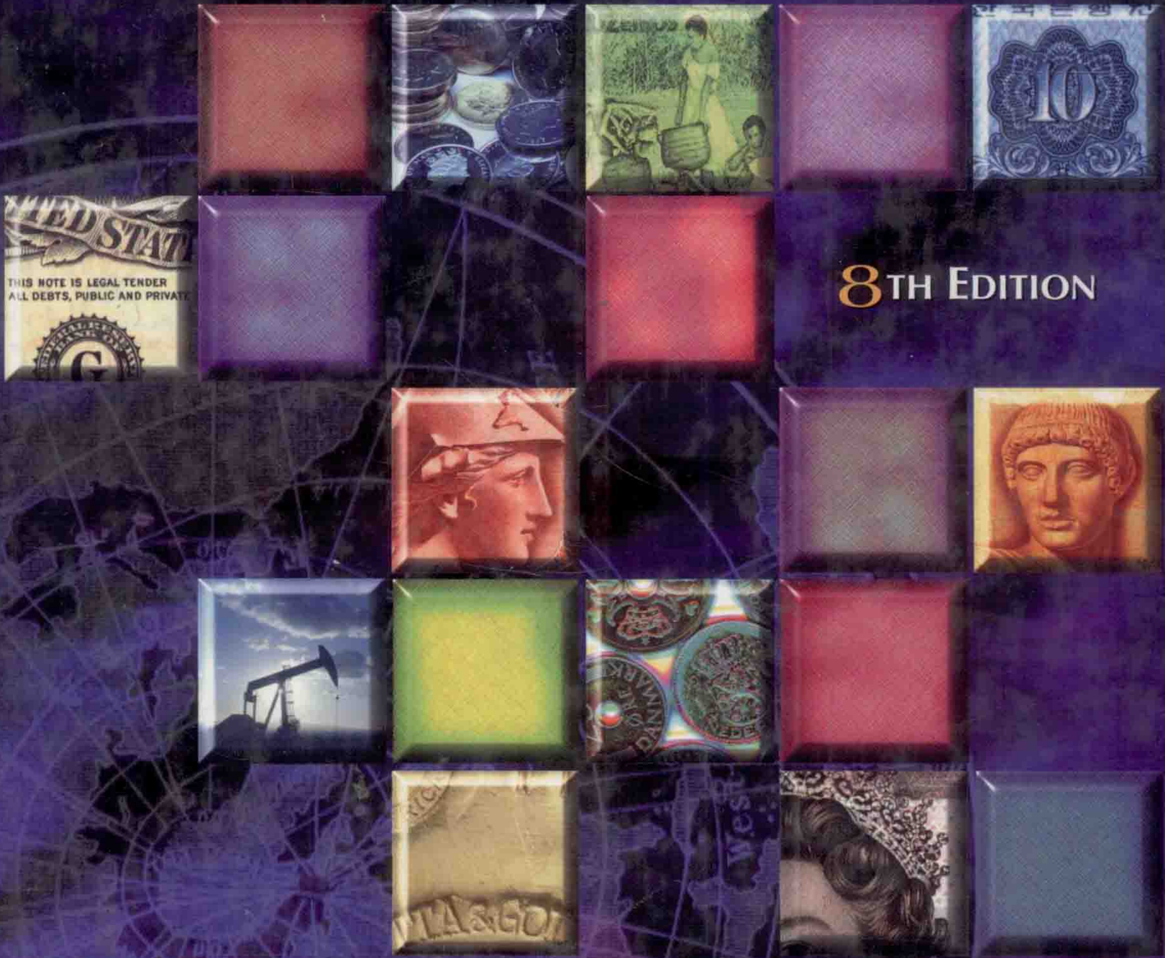
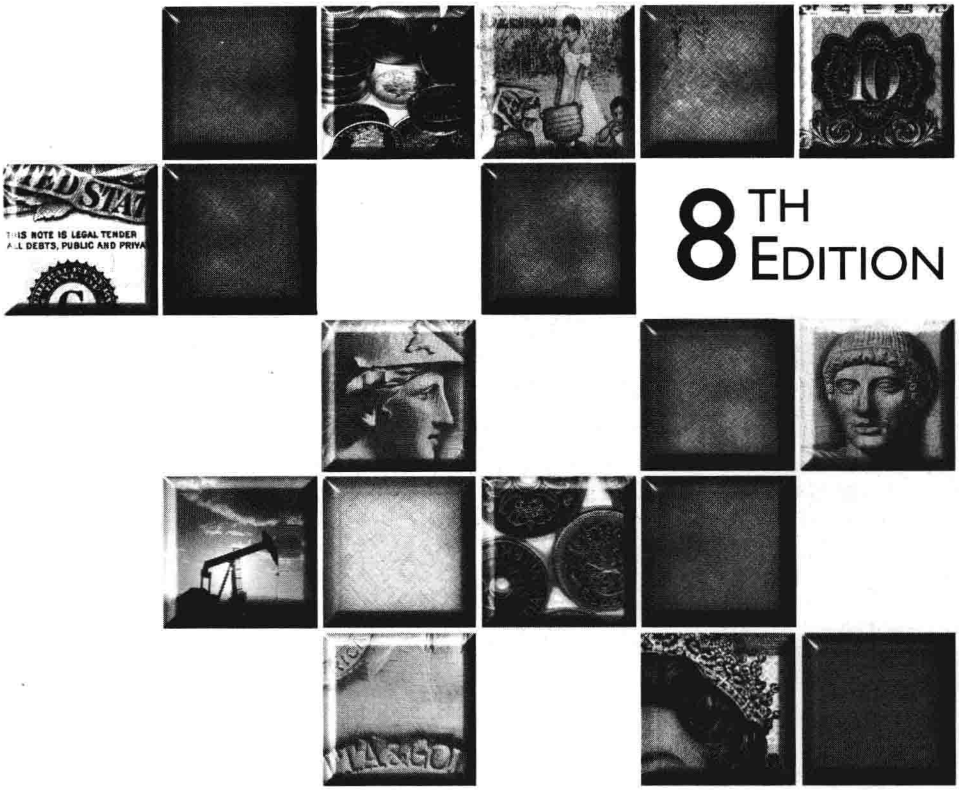


