

FOURTH EDITION

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WORLD  
TRADE  
AND  
PAYMENTS  
AN INTRODUCTION

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Richard E. Caves  
Ronald W. Jones

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# **WORLD TRADE AND PAYMENTS**

## **An Introduction**

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Harvard University

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# Preface

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In this fourth edition we have retained the goal proclaimed in previous editions: to supply an exposition of international economics that is serious in its theoretical underpinnings and yet connected to current economic events. These events are not in short supply; nor are advances in some areas of international economic theory, particularly the macroeconomic and monetary area. The late comic Fred Allen ad-libbed, as a joke fell flat, "When we warmed up the audience before the show, we must have cremated them." The trick is to adapt a textbook to the pace of events and intellectual development without losing the student in the resulting turbulence.

The book's organization underwent some revision in this edition to help us incorporate new issues and concepts. The real-variables section now consists of four parts. Chapters 8–10 make up Part III and deal with international flows of factors of production and intermediate goods and with noncompetitive markets. We seek to provide a more extensive and better-integrated treatment than before of these issues lying outside the classical core of trade theory. More theoretical and empirical material than before is provided on international migration and long-run capital transfers. In a new Chapter 8, we address trade in nonfinal products and related issues of internationally "footloose" industries.

The balance of the real-variables section retains the organization of the third edition, although with many minor changes. Chapters 2–7 have been further simplified and some of them completely rewritten. Chapter 13 was extensively revised to focus on the rise of "managed trade" and the political economy of trade controls.

In the section dealing with monetary and financial issues, a good deal of revision was undertaken in order to tighten the organization and ingest more fully the financial-asset approach to the foreign-exchange rate. The theory of exchange-rate determination now directly follows the monetary model of macroeconomic adjustment (Chapters 17 and 18), and the analytical relationship between them is developed extensively. Institutional material on the foreign-exchange market is now combined with the analysis of other international financial-asset markets in Chapter 20. The third edition's chapter on inflation has been dropped, but some material on this subject in Chapter 17 illustrates the monetary mechanism of adjustment. Chapter 21 on internal and external balance was rewritten extensively to integrate it more fully with Keynesian concepts of open-economy adjustment used in earlier chapters.

Users of the book have urged more applications to current policy issues, and accordingly we have expanded the space devoted to empirical investigations of these issues and the behavior underlying them. We consider, for example, the rapid increase in offshore sourcing by United States manufacturers (Chapter 8), the problem raised by the heavy external debts of certain developing countries (Chapter 10), and the relation between the United States government deficit and the current-account balance (Chapter 19). We have continued our effort to make generous reference to recent research findings on how the international economy operates, to show the student that the concepts of international economics are actively useful and not just a made-up story.

We have also added a pedagogical feature to this edition. To help students learn, we have included problems and exercises following each chapter. The Suggestions for Further Reading, a pedagogical tool of previous editions, have been thoroughly updated.

We have stuck to the third edition's level of difficulty, restricting the text to material that requires only the background in micro and macro theory provided by the standard course on principles of economics. To make the book adaptable for instructors who wish a more advanced approach, we have retained the mathematical supplements presented at the back of previous editions and also expanded the appendixes at the ends of chapters. The appendixes typically offer geometrical constructions that some instructors favor but others wish to avoid. The conclusions reached in the appendixes always receive self-sufficient coverage in the text, though with less weighty or less general analytical underpinning.

The book covers a conventional full line of topics, and with some additional material can serve as the basis for a full-year course at the undergraduate level, or for separate semester courses on the real and financial aspects of international trade. We have paid careful attention, however, to the needs of one-semester courses. In particular, we view the chapters in Part I and the first four chapters of Part V as the nucleus of a one-semester course that is meant to cover both the core of the real theory (with applications) and elements of balance-of-payments adjustment. Many of the chapters outside this core are at least somewhat independent of one another, and so can be selected to round out the course, with an emphasis depending on what topics the instructor wishes to emphasize.

Authors whose textbook reaches its third revision have acquired a string of debts to colleagues, students, and various helpers that stretches the bounds of memory, let alone explicit acknowledgment. We confine ourselves to thanking those who supplied suggestions for changes in the fourth edition—Robin Bade, Bradley Billings, Patrick Conway, Isaias Coelho, Robert Dohner, Jonathan Eaton, Dudley Johnson, and Jose Vinals.

