## Introduction

Since the 1990s the international economy has been characterized by the rise of powerful new industrial producers in developing countries; the increasing internationalization of firms and consequent dislocations of traditional production chains; modest improvements in living standards and employment in advanced countries, followed by the most serious economic crisis since 1929; growing and persistent disequilibria of trade balances among the most important world economies; increasing power of the giant corporations providing digital networks; and a fundamental role of standards for all economic activities. To those who are looking for an explanation for these developments, the current theory of international trade has offered limited guidance, leading to widespread dissatisfaction with the analysis it provides of the causes and effects of international trade flows.

This is not the first time that international trade theory has had difficulties in providing satisfactory explanations of contemporary events. A much stronger wave of criticism against what was then the orthodox theory took place in the 1960s and mid-1970s. Based on the principle of comparative costs set out by Ricardo in 1817 and the notion of the relative availability of production factors elaborated by Heckscher in 1919 and Ohlin in 1933, trade theory had proved unable to explain the extraordinary growth of post-war trade in manufactures among industrial countries. The reason was that it continued to ignore basic developments of modern economic life, such as the role of technical progress in determining which goods each country can export, the importance of economies of scale in production and distribution, the increasing sophistication of consumers, which opened new opportunities for non-price competition, and the activities of large multinational firms.

New theories centred on these factors as causes of international trade were then advanced, and references to these new explanations started to make their appearance in standard textbooks. But what made it possible for the new theories to gain academic recognition (though the importance of the insights provided by some of their authors was then largely played down) was a development that took place in the 1980s, when some of them were translated and developed by the economists of the so-called New Trade Theory into specific models that respected all the formal requirements of orthodox economics and could be used to produce precise results.

From the 1990s onwards, in an attempt to provide explanations for the new developments in the international economy, listed in the first paragraph, international economists have moved in two directions. They have started to recognize the impor-

tance of problems previously ignored or underestimated, such as unemployment and trade balance disequilibria, that hinder the smooth working of the comparative costs principle. And they have investigated how the epochal changes that took place in this period – political, technological and organizational – gave rise to new phenomena, such as massive trade in industrial inputs and the formation of complex international production chains.

At the same time, changes in the structure of the world economy have led international trade theory to modify the very object of its analysis. It now seems aimed not so much – or not so exclusively – at explaining why given countries export given goods; rather, new objects of analysis have been developed, respectively at a higher and at a lower level of aggregation compared with traditional analysis of comparative advantage.

On the one hand, research has sought to explain why certain countries have managed to become poles of attraction for production and export activities in general or for wide categories of goods belonging to many different sectors. This development was influenced – apart from renewed interest in the spatial aspects of economic activity (which led to the establishment of a new 'economic geography' line of economic research) – by the extraordinary surge of exports from some developing countries, above all China, which have emerged as important competitive world producers of a large number of goods and services. It also seems to have been favoured by the growing realization that to an increasing extent absolute advantages, and not only comparative ones, determine countries' exports and imports.

On the other hand, an opposite tendency has developed towards more disaggregated analysis; this has taken place in two directions. First, realizing the growing importance of the fragmentation of goods' production cycles among different countries, international trade theory has increasingly concentrated on the characteristics, not of the final goods exported by a country, but of the specific phases or tasks (or components) of the exported goods' entire production cycle that a country carries out. Second, instead of concentrating analysis on the overall characteristics of the exporting country or sector, more attention has been devoted – thanks to the availability since the 1990s of new sets of data at firm level - to the specific characteristics of a country's exporting firms. It was found that a country's firms producing the same good are characterized by large differences in productivity, and that taking part in international trade differentiates exporting firms from those producing exclusively for the domestic market. The result of this is that the stimuli to higher efficiency and competitiveness provided by increased trade integration and firms' greater involvement in export and import activity appear to produce a reshuffling of firms' composition within sectors and subsectors, which has significant positive effects on the latter's overall levels of productivity.

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This book represents an attempt to provide at an elementary level – after a brief summary of the main new theories produced in 1960–1975, which were the object of detailed analysis in Roccas (1975) – a description of some lines of research in interna-

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tional trade or connected fields of economics developed, at very dissimilar levels of academic refinement, in the following decades, which seem to throw light upon some crucial determinants of, and problems posed by, the new features of today's international economy that have already been mentioned.

Far from trying to provide a survey of the literature in the field, the book aims to present the reader with a number of contributions, covering a large number of different areas, that provide insights helping to explain the present configuration of international trade flows and the forces that are shaping it. The importance of some of these contributions has already been widely recognized, and they have found their place in current textbooks. They are treated here in less depth than those that have received less attention, often because they did not or could not reach the same level of formal elaboration. It has also seemed important to trace particular insights in the works of economists of the past who anticipated ideas and concepts that have been developed in more recent times.

A basic goal has been to show how non-economic forces of different kinds – technological, political, social and historical – have interacted with economic forces to determine the structure of contemporary international trade flows. Therefore, an attempt has been made to highlight new – or so far ignored or insufficiently examined – underlying factors (such as power asymmetries in relationships between economic actors, or the relevance of networks and standards for economic activity) that shape the flows of international trade and investment; flows that have often been analysed by international trade theory only in their final more technical aspects and mechanisms.

There has been a tendency in economics for non-economic factors to be excluded from analysis, together with economic factors that are not amenable to precise specification and measurement. This is unfortunate, as the objective importance of a factor in causing a phenomenon does not depend on our ability to insert it in a formal model and measure it precisely; so that exclusive concentration on measurable factors can lead to a seriously distorted representation of reality. But it is also unfortunate because by ignoring important, even if not precisely quantifiable, determinants of a phenomenon, attention is diverted from the urgent need to find ways to better specify and measure these determinants.

