



▲ 60.35 ▲ 60.

International Economics

EIGHTH EDITION



International Economics

James Gerber

San Diego State University

EIGHTH EDITION GLOBAL EDITION



Harlow, England • London • New York • Boston • San Francisco • Toronto • Sydney • Dubai • Singapore • Hong Kong Tokyo • Seoul • Taipei • New Delhi • Cape Town • São Paulo • Mexico City • Madrid • Amsterdam • Munich • Paris • Milan Cover Image by Aun Puttipong/Shutterstock

Pearson Education Limited KAO Two KAO Park Harlow CM17 9NA United Kingdom

and Associated Companies throughout the world

Visit us on the World Wide Web at: www.pearsonglobaleditions.com

© Pearson Education Limited, 2023

The rights of James Gerber to be identified as the author of this work have been asserted by him in accordance with the Copyright, Designs and Patents Act 1988.

Authorized adaptation from the United States edition, entitled International Economics, 8th Edition, ISBN 978-0-13-689241-0 by James Gerber, published by Pearson Education © 2022.

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 either the prior written permission of the publisher or a license permitting restricted copying in the United Kingdom issued by the Copyright Licensing Agency Ltd, Saffron House, 6–10 Kirby Street, London EC1N 8TS.

All trademarks used herein are the property of their respective owners. The use of any trademark in this text does not vest in the author or publisher any trademark ownership rights in such trademarks, nor does the use of such trademarks imply any affiliation with or endorsement of this book by such owners. For information regarding permissions, request forms, and the appropriate contacts within the Pearson Education Global Rights and Permissions department, please visit www.pearsoned.com/permissions.

This eBook is a standalone product and may or may not include all assets that were part of the print version. It also does not provide access to other Pearson digital products like MyLab and Mastering. The publisher reserves the right to remove any material in this eBook at any time.

British Library Cataloguing-in-Publication Data

A catalogue record for this book is available from the British Library

ISBN 10: 1-292-43399-X **ISBN 13:** 978-1-292-43399-8 eBook ISBN 13: 9781292434025

Typeset in Times Ten LT Std 10/12 by Straive eBook formatted by B2R Technologies Pvt. Ltd. For Monica and Elizabeth

This page is intentionally left blank

BRIEF CONTENTS

	Preface	13
PART 1	Introduction and Institutions	23
Chapter 1	An Introduction to the World Economy	24
Chapter 2	International Economic Institutions Since World War II	40
PART 2	International Trade	63
Chapter 3	Comparative Advantage and the Gains from Trade	64
Chapter 4	Comparative Advantage and Factor Endowments	87
Chapter 5	Beyond Comparative Advantage	117
Chapter 6	The Theory of Tariffs and Quotas	139
Chapter 7	Commercial Policy	161
Chapter 8	International Trade and Labor and Environmental Standards	181
PART 3	International Finance	205
Chapter 9	Trade and the Balance of Payments	206
Chapter 10	Exchange Rates and Exchange Rate Systems	236
Chapter 11	An Introduction to Open Economy Macroeconomics	272
Chapter 12	International Financial Crises	298
PART 4	Regional Issues in the Global Economy	327
Chapter 13	The United States in the World Economy	328
Chapter 14	The European Union: Many Markets into One	353
Chapter 15	Trade and Policy Reform in Latin America	382
Chapter 16	Export-Oriented Growth in East Asia	409
Chapter 17	China and India in the World Economy	438
	Glossary	464
	Index	475
	Suggested Readings are available at www.pearson.com/uk/	

CONTENTS

Preface		13
PART 1	Introduction and Institutions	23
	An Introduction to the World Economy	24
Introduction Integratio	: International Economic on	24
	International Economic	
Integratio		25
	vth of World Trade	26
*	nd Labor Mobility	28
	of Contemporary	• •
	national Economic Relations	30
Trade and	d Economic Growth	32
Twelve Then	nes in International	
Economic	S	33
	s from Trade and New Trade	
	y (Chapters 3, 4, and 5)	33
0	bs, and Protection	
· ·	ters 3, 6, 7, and 8)	34
	ficits (Chapters 9, 11, and 12)	34
	Trade Agreements	
(1	ters 2, 13, and 14)	34
	lution of Trade Conflicts	
	ters 2, 7, and 8)	35
	of International Institutions	
· ·	ters 2, 8, and 12)	35
	Rates and the Macroeconomy	
· ·	ters 10 and 11)	35
	Crises and Global Contagior	
(Chap	ter 12)	36

