, Maria Luisa Petit and Francesca Sanna Randaccio, who read the entire first draft with painstaking care and made innumerable and invaluable comments. Helpful observations on single points came from Claudio Gnesutta, Cristina Mastropasqua, Giancarlo Martinengo and Ferruccio Marzano. Derrick Plant went through the entire final version to check my English: as he is a wonderful linguist but not a mathematical economist, I must apologize for having caused him many a nightmare in forests swarming with such horrible creatures as Jacobians, Hessians, and the like (he was particularly awed by the Jacobians). It goes without saying that none of the persons mentioned has any responsibility for possible deficiencies that might remain.

Last, but not least, I wish to thank Anna Maria Olivari who, in addition to carrying out all the secretarial work, transformed my scribbblings into beautiful typescripts. Her collaboration has been indispensable for the completion of this work.

University of Rome "La Sapienza"
Summer 1986

Giancarlo Gandolfo

Preface to the Soft-Cover Edition

The present soft-cover edition, which follows the one-volume hard-cover one, has been published in two independent volumes with the intention of making the book more suitable for teaching purposes.

University of Rome "La Sapienza"
Spring 1987

Giancarlo Gandolfo

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