# **WORLD TRADE AND PAYMENTS**

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# Contents

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## **1 Introduction 1**

- 1.1 The Subject of International Economics 2
- 1.2 The Organization of This Book 5
  - Suggestions for Further Reading* 7

## **I The Basic Trade Model 9**

### **2 The International Exchange of Commodities 11**

- 2.1 The Gains from Trade 12
- 2.2 Free-Trade Equilibrium 19
- 2.3 The Basic Argument for Free Trade 20
- 2.4 Disagreements over Free Trade 23
  - Chapter Problems* 27
  - Suggestion for Further Reading* 27

### **3 Production Response and the Demand for Imports 28**

- 3.1 The Production-Possibilities Schedule 28
- 3.2 Production and Free-Trade Equilibrium 32
- 3.3 Comparative Advantage and the Pattern of Trade 36
- 3.4 The Elasticity of Import Demand 37
- 3.5 Summary 42
  - Chapter Problems* 42
  - Suggestions for Further Reading* 43
  - Appendix: The Offer-Curve Diagram* 43

### **4 Applications of the Basic Trade Model 46**

- 4.1 Disturbances from Abroad 46
- 4.2 Home Restrictions on Outputs 49

4.3 Growth and Trade	50
4.4 The Transfer Problem	54
4.5 Summary	58
<i>Chapter Problems</i>	60
<i>Suggestions for Further Reading</i>	61
Appendix: <i>The Stability Issue</i>	61

## **II Technology, Factor Endowments, and the Pattern of Trade   65**

<b>5 Technology and the Ricardian Trade Model</b>	<b>67</b>
5.1 Before Trade	68
5.2 Comparative Costs and the Pattern of Trade	69
5.3 National and World Gains from Trade	71
5.4 International Wage Comparisons and Productivities	75
5.5 Many Commodities and Many Countries	78
5.6 Technical Progress and the International Distribution of Gains	80
5.7 Nontraded Commodities	82
5.8 Summary	84
<i>Chapter Problems</i>	85
<i>Suggestions for Further Reading</i>	86
<b>6 Increasing Costs, Specific Factors, and Trade</b>	<b>87</b>
6.1 Choice of Technique for a Competitive Firm	88
6.2 Specific Factors and Economy-Wide Production Possibilities	92
6.3 The Distribution of Income in a Closed Economy	92
6.4 Free Trade and Income Distribution	95
6.5 Factor Growth in a Small Trading Community	96
6.6 The Pattern of Trade	100
6.7 The "Dutch Disease"	102
6.8 Summary	105
<i>Chapter Problems</i>	106
<i>Suggestions for Further Reading</i>	107
<b>7 Factor Endowments and Heckscher-Ohlin Theory</b>	<b>108</b>
7.1 Outputs and Factor Rewards in the $2 \times 2$ Model	109
7.2 International Trade in the $2 \times 2$ Heckscher-Ohlin Model	112
7.3 Trade Patterns with Many Commodities and Countries	117



7.4 Summary	126
<i>Chapter Problems</i>	128
<i>Suggestions for Further Reading</i>	129
Appendix A: <i>The Leontief Paradox</i>	130
Appendix B: <i>Heckscher-Ohlin and Sector-Specific Models:                   A Temporal Relationship</i>	135

### **III International Factor Flows and Non-Competitive Markets      139**

<b>8 International Trade in Intermediate Goods</b>	<b>141</b>
8.1 Resources and Materials in International Trade	142
8.2 Intermediate Goods Trade and Production Possibilities	145
8.3 The Newly Industrializing Countries and Footloose Production Processes	150
8.4 Footloose Inputs: The Joint Role of Comparative and Absolute Advantage	155
8.5 Summary	159
<i>Chapter Problems</i>	160
<i>Suggestions for Further Reading</i>	161
<b>9 Imperfect Competition in International Trade</b>	<b>162</b>
9.1 Export Cartels and Commodity Agreements	162
9.2 Monopoly, Monopolistic Competition, and International Trade	166
9.3 Oligopoly in International Markets	172
9.4 Summary	177
<i>Chapter Problems</i>	178
<i>Suggestions for Further Reading</i>	179
<b>10 International Factor Movements and Multinational     Companies</b>	<b>180</b>
10.1 Factor Movements: The Efficiency of World Production	180
10.2 Factor Movements: The Effect on Commodity Trade	181
10.3 Migration and Income Distribution	182
10.4 International Capital Movements: Selected Issues	185
10.5 Multinationals and Direct Foreign Investment	190
10.6 Summary	199
<i>Chapter Problems</i>	200
<i>Suggestions for Further Reading</i>	200