Capital Flows and the Debt of	
Developing Countries (Chapters 2,	
9, and 12)	36
Latin America and the World	
Economy (Chapter 15)	36
Export-Led Growth in East Asia	
(Chapter 16)	37
China and India in the World	
Economy (Chapter 17)	37
What Do International Economists Do?	37
Vocabulary 38 • Review Questions 38	3
~~~~	
Chapter 2 International Economic	
Institutions Since	
World War II	40
Introduction: International Institutions	
and Issues Since World War II	40
International Institutions	40
A Taxonomy of International	10
Economic Institutions	41
	11
The IMF, the World Bank,	
and the WTO	41
The IMF and World Bank	41
The GATT, the Uruguay Round,	10
and the WTO	43
<b>CASE STUDY:</b> The GATT Rounds	45
Regional Trade Agreements	<b>46</b>
Five Types of Regional Trade	
Agreements	47
<b>CASE STUDY:</b> Prominent Regional	
Trade Agreements	47
Regional Trade Agreements and	
the WTO	49
For and Against RTAs	50

The Role of International Eco	nomic
Institutions	51
The Definition of Public G	oods 52
Maintaining Order and Red	ducing
Uncertainty	53
CASE STUDY: Bretton Woo	ds 54
Criticism of International Inst	itutions 56
Sovereignty and Transparen	ncy 56
Ideology	57
Implementation and Adjust	ment
Costs	58
CASE STUDY: China's Altern	native to the
IMF and World Bank: Th	e AIIB 59
C (0 1/ 1 1	(1

Summary 60 • Vocabulary 61 • Review Questions 61

# PART 2 International Trade 63

Chapter 3	Comparative Advantage	
	and the Gains from Trade	64
Introductio	n: The Gains from Trade	64
Adam S	mith and the Attack on	
Econ	omic Nationalism	64
A Simpl	e Model of Production	
and T	rade	66
Absolut	e Productivity Advantage	
and t	he Gains from Trade	66
CASE ST	<b>UDY:</b> Gains from Trade in	
Ninet	teenth-Century Japan	68
Comparativ	e Productivity Advantage	
and the	Gains from Trade	<b>69</b>
The Pro	duction Possibilities Curve	70
Relative	Prices	71
The Cor	sumption Possibilities Curve	71
The Gai	ns from Trade	72
Domest	ic Prices and the Trade Price	74
Absolute a	nd Comparative Productivity	
Advanta	ge Contrasted	75
Gains from	Trade with No Absolute	
Advanta	ge	76

<b>CASE STUDY:</b> Changing Comparative	:
Advantage in the Republic of Korea, 1960–2010	77
Comparative Advantage and	,,
"Competitiveness"	79
Economic Restructuring	80
CASE STUDY: Losing Comparative	00
Advantage	82
Summary 84 • Vocabulary 85 • Review Questions 85	
Chapter 4 Comparative Advantage and Factor Endowments	87
Introduction: The Determinants of	
Comparative Advantage	87
Modern Trade Theory	88
The HO Trade Model	88
Gains from Trade in the HO Model	89
Trade and Income Distribution	92
The Stolper-Samuelson Theorem	93
The Specific Factors Model	95
<b>CASE STUDY:</b> Comparative Advantag in a Single Natural Resource	e 97
Empirical Tests of the Theory of	21
Comparative Advantage	98
Extensions of the HO Model	99
The Gravity Model	100
The Product Cycle	100
CASE STUDY: United States-China	
Trade	102
Foreign Trade Versus Foreign	100
Investment	103
Off-Shoring and Outsourcing CASE STUDY: Mexico's Participation	105
in Global Value Chains	107
The Impact of Trade on Wages and Jobs	108
CASE STUDY: Do Trade Statistics Give	
Distorted Picture of Trade Relations	
The Case of the iPhone 3G	110
Migration and Trade	111
Summary 113 • Vocabulary 114 • Review Questions 115	

Chapter 5	Beyond Comparative	
	Advantage	117
Introductio	on: More Reasons to Trade	117
Intraindust	try Trade	118
Charact	eristics of Intraindustry Trad	e 119
	ins from Intraindustry Trade	121
	<b>FUDY:</b> United States	
and (	Canada Trade	123
	Geography	124
	phy, Transportation Costs, an	
	nal Economics of Scale	124
	<b>TUDY:</b> The Shifting Geograph	
	exico's Manufacturing	125
	ll Economies of Scale	126
	nd External Economies	127
Industrial I	-	128
	al Policies and Market	120
Failu		129 131
	al Policy Tools	151
	Industrial Policy	132
	ns with Industrial Policies	132
	UDY: Do WTO Rules Prohibi	
	strial Policies?	134
Summary	136 • Vocabulary 137 •	
	Questions 137	
Chapter 6	The Theory of Tariffs	
Chapter 6	and Quotas	139
	-	
	on: Tariffs and Quotas	139
•	s of a Tariff her and Producer Surplus	139 140
	Dutput, and Consumption	140
	ce Allocation and Income	141
	ribution	143
	<b>FUDY:</b> A Comparison of	110
	f Rates	145
Other P	Potential Costs	147
The Lar	ge Country Case	148
<b>Effective V</b>	ersus Nominal Rates	
of Prote		149
	<b>TUDY:</b> The Uruguay	
and l	Doha Rounds	151

Analysis of Quotas	152
Types of Quotas	153
The Effect on the Profits of Foreign	
Producers	153
Hidden Forms of Protection	155
<b>CASE STUDY:</b> Intellectual Property	
Rights and Trade	156
Summary 158 • Vocabulary 159 •	
Review Questions 159	
CHAPTER 7 Commercial Policy	161
Introduction: Commercial Policy,	
Tariffs, and Arguments for	
Protection	161
Tariff Rates in The World's Major	
Traders	162
The Costs of Protectionism	164
The Logic of Collective Action	165
<b>CASE STUDY:</b> Agricultural Subsidies	166
Why Nations Protect Their Industries	168
Revenue	168
The Labor Argument	169
The Infant Industry Argument	170
The National Security Argument	170
The Cultural Protection Argument	171
The Retaliation Argument	172
CASE STUDY: National Security Protection and the WTO	172
	1/2
The Politics of Protection in the	474
United States	<b>174</b> 174
Antidumping Duties Countervailing Duties	174
Escape Clause Relief	176
Section 301	170
National Security Protection	177
<b>CASE STUDY:</b> Economic Sanctions	177
Summary 179 • Vocabulary 180 •	
Review Questions 180	
CHAPTER 8 International Trade and	
Labor and Environmenta	al
Standards	181

Introduction: Income and Standards 181

Setting Standards: Harmonization,	
Mutual Recognition, or Separate?	182
Labor Standards	184
Defining Labor Standards	184
CASE STUDY: Child Labor	185
Labor Standards and Trade	188
Evidence on Low Standards as a	
Predatory Practice	189
<b>CASE STUDY:</b> The International	
Labour Organization	190
Trade and the Environment	192
Transboundary and Nontransboundary	<i>,</i>
Effects	192
<b>CASE STUDY:</b> Trade Barriers and	
Endangered Species	194
Alternatives to Trade Measures	195
Labels for Exports	196
Requiring Home Country Standards	197
Increasing International Negotiations	198
CASE STUDY: Global Climate Change	199
Summary 201 • Vocabulary 202 •	

*Summary 201 • Vocabulary Review Questions 202* 

# PART 3 International Finance 205

Chapter 9	Trade and the Balance	
	of Payments	206
Introducti	on: The Current Account	206
The Tra	ade Balance	207
The Cu	irrent and Capital Account	
Bala	ances	207
Introducti	on to the Financial Account	210
Types of	of Financial Flows	210
Limits	on Financial Flows	216
CASE S	TUDY: The Crisis of 2007–200	9
and	the Balance of Payments	217
The Curre	nt Account and the	
Macroe	economy	218
The Na	ational Income and Product	
Acc	ounts	219
Nation	al Savings and Current	
Acc	ount Balances	222

Are Current Account Deficits	
Harmful?	224
<b>CASE STUDY:</b> Current Account	
Deficits in the United States	225
International Debt	227
CASE STUDY: Odious Debt	228
The International Investment Position	230
Summary 231 • Vocabulary 232 • Review Questions 232	
Appendix A:	
Measuring the International	
Investment Position	233
Appendix B:	
Balance of Payments Data	234
Bureau of Economic Analysis	234
International Financial Statistics	234
Balance of Payments Statistics	235
Appendix C:	
A Note on Numbers	235
Chapter 10 Exchange Rates and Exchange Rate	
Exclidinge hate	
Systems	236
Systems	236
-	236 236
Systems Introduction: Fixed, Flexible, or In Between?	
Systems Introduction: Fixed, Flexible, or	236
Systems Introduction: Fixed, Flexible, or In Between? Exchange Rates and Currency Trading	236
Systems Introduction: Fixed, Flexible, or In Between? Exchange Rates and Currency Trading Reasons for Holding Foreign	236 237
Systems Introduction: Fixed, Flexible, or In Between? Exchange Rates and Currency Trading Reasons for Holding Foreign Currencies	<b>236</b> <b>237</b> 238
Systems Introduction: Fixed, Flexible, or In Between? Exchange Rates and Currency Trading Reasons for Holding Foreign Currencies Institutions Exchange Rate Risk	236 237 238 239
Systems Introduction: Fixed, Flexible, or In Between? Exchange Rates and Currency Trading Reasons for Holding Foreign Currencies Institutions	236 237 238 239
Systems Introduction: Fixed, Flexible, or In Between? Exchange Rates and Currency Trading Reasons for Holding Foreign Currencies Institutions Exchange Rate Risk The Supply and Demand for Foreign Exchange	236 237 238 239 240
Systems Introduction: Fixed, Flexible, or In Between? Exchange Rates and Currency Trading Reasons for Holding Foreign Currencies Institutions Exchange Rate Risk The Supply and Demand for Foreign Exchange Supply and Demand with Flexible	236 237 238 239 240
