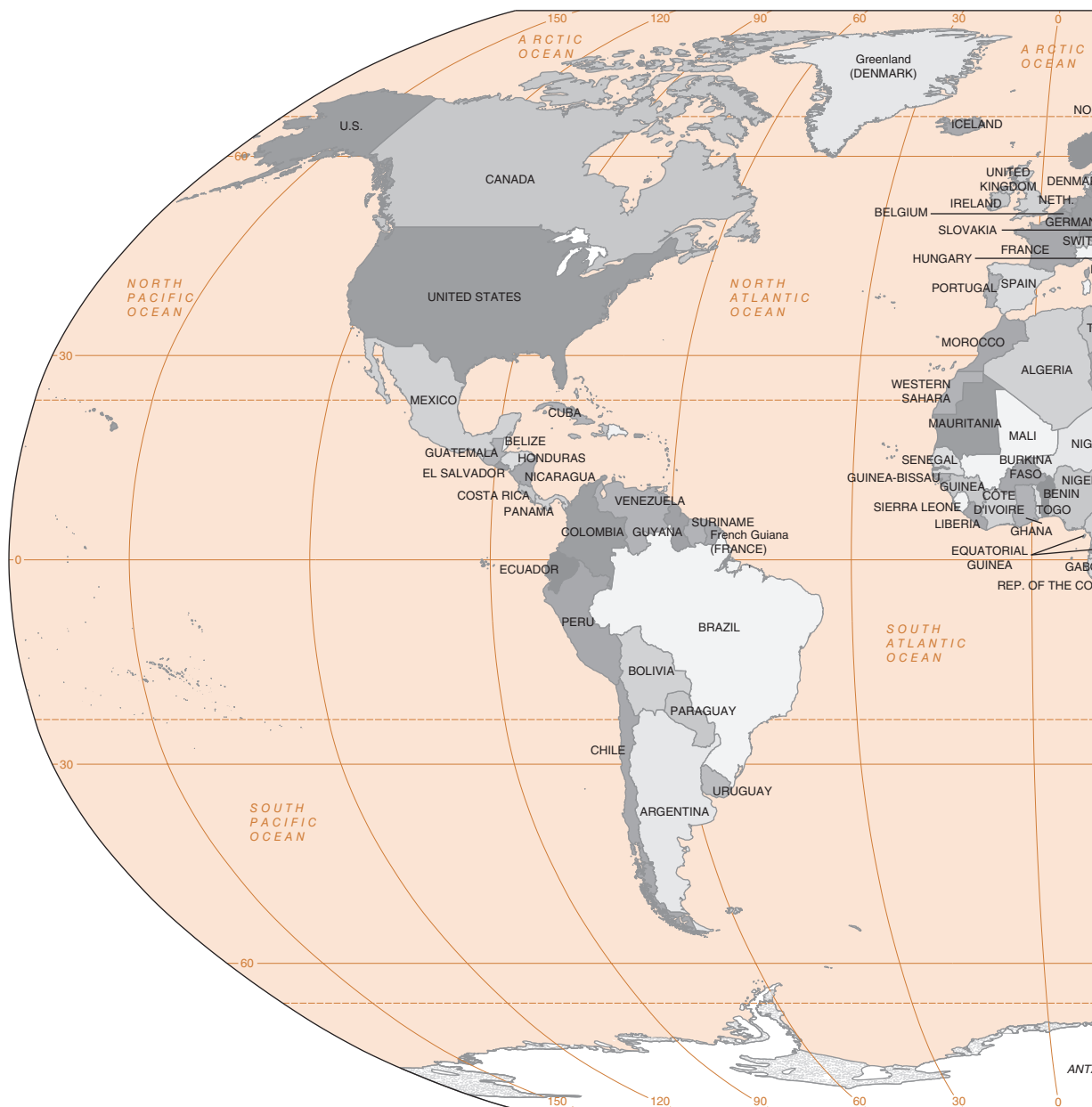
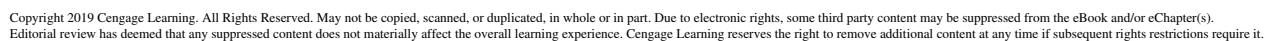


SEVENTEENTH EDITION

ROBERT J. CARBAUGH









# International Economics

**SEVENTEENTH EDITION**

**ROBERT J. CARBAUGH**

*Professor of Economics, Central Washington University*



Australia • Brazil • Mexico • Singapore • United Kingdom • United States

This is an electronic version of the print textbook. Due to electronic rights restrictions, some third party content may be suppressed.

Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. The publisher reserves the right to remove content from this title at any time if subsequent rights restrictions require it. For valuable information on pricing, previous editions, changes to current editions, and alternate formats, please visit [www.cengage.com/highered](http://www.cengage.com/highered) to search by ISBN#, author, title, or keyword for materials in your areas of interest.

**Important Notice:** Media content referenced within the product description or the product text may not be available in the eBook version.

***International Economics,***  
**Seventeenth edition**

**Robert J. Carbaugh**

Senior Vice President, Higher Ed  
Product, Content, and Market  
Development: Erin Joyner

Product Director: Jason Fremder

Product Manager: Michael  
Parthenakis

Project Manager: Julie Dierig

Content Developer: Kimberly  
Beauchamp - MPS

Production Service: SPi-Global

Sr. Art Director: Bethany  
Bourgeois

Intellectual Property  
Analyst: Jennifer Bowes  
Project Manager: Carly Belcher

Manufacturing Planner: Kevin  
Kluck

Cover Image: Yevgenij\_D/  
Shutterstock.com  
dibrova/Shutterstock.com

© 2019, 2017 Cengage Learning, Inc.

Unless otherwise noted, all content is © Cengage

ALL RIGHTS RESERVED. No part of this work covered by the copyright herein may be reproduced or distributed in any form or by any means, except as permitted by U.S. copyright law, without the prior written permission of the copyright owner.

For product information and technology assistance, contact us at  
**Cengage Customer & Sales Support, 1-800-354-9706**

For permission to use material from this text or product,  
submit all requests online at **[www.cengage.com/permissions](http://www.cengage.com/permissions)**  
Further permissions questions can be emailed to  
**[permissionrequest@cengage.com](mailto:permissionrequest@cengage.com)**

Library of Congress Control Number: 2018939997

ISBN: 978-1-337-55893-8

**Cengage**

20 Channel Center Street  
Boston, MA 02210  
USA

Cengage is a leading provider of customized learning solutions with employees residing in nearly 40 different countries and sales in more than 125 countries around the world. Find your local representative at **[www.cengage.com](http://www.cengage.com)**.

Cengage products are represented in Canada by  
Nelson Education, Ltd.