## IV Commercial Policy 203

<b>11 Tariffs and the National Welfare</b>	<b>205</b>
11.1 The Tariff for a Small Country	205
11.2 The Impact of a Tariff on World and Domestic Prices	210
11.3 Tariffs and Domestic Welfare	214
11.4 Tariffs and World Welfare	214
11.5 Summary	216
Chapter Problems	217
Suggestions for Further Reading	217
Appendix: Tariffs and the Offer Curve	217
<b>12 The Political Economy of Protection</b>	<b>220</b>
12.1 The Tariff as a Device for Raising Revenue	220
12.2 Tariffs and the Distribution of Income	223
12.3 The Tariff as a "Second-Best" Device	224
12.4 Commercial Policy and Economic Development	227
12.5 Protection and Foreign Investment	231
12.6 Tariffs, Employment, and the Balance of Payments:	
A Preliminary View	232
12.7 Effective Protection	233
12.8 Summary	235
Chapter Problems	236
Suggestions for Further Reading	236
<b>13 Trade Controls in Practice</b>	<b>237</b>
13.1 United States Tariff and Its Incidence	237
13.2 Multilateral Tariff Reduction	241
13.3 The Trend Toward "Managed" Trade	247
13.4 Trade Policy and the Less-Developed Countries	256
13.5 Summary	259
Chapter Problems	260
Suggestions for Further Reading	261
<b>14 Preferential Trading Arrangements</b>	<b>262</b>
14.1 Fundamental Effects of Trade Preferences	263
14.2 Distribution of Gains and Losses from Preferences	267

14.3 Preferential Arrangements in Practice	269
14.4 Trade Problems of the Soviet Bloc	273
14.5 Summary	277
Chapter Problems	278
Suggestions for Further Reading	279

## **V Income, Money, and the Balance of Payments      281**

### **15 The Balance of Payments and the Foreign-Exchange Rate      283**

15.1 The Foreign-Exchange Rate	284
15.2 The Balance-of-Payments Accounts	289
15.3 Payments Accounts and Policies Toward Net International Transactions	295
15.4 Summary	304
Chapter Problems	305
Suggestions for Further Reading	305

### **16 National Income and the Balance of Payments      307**

16.1 Income Determination in Closed and Open Economies	307
16.2 Monetary Adjustments and Real Expenditure	315
16.3 The Open-Economy Multiplier in Practice	318
16.4 Summary	321
Chapter Problems	322
Suggestions for Further Reading	322
Appendix: The IS-LM Analysis of the Open Economy	323

### **17 Money Supply and the Price Level      328**

17.1 Equilibrium in Money Holdings and the Price Level	329
17.2 Monetary Adjustment and the Trade Balance in the Open Economy	331
17.3 Money and Financial Assets in International Adjustment	338
17.4 The Gold Standard: Rules and Policy Options	340
17.5 Summary	344
Chapter Problems	345
Suggestions for Further Reading	346