8TH EDITION

# World Trade and Payments

## AN INTRODUCTION


RICHARD E. CAVES
JEFFREY A. FRANKEL
RONALD W. JONES




8TH EDITION

# WORLD TRADE AND PAYMENTS

## AN INTRODUCTION

**Richard E. Caves**
Harvard University

**Jeffrey A. Frankel**
University of California, Berkeley

**Ronald W. Jones**
University of Rochest

ADDISON-WESLEY

An imprint of Addison Wesley Longman, Inc.

Reading, Massachusetts • Menlo Park, California • New York • Harlow, England
Don Mills, Ontario • Sydney • Mexico City • Madrid • Amsterdam

Executive Editor: Denise Clinton
Senior Editor: Andrea Shaw
Editorial Assistant: Debra Lally
Senior Production Supervisor: Nancy H. Fenton
Marketing Manager: Amy Cronin
Senior Design Manager: Regina Hagen
Cover Designer: Leslie Haimes
Print Buyer: Sheila Spinney
Publishing Services: Thompson Steele Production Services, Inc.
Electronic Page Makeup: Thompson Steele Production Services, Inc.
Printer and Binder: Maple-Vail Book Manufacturing Group
Cover Photographs: (globe) Heck's Pictorial Archives of Nature and Science; KPT Power Photos
Cover Printer: Coral Graphics

*World Trade and Payments: An Introduction*, Eighth Edition



**Library of Congress Cataloging-in-Publication Data**

Caves, Richard E.
World trade and payments: an introduction / Richard E. Caves,
Jeffrey A. Frankel, Ronald W. Jones. — 8th ed.
p. cm. — (The Addison Wesley series in economics)
Includes bibliographical references and index.
ISBN 0-321-03142-3
1. International trade. 2 Balance of payments. 3. Commercial policy.
I. Caves, Richard E. II. Frankel, Jeffrey A. III. Jones, Ronald Winthrop IV. Title. V. Series
HF1379.J677 1999
382—dc21 98-37839
CIP