To learn more about Cengage platforms and services, register or access your online learning solution, or purchase materials for your course, visit **[www.cengage.com](http://www.cengage.com)**

Printed in the United States of America  
Print Number: 01      Print Year: 2018

# Brief Contents



PREFACE .....	xii
ABOUT THE AUTHOR .....	xxi
CHAPTER 1 The International Economy and Globalization .....	1
<b>PART 1 International Trade Relations</b> .....	<b>25</b>
CHAPTER 2 Foundations of Modern Trade Theory: Comparative Advantage.....	27
CHAPTER 3 Sources of Comparative Advantage .....	71
CHAPTER 4 Tariffs .....	113
CHAPTER 5 Nontariff Trade Barriers .....	157
CHAPTER 6 Trade Regulations and Industrial Policies .....	189
CHAPTER 7 Trade Policies for the Developing Nations .....	239
CHAPTER 8 Regional Trading Arrangements .....	277
CHAPTER 9 International Factor Movements and Multinational Enterprises .....	311
<b>PART 2 International Monetary Relations</b> .....	<b>343</b>
CHAPTER 10 The Balance-of-Payments .....	345
CHAPTER 11 Foreign Exchange .....	375
CHAPTER 12 Exchange Rate Determination .....	413
CHAPTER 13 Exchange Rate Adjustments and the Balance-of-Payments .....	439
CHAPTER 14 Exchange Rate Systems and Currency Crises .....	459
CHAPTER 15 Macroeconomic Policy in an Open Economy .....	495
GLOSSARY .....	511
INDEX .....	529



# Contents



<b>Preface .....</b>	<b>xii</b>
<b>About the Author .....</b>	<b>xxi</b>

## CHAPTER 1

### **The International Economy and Globalization ..... 1**

Economic Interdependence: Federal Reserve Policy		
Incites Global Backlash .....	2	
Globalization of Economic Activity .....	3	
<b>U.S. Apple Growers Not Overly Worried about Chinese Imports.....</b>	<b>4</b>	
Waves of Globalization .....	5	
<i>First Wave of Globalization: 1870–1914.....</i>	<i>5</i>	
<i>Second Wave of Globalization: 1945–1980.....</i>	<i>6</i>	
<i>Latest Wave of Globalization .....</i>	<i>7</i>	
<b>Diesel Engines and Gas Turbines as Movers of Globalization .....</b>	<b>9</b>	
The United States as an Open Economy .....	9	
<i>Trade Patterns.....</i>	<i>9</i>	
<i>Labor and Capital .....</i>	<i>12</i>	
Why Is Globalization Important? .....	13	
Globalization and Competition.....	15	
<i>Globalization Forces Kodak to Reinvent Itself .....</i>	<i>15</i>	
<i>Bicycle Imports Force Schwinn to Downshift .....</i>	<i>16</i>	
<i>Element Electronics Survives by Moving TV Production to America.....</i>	<i>17</i>	
Common Fallacies of International Trade .....	17	
<b>Is the United States Losing Its Innovation Edge?.....</b>	<b>18</b>	
Is International Trade an Opportunity or a Threat to Workers?.....	19	
Has Globalization Gone Too Far? .....	21	
The Plan of This Text .....	23	
Summary .....	24	
Key Concepts and Terms .....	24	
Study Questions .....	24	

## **PART 1 International Trade Relations**

**25**

## CHAPTER 2

### **Foundations of Modern Trade Theory: Comparative Advantage .....27**

Historical Development of Modern Trade Theory .....	27	
<i>The Mercantilists .....</i>	<i>27</i>	
<i>Why Nations Trade: Absolute Advantage .....</i>	<i>28</i>	
<b>Adam Smith and David Ricardo.....</b>	<b>30</b>	
<i>Why Nations Trade: Comparative Advantage .....</i>	<i>31</i>	
Production Possibilities Frontiers.....	33	
Trading under Constant-Cost Conditions .....	35	
<i>Basis for Trade and Direction of Trade .....</i>	<i>35</i>	
<i>Production Gains from Specialization .....</i>	<i>35</i>	
<b>Babe Ruth and the Principle of Comparative Advantage.....</b>	<b>37</b>	
<i>Consumption Gains from Trade .....</i>	<i>38</i>	
<i>Distributing the Gains from Trade .....</i>	<i>39</i>	
<i>Equilibrium Terms of Trade .....</i>	<i>40</i>	
<i>Terms of Trade Estimates.....</i>	<i>41</i>	
Dynamic Gains from Trade: Economic Growth .....	42	
Changing Comparative Advantage .....	43	
<b>Natural Gas Boom Fuels Debate .....</b>	<b>45</b>	
Trading under Increasing-Cost Conditions .....	46	
<i>Increasing-Cost Trading Case .....</i>	<i>47</i>	
<i>Partial Specialization .....</i>	<i>49</i>	
The Impact of Trade on Jobs .....	49	
Wooster, Ohio Bears the Brunt of Globalization .....	50	
Comparative Advantage Extended to Many Products and Countries .....	51	
<i>More Than Two Products .....</i>	<i>52</i>	
<i>More Than Two Countries .....</i>	<i>52</i>	
Factor Mobility, Exit Barriers, and Trade .....	53	
Empirical Evidence on Comparative Advantage .....	55	



<i>Can American Workers Compete with Low-Wage Workers Abroad?</i> .....	56
The Case for Free Trade .....	58
Comparative Advantage and Global Supply Chains.....	58
<i>Advantages and Disadvantages of Outsourcing</i> .....	60
<i>Outsourcing and the U.S. Automobile Industry</i> .....	61
<i>The iPhone Economy and Global Supply Chains</i> .....	61
<i>Outsourcing Backfires for Boeing 787 Dreamliner</i> .....	63
<i>Reshoring Production to the United States</i> .....	64
<b>Deindustrialization Redeploys Workers to Growing Service Sector.....</b>	<b>64</b>
Summary .....	66
Key Concepts and Terms .....	66
Study Questions .....	67

## CHAPTER 3

**Sources of Comparative Advantage ..... 71**

Factor Endowments as a Source of Comparative Advantage.....	71
<i>The Factor-Endowment Theory</i> .....	72
<i>Visualizing the Factor-Endowment Theory</i> .....	74
<i>Applying the Factor-Endowment Theory to U.S.–China Trade</i> .....	75
<i>Chinese Manufacturers Beset by Rising Wages and a Rising Yuan</i> .....	76
<i>Does Trade with China Take Away Blue-Collar American Jobs?</i> .....	77
<i>Factor-Price Equalization</i> .....	78
<b>Globalization Drives Changes for U.S. Automakers ..... 79</b>	
<i>Who Gains and Loses from Trade?</i>	
<i>The Stolper–Samuelson Theorem</i> .....	82
<i>Is International Trade a Substitute for Migration?</i> .....	83
<i>Specific-Factors Theory: Trade and the Distribution of Income</i> .....	84
<i>Does Trade Make the Poor Even Poorer?</i> .....	86
Is International Trade Responsible for the Loss of American Manufacturing Jobs? How about Robots Instead?.....	88
Is the Factor-Endowment Theory a Good Predictor of Trade Patterns? The Leontief Paradox .....	89
Economies of Scale and Comparative Advantage .....	90
<i>Internal Economies of Scale</i> .....	90
<i>External Economies of Scale</i> .....	91
<b>Does a “Flat World” Make Ricardo Wrong? ..... 93</b>	
Overlapping Demands as a Basis for Trade .....	93
Intra-industry Trade .....	94
Technology as a Source of Comparative Advantage:	
<i>The Product Cycle Theory</i> .....	97
<i>Radios, Pocket Calculators, and the International Product Cycle</i> .....	98
<i>Japan Fades in the Electronics Industry</i> .....	99
Dynamic Comparative Advantage: Industrial Policy .....	100
World Trade Organization Rules That Illegal Government Subsidies Support Boeing and Airbus .....	102
Government Regulatory Policies and Comparative Advantage.....	103
<b>Do Labor Unions Stifle Competitiveness? ..... 103</b>	
Transportation Costs and Comparative Advantage.....	105
<i>Trade Effects</i> .....	105
<i>Falling Transportation Costs Foster Trade</i> .....	107
<i>How Containers Revolutionized the World of Shipping</i> .....	108
<i>The Port of Prince Rupert: Shifting Competitiveness in Shipping Routes</i> .....	109
Summary .....	110
Key Concepts and Terms .....	111
Study Questions .....	111

