Introduction to international economics

Delbert A. Snider

Introduction to international economics

SEVENTH EDITION

Delbert A. Snider, Ph.D.

Professor of Economics Miami University

© RICHARD D. IRWIN, INC., 1954, 1958, 1963, 1967, 1971, 1975, and 1979

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher.

ISBN 0-256-02176-7 Library of Congress Catalog Card No. 78-70008 Printed in the United States of America

Preface

The most extensive revisions embodied in the present edition of this book relate to the section (Part Three) on international monetary relations. Previous separate chapters on the means of making international payments and their relationship to the balance of payments have been combined into a single chapter. The theory of balance-of-payments adjustment has been simplified in certain respects and expanded in other respects, with a fuller discussion of monetary aspects. In addition, a series of entirely new chapters on alternative monetary systems, the Bretton Woods system, the theory of and experience with floating exchange rates, reform of the Bretton Woods system, and the special status and role of the U.S. dollar have replaced chapters in the previous edition. These revisions have been designed to give the student a good foundation for understanding the current, and probably continuing, issues emerging from the operations of a managed float exchange rate system.

An entirely new chapter on current issues in commercial policy is devoted to a critical discussion of various manifestations of protectionism and their implications for the future. In the chapters preceding this discussion, extensive efforts have been made to update the historical and theoretical material on trade policy.

viii Preface

Finally, the chapters on the pure theory of trade and factor movements have been left largely intact, except for minor changes and a more extended treatment of multinational corporations.

As with respect to the six earlier editions of this book, I am indebted to so many persons for their helpful comments that listing their names is impractical. Three different anonymous readers of the sixth edition were especially helpful in their suggestions, all of which were taken seriously, though not in all instances followed.

Grateful acknowledgement is made to the National Bureau of Economic Research and Dr. G. C. Hufbauer for permission to reproduce data contained in Table 4, p. 157 of G. C. Hufbauer, "The Impact of National Characteristics and Technology on the Commodity Composition of Trade in Manufactured Goods," in Raymond Vernon, editor, *The Technology Factor in International Trade*, National Bureau of Economic Research, 1970.

To Ms. Kathy Fox and Ms. Mimi Farr I owe thanks for expeditious typing of manuscript, and to my wife thanks and gratitude for skillful cutting and pasting and—above all—moral support.

December 1978

DELBERT A. SNIDER

List of figures and tables

FIGURE

- 3.1 The production transformation curve, 40
- 3.2 The effect of factor supplies on transformation curves, 45
- 3.3 Offsetting influences on opportunity costs, 47
- 4.1 Consumption possibilities with trade, 71
- 4.2 Reciprocal demand and the terms of trade, 78
- 4.3 Production isoquants and factor proportions, 84
- 4.4 The efficiency locus, 85
- 4.5 Transformation curve derived from the efficiency locus, 87
- 4.6 A consumption indifference map, 88
- 4.7 Equilibrium output and consumption in pretrade isolation, 89
- 4.8 Increased consumption possibilities with trade: Country A, 91
- 4.9 Increased consumption possibilities with trade: Country B, 91
- 5.1 Output and price of competitive firm and monopolistic firm, 95
- 5.2 International price discrimination, 98
- 9.1 The effects of a tariff, 177
- 13.1 The demand for foreign exchange, 274
- 13.2 Franc supply in New York based on dollar demand in Paris, 278
- 13.3 The equilibrium rate of exchange, 280
- 13.4 The effects of an increased demand for foreign exchange, 281

FIGURE

- 15.1 Unstable rate situation, 305
- 15.2 Adjustment of current account balance to capital outflow via exchange rate change, 305
- 18.1 Changes from December 1974 in the dollar exchange value of selected currencies, 377