<b>18 Factors Affecting the Foreign-Exchange Rate</b>	<b>347</b>
18.1 Money Supplies and Exchange Rate	347
18.2 Price Levels and Exchange Rate	351
18.3 The Exchange Rate and International Capital Movements	356
18.4 Summary	362
<i>Chapter Problems</i>	363
<i>Suggestions for Further Reading</i>	364
<b>19 Exchange-Rate Changes and Their Effects</b>	<b>366</b>
19.1 Adjustment with Flexible Exchange Rates	366
19.2 Effects of Changes in Pegged Exchange Rates	373
19.3 Devaluation and Other Policies for External Equilibrium	378
19.4 Summary	383
<i>Chapter Problems</i>	384
<i>Suggestions for Further Reading</i>	384
Appendix A: <i>The Balance of Payments Adjustment Process</i>	385
Appendix B: <i>Devaluation with Nontraded Goods</i>	391
<b>20 International Financial Markets</b>	<b>395</b>
20.1 The Foreign Exchange Market	395
20.2 Forward Exchange Rates and Short-Term Capital Flows	398
20.3 Performance of Foreign-Exchange Markets	405
20.4 Euro-Dollars and the Efficiency of International Capital Markets	407
20.5 Portfolio Adjustments and International Capital Movements	412
20.6 Summary	416
<i>Chapter Problems</i>	417
<i>Suggestions for Further Reading</i>	418
<b>VI Economic Policy in the International Economy</b>	<b>419</b>
<b>21 Policies for Internal and External Balance</b>	<b>421</b>
21.1 Market Adjustment and Economic Policy	421
21.2 Attaining Internal and External Balance	423
21.3 Macroeconomic Policy, Exchange Rates, and Capital Flows	426
21.4 Policy Coordination with a Fixed Exchange Rate	431
21.5 Policy-Making in Practice	436

21.6 Summary	439
<i>Chapter Problems</i>	440
<i>Suggestions for Further Reading</i>	440

## **22 International Reserves and Liquidity      442**

22.1 The Demand for International Reserves	442
22.2 Supply of International Reserves and Liquidity	445
22.3 Reserves Demand, Supply, and Adjustment	451
22.4 International Monetary Reform	454
22.5 Summary	457
<i>Chapter Problems</i>	458
<i>Suggestions for Further Reading</i>	459

## **23 Exchange-Rate Regimes and the International Policy System      460**

23.1 Flexible Exchange Rates: Theory and Experience	460
23.2 Fixed Exchange Rates and Their Adherents	466
23.3 Adjustment in an Integrated Monetary Area	470
23.4 Policy Systems and International Welfare	474
23.5 Summary	477
<i>Chapter Problems</i>	478
<i>Suggestions for Further Reading</i>	479

## **Supplements      481**

### **Supplement to Chapter 2:**

<b>The Equations of Exchange Equilibrium</b>	<b>483</b>
--	------------

### **Supplement to Chapter 3:**

<b>Real Incomes, Production, Elasticities, and the Trade Pattern</b>	<b>484</b>
--	------------

### **Supplement to Chapter 4:**

<b>Stability and Comparative Statics in the Basic Trade Model</b>	<b>491</b>
---	------------

**Supplement to Chapter 5:****Comparative Advantage and the Assignment Problem     498****Supplement to Chapter 6:****The Specific-Factors Model of Production     505****Supplement to Chapter 7:****The Two-Sector Heckscher-Ohlin Model     509****Supplement to Chapter 10:****Foreign Investment, “Brain Drain,” and the Distribution of Income     516****Supplement to Chapter 11:****Real Incomes, Prices, and the Tariff     519****Supplement to Chapter 12:****Tariffs, Growth, and Welfare     525****Index     531**

# Introduction

Unique among the concerns of economics, international trade has always carried a note of romance — the lure of the exotic, the hint of danger. Traders' dreams of bartering for the riches of the Orient spurred the European voyages of discovery that began in the fifteenth century. Today, supertankers move hundreds of thousands of tons of crude oil at a time from producing to consuming lands at strikingly low cost — and have been known to pollute hundreds of miles of shoreline when they break up at sea.

The romance of international commerce surges through its contact with public policy. British restrictions on colonial trade helped to fuel the American Revolution. After World War II the nations of Western Europe, sickened of the recurrent wars spawned by modern nationalism, sought permanent reconciliation and peace through a trade treaty — removing barriers to commerce through the European Common Market.

In this book we try to provide an understanding of the economic causes and consequences of international exchange. Any branch of economics rests on theoretical concepts and models. The scholar's job is to bring systematic observation and explanation to the chaotic diversity of the world he observes. The Census Bureau records data on about 14,000 classifications of commodities entering into the foreign trade of the United States — about 4,000 for exports and 10,000 for imports. Do we need 14,000 explanations for these trade flows? Could we find one that would cover every bundle of merchandise? Our quest is for the *simplest model*, or the *smallest family of models*, capable of answering what seem to be the important questions about patterns of trade, and how public policy should deal with them.