## CHAPTER 4

**Tariffs ..... 113**

The Tariff Concept .....	114
Types of Tariffs .....	115
<i>Specific Tariff</i> .....	115
<i>Ad Valorem Tariff</i> .....	116
<i>Compound Tariff</i> .....	116
<b>Trade Protectionism Intensifies as Global Economy Falls into the Great Recession..... 117</b>	
Effective Rate of Protection.....	118
Tariff Escalation .....	120
Outsourcing and Offshore Assembly Provision .....	121
Dodging Import Tariffs: Tariff Avoidance and Tariff Evasion .....	122
<i>Ford Strips Its Wagons to Avoid a High Tariff</i> .....	122
<i>Smuggled Steel Evades U.S. Tariffs</i> .....	123
Postponing Import Tariffs .....	123

<b>Gains from Eliminating Import Tariffs.....</b>	<b>124</b>
<i>Bonded Warehouse .....</i>	<i>124</i>
<i>Foreign-Trade Zone .....</i>	<i>125</i>
<i>FTZs Benefit Motor Vehicle Importers .....</i>	<i>126</i>
Tariff Effects: An Overview.....	126
Tariff Welfare Effects: Consumer Surplus and Producer Surplus.....	127
Tariff Welfare Effects: Small-Nation Model.....	129
Tariff Welfare Effects: Large-Nation Model.....	131
<i>Donald Trump's Border Tax: How to Pay         for the Wall.....</i>	<i>134</i>
<i>The Optimal Tariff and Retaliation .....</i>	<i>135</i>
Examples of U.S. Tariffs.....	135
<i>Obama's Tariffs on Chinese Tires .....</i>	<i>135</i>
<i>Should Footwear Tariffs Be Given the Boot?.....</i>	<i>137</i>
<b>Could a Higher Tariff Put a Dent in the Federal Debt? .....</b>	<b>138</b>
How a Tariff Burdens Exporters .....	138
Tariffs and the Poor: Regressive Tariffs .....	140
Arguments for Trade Restrictions .....	142
<i>Job Protection .....</i>	<i>143</i>
<i>Protection against Cheap Foreign Labor .....</i>	<i>143</i>
<i>Fairness in Trade: A Level Playing Field .....</i>	<i>145</i>
<i>Maintenance of the Domestic Standard of Living.....</i>	<i>146</i>
<i>Equalization of Production Costs.....</i>	<i>146</i>
<i>Infant-Industry Argument.....</i>	<i>147</i>
<i>Noneconomic Arguments .....</i>	<i>147</i>
Would a Tariff Wall Really Protect U.S. Jobs? .....	148
<b>Petition of the Candle Makers.....</b>	<b>149</b>
The Political Economy of Protectionism .....	150
<i>A Supply and Demand View of Protectionism.....</i>	<i>151</i>
Summary .....	152
Key Concepts and Terms .....	153
Study Questions.....	154

## CHAPTER 5

**Nontariff Trade Barriers..... 157**

Absolute Import Quota .....	157	<i>Whirlpool Agitates for Antidumping Tariffs on Clothes Washers.....</i>	<i>175</i>
<i>Trade and Welfare Effects .....</i>	<i>158</i>	<i>Vaughan-Bassett Furniture Company: Furniture Dumping from China.....</i>	<i>177</i>
<i>Allocating Quota Licenses .....</i>	<i>160</i>	Is Antidumping Law Unfair?.....	178
<i>Quotas versus Tariffs .....</i>	<i>161</i>	<i>Should Average Variable Cost Be the Yardstick         for Defining Dumping?.....</i>	<i>178</i>
Tariff-Rate Quota: A Two-Tier Tariff.....	162	<i>Should Antidumping Law Reflect Currency         Fluctuations?.....</i>	<i>179</i>
<i>Tariff-Rate Quota Bittersweet for Sugar Consumers.....</i>	<i>164</i>	<i>Are Antidumping Duties Overused? .....</i>	<i>179</i>
Export Quotas.....	164	Other Nontariff Trade Barriers.....	180
<i>Japanese Auto Restraints Put Brakes on         U.S. Motorists .....</i>	<i>165</i>	<i>Government Procurement Policies: "Buy American" .....</i>	<i>180</i>
Domestic Content Requirements.....	166	<b>U.S. Fiscal Stimulus and Buy American Legislation .....</b>	<b>182</b>
<b>How American Is Your Car? .....</b>	<b>168</b>	<i>Social Regulations .....</i>	<i>182</i>
Subsidies .....	168	<i>CAFE Standards.....</i>	<i>182</i>
<i>Domestic Production Subsidy.....</i>	<i>169</i>	<i>Europe Has a Cow over Hormone-Treated U.S. Beef.....</i>	<i>183</i>
<i>Export Subsidy.....</i>	<i>170</i>	<i>Sea Transport and Freight Regulations .....</i>	<i>184</i>
Dumping .....	171	Summary .....	185
<i>Forms of Dumping .....</i>	<i>171</i>	Key Concepts and Terms .....	185
<i>International Price Discrimination .....</i>	<i>172</i>	Study Questions.....	186
<b>Avoiding Antidumping Duties: U.S.–Mexico Sugar Agreement.....</b>	<b>174</b>		
Antidumping Regulations.....	174		

## CHAPTER 6

**Trade Regulations and Industrial Policies..... 189**

U.S. Tariff Policies Before 1930.....	189	Reciprocal Trade Agreements Act.....	192
Smoot–Hawley Act .....	191	General Agreement on Tariffs and Trade.....	193

<i>Trade without Discrimination</i> .....	193
<i>Promoting Freer Trade</i> .....	194
<i>Predictability: Through Binding and Transparency</i> .....	194
<i>Multilateral Trade Negotiations</i> .....	195
<b>Avoiding Trade Barriers during the Great Recession</b> .....	<b>197</b>
World Trade Organization .....	198
<i>Settling Trade Disputes</i> .....	198
<i>Does the WTO Reduce National Sovereignty?</i> .....	201
<i>Does the WTO Harm the Environment?</i> .....	201
<i>Harming the Environment</i> .....	202
<i>Improving the Environment</i> .....	203
<i>WTO Rules against China's Hoarding of Rare Earth Metals</i> .....	203
<i>Future of the World Trade Organization</i> .....	205
Trade Promotion Authority (Fast Track Authority) .....	206
Safeguards (The Escape Clause): Emergency Protection from Imports .....	206
<i>U.S. Safeguards Limit Surging Imports of Textiles from China</i> .....	208
Countervailing Duties: Protection against Foreign Export Subsidies .....	209
<i>Countervailing Duties: Trade Disputes between Canada and the United States</i> .....	209
<b>Would a Carbon Tariff Help Solve the Climate Problem?</b> .....	<b>211</b>
Antidumping Duties: Protection against Foreign Dumping .....	212
<i>Remedies against Dumped and Subsidized Imports</i> .....	213
<i>U.S. Steel Companies Lose an Unfair Trade Case and Still Win</i> .....	215
Section 301: Protection against Unfair Trading Practices .....	216
Protection of Intellectual Property Rights .....	217
<i>China's Piracy of Software</i> .....	218
Trade Adjustment Assistance .....	219
<i>Trade Adjustment Assistance for Workers, Firms, Farmers, and Fishermen</i> .....	220
<i>Is Trade Adjustment Assistance Necessary?</i> .....	221
<b>United States Lifts Its Restrictions on Oil Exports</b> .....	<b>222</b>
Industrial Policies of the United States .....	223
<i>The Export-Import Bank</i> .....	224
<i>U.S. Airlines and Boeing Spar over Export-Import Bank Credit</i> .....	226
<i>U.S. Solar Industry Dims as China's Industrial Policy Lights Up</i> .....	227
<i>Carrier Inc. Agrees to Keep Jobs in Indiana</i> .....	228
Strategic Trade Policy .....	228
Economic Sanctions .....	230
<i>Factors Influencing the Success of Sanctions</i> .....	231
<i>Sanctions and Nuclear Weapons: Iran and North Korea</i> .....	233
<i>Russia Hit by Sanctions over Ukraine</i> .....	235
Summary .....	236
Key Concepts and Terms .....	237
Study Questions .....	237