TABLE

- 1.1 Trends in world merchandise exports, 4
- 1.2 Distribution of world exports by type of economy, 5
- 1.3 Pattern of trade among economies by types, annual averages 1971-1976, 5
- 1.4 Imports of goods and services as a percentage of the gross national product, selected countries, 7
- 1.5 World exports by commodity classes, 9
- 1.6 Percentage of exports accounted for by principal export commodity, selected countries, 1976, 10
- 6.1 Land-labor ratios in selected countries, 114
- 6.2 Relative capital supplies and skilled employees for selected countries, 116
- 8.1 Official capital flows to developing countries, 153
- 8.2 Long-term private capital outflow from the United States, selected years and total, 1960-1975, 154
- 8.3 International investment position of the United States, end of 1976, 155
- 8.4 U.S. foreign direct investments by type of industry, end of 1975, 156
- 8.5 U.S. foreign direct investment by geographic area, end of 1975, 156
- 10.1 Percentage reduction in average tariff levels as result of trade agreements, base year to 1972, 219
- 14.1 U.S. balance of payments, 1976, 290
- 21.1 Estimated per capita national income for selected regions and countries, 1970, 415

Contents

List of figures and tables

xiv

INTRODUCTION, 1

1. The significance and scope of international economics

3

The volume and pattern of international economic relations. Interdependencies in the world economy: Import dependency. Export dependency. Income, employment, and price interdependencies. Implications of economic interdependence. The task of theory.

Part I THE THEORY AND EMPIRICAL FOUNDATIONS OF INTERNATIONAL TRADE AND FACTOR MOVEMENTS, 17

2. The pure theory of international trade: The proximate causes

19

Basic assumptions. The proximate causes of trade: Comparative cost differences. Converting relative into absolute price differences: The rate of exchange. Multicommodity, multicountry trade: Multicommodity trade. Multicountry trade. Multilateral trade. General equilibrium.

3. The pure theory of international trade: The underlying causes

36

Classical theory. Modern theory: Equilibrium in isolation. Opportunity cost differences. The shape of transformation curves. Factor proportions. Relative factor supplies. Pretrade output points. Summary of modern theory. The Heckscher-Ohlin theorem. Identical production functions. Factor proportions. Economies of scale. The pattern of demand. The specification of "factors." Empirical tests.

4. The economic effects of competitive trade

63

The equalization of prices and costs: The role of transportation costs. Factor price equalization. The gains from trade: The gain from specialization. The gain from exchange. The terms of trade: Limits of the terms of trade. The equilibrium terms of trade. Reciprocal demand. Some welfare questions. Appendix: A diagrammatic analysis of international trade: Production functions, resource supplies, and the production transformation curve. Demand and pretrade equilibrium output. Production, consumption, and trade.

5. The theory of trade in imperfectly competitive markets

93

Types of market imperfections. The effect of imperfect markets on cost-price relationships. Distorting and restrictive effects of monopoly on trade: Perverse specialization. Loss of specialization gains. Loss of exchange gains. Trade obstruction: Cartels. The effects of trade on monopoly. Economies of scale as a basis of trade. Product differentiation and trade. Dynamic factors: Technological-gap and product-cycle trade.

6. The empirical bases of trade

112

Relative factor endowments: Land-labor ratios. Capital-labor ratios. Land, labor, capital, and types of economy. Imperfectly competitive characteristics: Internal economies of scale. Product differentiation. Technological gaps.

7. The theory of international factor movements

123

The meaning of factor movements. Economic motives for factor movements. Factor supplies and factor returns in competitive markets. The economic effects of factor movements: The level of world income. The level of national income. Factor price equalization. Factor movements and trade as substitutes. Complementary aspects of trade and factor movements. The coordinate movement of capital and labor. Factor movements and welfare. The dynamics of factor movements: The multinational corporation: The economic effects of direct foreign investment.

8. A survey of international factor movements

149

Long-term international capital movements: A brief history: The pre-1914 period. The 1920s. The Depression decade. The period since World War II. The nature and significance of recent capital flows. International population movements: The brain drain. The economic effects of immigration.

Part II PUBLIC BARRIERS TO TRADE, 167

9. The theory of tariffs and other trade restrictions

169

The nature of tariffs and other trade restrictions: Tariffs. Quotas. Technical and administrative protection. Government procurement policies. The economic effects of trade restrictions: Price-cost effects. The volume and benefits of trade. The allocation of resources. Consumption effects. The distribution of income. Effects on the balance of payments. The effective rate of protection. The origins of trade impediments. The national economy versus the world economy: Improve the terms of trade. Reduce unemployment. Encourage industrialization. Military, political, and economic security. The national interest versus the interest of owners of scarce factors: Prevent the pauperization of labor. The national interest versus special-interest groups: Expand production and enlarge the market. Equalize the costs of production at home and abroad. Keep money at home. Retaliation or increased bargaining power. Conclusion.