The foreign commerce of nations is one of the oldest branches of economics, and has drawn the attention of some of the greatest economists. Indeed, many of the ideas you will meet in this book can boast of famous ancestors. We owe

much of our understanding of money in international trade to the philosopher David Hume (Chapter 17). One of our principal models of international trade and production (Chapter 5) derives from David Ricardo, an English stockbroker with a powerful analytical mind. Yet much of present-day international economics is quite new. A most fruitful model relating trade to factors of production comes from two twentieth-century Swedish economists, Eli F. Heckscher and Bertil Ohlin (Chapter 7). And our understanding of how trade relates to employment, and how policy can deal properly with both, is in part a late fallout of the Keynesian Revolution of the late 1930's (Chapter 16).

## 1.1 The Subject of International Economics

International economics is somewhat curiously related to the other conventional branches of economics. Public finance, money and banking, or labor economics selects a neatly distinguished group of transactors or markets in the economy for special study. "But," you may ask, "doesn't international economics similarly deal with international markets?" It does, and these markets are capable of exact *legal* definition. Sovereign states are ubiquitous; therefore, we can always tell whether the two parties to a transaction are citizens of different countries.

But are international transactions economically unique and readily separated from transactions within nations? Does the Kansas wheat farmer know or care whether the bushel of wheat he sells will be exported? When you buy a handkerchief, do you inspect it closely for a label indicating manufacture abroad? International transactions are of a piece with domestic markets. Ultimately our explanation of international trade must be part of an explanation of each national market.

This intertwining of international and national markets runs through all of international economics. If India decides to train more physicians, the supply of physicians in Britain is apt to increase (through emigration). If the United States raises government spending to increase employment, employment in Canada is almost sure to increase. Hence you should not be surprised that international economics can easily (and usefully) be viewed as "international aspects of supply and demand," or "international aspects of money and finance," or "international aspects of taxation."

Nonetheless, there are good reasons for treating international trade and payments as a separate field of study. Here are two reasons that we think are most important:

1. The models we find useful for explaining international trade are simple, but strong and general. They not only explain patterns of international trade, but they also tell much about patterns of production, income distribution, etc., within countries.



2. The policy questions that arise in international exchange differ from those typically discussed within nation-states, and they require a special analytical apparatus. Yet we contend that the *principles* of policy-making should be the same at home and abroad. International economics can attack both the special questions of international economic policy and show how to couple foreign and domestic policies correctly.

What, indeed, is the simplest possible way to model the international economy? The central questions about international trade deal solely with *exchange* between traders in two national markets. We shall argue that the sparest and clearest explanation of trade between nations, and the gains nations derive from trade, requires only a description of the exchange of fixed endowments of goods. The simplification we make, by concentrating first on exchange, is to put aside the details of how goods are produced. We can then explain, for example, what happened in 1973 when the exporting nations quadrupled the price of oil. Having set the essentials, we then can expand the basic model of trade to explore details of how bundles of goods are produced.

Why should we employ separate models to explain international trade and domestic trade? The traditional answer has been that factors of production — labor and capital — in the long run move freely within the national economy, but their mobility between countries is sharply limited. We suppose that labor and capital move freely between New York and California, whenever workers or lenders feel that such a shift will improve their real incomes. If that assumption is correct, the goods traded between the two states, and the effect of that trade on their “native” factor endowments will be less interesting. (California has no natives.) On the other hand, if little movement of labor and capital takes place between, say, Mexico and France, the commodities they trade and their benefit from the exchange become both interesting and important.

The assumption that factors of production are perfectly mobile within countries and perfectly immobile between them is obviously not completely true. Think of the international migrations of the nineteenth century, the outflow of long-term capital from the United States in the last three decades — and the immobility of low-paid labor out of America's Appalachia or Italy's Mezzogiorno! However, probably no assumption used by economists is completely true. We start out by supposing that the assumption is true, but we then relax that assumption in two ways. We introduce a form of immobility in the domestic economy by assuming that one factor of production used by each industry is tied to that industry and cannot find employment elsewhere, no matter what happens to its wage. We also relax the assumption that factors are immobile between countries; after we learn how trade affects the incentive for factors to migrate internationally, we can show more easily what happens when some factors seize the opportunity.

We mentioned above a second reason for studying international economics separately: Special questions of policy arise in the international economy. Trade