## CHAPTER 7

**Trade Policies for the Developing Nations**.....**239**

Developing Nation Trade Characteristics .....	240
Tensions between Developing Nations and Advanced Nations .....	241
Trade Problems of the Developing Nations .....	241
<i>Unstable Export Markets</i> .....	242
<i>Falling Commodity Prices Threaten Growth of Exporting Nations</i> .....	243
<i>Worsening Terms of Trade</i> .....	244
<b>Does Foreign Direct Investment Hinder or Help Economic Development?</b> .....	<b>245</b>
<i>Limited Market Access</i> .....	246
<i>Agricultural Export Subsidies of Advanced Nations</i> .....	247
<i>Bangladesh's Sweatshop Reputation</i> .....	248
Stabilizing Primary-Product Prices .....	249
<i>Production and Export Controls</i> .....	249
<i>Buffer Stocks</i> .....	250
<i>Multilateral Contracts</i> .....	251
<i>Does the Fair Trade Movement Help Poor Coffee Farmers?</i> .....	251
The OPEC Oil Cartel .....	252
<i>Maximizing Cartel Profits</i> .....	253
<b>Declining Oil Prices Test OPEC's Unity</b> .....	<b>255</b>
<i>OPEC as a Cartel</i> .....	255
Aiding the Developing Nations .....	256
<i>The World Bank</i> .....	257
<i>International Monetary Fund</i> .....	258
<i>Generalized System of Preferences</i> .....	259
<i>Does Aid Promote Growth of Developing Nations?</i> .....	260
Economic Growth Strategies: Import Substitution versus Export-Led Growth .....	260
<i>Import Substitution</i> .....	261
<i>Import Substitution Laws Backfire on Brazil</i> .....	262



<i>Export-Led Growth</i> .....	262	<i>Challenges and Concerns for China's Economy</i> .....	268
<i>Is Economic Growth Good for the Poor?</i> .....	263	<i>China's Export Boom Comes at a Cost: How to</i>	
<i>Can All Developing Nations Achieve</i>		<i>Make Factories Play Fair</i> .....	272
<i>Export-Led Growth?</i> .....	264	India: Breaking Out of the Third World .....	273
East Asian Economies .....	264	Summary .....	275
<i>Flying Geese Pattern of Growth</i> .....	265	Key Concepts and Terms .....	275
<b>Is State Capitalism Winning? .....</b>	<b>266</b>	Study Questions .....	276
China's Great Leap Forward .....	267		

## CHAPTER 8

**Regional Trading Arrangements.....277**

Regional Integration versus Multilateralism .....	277	<i>Greece and the Eurozone</i> .....	296
Types of Regional Trading Arrangements .....	279	<i>Deflation and the Eurozone</i> .....	297
Impetus for Regionalism .....	280	North American Free Trade Agreement .....	298
Effects of a Regional Trading Arrangement .....	281	<i>NAFTA's Benefits and Costs for Mexico and Canada</i> ....	299
<i>Static Effects</i> .....	281	<i>NAFTA's Benefits and Costs for the United States</i> .....	299
<i>Dynamic Effects</i> .....	283	<i>Modernizing NAFTA</i> .....	301
The European Union .....	284	<b>Free Trade Agreements Bolster</b>	
<i>Pursuing Economic Integration</i> .....	284	<b>Mexico's Competitiveness .....</b>	<b>302</b>
<i>Agricultural Policy</i> .....	286	<i>U.S.-Mexico Trucking Dispute</i> .....	303
<i>Is the European Union Really a Common Market?</i> .....	288	<i>U.S.-Mexico Tomato Dispute</i> .....	304
<i>Britain Announces Withdrawal from the European</i>		<i>Is NAFTA an Optimal Currency Area?</i> .....	305
<i>Union (Brexit)</i> .....	289	<b>A Trans-Pacific Partnership? .....</b>	<b>306</b>
Economic Costs and Benefits of a Common Currency:		<b>A U.S.-China Free Trade Agreement? ..</b>	<b>307</b>
<i>The European Monetary Union</i> .....	292	Summary .....	308
<i>Optimal Currency Area</i> .....	293	Key Concepts and Terms .....	308
<b>European Monetary "Disunion" .....</b>	<b>294</b>	Study Questions .....	309
<i>Eurozone's Problems and Challenges</i> .....	294		

## CHAPTER 9

**International Factor Movements and Multinational Enterprises.....311**

The Multinational Enterprise .....	311	International Joint Ventures .....	323
Motives for Foreign Direct Investment .....	313	<i>Welfare Effects</i> .....	324
<i>Demand Factors</i> .....	314	Multinational Enterprises as a Source of Conflict .....	326
<i>Cost Factors</i> .....	314	<i>Employment</i> .....	326
Supplying Products to Foreign Buyers:		<i>Caterpillar Bulldozes Canadian Locomotive Workers</i> ...	327
<i>Whether to Produce Domestically or Abroad</i> .....	315	<i>Technology Transfer</i> .....	328
<i>Direct Exporting versus Foreign Direct Investment/</i>		<i>National Sovereignty</i> .....	330
<i>Licensing</i> .....	316	<i>Balance-of-Payments</i> .....	331
<i>Foreign Direct Investment versus Licensing</i> .....	317	<i>Transfer Pricing</i> .....	331
Country Risk Analysis .....	318	<b>The Tax Cuts and Jobs Act of 2017:</b>	
<b>Do U.S. Multinationals Exploit</b>		<b>Apple Plans to Build a New U.S.</b>	
<b>Foreign Workers? .....</b>	<b>319</b>	<b>Campus .....</b>	<b>332</b>
International Trade Theory and Multinational		International Labor Mobility: Migration .....	333
<i>Enterprise</i> .....	321	<i>The Effects of Migration</i> .....	334
Foreign Auto Assembly Plants in the United States .....	321	<i>Immigration as an Issue</i> .....	336

<i>Does Canada's Immigration Policy Provide a Model for the United States?</i> .....	338
--	-----

<b>Does U.S. Immigration Policy Harm Domestic Workers?</b> .....	<b>340</b>
--	------------

Summary .....	340
Key Concepts and Terms .....	341
Study Questions.....	341

## **PART 2 International Monetary Relations**

**343**

### **CHAPTER 10**

## **The Balance-of-Payments .....345**

Double Entry Accounting.....	345
------------------------------	-----

Balance-of-Payments Structure.....	347
------------------------------------	-----

<i>Current Account</i> .....	347
------------------------------	-----

### **International Payments Process ..... 348**

<i>Capital and Financial Account</i> .....	349
--	-----

<i>Special Drawing Rights</i> .....	351
-------------------------------------	-----