Systems Introduction: Fixed, Flexible, or In Between? Exchange Rates and Currency Trading Reasons for Holding Foreign Currencies Institutions Exchange Rate Risk The Supply and Demand for Foreign Exchange Supply and Demand with Flexible Exchange Rates	<ul> <li>236</li> <li>237</li> <li>238</li> <li>239</li> <li>240</li> <li>241</li> </ul>
Systems Introduction: Fixed, Flexible, or In Between? Exchange Rates and Currency Trading Reasons for Holding Foreign Currencies Institutions Exchange Rate Risk The Supply and Demand for Foreign Exchange Supply and Demand with Flexible Exchange Rates Exchange Rates in the Long Run	<ul> <li>236</li> <li>237</li> <li>238</li> <li>239</li> <li>240</li> <li>241</li> <li>241</li> </ul>
Systems Introduction: Fixed, Flexible, or In Between? Exchange Rates and Currency Trading Reasons for Holding Foreign Currencies Institutions Exchange Rate Risk The Supply and Demand for Foreign Exchange Supply and Demand with Flexible Exchange Rates	<ul> <li>236</li> <li>237</li> <li>238</li> <li>239</li> <li>240</li> <li>241</li> <li>241</li> </ul>
Systems Introduction: Fixed, Flexible, or In Between? Exchange Rates and Currency Trading Reasons for Holding Foreign Currencies Institutions Exchange Rate Risk The Supply and Demand for Foreign Exchange Supply and Demand with Flexible Exchange Rates Exchange Rates in the Long Run Exchange Rates in the Medium Run and Short Run	<ul> <li>236</li> <li>237</li> <li>238</li> <li>239</li> <li>240</li> <li>241</li> <li>242</li> </ul>
Systems Introduction: Fixed, Flexible, or In Between? Exchange Rates and Currency Trading Reasons for Holding Foreign Currencies Institutions Exchange Rate Risk The Supply and Demand for Foreign Exchange Supply and Demand with Flexible Exchange Rates Exchange Rates in the Long Run Exchange Rates in the Medium	<ul> <li>236</li> <li>237</li> <li>238</li> <li>239</li> <li>240</li> <li>241</li> <li>242</li> </ul>
Systems Introduction: Fixed, Flexible, or In Between? Exchange Rates and Currency Trading Reasons for Holding Foreign Currencies Institutions Exchange Rate Risk The Supply and Demand for Foreign Exchange Supply and Demand with Flexible Exchange Rates Exchange Rates Exchange Rates in the Long Run Exchange Rates in the Long Run Exchange Rates in the Medium Run and Short Run CASE STUDY: The Largest Market in the World	<ul> <li>236</li> <li>237</li> <li>238</li> <li>239</li> <li>240</li> <li>241</li> <li>242</li> <li>246</li> <li>250</li> </ul>
Systems Introduction: Fixed, Flexible, or In Between? Exchange Rates and Currency Trading Reasons for Holding Foreign Currencies Institutions Exchange Rate Risk The Supply and Demand for Foreign Exchange Supply and Demand with Flexible Exchange Rates Exchange Rates Exchange Rates in the Long Run Exchange Rates in the Long Run Exchange Rates in the Medium Run and Short Run CASE STUDY: The Largest Market in the World Fixed Exchange Rates	<ul> <li>236</li> <li>237</li> <li>238</li> <li>239</li> <li>240</li> <li>241</li> <li>242</li> <li>246</li> </ul>
Systems Introduction: Fixed, Flexible, or In Between? Exchange Rates and Currency Trading Reasons for Holding Foreign Currencies Institutions Exchange Rate Risk The Supply and Demand for Foreign Exchange Supply and Demand with Flexible Exchange Rates Exchange Rates Exchange Rates in the Long Run Exchange Rates in the Medium Run and Short Run CASE STUDY: The Largest Market in the World Fixed Exchange Rates CASE STUDY: The End of the Bretton	<ul> <li>236</li> <li>237</li> <li>238</li> <li>239</li> <li>240</li> <li>241</li> <li>242</li> <li>246</li> <li>250</li> <li>252</li> </ul>
Systems Introduction: Fixed, Flexible, or In Between? Exchange Rates and Currency Trading Reasons for Holding Foreign Currencies Institutions Exchange Rate Risk The Supply and Demand for Foreign Exchange Supply and Demand with Flexible Exchange Rates Exchange Rates Exchange Rates in the Long Run Exchange Rates in the Long Run Exchange Rates in the Medium Run and Short Run CASE STUDY: The Largest Market in the World Fixed Exchange Rates	<ul> <li>236</li> <li>237</li> <li>238</li> <li>239</li> <li>240</li> <li>241</li> <li>241</li> <li>242</li> <li>246</li> <li>250</li> </ul>

CASE STUDY: The Collapse of Thailand's Currency, 1997–1998	260
Choosing the Right Exchange	200
Rate System	261
<b>CASE STUDY:</b> Monetary Unions	263
Single Currency Areas	265
Conditions for Adopting a Single	
Currency	266
Summary 267 • Vocabulary 268 •	
Review Questions 269	
Appendix:	
The Interest Rate Parity Condition	270
Chapter 11 An Introduction	
to Open Economy	
Macroeconomics	272
Introduction: The Macroeconomy	
in a Global Setting	272
Aggregate Demand and Aggregate	
Supply	273
Fiscal and Monetary Policies	278
Fiscal Policy	278
Monetary Policy	279
<b>CASE STUDY:</b> Fiscal and Monetary	
Policy during the Great	001
Depression	281
Current Account Balances Revisited	284
Fiscal and Monetary Policies, Interest	
Rates, and Exchange Rates	285
Fiscal and Monetary Policy and the Current Account	286
The Long Run	288
CASE STUDY: Argentina and the	200
Limits to Macroeconomic Policy	289
Macro Policies for Current Account	207
Imbalances	291
The Adjustment Process	291
CASE STUDY: The Adjustment Process	
in the United States	293
Macroeconomic Policy Coordination	
in Developed Countries	<b>294</b>
Summary 295 • Vocabulary 296 • Review Questions 297	

Chapter 12 International Financial Crises	298
Introduction: The Challenge to Financial	
Integration	<b>298</b>
Definition of a Financial Crisis	299
Vulnerabilities, Triggers, and Contagion	302
Vulnerability: Economic Imbalances	302
Vulnerability: Volatile Capital Flows	304
How Crises Become International:	
Contagion	305
<b>CASE STUDY:</b> The Mexican Peso	
Crisis of 1994 and 1995	306
Issues in Crisis Prevention	309
Moral Hazard and Financial Sector	
Regulation	310
Exchange Rate Policy	311
Capital Controls	311
<b>CASE STUDY:</b> The Asian Crisis of	
1997 and 1998	313
Policies for Crisis Management	317
Reform of the International Financial	
Architecture	318
The Role of the IMF	318
Transparency and Private Sector	
Coordination	320
<b>CASE STUDY:</b> The Global Crisis of 2007	320
Summary 324 • Vocabulary 325 • Review Questions 326	

PART 4	Regional Issu	ies
	in the Global	
	Economy	327

	Chapter 13 The United States in the World Economy	328
-	Introduction: A Changing	
	World Economy	328
,	Background and Context	329
	The Shifting Focus of U.S. Trade	
	Relations	330
	<b>CASE STUDY:</b> Manufacturing in	
	the United States	331

The Nafta Model	334
Demographic and Economic	
Characteristics of North America	334
Canada–U.S. Trade Relations	335
Mexican Economic Reforms	337
The North American Free Trade	
Agreement	339
CASE STUDY: North America's	
Automotive Value Chain	341
Trade Initiatives and Preferential	
Agreements	343
<b>CASE STUDY:</b> The African Growth	
and Opportunity Act	345
Jobs and Trade Agreements	346
<b>CASE STUDY:</b> The Gravitational Pull	
of the U.S. Economy	349
Summary 351 • Vocabulary 351 •	
Review Questions 352	
Chapter 14 The European Union:	252
Many Markets into One	
Introduction, The European Union	
Introduction: The European Union	353
The Size of the European Market	353 355
The Size of the European Market	
The Size of the European Market The European Union and	355
The Size of the European Market The European Union and Its Predecessors	355 356
The Size of the European Market The European Union and Its Predecessors The Treaty of Rome	<b>355</b> <b>356</b> 356
The Size of the European Market The European Union and Its Predecessors The Treaty of Rome Institutional Structure	<b>355</b> <b>356</b> 356
The Size of the European Market The European Union and Its Predecessors The Treaty of Rome Institutional Structure Deepening and Widening the	<b>355</b> <b>356</b> 356 357
The Size of the European Market The European Union and Its Predecessors The Treaty of Rome Institutional Structure Deepening and Widening the Community in the 1970s and 1980s Before the Euro	<ul> <li>355</li> <li>356</li> <li>356</li> <li>357</li> <li>359</li> </ul>
The Size of the European Market The European Union and Its Predecessors The Treaty of Rome Institutional Structure Deepening and Widening the Community in the 1970s and 1980s	<ul> <li>355</li> <li>356</li> <li>356</li> <li>357</li> <li>359</li> </ul>
The Size of the European Market The European Union and Its Predecessors The Treaty of Rome Institutional Structure Deepening and Widening the Community in the 1970s and 1980s Before the Euro The Second Wave of Deepening:	<b>355</b> <b>356</b> 356 357 <b>359</b> 359