10. Commercial policies of the United States

202

A bird's-eye view of commercial-policy history: Mercantilism. The free-trade movement. The revival of protectionism. U.S. tariffs, 1789-1934: Tariffs for revenue. Tariffs for protection. Major tariff issues before 1934. American commercial policy, 1934-1962: The Reciprocal Trade Agreements program. Weakening of the Trade Agreements program. The Trade Expansion Act of 1962: Authority to reduce tariffs. Escape clause. Adjustment assistance. The Kennedy round. The General Agreement on Tariffs and Trade (GATT).

11. Current issues in commercial policy

226

The Trade Act of 1974. The revival of protectionism. The basic issues: Trade restrictions and employment. Trade restrictions and efficiency. Trade restrictions and consumption. Trade restrictions and developing countries. Nontariff barriers. The role of multilateral negotiations.

12. R	egional	economic	integration
-------	---------	----------	-------------

244

The forms and degrees of economic integration: The free-trade area. The customs union. The Common Market. Economic union. The economic effects of regional economic integration: Trade creation versus trade diversion. The economic effects of free factor movements. Dynamic effects of integration. Regions versus the outside world.

Part III INTERNATIONAL MONETARY RELATIONS, 263

13. International payments and the foreign exchange market 265

The means of making payment: Foreign exchange. Sources of foreign exchange. Uses of foreign exchange. The rate of exchange. The demand for foreign exchange. The supply of foreign exchange. Demand, supply, and equilibrium.

14. The balance of payments

283

Structure of the balance of payments: Debit and credit entries. Total debits equal total credits. Balance-of-payments accounts. The U.S. balance of payments, 1976. Planned versus realized transactions. Equilibrium and disequilibrium. Measures of disequilibrium. Significance of balance-of-payments disequilibrium.

Disequilibrium and adjustment of the balance of payments

301

The general nature of payments adjustment. Adjustment through exchange rates. Adjustment through price changes. Adjustment through income changes. Monetary adjustment. Adjustment through controls.

16. Fixed versus floating exchange rates

323

The gold standard system. Trade and investment under fixed exchange rates. Domestic stability under fixed exchange rates. Conclusion. The clean float system: Clean float and internal balance. The clean float and international trade and investment. Conclusion.

17. The Bretton Woods system: Birth, evolution, demise

342

Principles of the system: Stable exchange rates. Exchange rate adjustment. Short-term credit facilities. Evolution and breakdown of the Bretton Woods system. The liquidity problem: Gold reserves. Key currency reserves. IMF credit and special arrangements. Special drawing rights. The adjustment problem. The confidence problem. The dollar crisis, 1971. Emergence of floating rates.

18. The post-Bretton Woods monetary system: The managed float

366

The theory of exchange-rate management. The exchange rate as a policy instrument. Guides to exchange rate management. Operational problems of rate management: Conflicts in management. The timing and magnitude of rate changes. Experience with managed floating, 1973-1978.

19. The emerging monetary system

382

The exchange rate regime. Gold and the SDR. Enlarged credit facilities of the IMF and the role of the IMF. Summary.

20. The dollar, the U.S. balance of payments and the international monetary system

393

The dollar as world money. The Eurodollar. The United States as a world banker. The U.S. balance of payments and the dollar.

Part IV THE INTERNATIONAL ECONOMICS OF DEVELOPMENT, 411

21. The challenge of economic development

413

The meaning and extent of underdevelopment. The meaning and purposes of development. The process of economic growth: Sociopolitical elements. Economic obstacles to growth: Limited resources. Static technology. Inefficient organization. The release of developmental forces.

22. The role of international trade and capital movements in development

427

The importance of trade in development: Trade and efficiency. Dynamic effects. Capital inflows and development. Critique of the conventional view: The dual economy. The widening gap. The terms of trade. Instability of export earnings. Balanced growth versus outward-looking policies. Early UNCTAD proposals. Trade preferences. Foreign aid. The New International Economic Order. Summary and conclusions.