*Reprinted with corrections, April 1999*

2 3 4 5 6 7 8 9 10—MA—02 01 00 99

# PREFACE

The eighth edition of *World Trade and Payments* arrives at a time of both triumph and tension in the world economy. The triumph lies in the sweep of an apparently effective market organization of economic activity across the trading nations of the world. Nobody expected a smooth transition for the centrally planned economies of the former Soviet Union and Eastern Europe, but the transition is making progress, bumps and all, and trade between these nations and the rest of the world (suppressed under central planning) is fast being restored. In 1992 the members of the European Union took a big step toward the elimination of remaining border restrictions and the economic unification of their national markets. The Union's membership has expanded to embrace most of Western Europe, and the Eastern European nations are knocking at the door. The less-developed countries have continued a decades-long trend toward reducing their restrictions on international commerce and, increasingly, have removed many other regulatory restraints that were apparently dysfunctional for their development. After a perilous journey of negotiation, the world's trading nations reached an agreement in the Uruguay Round to reduce restrictions on trade—not just conventional tariffs, but also nontariff barriers and deterrents to trade in services and foreign investment. The World Trade Organization provides a new governance structure to limit and resolve trade disputes. World capital markets grow increasingly integrated, providing new funding opportunities for borrowers and making it increasingly easy for lenders to diversify their risks internationally.

Yet beneath these triumphs there remain tensions of discontent with national and international economic performance. The United States remains fixated—inappropriately in the eyes of most economists—on its deficit in merchandise trade with Japan. Integrated international capital markets make it harder and harder for countries to implement policies to stabilize or manage their foreign exchange rates: the bursting of securities-market bubbles in several Asian countries undermined the expectations of foreign lenders and forced depreciation of the exchange rates. The Western European countries struggle with macroeconomic problems of high unemployment and central government deficits that clearly cannot be sustained without serious consequences. Despite appearances of prosperity and growth, wages and real personal incomes in some industrial countries rise slowly or even fall, generating disappointment and discontent.

The subject of international economics takes on the large task of explaining the economic mechanisms and the policy options behind all these complex developments. We claim no clairvoyance about how these issues will be resolved. We do, however, believe that students can be prepared to understand and interpret these structural changes and policy issues in the international economy along with others now unforeseen.

## What's New in This Edition

Through this and previous editions of *World Trade and Payments* we have sought to combine clear exposition of the proven and long-lasting basic theories and analytical constructs of international trade and finance with applications that illustrate their uses. We have incorporated new theoretical developments as they have come on stream and adjusted the emphasis given to those—new or old—that seem particularly helpful to the student seeking to understand the currently high-profile issues. At the same time we have kept a place for analyses speaking to issues currently shaded from popular attention, but likely to burst forth in the future into the light of public discourse.

This general objective guides the changes that were made in this eighth edition. A major change, especially in Parts I through III, has been a slimming exercise to remove a number of minor points that, we feared, were adding more to length than to students' interest and comprehension. A conspicuous example is the combination of the former Chapters 9 and 10 into a single chapter on trade in intermediate goods and factors of production, which underlines their common properties. Another major change appears in Chapter 14 (previously 15) on regional issues in trade policy, which now introduces the gravity model of bilateral trade and incorporates elements of the new economic geography. Additional emphasis is placed on both theoretical and empirical aspects of the relationship between trade and wages.

Changes in this edition seek to extend some features of our analysis that differentiate it from other texts. The "new trade theory" dealing with product differentiation and intraindustry trade is fully integrated into the analysis, appearing in Chapters 2, 3, 8, and 12. The political economy of international trade receives a good deal of emphasis, in relation to differing degrees of factor mobility, and as a basis for understanding why nations choose the trade controls that they do. The prevalence and importance of spillovers of welfare effects from one trading country to another are emphasized, as is the importance of international trade for economic development and the essential role in development of the shifting composition of trade.

## Pedagogy

Pedagogical features from previous editions of this book are retained and strengthened. Each chapter ends with a series of problems and discussion questions, as well as a list of suggestions for further reading. These readings represent either fundamental contributions or elaborations and applications that might prove useful to both student and instructor. The accompanying *Study Guide* by Carsten Kowalczyk and Linda Tesar and updated by Eirik Evenhouse and Siobhan Reilly provides an extensive review of key concepts and contains numerous problem sets. We are pleased that Greg Leonard has prepared a new *Instructor's Manual/Test Bank* to accompany this edition.

## Adapting the Course

*World Trade and Payments* is adaptable to various tracking styles. Some chapters are followed by one or more appendixes that explain specialized points or analytical constructions that some instructors might want to emphasize (but others want to avoid). Omitting any appendix will not lessen comprehension of the chapter. For instructors wanting a more advanced approach we have retained, at the back of the text, the mathematical supplements present in previous editions.