<i>Statistical Discrepancy: Errors and Omissions</i> .....	352
--	-----

U.S. Balance-of-Payments.....	352
-------------------------------	-----

What Does a Current Account Deficit (Surplus) Mean? ....	354
--	-----

<i>Net Foreign Investment and the Current Account</i>	
---	--

<i>Balance</i> .....	355
----------------------	-----

<i>Impact of Capital Flows on the Current Account</i> .....	356
---	-----

<i>Is Trump's Trade Doctrine Misguided?</i> .....	357
---	-----

### **The iPhone's Complex Supply Chain Depicts Limitations of Trade**

### **Statistics .....358**

<i>Is a Current Account Deficit a Problem?</i> .....	359
--	-----

<i>Business Cycles, Economic Growth, and the Current</i>	
--	--

<i>Account</i> .....	360
----------------------	-----

<i>How the United States Has Borrowed at</i>	
--	--

<i>Very Low Cost</i> .....	361
----------------------------	-----

<i>Do Current Account Deficits Cost</i>	
---	--

<i>Americans Jobs?</i> .....	362
------------------------------	-----

<i>Can the United States Continue to Run Current</i>	
--	--

<i>Account Deficits Indefinitely?</i> .....	363
---	-----

Balance of International Indebtedness.....	365
--	-----

<i>United States as a Debtor Nation</i> .....	366
---	-----

### **Global Imbalances .....366**

The Dollar as the World's Reserve Currency .....	367
--	-----

<i>Benefits to the United States</i> .....	368
--	-----

<i>Will the Special Drawing Right or the Yuan Become</i>	
--	--

<i>a Reserve Currency?</i> .....	368
----------------------------------	-----

<i>Will Cryptocurrencies Lower the Dollar's Status</i>	
--	--

<i>as a World Reserve Currency?</i> .....	370
---	-----

Summary .....	371
---------------	-----

Key Concepts and Terms .....	372
------------------------------	-----

Study Questions.....	372
----------------------	-----

### **CHAPTER 11**

## **Foreign Exchange .....375**

Foreign Exchange Market.....	375
------------------------------	-----

Foreign Currency Trading Becomes Automated .....	377
--	-----

Types of Foreign Exchange Transactions.....	379
---	-----

Interbank Trading.....	380
------------------------	-----

Reading Foreign Exchange Quotations.....	382
--	-----

### **Yen Depreciation Drives Toyota Profits Upward .....385**

Forward and Futures Markets .....	385
-----------------------------------	-----

Foreign Currency Options .....	387
--------------------------------	-----

Exchange Rate Determination.....	388
----------------------------------	-----

<i>Demand for Foreign Exchange</i> .....	388
--	-----

<i>Supply of Foreign Exchange</i> .....	388
---	-----

<i>Equilibrium Rate of Exchange</i> .....	389
---	-----

Indexes of the Foreign Exchange Value	
---------------------------------------	--

<i>of the Dollar: Nominal and Real Exchange Rates</i> .....	390
---	-----

<i>Arbitrage</i> .....	392
------------------------	-----

The Forward Market.....	393
-------------------------	-----

<i>The Forward Rate</i> .....	394
-------------------------------	-----

<i>Relation between the Forward Rate and the Spot Rate</i> ..	395
---	-----

<i>Managing Your Foreign Exchange Risk: Forward</i>	
---	--

<i>Foreign Exchange Contract</i> .....	396
--	-----

<i>Case 1</i> .....	397
---------------------	-----

<i>Case 2</i> .....	397
---------------------	-----

<i>How Merkel, Volkswagen, and Nintendo Manage</i>	
--	--

<i>Foreign Exchange Risk</i> .....	398
------------------------------------	-----

<i>Does Foreign Currency Hedging Pay Off?</i> .....	399
---	-----

### **Currency Risk and the Hazards of Investing Abroad .....400**

Interest Arbitrage, Currency Risk, and Hedging.....	401
<i>Uncovered Interest Arbitrage</i> .....	401
<i>Covered Interest Arbitrage (Reducing Currency Risk)</i> ...	402
Foreign Exchange Market Speculation .....	403
<i>Long and Short Positions</i> .....	404
<i>Andy Krieger Shorts the New Zealand Dollar</i> .....	404
<i>George Soros Shorts the Pound and Yen</i> .....	405
<i>People's Bank of China Widens Trading Band to</i> <i>Punish Currency Speculators</i> .....	405
<i>How to Play the Falling (Rising) Dollar</i> .....	406
<i>Stabilizing and Destabilizing Speculation</i> .....	407

## CHAPTER 12

# Exchange Rate Determination ..... 413

What Determines Exchange Rates? .....	413
Determining Long-Run Exchange Rates .....	415
<i>Relative Price Levels</i> .....	415
<i>Relative Productivity Levels</i> .....	416
<i>Preferences for Domestic or Foreign Goods</i> .....	416
<i>Trade Barriers</i> .....	416
Inflation Rates, Purchasing Power Parity and Long-Run Exchange Rates.....	417
<i>Law of One Price</i> .....	418
<i>Burgeromics: The "Big Mac" Index and the Law of One</i> <i>Price</i> .....	418
<b>Banks Found Guilty of Foreign Exchange Market Rigging .....420</b>	
<i>Purchasing-Power-Parity</i> .....	420
Determining Short-Run Exchange Rates: The Asset Market Approach .....	423
<i>Relative Levels of Interest Rates</i> .....	424

Foreign Exchange Trading as a Career .....	407
<i>Foreign Exchange Traders Hired by Commercial</i> <i>Banks, Companies, and Central Banks</i> .....	408
<i>Do You Really Want to Trade Currencies?</i> .....	408
<b>Money Managers Scramble to Pull Off Currency Carry Trades .....409</b>	
Summary .....	410
Key Concepts and Terms .....	411
Study Questions.....	411

## CHAPTER 13

# Exchange Rate Adjustments and the Balance-of-Payments .....439

Effects of Exchange Rate Changes on Costs and Prices.....	439
<i>Case 1: No Foreign Sourcing—All Costs Are</i> <i>Denominated in Dollars</i> .....	439
<i>Case 2: Foreign Sourcing—Some Costs Denominated in</i> <i>Dollars and Some Costs Denominated in Francs</i> .....	440
Cost-Cutting Strategies of Manufacturers in Response to Currency Appreciation .....	442
<i>Appreciation of the Yen: Japanese Manufacturers</i> .....	442
<i>Appreciation of the Dollar: U.S. Manufacturers</i> .....	443
<b>Japanese Firms Send Work Abroad as Rising Yen Makes Their Products Less Competitive..... 444</b>	
Will Currency Depreciation Reduce a Trade Deficit? The Elasticity Approach.....	444

<i>Expected Change in the Exchange Rate</i> .....	426
<i>Diversification, Safe Havens, and Investment Flows</i> .....	428
<b>International Comparisons of GDP: Purchasing Power Parity .....428</b>	
Exchange Rate Overshooting.....	430
Forecasting Foreign Exchange Rates .....	431
<i>Judgmental Forecasts</i> .....	432
<i>Technical Forecasts</i> .....	432
<b>Comercial Mexicana Gets Burned by Speculation.....434</b>	
<i>Fundamental Analysis</i> .....	435
<i>Exchange Rate Misalignment</i> .....	435
Summary .....	436
Key Concepts and Terms .....	437
Study Questions.....	437

<i>Case 1: Improved Trade Balance</i> .....	445
<i>Case 2: Worsened Trade Balance</i> .....	446
J-Curve Effect: Time Path of Depreciation.....	447
Exchange Rate Pass-Through .....	450
<i>Partial Exchange Rate Pass-Through</i> .....	450
<b>Does Currency Depreciation Stimulate Exports? .....452</b>	
The Absorption Approach to Currency Depreciation.....	453
The Monetary Approach to Currency Depreciation.....	454
Summary .....	455
Key Concepts and Terms .....	456
Study Questions.....	456