The Size of the European Market The European Union and Its Predecessors The Treaty of Rome Institutional Structure Deepening and Widening the Community in the 1970s and 1980s Before the Euro The Second Wave of Deepening: The Single European Act	<b>355</b> <b>356</b> 356 357 <b>359</b> 359
The Size of the European Market The European Union and Its Predecessors The Treaty of Rome Institutional Structure Deepening and Widening the Community in the 1970s and 1980s Before the Euro The Second Wave of Deepening: The Single European Act CASE STUDY: The Schengen	<ul> <li>355</li> <li>356</li> <li>356</li> <li>357</li> <li>359</li> <li>361</li> </ul>
The Size of the European Market The European Union and Its Predecessors The Treaty of Rome Institutional Structure Deepening and Widening the Community in the 1970s and 1980s Before the Euro The Second Wave of Deepening: The Single European Act CASE STUDY: The Schengen Agreement The Delors Report Forecasts of the Gains from the	<ul> <li>355</li> <li>356</li> <li>356</li> <li>357</li> <li>359</li> <li>359</li> <li>361</li> <li>362</li> </ul>
The Size of the European Market The European Union and Its Predecessors The Treaty of Rome Institutional Structure Deepening and Widening the Community in the 1970s and 1980s Before the Euro The Second Wave of Deepening: The Single European Act CASE STUDY: The Schengen Agreement The Delors Report Forecasts of the Gains from the Single European Act	<ul> <li>355</li> <li>356</li> <li>356</li> <li>357</li> <li>359</li> <li>359</li> <li>361</li> <li>362</li> </ul>
The Size of the European Market The European Union and Its Predecessors The Treaty of Rome Institutional Structure Deepening and Widening the Community in the 1970s and 1980s Before the Euro The Second Wave of Deepening: The Single European Act CASE STUDY: The Schengen Agreement The Delors Report Forecasts of the Gains from the Single European Act Problems in the Implementation of	<ul> <li>355</li> <li>356</li> <li>356</li> <li>357</li> <li>359</li> <li>361</li> <li>362</li> <li>363</li> <li>363</li> </ul>
<ul> <li>The Size of the European Market</li> <li>The European Union and Its Predecessors</li> <li>The Treaty of Rome Institutional Structure</li> <li>Deepening and Widening the Community in the 1970s and 1980s Before the Euro</li> <li>The Second Wave of Deepening: The Single European Act CASE STUDY: The Schengen Agreement</li> <li>The Delors Report</li> <li>Forecasts of the Gains from the Single European Act</li> <li>Problems in the Implementation of the SEA</li> </ul>	<ul> <li>355</li> <li>356</li> <li>356</li> <li>357</li> <li>359</li> <li>361</li> <li>362</li> <li>363</li> </ul>
The Size of the European Market The European Union and Its Predecessors The Treaty of Rome Institutional Structure Deepening and Widening the Community in the 1970s and 1980s Before the Euro The Second Wave of Deepening: The Single European Act CASE STUDY: The Schengen Agreement The Delors Report Forecasts of the Gains from the Single European Act Problems in the Implementation of the SEA CASE STUDY: The Erasmus+	<ul> <li>355</li> <li>356</li> <li>356</li> <li>357</li> <li>359</li> <li>361</li> <li>362</li> <li>363</li> <li>364</li> </ul>
<ul> <li>The Size of the European Market</li> <li>The European Union and Its Predecessors</li> <li>The Treaty of Rome Institutional Structure</li> <li>Deepening and Widening the Community in the 1970s and 1980s</li> <li>Before the Euro</li> <li>The Second Wave of Deepening: The Single European Act</li> <li>CASE STUDY: The Schengen Agreement</li> <li>The Delors Report</li> <li>Forecasts of the Gains from the Single European Act</li> <li>Problems in the Implementation of the SEA</li> <li>CASE STUDY: The Erasmus+ Program and Higher Education</li> </ul>	<ul> <li>355</li> <li>356</li> <li>356</li> <li>357</li> <li>359</li> <li>361</li> <li>362</li> <li>363</li> <li>363</li> </ul>
The Size of the European Market The European Union and Its Predecessors The Treaty of Rome Institutional Structure Deepening and Widening the Community in the 1970s and 1980s Before the Euro The Second Wave of Deepening: The Single European Act CASE STUDY: The Schengen Agreement The Delors Report Forecasts of the Gains from the Single European Act Problems in the Implementation of the SEA CASE STUDY: The Erasmus+	<ul> <li>355</li> <li>356</li> <li>356</li> <li>357</li> <li>359</li> <li>361</li> <li>362</li> <li>363</li> <li>364</li> </ul>

Monetary Union and the Euro	368
Costs and Benefits of Monetary	260
Union The Political Economy of the Euro	369 371
CASE STUDY: The Financial Crisis	5/1
of 2007–2009 and the Euro	372
Widening the European Union	376
New Members	376
CASE STUDY: The United Kingdom	570
Leaves the European Union	377
Future Challenges	378
Summary 380 • Vocabulary 381 •	
Review Questions 381	
Chapter 15 Trade and Policy Reform	
in Latin America	382
Introduction: Defining a "Latin American"	
Economy	382
Population, Income, and Economic	
Growth	383
Import Substitution Industrialization	385
Origins and Goals of ISI	385
Criticisms of ISI	388
<b>CASE STUDY:</b> ISI in Mexico	389
Macroeconomic Instability and	
Economic Populism	391
Populism in Latin America	392
<b>CASE STUDY:</b> Economic Populism	
in Peru, 1985–1990	393
The Debt Crisis of the 1980s	394
Proximate Causes of the Debt Crisis	395
Responses to the Debt Crisis	395
Neoliberal Policy Reform and the	
Washington Consensus	398
Stabilization Policy to Control	
Inflation	399
Structural Reform and Open Trade	400
CASE STUDY: Regional Trade Blocs	400
in Latin America The Next Generation of Reforms	402
CASE STUDY: The Chilean Model	403 405
	405
Summary 406 • Vocabulary 407 • Review Questions 408	

Chapter 16 Export-Oriented Growth in East Asia	409
Introduction: High-Growth	
Asian Economies	409
Population, Income, and Economic	
Growth	411
A Note on Hong Kong and Taiwan	413
General Characteristics of Growth	413
Shared Growth	413
Rapid Accumulation of Physical	
and Human Capital	414
Rapid Growth of Manufactured	
Exports	415
Stable Macroeconomic Environments	416
The Institutional Environment	417
<b>CASE STUDY:</b> Worldwide Governanc	e
Indicators	418
Fiscal Discipline and Business-	
Government Relations	420
<b>CASE STUDY:</b> Doing Business in the	
Export Oriented Asian	
Economies	420
Avoiding Rent Seeking	422
<b>CASE STUDY:</b> Were East Asian	
Economies Open?	424
The Role of Industrial Policies	<b>426</b>
Targeting Specific Industries	426
Did Industrial Policies Work?	427
<b>CASE STUDY:</b> HCI in Korea	429
The Role of Manufactured Exports	430
The Connections between Growth	
and Exports	430
Is Export Promotion a Good Model	
for Other Regions?	432

<b>CASE STUDY:</b> Asian Trade Blocs	433
Is There an Asian Model of Economic Growth?	434
Summary 436 • Vocabulary 437 • Review Questions 437	
Chapter 17 China and India in the World Economy	438
Introduction: New Challenges	438
Demographic and Economic	
Characteristics	439
Economic Reforms in China and India	443
The Reform Process in China	444
Indian Economic Reforms	445
Shifting Comparative Advantages	446
<b>CASE STUDY:</b> Why Did the USSR	
Collapse and China Succeed?	448
China and India in the World	
Economy	449
Chinese and Indian Trade Patterns	450
Tariffs and Protection	450
Current Account Balances	452
Looking Forward	453
Difficult Issues	455
Services	455
Manufacturing	456
Resources	457
Multilateral Institutions	458
Unresolved Issues	459
Conflict or Collaboration?	460
Summary 462 • Vocabulary 463 • Review Questions 463	
Glossary 464 Index 475	

# PREFACE

*International Economics* is designed for a one-semester course covering both the trade and finance components of international economics. The Eighth Edition continues the approach of the first seven editions by offering a principles-level introduction to core theories together with policy analysis and the institutional and historical contexts of international economic relations. My goal is to make economic reasoning about the international economy accessible to a diverse group of students, including both economics majors and nonmajors. My intention is to present the consensus of economic opinion, when one exists, and to describe the differences when one does not. In general, however, economists are more often in agreement than not.

# What's New in the Eighth Edition

This Eighth Edition of *International Economics* preserves the organization and coverage of the Seventh Edition and adds several updates and enhancements. New to this edition:

- Five new case studies cover Mexico's participation in global value chains, the collapse of Thailand's currency in 1997–98, the North American automotive value chain, North American trade through the lens of the gravity model of trade, and the United Kingdom's exit from the European Union.