Finally, it is hoped that this work will show the complexity, the problems of definition and often the ambiguity and contradictions of some apparently clear and precise terms and concepts that are currently employed in the analysis of international trade; and especially the debatable and controversial nature – in some cases, the shaky foundations – of many theories and propositions, and connected policy prescriptions, that have been developed by international trade theory and economic theory in general (it is significant, in this respect, that the economists who have analysed a subject most thoroughly are usually those most aware of the complexity and limits of the concepts they use and the results they have reached, and of the difficulty of advancing conclusions and prescriptions of general validity). This will contribute to expose the largely illusory nature of the claim by many economists that, alone among social fields of research, their profession shares the 'scientific character' of

natural sciences. In fact - apart from the fundamental differences between the analyses of social and natural phenomena, ideological and political motivations inevitably influence economists' work, in particular as regards the very choice of the subjects to be researched, the hypotheses on which models are built and, sometimes, the analytical tools employed.

An effort has been made to present in simple words the content of a large number of more technical contributions that it might be difficult for the non-specialist to access. References are provided in the text and the footnotes to more specific or – for the economist – more formal texts. Although this work is not directed at professional economists, the hope is that some of them and, especially, students preparing to enter the profession in the future may find an interest in some of the issues discussed or mentioned here but only sporadically analysed in the economic literature; and that they will devote their efforts to develop the additional insights and the formal tools necessary for the issues to become the object of analysis and debate among economists.

Unfortunately, limits of time available to the author, and of space within which the work is to be contained, have made it impossible to analyse and evaluate the vast empirical literature underlying the arguments advanced by the economists whose ideas are presented here; to provide adequate statistical data on the phenomena under discussion; and to extend the analysis to the economic policies proposed by international economists on the basis of their theoretical arguments and to the debates that have developed over these policies.

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The structure of this book is as follows. Chapter 1, after briefly explaining the concepts of absolute and comparative advantage, describes what is here called the Ricardo–Heckscher–Ohlin (RHO) model, the basic analytical framework that international trade theory adopted until the 1970s, and that to a considerable extent continued, with some adaptations, to be referred to in international trade analysis. It can be useful to view all the new trade theories developed in the last sixty years as moving from the rejection of one or more of the assumptions on which that framework was based and which increasingly appeared to be contradicted by the reality of international economic life. Chapter 2 discusses some preliminary problems, mainly conceptual and methodological, that international trade analysis must try to overcome, or at least should take into consideration; these problems highlight the inevitable limitations of many of the conclusions reached by that analysis.

Chapters 3, 4 and 5 briefly discuss three central issues (scale economies, imperfect competition and technology) that gave rise to the most interesting new theories which in the 1960s and 1970s started to challenge the 150-year-old international trade theory orthodoxy based on Ricardo and then on Heckscher and Ohlin. Reference is made to some of the new problems that emerged, and the theoretical contributions that were produced, in the following decades on these three issues.

The RHO model's hypotheses of full employment and trade balance equilibrium are the object of Chapters 6 and 7. They seem to represent the key elements of the

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RHO theoretical construction: the first provides the logical basis for the importance of the comparative costs principle itself (so that when Keynes introduced the opposite assumption of resources' unemployment, the whole rationale for international trade was upset); the second is essential for the operation of the mechanisms that allow the comparative costs principle to apply in real international transactions.

In Chapter 8, Adam Smith's theory of international trade is reconsidered in order to highlight some crucial insights he provided on many issues that are at the centre of contemporary international trade theory; his contribution to trade theory is compared with that of Ricardo. The tendency for international trade theory to attribute increasing importance to countries' absolute advantages relative to comparative ones is underlined, the latter finding an obstacle to their practical operation in the weaknesses of the re-equilibrating mechanisms required for their working.

Two elements that have a strong influence on international trade flows, but which have seldom been the object of analysis in international trade theory, are discussed in Chapters 9 and 10. The first is power, which has always conditioned the types and prices of the products exchanged between countries: the different aspects of economic power are discussed, and an attempt is made to synthetically outline the main changes in countries', firms' and individuals' power relationships that have taken place in the last forty years. The second is standards and networks, factors that became important from, respectively, the last decades of the 19th century and the 1980s, but which in recent years have increasingly contributed to determining countries' hierarchy in the international economy and the structure of international trade.

The last two chapters deal with issues that have been at the centre of international economists' recent discussions. Chapter 11 retraces the debate that took place from the early 1990s, particularly in the USA, on the phenomenon of advanced countries' offshoring to low-wage developing countries phases of manufacturing and service activities previously performed at home, and on the negative consequences of this phenomenon for the levels of employment and wages of significant sections of the workforce in the West. It stresses the importance of some contributions by economists to the study of the process of international fragmentation of economic activity, and to the analysis of the large international production chains managed by powerful multinational corporations (MNCs). The difficulty of determining the distribution of trade benefits among firms and countries taking part in these chains is specifically discussed in the chapter.

Chapter 12 analyses the phenomenon that has dominated the international economic stage since the 1990s: the exceptional growth of the Chinese economy (and that of other important developing countries), and the dislocations that the rise of this new protagonist – given its gigantic size – has produced in the economies of the advanced countries and in world trade equilibria. It also discusses the measures economists have proposed to eliminate or minimize the negative consequences of these new trade equilibria in terms of increasingly unequal domestic income distribution.

A few final remarks on world trade, international trade theory and international trade economists conclude the work.

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The reader is invited to note that throughout this book the words 'good' and 'product', unless otherwise indicated, will always refer not only to physical goods but also to all services that can be – and increasingly are – the object of international trade.<sup>1</sup>

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