Index

449

INTRODUCTION

1

The significance and scope of international economics

The daily lives of most of us are largely confined to activities in our home communities. We are aware of the local economy, for this is the immediate provider of the goods and services we consume and the source of our employment opportunities. Most of us are also conscious, however, that the local economy is only a small part of a much larger national economy. Aside from personal services, by far the greatest portion of the goods and services we purchase are not the product of the local economy: the meat on the table may come from Texas via packing plants in Chicago, the clothing in the wardrobe from manufacturers in New York, the fruit in the bowl from Florida and California, the car in the garage from Detroit, and so on. At the same time, our jobs yield products which more than likely will be consumed outside the local economy.

The complex of interrelationships among the thousands of local communities, bound together through a vast volume of exchange of goods and services and the movements of people and capital, constitutes the national economy. Awareness of the national economy is sharpened by the presence of a federal government whose influence is felt, through its taxes, spending and regulations, in every nook and corner of the country.

We live and work in a local economy and a national economy; but

4 Introduction

we also live and work in an international or "world" economy. Just as national economies are composed of local and regional parts, so the world economy is composed of national economies. The world economy is "looser" than the usual national economy, in the sense that the national members of the world economy are not as closely interrelated and interdependent as the local and regional parts of the typical national economy. However, for many national economies external economic relations are of paramount importance. And for nearly all countries, participation in the world economy could not be withdrawn without extremely serious adverse consequences which would be felt at every level in every community.

THE VOLUME AND PATTERN OF INTERNATIONAL ECONOMIC RELATIONS

International economic relations consist of a "real" side and a monetary side. The real side embraces the exchange of goods and services among countries and the movement of factors of production from one country to another, while the monetary side provides the financial framework and means for conducting real transactions. Ultimately, it is the real transactions that are significant for the welfare of countries, though a smoothly functioning and efficient monetary mechanism is essential for realizing the potential benefits of real transactions.

Table 1.1 shows the trend in the volume of world merchandise trade, expressed in current prices and, more significantly, in terms of a quantum index that removes the influence of inflation. For lack of adequate information, the data exclude the trade of communist bloc countries. According to one estimate, the trade of the latter amounted in 1975 to about \$85 billion, increasing the total for that year listed in the table by more than 10 percent.¹

TABLE 1.1
Trends in world merchandise exports*

Year	Value (billions of dollars)	Quantum Index		
1938	21	21		
	54	22		
	519	131		
1975	788	132		

*Excludes trade of communist bloc countries. Source: United Nations, Statistical Yearbook, 1976, pp. 55, 464.

¹ International Economic Report of the President, Washington, D.C., 1977, p. 148.

In addition to merchandise trade, there are annually tens of billions of dollars of international service transactions—shipping and passenger transportation, insurance, tourism, interest and dividend payments, and so on.

Although available data do not permit an accurate estimate, it would appear that total world exports of goods and services together constitute between 15 and 20 percent of the world's gross national product.²

Of course, not all countries participate equally in international economic relations. World trade is dominated by the trade of developed market economies, as shown in Table 1.2. Moreover, of developed market economies, a mere handful account for the lion's share of world trade. The United States, Canada, Japan, and the nine members of the European Common Market conduct approximately two thirds of the world's trade.

TABLE 1.2
Distribution of world exports by type of economy (percentage shares of total world exports, annual average for years 1971–76)

Developed market economies	67
Developing market economies	
Centrally planned economies	10

Source: World Bank, Annual Report, 1977, Table 2, p. 106.

A more subtle but interesting point is that whereas the trade of developed market economies is mainly with each other, as is also the trade of centrally planned economies, that of developing market economies is principally with developed market economies (see Table 1.3).

TABLE 1.3
Pattern of trade among economies by types, annual averages 1971–76 (percentage of total exports)*

		Exports to	
Exports from	Developed market economies	Developing market economies	Centrally planned economies
Developed market economies Developing market economies Centrally planned economies	73.1	21.0 21.6 15.4	5.2 4.3 55.4

^{*}Totals do not sum to 100 percent because of rounding. Source: World Bank, Annual Report, 1977, Table 2, p. 106.

² This very rough estimate is based on trade and income data presented in Tables 2 and 18 of the *International Economic Report of the President*, 1977, adjusted for service transactions.