- The growth of protectionism is woven into the discussion of trade policies throughout the book.
- The gravity model of trade has a more complete presentation.
- Global value chains are introduced in the section on off-shoring.
- The national security argument for protection is discussed, along with the challenges it poses for the World Trade Organization.
- All tables and graphs have been updated.

# **Notable Content Changes**

Chapter 1's minor revisions begin the discussion of the recently protectionist direction in U.S. trade policy. While it is uncertain if this is a permanent or temporary shift away from multilateral agreements and increasing openness, it is an expression of the concerns about globalization and international trade that are felt by many people around the world.

- Chapter 2 changes reflect the discussion begun in Chapter 1 by adding an overview of the views of the opponents to regional trade agreements. Their concerns are presented in terms of jobs, industries, and communities.
- Chapter 3 changes continue the discussion by highlighting and contrasting the views of trade economists with the objections of protectionist interests. The idea of gains from trade is emphasized and differentiated from the notion that every individual benefits from trade. The chapter points out the complexity and uncertainty of disentangling the trade effects from those caused by new communication, transportation, and information technologies.
- Chapter 4 incorporates a discussion of the gravity model of trade. The gravity model is presented as the most accurate model for predicting trade flows between countries but is silent on the issue of the specific goods and services traded and on the determinants of comparative advantage. The section on outsourcing and off-shoring is rewritten to emphasize the role of global value chains (GVCs) and is followed up with a new case study on Mexico's participation in GVCs.
- Chapter 5 has minor changes that refocus the case study on the WTO and industrial policies in order to ask whether WTO rules prohibit the use of industrial policies.
- Chapters 6 and 7 on commercial policy describe the problems created when tariffs are applied to intermediate goods. They also discuss how the disconnect between wages and labor productivity reduces the bargaining power of workers and alters the labor argument for protection. Chapter 7 explains in more detail the problems associated with the national security argument for protection and has a new case study that addresses the WTO's rules for using national security as a reason for increased tariffs.
- Chapter 8 adopts the position that labor and environmental standards have become a part of many new trade agreements and are here to stay. Since the efficacy of labor and environmental clauses in trade agreements is uncertain, alternatives to trade measures are still worth considering.
- Chapter 9 retains most of the content from the previous edition. Given the current rhetoric about U.S. trade deficits, it is worth emphasizing the section that reviews the causes of current account deficits and the case study of the U.S. deficit.
- Changes to Chapter 10 are mostly in its organization and a new case study. Fixed exchange rates, including the gold standard, are discussed directly after the section on flexible rates and before discussion of the real exchange rate. A new case study on the collapse of Thailand's currency in 1997–98 comes directly after the section on real rates.

- A very minor change to **Chapter 11** introduces the change in U.S. and European central bank policies that have enabled them to expand the types of assets they purchase.
- Chapter 12 adds the concept of balance of payments crises to its list and introduces the concept of asymmetric information in the section on moral hazard and financial regulation. In addition, the case study on the Asian Crisis of 1997–98 is condensed.
- Chapter 13 has major changes given the sudden redirection of U.S. trade policy. These changes emphasize the challenges to the United States stemming from the growth and development of the Chinese economy and the U.S. shift toward unilateral trade actions. The focus on the NAFTA model is retained since it is the basis for most subsequent U.S. trade agreements even as it is replaced by the United States-Mexico-Canada Agreement (USMCA). A new case study on the North American automotive value chain replaces the earlier study on Mexico's collective agriculture. The distinction between trade preference programs, trade initiatives, and bilateral or plurilateral trade agreements is clarified and strengthened, and a new case study uses the gravity model to discuss North American trade.
- Chapter 14 takes into account the departure of the United Kingdom from the European Union with a new case study on the subject. It also improves the discussion of EU institutions. The final section adds a discussion of the challenge to the EU to find new institutional mechanisms for risk sharing across the region.
- All relevant economic data are made current and up to date for Chapters 15 and 16.
- Chapter 17 highlights the advances of India and China and notes the growing conflict between China and high-income economies. It has added material on China's Made in China 2025 initiative and its Belt and Road Initiative. The problems for trade rules created by the extensive use of state-owned enterprises are highlighted, as are intellectual property enforcement and the forced transfer of technology.

# Flexibility of Organization

A text requires a fixed topical sequence because it must order the chapters one after another. This is a potential problem for some instructors, as there is a wide variety of preferences for the order in which topics are taught. The Eighth Edition, like the previous editions, strives for flexibility in allowing instructors to find their own preferred sequence.

Part 1 includes two introductory chapters that are designed to build vocabulary, develop historical perspective, and provide background information about the different international organizations and the roles they play in the world economy. Some instructors prefer to delve into the theory chapters immediately, reserving this material for later in the course. There is no loss of continuity with this approach.

- Part 2 presents the trade and commercial policy side of international economics. Part 2 can be taught before or after Part 3, which covers international finance. Part 2 includes six chapters that cover trade models (Chapters 3–5) and commercial policy (Chapters 6–8). A condensed treatment of this section could focus on the Ricardian model in Chapter 3 and the analysis of tariffs and quotas in Chapters 6 and 7. Chapter 8 on labor and environmental standards can stand on its own, although the preceding chapters deepen student understanding of the trade-offs.
- Part 3 covers international finance. It begins with a discussion of the balance of payments that is followed by chapters on exchange rates, open economy macroeconomics, and financial crises. Chapter 11 on open economy macroeconomics is optional. It is intended for students and instructors who want a review of macroeconomics, including the concepts of fiscal and monetary policy, in a context that includes current accounts and exchange rates. If Chapter 11 is omitted, Chapter 12 (financial crises) remains accessible as long as students have an understanding of the basic concepts of fiscal and monetary policy. Chapter 12 relies most heavily on Chapters 9 (balance of payments) and 10 (exchange rates and exchange rate systems).
- Part 4 presents five chapters, each focused on a geographic area. These chapters use theory presented in Chapters 3–12 in a similar fashion to the economics discussion that students find in the business press, congressional testimonies, speeches, and other sources intended for a broad civic audience. Where necessary, concepts such as the real rate of exchange are briefly reviewed. One or more of these chapters can be moved forward to fit the needs of a particular course.