## CHAPTER 14

**Exchange Rate Systems and Currency Crises .....459**

Exchange Rate Practices.....	459	The Crawling Peg .....	476
Choosing an Exchange Rate System: Constraints		Currency Manipulation and Currency Wars.....	477
Imposed by Free Capital Flows .....	461	<i>Is China a Currency Manipulator?</i> .....	478
Fixed Exchange Rate System .....	462	Currency Crises .....	481
<i>Use of Fixed Exchange Rates</i> .....	462	<b>The Global Financial Crisis</b>	
<i>Par Value and Official Exchange Rate</i> .....	464	<b>of 2007–2009 .....</b>	<b>482</b>
<b>Russia's Central Bank Fails to Offset</b>		<i>Sources of Currency Crises</i> .....	483
<b>the Ruble's Collapse.....</b>	<b>464</b>	<i>Speculators Attack East Asian Currencies</i> .....	485
<i>Exchange Rate Stabilization</i> .....	465	Capital Controls .....	485
<i>Devaluation and Revaluation</i> .....	466	<i>Should Foreign Exchange Transactions Be Taxed?</i> .....	486
<i>Bretton Woods System of Fixed Exchange Rates</i> .....	467	Increasing the Credibility of Fixed Exchange Rates.....	487
Floating Exchange Rates.....	468	<i>Currency Board</i> .....	487
<i>Achieving Market Equilibrium</i> .....	469	<i>For Argentina, No Panacea in a Currency Board</i> .....	489
<i>Trade Restrictions, Jobs, and Floating Exchange Rates</i> ..	470	<b>Swiss Franc Soars after Exchange Rate</b>	
<i>Arguments for and against Floating Rates</i> .....	471	<b>Anchor Scrapped.....</b>	<b>490</b>
Managed Floating Rates.....	471	<i>Dollarization</i> .....	491
<i>Managed Floating Rates in the Short Run and</i>		Summary .....	492
<i>Long Run</i> .....	472	Key Concepts and Terms .....	494
<i>Exchange Rate Stabilization and Monetary Policy</i> .....	474	Study Questions.....	494
<i>Is Exchange Rate Stabilization Effective?</i> .....	476		

## CHAPTER 15

**Macroeconomic Policy in an Open Economy ..... 495**

Economic Objectives of Nations.....	495	Macroeconomic Stability and the Current Account:	
Policy Instruments .....	496	Policy Agreement versus Policy Conflict.....	503
Aggregate Demand and Aggregate Supply:		Inflation with Unemployment .....	503
A Brief Review .....	496	International Economic Policy Coordination.....	504
Monetary and Fiscal Policies in a Closed Economy.....	497	<i>Policy Coordination in Theory</i> .....	505
Monetary and Fiscal Policies in an Open Economy.....	498	<i>Does Policy Coordination Work?</i> .....	506
<i>Effect of Fiscal and Monetary Policies under Fixed</i>		<b>Does Crowding Occur in an Open</b>	
<i>Exchange Rates</i> .....	500	<b>Economy?.....</b>	<b>507</b>
<i>Effect of Fiscal and Monetary Policies under Floating</i>		Summary .....	508
<i>Exchange Rates</i> .....	501	Key Concepts and Terms .....	509
<b>Monetary and Fiscal Policies</b>		Study Questions.....	509
<b>Respond to Financial Turmoil in</b>			
<b>the Economy .....</b>	<b>502</b>		

**Glossary ..... 511****Index ..... 529**

# Preface



I believe the best way to motivate students to learn a subject is to demonstrate how it is used in practice. The first sixteen editions of *International Economics* reflected this belief and were written to provide a serious presentation of international economic theory with an emphasis on current applications. Adopters of these editions strongly supported the integration of economic theory with current events.

The seventeenth edition has been revised with an eye toward improving this presentation and updating the applications as well as including the latest theoretical developments. Like its predecessors, this edition is intended for use in a one-quarter or one-semester course for students having no more background than principles of economics. This book's strengths are its clarity, organization, and applications that demonstrate the usefulness of theory to students. The revised and updated material in this edition emphasizes current applications of economic theory and incorporates recent theoretical and policy developments in international trade and finance. Here are some examples.

## INTERNATIONAL ECONOMICS THEMES

---

This edition highlights five current themes that are at the forefront of international economics:

### ■ GLOBALIZATION OF ECONOMIC ACTIVITY

- Is international trade an opportunity or a threat to workers?—Ch. 1
- U.S. apple growers and competition from China—Ch. 1
- Is international trade responsible for the loss of American jobs?—Ch. 3
- Shifting competitiveness in shipping routes—Ch. 3
- How containers revolutionized the world of shipping—Ch. 3
- Factor mobility, exit barriers, and trade—Ch. 2
- Dynamic gains from digital trade—Ch. 2
- Wooster, Ohio bears brunt of globalization—Ch. 2
- Comparative advantage and global supply chains—Ch. 2
- Caterpillar bulldozes Canadian locomotive workers—Ch. 9
- The Tax Cuts and Jobs Act of 2017: Apple Plans to Build a New Campus—Ch. 9
- Diesel engines and gas turbines as engines of growth—Ch. 1
- Waves of globalization—Ch. 1
- Constraints imposed by capital flows on the choice of an exchange rate system—Ch. 14

## ■ **FREE TRADE AND PROTECTIONISM**

- Does trade with China take away blue-collar American jobs?—Ch. 3
- Would a tariff wall protect American jobs?—Ch. 4
- Donald Trump's border tax: How to pay for the wall—Ch. 4
- Vaughan Basset Furniture and dumping—Ch. 5
- U.S. lifts its restrictions on oil exports—Ch. 6
- U.S. Export-Import Bank avoids shutdown—Ch. 6
- Whirlpool agitates for antidumping tariffs on clothes washers—Ch. 5
- Wage increases and China's trade—Ch. 3
- Should shoe tariffs be stomped out?—Ch. 4
- Element Electronics brings TV manufacturing back to the United States—Ch. 1
- Government procurement policies and buy American—Ch. 5
- Carbon tariffs—Ch. 6
- Carrier agrees to keep jobs in India—Ch. 6
- Lumber imports from Canada—Ch. 6
- Bangladesh's sweatshop reputation—Ch. 7
- Does the principle of comparative advantage apply in the face of job outsourcing?—Ch. 2
- Trade adjustment assistance—Ch. 6
- North Korea and economic sanctions—Ch. 6
- Boeing outsources work, but protects its secrets—Ch. 2
- WTO rules against subsidies to Boeing and Airbus—Ch. 6
- Does wage insurance make free trade more acceptable to workers?—Ch. 6
- China's hoarding of rare earth metals declared illegal by WTO—Ch. 6
- The environment and free trade—Ch. 6

## ■ **TRADE CONFLICTS BETWEEN DEVELOPING NATIONS AND INDUSTRIAL NATIONS**

- Russia hit by sanctions over Ukraine—Ch. 6
- U.S. economic sanctions and Iran—Ch. 6
- Declining oil prices test OPEC—Ch. 7
- China's economic challenges U.S.—Mexico tomato dispute—Ch. 8
- Is state capitalism winning?—Ch. 7
- Canada's immigration policy—Ch. 9
- Is international trade a substitute for migration?—Ch. 3
- Economic growth strategies: Import substitution versus export-led growth—Ch. 7
- Does foreign aid promote the growth of developing countries?—Ch. 7
- The globalization of intellectual property rights—Ch. 7
- Microsoft scorns China's piracy of software—Ch. 6
- China's export boom comes at a cost: How to make factories play fair—Ch. 7
- Do U.S. multinationals exploit foreign workers?—Ch. 9