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 (quarter) courses on the real and financial aspects of international trade. We have paid special attention, however, to the needs of one-semester courses. The chapters in Part I and Chapters 16, 17, 23, and part of 19 provide the nucleus of a one-semester course that covers both the core of the real theory (with applications) and elements of open-economy macroeconomics and balance-of-payments adjustment. Many of the chapters outside this core are at least somewhat independent of one another, so that instructors can round out the course with selections from them (examples are Chapters 9 and 14). A course in international macroeconomics might include Chapters 15 to 19 (Section 19.2) and 22 to 25, and then might emphasize Chapters 21 and 26 if the orientation is toward finance, or Chapter 20 and Section 19.3 if it is toward less-developed countries.

## Acknowledgments

As authors of a textbook in its eighth edition, we have acquired debts to colleagues, students, and various helpers that stretch the bounds of memory, let alone explicit acknowledgment. We confine ourselves to recognizing those who helped with the eighth edition. Suggestions for revisions were received from Bruce Blonigen, Robert Driskill, Theo Eicher, Marko Lehtimaki, Alvin L. Marty, and Rod Swanson. Thanks to Mark Hopkins and Rachel Rubinfeld for research assistance, and Peter Hooper for data. For clerical and related assistance, we thank Lynn Enright and Ann Flack.

Richard E. Caves
Jeffrey A. Frankel
Ronald W. Jones

# CONTENTS

# PART V INTERNATIONAL FINANCIAL MARKETS AND THEIR MACROECONOMIC IMPLICATIONS 409

# 1 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—except when the breakup of a tanker at sea pollutes hundreds of miles of shoreline.

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 by the recurrent wars spawned by modern nationalism, sought permanent reconciliation and peace through a trade treaty that removed barriers to commerce through the European Union.

This book promotes 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. The Census Bureau records data on about 14,000 classifications of commodities entering into the foreign trade of the United States—4,000 for exports and 10,000 for imports. Are 14,000 explanations for these trade flows truly necessary? Could one explanation possibly cover every bundle of merchandise? Our quest is for the simplest model, or the smallest family of models, capable of answering the important questions about trade patterns and how public policy should deal with them.

The foreign commerce of nations, one of the oldest branches of economics, has drawn the attention of some of history's greatest economists. Indeed, many of the ideas in this book can boast of famous ancestors. Modern economics owes much of its understanding of money in international trade to the philosopher David Hume (Chapter 19). One principal model of international trade and production derives from David Ricardo (Chapter 5), an English stockbroker with a powerful, analytical mind. Still, much of present-day international economics is quite new. A fruitful model relating trade to factors of production comes from two twentieth-century Swedish economists, Eli F. Heckscher and Bertil Ohlin (Chapter 7). As well, 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 1930s (Chapter 17).

## 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, and labor economics select 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 always can tell whether the two parties to a transaction are citizens of different countries.

Still, are international transactions economically unique and readily separated from transactions within nations? Do Kansas wheat farmers know or care whether the bushels of wheat they sell will be exported? When you buy a handkerchief, do you inspect it closely for a label indicating manufacture abroad? International transactions are indeed interrelated 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 throughout international economics. If India decides to train more physicians, the supply of physicians in Britain is apt to increase (through immigration). If the United States raises government spending to increase employment, employment in Canada is almost sure to increase. Clearly then, international economics can easily (and usefully) be viewed as "international aspects of supply and demand," "international aspects of money and finance," or "international aspects of taxation." Nonetheless, international trade and payments must be treated—for many good reasons—as a separate field of study. Following are two of the most important reasons for such treatment.

### The Power of International Economic Theory

The most useful models for explaining international trade are those that are simple, strong, and general. They not only explain international trade patterns, they also tell much about patterns of production, income distribution, and so on within countries.

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. This book will argue that the sparest and clearest explanation of trade between nations, and of the gains nations derive from trade, requires only a description of the exchange of fixed endowments of goods. Such simplification, by concentrating first on exchange, stems from putting aside the details of how goods are produced. We then can explain, for example, what happened in 1973 when the exporting nations quadrupled the price of oil. Having set the essentials, the basic model of trade can be expanded to explore details of how bundles of goods are produced.

Why should economists employ separate models to explain international trade and domestic trade? The traditional answer holds that in the long run the factors