# Solving Teaching and Learning Challenges

Teaching and learning international economics has a number of inherent challenges. In a one-semester course, instructors must carefully choose the material they will cover and what they will omit. Meanwhile, students frequently experience international economics as overly theoretical and too abstract. These were two of the main concerns that led to the development of this text. In addition, the rapidly evolving international economy has led to the creation of global value chains, surprisingly frequent financial crises, intense debates about trade, trade agreements, and migration, as well as many other new issues. Moved by these trends and their impacts, many non-economics students with limited background have signed up for introductory courses in international economics. This is an ongoing opportunity for teaching international economics to a wider audience, but it also poses challenges for the traditional course.

## A Solid Foundation for International Economics

While writing the text and selecting topics to cover and to omit, I constantly asked what students need to know. A one-semester course must leave out many topics. My goal is to provide a solid foundation for advancing student interests and skills for further study and, if this is to be their only course in international economics, for guiding them to a level of competency and understanding of the many international forces around us.

## **Case Studies**

One of the first choices in writing this book was to include several case studies in each chapter that highlight and build on the core theories and ideas. This allows students the opportunity to see theories in action and provides instructors with concrete examples of how theories can be used to analyze the forces behind everyday events.

### **International Economic Institutions**

The positioning of the introduction to international institutions in Chapter 2 enables students to understand the goals of those institutions and the constraints they face. This is particularly useful when they encounter those and other institutions in subsequent chapters. Throughout the text, there is more coverage of historical and institutional details than is typical. As with Chapter 2, this helps illuminate the relationships among economic theory, economic policy, and economic events.

### **Five World Regions**

Another atypical component of the text is the final section, Part 4. It is organized into five chapters, each focused on a different geographic area of the world. Instructors may choose to skip some or all of this material without loss of continuity, although many find it useful for highlighting economic theory in a real-world setting. Students will also find it useful for seeing the deployment of theory as a tool for understanding the challenges, opportunities, and actions of different national economies.

### **Vocabulary Checks and Study Questions**

Each chapter has a set of five to seven learning objectives that are stated at the beginning and individually repeated after the subchapter heading where the objective is covered. This helps the students to learn in an organized and structured way. And finally, the end-of-the-chapter vocabulary and study questions are designed for students to test their understanding.

# **Real-World Career Skills**

Students who work with this text on international economics will gain numerous career-building benefits.

### **Knowledge Application and Analysis**

Students are exposed to a large number of new concepts and relationships that they must appropriately apply. This requires them to recall the material,

express it in their own words, and apply it to real-life situations. Application builds analytical skills, including the ability to break down concepts or ideas into component parts, and skills of synthesizing ideas to form new perspectives. Analysis also requires students to practice using their judgment to evaluate ideas and perspectives.

#### **Critical Thinking**

Critical thinking includes an understanding of the uses and limits of theory, but it also includes skills such as the ability to organize, synthesize, and analyze information. International economics is one of the subdisciplines of economics where the gap between expert opinion and the views of the general public is widest. Most of the propositions put forward by international economists are controversial with some groups or even the general public. Consequently, the ability to organize, synthesize, and analyze the arguments made and then to apply them to real-world conditions is an essential skill for mastering international economics.

#### **Strengthened Numeracy**

Numeracy is the ability to work with, interpret, and understand numbers. Those skills are directly covered in statistics and mathematical economics classes, but in order to strengthen their ability to work with data, most students need to experience numbers in their natural setting. The book offers many tables and graphs and a few equations that call for interpretation, analysis, and comparison. Students gain confidence and experience when they grapple with these types of real-world information.

#### **Cultural Competency**

The world is large, and there are many different ways that national economies exist in it. Throughout the text, there are examples drawn from a wide variety of countries. Part 4 delves more deeply into five specific world regions where students gain insight into the different ways countries solve the fundamental economic problem. These features widen student perspectives and prepare them for working in more diverse environments.

#### The Uses and Limits of Theories

Regardless of the career path a person takes, they need to understand the theories most relevant to their work because theories are usually the foundation for analysis and decision-making. All theories have limits, however, including the theories that form the field of international economics. It is important to know when conditions on the ground have exceeded the limits of theory. This text requires mastery of several theories, while the examination of specific conditions in countries and regions sometimes uncovers the limits of those theories. Throughout the text, the case studies, and examples drawn from actual historical conditions, help students practice applying theory and understanding their limits.

# **Supplementary Materials**

For more information and resources, visit www.pearsonglobaleditions.com.

# **Acknowledgments**

All texts are team efforts, even single-author texts. I owe a debt of gratitude to a large number of people. At San Diego State University, I have benefited from the opportunity to teach and converse with a wide range of students. My colleagues in San Diego and across the border in Mexico have been extremely helpful. Their comments and our conversations constantly push me to think about the core economic ideas that should be a part of a college student's education and to search for ways to explain the relevance and importance of those ideas with greater clarity and precision. Any failure in this regard is, of course, mine alone.

I am deeply grateful to Samantha Lewis, Thomas Hayward, Neeraj Bhalla, Sugandh Juneja, Bhanuprakash Sherla, Allison Campbell, Gopala Krishnan Sankar, and the MyLab team.

Finally, my gratitude goes to the numerous reviewers who have played an essential role in the development of *International Economics*. Each of the following individuals reviewed the manuscript, many of them several times, and provided useful commentary. I cannot express how much the text has benefited from their comments.

Mary Acker, Iona College Byron Brown, Southern Alan Deardorff, University Oregon University of Michigan Jeff Ankrom, Wittenberg Laura Brown, University of Craig Depken II, University Manitoba University of North David Aschauer, Bates Carolina, Charlotte Albert Callewaert, Walsh College College John Devereaux, University H. Somnez Atesoglu, Tom Carter, Oklahoma of Miami Clarkson University City University K. Doroodian, Ohio Titus Awokuse, University Srikanta Chatterjee, University of Delaware Massey University, New Carolyn Evans, Santa Clara Mohsen Bahmani-Zealand University Oskooee, University of Jen-Chi Cheng, Wichita Wisconsin, Milwaukee Noel J. J. Farley, Bryn State University Mawr College Richard T. Baillie, Michigan Don Clark, University of State University Ora Freedman, Stevenson Tennessee University Mina Baliamoune-Lutz. Raymond Cohn, Illinois University of North Florida Lewis R. Gale IV, State University University of Southwest Eugene Beaulieu, Peter Crabb, Northwest Louisiana University of Calgary Nazarene University Ted Black, Towson Kevin Gallagher, Boston David Crary, Eastern University University Michigan University Ira Gang, Rutgers Bruce Blonigen, University Al Culver, California State University of Oregon University, Chico Lee Bour, Florida State John Gilbert, Utah State Joseph Daniels, *Marquette* University University University