## ■ LIBERALIZING TRADE: THE WTO VERSUS REGIONAL TRADING ARRANGEMENTS

- Modernizing NAFTA—Ch. 8
- Brexit and the Eurozone—Ch. 8
- Free-trade agreements bolster Mexico—Ch. 8
- Deflation and the Eurozone—Ch. 8
- Does the WTO reduce national sovereignty?—Ch. 6
- Regional integration versus multilateralism—Ch. 8
- Will the euro survive?—Ch. 8

## ■ TURBULENCE IN THE GLOBAL FINANCIAL SYSTEM

- Foreign currency trading becomes automated—Ch. 11
- Is Trump's trade doctrine misguided?—Ch. 10
- Germany's current account surplus—Ch. 10
- The sinking of Russia's ruble—Ch. 14
- Swiss franc soars after exchange rate peg scrapped—Ch. 14
- Reserve currency burdens for the United States—Ch. 11
- Foreign exchange market rigging—Ch. 12
- Exchange rate misalignments—Ch. 12
- Does currency depreciation stimulate exports?—Ch. 14
- Currency carry trade—Ch. 11
- China announces currency independence—Ch. 15
- People's Bank of China punishes speculators—Ch. 11
- Currency manipulation and currency wars—Ch. 14
- Paradox of foreign debt: How the United States borrows at low cost—Ch. 10
- Why a dollar depreciation may not close the U.S. trade deficit—Ch. 13
- Japanese firms send work abroad as yen makes its products less competitive—Ch. 13
- Preventing currency crises: Currency boards versus dollarization—Ch. 14

## ORGANIZATIONAL FRAMEWORK: EXPLORING FURTHER SECTIONS

---

Although instructors generally agree on the basic content of the international economics course, opinions vary widely about what arrangement of material is appropriate. This book is structured to provide considerable organizational flexibility. The topic of international trade relations is presented before international monetary relations, but the order can be reversed by instructors choosing to start with monetary theory. Instructors can begin with Chapters 10–15 and conclude with Chapters 2–9. Those who do not wish to cover all the material in the book can easily omit all or parts of Chapters 6–9 and Chapters 14–15 without loss of continuity.

The seventeenth edition streamlines its presentation of theory to provide greater flexibility for instructors. This edition uses online *Exploring Further* sections to discuss more advanced topics. By locating the *Exploring Further* sections within

MindTap rather than in the printed textbook, more textbook coverage can be devoted to contemporary applications of theory. The *Exploring Further* sections consist of the following:

- Comparative advantage in money terms—Ch. 2
- Indifference curves and trade—Ch. 2
- Offer curves and the equilibrium terms of trade—Ch. 2
- The specific-factors theory—Ch. 3
- Offer curves and tariffs—Ch. 4
- Trump’s American First Program: Steel and Aluminum Tariffs—Ch. 4
- Tariff-rate quota welfare effects—Ch. 5
- Export quota welfare effects—Ch. 5
- Welfare effects of strategic trade policy—Ch. 6
- Government procurement policy and the European Union—Ch. 8
- Economies of scale and NAFTA—Ch. 8
- Techniques of foreign-exchange market speculation—Ch. 11
- A primer on foreign-exchange trading—Ch. 11
- Fundamental forecasting—regression analysis—Ch. 12
- Mechanisms of International Adjustment—Ch. 13
- Exchange rate pass-through—Ch. 13
- International Banking: Reserves, Debt, and Risk—Ch. 15

## REPOSITIONING OF TWO CHAPTERS

---

The sixteenth edition of *International Economics* included Chapter 13 (“Mechanisms of International Adjustment”) and Chapter 17 (“International Banking: Reserves, Debt, and Risk”). In order to most effectively streamline the content of the seventeenth edition, these chapters have been repositioned as part of the *Exploring Further* sections that are discussed in the previous section of this preface.

## SUPPLEMENTARY MATERIALS

---

**MindTap: Empower Your Students** MindTap is a platform that propels students from memorization to mastery. It gives you complete control of your course, so you can provide engaging content, challenge every learner, and build student confidence. Customize interactive syllabi to emphasize priority topics, then add your own material or notes to the eBook as desired. This outcomes-driven application gives you the tools needed to empower students and boost both understanding and performance.

**Access Everything You Need in One Place** Cut down on prep with the preloaded and organized MindTap course materials. Teach more efficiently with interactive multimedia, assignments, quizzes, and more. Give your students the power to read, listen, and study on their phones, so they can learn on their terms.

***Empower Students to Reach Their Potential*** Twelve distinct metrics give you actionable insights into student engagement. Identify topics troubling your entire class and instantly communicate with those struggling. Students can track their scores to stay motivated toward their goals. Together, you can be unstoppable.

***Control Your Course—and Your Content*** Get the flexibility to reorder textbook chapters, add your own notes, and embed a variety of content including Open Educational Resources (OER). Personalize course content to your students' needs. They can even read your notes, add their own, and highlight key text to aid their learning.

***Get a Dedicated Team, Whenever You Need Them*** MindTap isn't just a tool, it's backed by a personalized team eager to support you. We can help set up your course and tailor it to your specific objectives, so you'll be ready to make an impact from day one. Know we'll be standing by to help you and your students until the final day of the term.

***PowerPoint Slides*** The seventeenth edition also includes updated PowerPoint slides. These slides can be easily downloaded from the instructor's companion website (<http://login.cengage.com>).

***Instructor's Manual*** To assist instructors in the teaching of international economics, there is an *Instructor's Manual* that accompanies the seventeenth edition. The manual contains brief answers to the end-of-chapter study questions and is available for download from the instructor's companion website (<http://login.cengage.com>).

***Test Bank*** The test bank provides items for instructors' reference and use. It contains a variety of question formats in varying levels of difficulty. Cognero® software makes test preparation, scoring, and grading easy. Featuring automatic grading, Cognero® allows you to create, deliver, and customize tests and study guides (both print and online) in minutes.

***Compose*** Compose is the home of Cengage's online digital content. Compose provides the fastest, easiest way for you to create your own learning materials. Contact your Cengage sales representative for more information.

## ACKNOWLEDGMENTS

I am pleased to acknowledge those who aided me in preparing the current and past editions of this textbook. Helpful suggestions and often detailed reviews were provided by:

- Abdullah Khan, Kennesaw State University
- Adis M. Vila, Esq., Winter Park Institute Rollins College
- Afia Yamoah, Hope College
- Al Maury, Texas A&I University
- Alyson Ma, University of San Diego

- Andy Liu, Youngstown State University
- Ann Davis, Marist College
- Anthony Koo, Michigan State University
- Anthony Scaperlanda, Northern Illinois University
- Bassam Harik, Western Michigan University
- Ben Slay, Middlebury College (now at PlanEcon)
- Benjamin Liebman, St. Joseph's University
- Brad Andrew, Juniata College
- Burton Abrams, University of Delaware
- Carolyn Fabian Stumph, Indiana University–Purdue University Fort Wayne
- Charles Chittle, Bowling Green University
- Chong Xiang, Purdue University
- Christopher Cornell, Fordham University
- Chuck Rambeck, St. John's University
- Clifford Harris, Northwood University
- Daniel Falkowski, Canisius College
- Daniel Lee, Shippensburg University
- Daniel Ryan, Temple University
- Darrin Gulla, University of Kentucky
- Darwin Wassink, University of Wisconsin–Eau Claire
- David Hudgins, University of Oklahoma
- Earl Davis, Nicholls State University
- Edhut Lehrer, Northwestern University
- Elanor Craig, University of Delaware
- Elisa Quennan, Taft College
- Elizabeth Rankin, Centenary College of Louisiana
- Emanuel Frenkel, University of California–Davis
- Faik Koray, Louisiana State University
- Farideh Farazmand, Lynn University
- Firat Demir, University of Oklahoma
- Fyodor Kushnirsky, Temple University
- Gary Pickersgill, California State University, Fullerton
- Gopal Dorai, William Paterson College
- Gordon Smith, Anderson University
- Grace Wang, Marquette University
- Hamid Tabesh, University of Wisconsin–River Falls
- Hamid Zangeneh, Widener University
- Harold Williams, Kent State University
- Howard Cochran, Jr., Belmont University
- J. Bang, St. Ambrose University
- James Richard, Regis University
- Jean-Ellen Giblin, Fashion Institute of Technology (SUNY)
- Jeff W. Bruns, Bacone College
- Jeff Sarbaum, University of North Carolina, Greensboro
- Jim Hanson, Willamette University
- Jim Levinsohn, University of Michigan



- John Charalambakis, Asbury College
- John Harter, Eastern Kentucky University
- John Muth, Regis University
- John Olienyk, Colorado State University
- John Polimeni, Albany College of Pharmacy and Health Sciences
- Jonathan Warshay, Baker College
- Jorge Vidal, The University of Texas Pan American
- Jose Mendez, Arizona State University
- Joshua Ang, Rogers State University
- Juan De La Cruz, Fashion Institute of Technology
- Juha Seppälä, University of Illinois
- Kelvin Bentley, Baker College Online
- Kevin Balsam, Hunter College
- Laurie Strangman, University of Wisconsin–La Crosse
- Leka Gjolaj, Baker College
- Li Guoqiang, University of Macau (China)
- Manabu Saeki, Jacksonville State University
- Manjira Datta, Arizona State University
- Manjuri Talukdar, Northern Illinois University
- Martin Lozano, University of Manchester, UK
- Mary Norris, Southern Illinois University
- Miao Chi, University of Wisconsin–Milwaukee
- Michael McCully, High Point University
- Mike Marks, Georgia College School of Business
- Mitch Charkiewicz, Central Connecticut State University
- Mohamad Khalil, Fairmont State College
- Mohsen Bahmani-Oskooee, University of Wisconsin–Milwaukee
- Nalitra Thaiprasert, Ball State University
- Neil Meredith, West Texas A&M University
- Nindy Sandhu, California State University, Fullerton
- Norman Gharrity, Ohio Wesleyan University
- Patrice Franko, Colby College
- Paul Stock, University of Mary Hardin–Baylor
- Pershing Hill, University of Alaska–Anchorage
- Peter Karl Kresl, Bucknell University
- Peter Petrick, University of Texas at Dallas
- Peter Wilamoski, Seattle University
- Phyllis Herdendorf, Empire State College (SUNY)
- Rahim Quazi, Prairie View A&M University
- Ralph Husby, University of Illinois–Urbana/Champaign
- Richard Adkisson, New Mexico State University
- Richard Anderson, Texas A & M
- Richard Ault, Auburn University

- Robert Blecker, Stanford University
- Robert Jerome, James Madison University
- Robert Stern, University of Michigan
- Robin Klay, Hope College
- Roger Morefield, University of St. Thomas
- Roman Cech, Longwood University
- Scott Brunger, Maryville College
- Seid Hassan, Murray State University
- Seymour Douglas, Emory University
- Shawn Osell, Minnesota State University–Mankato
- Sofyan Azaizeh, University of New Haven
- Steve Steib, University of Tulsa
- Sucharita Ghosh, University of Akron
- Surekha Rao, Indiana University Northwest
- Suryadipta Roy, High Point University
- Susan Linz, Michigan State University
- Sylwia Starnawska, SUNY Empire State College
- Teresita Ramirez, College of Mount Saint Vincent
- Terutomo Ozawa, Colorado State University
- Thomas Grennes, North Carolina State University
- Tony Mutsune, Iowa Wesleyan College
- Veda Doss, Wingate University
- Wahhab Khandker, University of Wisconsin–La Crosse
- William Hallagan, Washington State University
- William Kleiner, Western Illinois University
- William Phillips, University of South Carolina
- William Schlosser, Lewis and Clark State College
- William Urban, University of South Florida
- Xiujuan Chen, California State University, Fullerton

I would like to thank my colleagues at Central Washington University—David Hedrick, Peter Gray, Koushik Ghosh, Peter Saunders, Toni Sipic, and Chad Wassell—for their advice and help while I was preparing the manuscript. I am also indebted to Shirley Hood who provided advice in the manuscript's preparation.

It has been a pleasure to work with the staff of Cengage Learning, especially Julie Dierig (Project Manager), Chris Rader (Project Manager) and Michael Parthenakis (Senior Product Manager) who provided many valuable suggestions and assistance in seeing this edition to its completion. Thanks also to Kimberly Beauchamp, Erica Longenbach, and Pradhiba Kannaiyan who orchestrated the content development and composition of this book. I also appreciate the meticulous efforts that Linda Duarte provided in the copyediting of this textbook. Finally, I am grateful to my students, as well as faculty and students at other universities, who provided helpful comments on the material contained in this new edition.

I would appreciate any comments, corrections, or suggestions that faculty or students wish to make so I can continue to improve this text in the years ahead. Please contact me! Thank you for permitting this text to evolve to the seventeenth edition.

**Bob Carbaugh**

Department of Economics  
Central Washington University  
Ellensburg, Washington 98926  
Phone: (509) 963-3443  
Email: [Carbaugh@cwu.edu](mailto:Carbaugh@cwu.edu)

# About the Author



When students take my economics courses at Central Washington University, on the first day of class I ask them to stand up, go around the classroom, and meet all of the other students in the class. I feel that we are a community of learners and that getting to know each other is very important. So allow me to tell you a little about myself and how I became the author of *International Economics*.

I was born in the year that the famous British economist, John Maynard Keynes died (you can look it up if you wish). I proudly remind my fellow economists that this allows me to be the successor of Keynes, and that since that time all great ideas come from me. However, I can't figure out why they are not impressed with my conclusion—to me, it seems obvious. But it should be noted that I was born without much hair, and I maintain this characteristic even today.

Growing up in Spokane, Washington, I came from a family of Mom & Dad and five brothers and sisters. We lived in a modest three-bedroom house with one bathroom and bunk beds for the kids. It was at this time that I first learned about productivity in terms of not tying up the bathroom. Also, I enthusiastically played baseball from little-league through high school. I was a pitcher who threw a fastball (it wasn't that fast), a roundhouse curveball, and a change-up. Being able to hit for a high percentage, I played left field while not pitching. I also played club hockey, competed in local golf tournaments, and eventually got into running 10K races.

As for music, 1950s rock was fun. Looking back in life, I wish that I had learned to play a saxophone so I could have played in a Fifties rock band. However, the folk music of the late 1950s and 1960s had the biggest musical influence on my life, and it still does. Without musical background, my friends and I bought cheap guitars and we learned how to play folk songs while listening to 33 1/3 LPs (not CDs) by groups such as the Kingston Trio, Brothers Four, and New Christy Minstrels. One of my friends became the banjo player with the Brothers Four which still makes CDs and plays at concerts worldwide.

By the time I went to Gonzaga University, I was becoming quite serious about my education, and I enjoyed being challenged by my professors and fellow students. To help finance my college education, I worked at many part-time jobs: I washed dishes at the student dining hall, pumped gas and performed mechanical work at gasoline stations, stocked bottles of liquor on the shelves of the Garland Liquor Store, drove a delivery truck with cement blocks for the Spokane Block Co, bailed hay for farmers, and so on. These were learning experiences. In 1969 I graduated from Gonzaga with a bachelor's degree in economics and a minor in philosophy/theology. It was at this time that I met my wife, Cathy—we now have four daughters and nine grandchildren.