James Giordano, Villanova University Amy Jocelyn Glass, Texas A&M University Joanne Gowa, Princeton University Gregory Green, Idaho State University Thomas Grennes, North Carolina State University Winston Griffith, Bucknell University Jane Hall, California State University, Fullerton Seid Hassan, Murray State University F. Steb Hipple, East Tennessee State University Paul Jensen, Drexel University Ghassan Karam, Pace University George Karras, University of Illinois at Chicago Kathy Kelly, University of Texas, Arlington Abdul Khandker, University of Wisconsin, La Crosse Jacqueline Khorassani, Marietta College Sunghyun Henry Kim, Brandeis University Vani Kotcherlakota, University of Nebraska at Kearnev Corrine Krupp, Michigan State University Kishore Kulkarni, Metropolitan State College of Denver Farrokh Langdana, Rutgers University Daniel Y. Lee, Shippensburg University Mary Lesser, Iona College Benjamin H. Liebman,

Saint Joseph's University

Susan Linz, Michigan State University

Marc Lombard, Macquarie University, Australia

Thomas Lowinger, Washington State University

Nicolas Magud, University of Oregon

Bala Maniam, Sam Houston State University

Mary McGlasson, Arizona State University

Joseph McKinney, Baylor University

Judith McKinney, Hobart & William Smith Colleges

Howard McNier, San Francisco State University

Michael O. Moore, *George* Washington University

Stephan Norribin, *Florida State University* 

William H. Phillips, University of South Carolina

Frank Raymond, Bellarmine University

Donald Richards, *Indiana State University* 

John Robertson, University of Kentucky Community College System

Jeffrey Rosensweig, Emory University

Marina Rosser, James Madison University

Raj Roy, University of Toledo

Michael Ryan, Western Michigan University

George Samuels, Sam Houston State University

Craig Schulman, University of Arizona

William Seyfried, Winthrop University Eckhard Siggel, Concordia University

David Spiro, Columbia University

Richard Sprinkle, University of Texas, El Paso

Ann Sternlicht, Virginia Commonwealth University

Leonie Stone, State University of New York at Geneseo

Carolyn Fabian Stumph, Indiana University, Purdue University, Fort Wayne

Rebecca Summary, Southeast Missouri State University

Jack Suyderhoud, University of Hawaii

Kishor Thanawala, Villanova University

Henry Thompson, Auburn University

Cynthia Tori, Valdosta State University

Edward Tower, Duke University

Ross vanWassenhove, University of Houston

Jose Ventura, Sacred Heart University

Craig Walker, Oklahoma Baptist University

Michael Welker, Franciscan University

Jerry Wheat, Indiana State University

Laura Wolff, Southern Illinois University, Edwardsville

Chong K. Yip, *Georgia* State University

Alina Zapalska, Marshall University

# **Global Edition Acknowledgments**

Pearson would like to thank the following people for contributing to and reviewing the Global Edition and sharing their insightful comments and suggestions:

## Contributor

Gabriela Sterian, Romanian-American University

#### **Reviewers**

Jassem Alokla, *University of Portsmouth* Merve Bernazoglu, *Utrecht University* Natalie Chen, *Warwick University*  This page is intentionally left blank



# Introduction and Institutions



# Learning Objectives

After studying this chapter, students will be able to:

- 1.1 Discuss historical measures of international economic integration with data on trade, capital flows, and migration.
- **1.2** Compute the trade-to-GDP ratio and explain its significance.
- **1.3** Describe three factors in the world economy today that are different from the economy at the end of the first wave of globalization.
- **1.4** List the three types of evidence that trade supports economic growth.
- **1.5** Describe the employment possibilities and occupations open to students of international economics.

# INTRODUCTION: INTERNATIONAL ECONOMIC INTEGRATION

In August 2007, a crisis erupted in the housing sector of the United States. At the time, few people realized that the subprime mortgage crisis would become a demonstration of international economic integration or that it would push the world economy to the brink of collapse. The crisis grew through the remainder of 2007 and into 2008, so that by the summer nearly all high-income economies were in deep distress. Contagion from the crisis spread like an epidemic as banks and other financial firms collapsed and solvent firms stopped lending. The scarcity of credit caused difficulties for businesses that could not find financing for their day-to-day operations, while, at the same time, consumers cut back on their spending and businesses cut back on new investment. By the end of 2008, economies around the world were in recession, with the notable exceptions of China, India, and the major oil producers.

In early 2020, another crisis, the deadly COVID-19 pandemic, caused national economies to suddenly shut down and severely disrupted the international flow of goods, services, and people. The effects are still developing as this text goes to print, but even though the pandemic has an entirely different origin than the financial crisis of 2007–09, both are examples of crises leading to severe economic recessions in many countries around the world. Both are extreme examples, but they are not unique. The Russian Crisis of 1998–99, the Asian Crisis of 1997–98, the Mexican Crisis of 1994–95, the Latin American Debt Crisis of 1982–89, and a number of others caused major

damage to financial systems, businesses, and households, both in the places where they originated and in many other countries.

The international integration of national economies has brought many benefits to nations across the globe, including technological innovation, less expensive products, and greater investment in regions where local capital is scarce, to name a few. But it has also made countries vulnerable to economic problems that have become more easily transmitted from one place to another. Given that the benefits and costs of international economic integration are surrounded by controversy, it is worth clarifying what we mean by the term *international economic integration*, or *globalization in the economic sphere*. To help us understand these forces better, a historical perspective is also useful.

# ELEMENTS OF INTERNATIONAL ECONOMIC INTEGRATION

- LO 1.1 Discuss historical measures of international economic integration with data on trade, capital flows, and migration.
- LO 1.2 Compute the trade-to-GDP ratio and explain its significance.
- LO 1.3 Describe three factors in the world economy today that are different from the economy at the end of the first wave of globalization.
- LO 1.4 List the three types of evidence that trade supports economic growth.

Most people would agree that the major economies of the world are more integrated than at any time in history. Given our instantaneous communications, modern transportation, and relatively open trading systems, most goods can move from one country to another without major obstacles and at relatively low cost. For example, most cars today are made in fifteen or more countries after you consider where each part is made, where the advertising originates, who does the accounting, and who transports the components and the final product. Nevertheless, the proposition that today's economies are more integrated than at any other time in history is not simple to demonstrate. It is clear that our current wave of economic integration began in the 1950s, with the reduction of trade barriers after World War II. In the 1970s, many countries began to encourage financial integration by increasing the openness of their capital markets. The advent of the Internet in the 1990s, along with the other elements of the telecommunications revolution, pushed economic integration to new levels as multinational firms developed international production networks and markets became ever more tightly linked.

Today's global economy is not the first instance of a dramatic growth in economic ties between nations, however, as there was another important period between approximately 1870 and 1913. New technologies such as transatlantic cables, steam-powered ships, railroads, and many others led the way, much as they do today. For example, when the first permanent transatlantic cable was completed in 1866, the time it took for a New York businessperson to complete a financial transaction in London fell from approximately three weeks to one day, and by 1914 it had fallen to one minute as radio telephony became possible.

We have mostly forgotten about this earlier period of economic integration, and that makes it easier to overestimate integration today. Instantaneous communications and rapid transportation, together with the easy availability of foreign products, often cause us to lose sight of the fact that most of what we buy and sell never makes it out of our local or national markets. We rarely pause to think that haircuts, restaurant meals, gardens, health care, education, utilities, and many other goods and services are partially or wholly domestic products. In the United States, for example, about 83.4 percent of goods and services are produced domestically, with imports (16.6 percent) making up the remainder of what we consume (2014). By comparison, in 1890 the United States made about 92 percent of its goods and services, a larger share than today but not radically different.

The question as to whether we are more economically integrated today or during some period in the past is not academic. Between the onset of World War I in 1914 and the end of World War II in 1945, the world economy suffered a series of human-made catastrophes that de-integrated national economies. Two world wars and a global depression caused most countries to close their borders to foreign goods, foreign capital, and foreign people. Since the end of World War II, many of the economic linkages between nations have served to repair the damage done during the first half of the twentieth century, but there is no reason to think that events might not cause a similar decoupling in the future.

Understanding international economic integration requires us to define what we mean by the term. Economists usually point to four criteria or measures for judging the degree of integration, which are trade flows, capital flows, people flows, and the similarity of prices in separate markets. The first three points are relatively self-explanatory, while the similarity of prices refers to the fact that integrated economies have price differences that are relatively small and are due mainly to differences in transportation costs. Goods that can move freely from a low-cost to a high-cost region should experience price convergence as goods move from where they are plentiful and cheap to where they are relatively scarcer and more expensive. All of these indicators—trade flows, factor (labor and capital) movements, and similarity of prices—are measures of the degree of international economic integration.

## The Growth of World Trade

Since the end of World War II, world trade has grown much faster than world output. One way to show this is to estimate the ratio of exports by all countries to total production by all countries. In 1950, total world exports—which are the same as world imports—are estimated to have been 5.5 percent of world **gross domestic product (GDP)**, a measure of total production. Sixty-three years later, in 2013, they were approximately 30 percent of world GDP, nearly

six times more important relative to the size of the world economy. One important measure of international trade in a nation's economy is the sum of exports plus imports divided by the GDP. Specifically, it is the value of all final goods and services produced inside a nation during some period, usually one year. The **trade-to-GDP ratio** is represented as follows:

Trade to GDP ratio =  $(Exports + Imports) \div GDP$ 

The ratio does not tell us about a country's trade policies and countries with higher ratios do not necessarily have lower barriers to trade, although that is one possibility. In general, large countries are less dependent on international trade because their firms can reach an optimal production size without having to sell to foreign markets. Consequently, smaller countries tend to have higher ratios of trade to GDP.

Figure 1.1 shows the trade-to-GDP ratio for four countries between 1913 and 2013. The decline in trade between the onset of World War I and 1950 is clearly visible in each country, as is the subsequent increase after 1950. Another pattern shown in Figure 1.1 is the smaller ratios for the United States and Japan, which have the largest populations, and the much higher ratio for the Netherlands, which has the smallest population in the sample. In general, smaller countries trade more than larger ones since they cannot efficiently produce a wide range of goods and must depend on trade to a greater extent. For example, if the Netherlands were to produce autos solely for its own market, it would lack

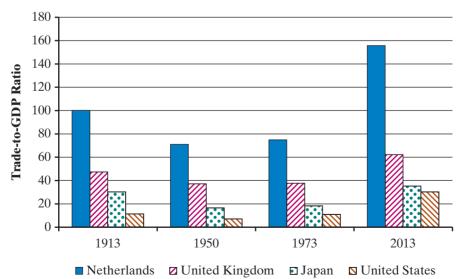


FIGURE 1.1 Trade-to-GDP Ratios for Four Countries, 1913–2013

Data from Maddison, A. (1991). "Dynamic Forces in Capitalist Development" © 1991 Oxford University Press and The World Bank, *World Integrated Trade Solution*, © James Gerber.

economies of scale and could not produce at a competitive cost, whereas the U.S. market can absorb a large share of U.S. output. Hence, the trade-to-GDP ratio measures the relative importance of international trade in a nation's economy, but it does not provide any direct information about trade policy or trade barriers.

Figure 1.1 gives a historical overview of the decline and subsequent return of international trade after World War II, but it obscures important changes in the composition of trade flows from early in the twentieth century to those at the end of the century. Before World War I most trade consisted of agricultural commodities and raw materials, while current trade is primarily manufactured consumer goods and producer goods (machinery and equipment). Consequently, today's manufacturers are much more exposed to international competition than was the case in 1900. In addition, much of the growth of world trade since 1950 has been accomplished by multinational corporations. With production sites in multiple countries and inputs that pass back and forth between affiliates, multinational corporations have become dramatically important. This trend has been supported and encouraged by the telecommunications revolution and transportation improvements that have lowered the costs of coordinating operations physically separated by oceans and continents. And finally, it has also become possible to coordinate service operations such as accounting and data processing from a great distance. In sum, trade today is qualitatively different than in 1913, and the growth of the trade-to-GDP ratio since 1950 does not tell the whole story.

## **Capital and Labor Mobility**

In addition to exports and imports, factor movements also are an indicator of economic integration. As national economies become more interdependent, labor and capital should move more easily across international boundaries. Labor, however, is less mobile internationally than it was in 1900. Consider, for example, that in 1890 approximately 14.5 percent of the U.S. population was foreign born, while in 2010, the figure was 12.9 percent. In 1900, many nations had open door immigration policies, and passport controls, immigration visas, and work permits were exceptions rather than rules. The movement of people was severely restricted by the two world wars and the Great Depression of the 1930s. In the 1920s, during the interwar period, the United States sharply restricted immigration with policies that lasted until the 1960s, when changes in immigration laws once again encouraged foreigners to migrate to the United States.

On the capital side, measurement is more difficult, since there are several ways to measure capital flows. The most basic distinction is between flows of financial capital representing paper assets such as stocks, bonds, currencies, bank accounts, and flows of capital representing physical assets such as real estate, factories, and businesses. The latter type of capital flow is called **foreign direct investment (FDI)**. To some extent, the distinction between the two types of capital flows is immaterial because both represent shifts in wealth across national boundaries and both make one nation's savings available to another.

When we compare international capital flows today to a century ago, there are two points to keep in mind. First, savings and investment are highly correlated. That is, countries with high savings tend to have high rates of investment, and low savings is correlated with low investment. If there were a single world market in which capital flowed freely and easily, this would not necessarily be the case. Capital would flow from countries with abundant savings and capital to countries with low savings and capital, where it would find its highest returns. Second, a variety of technological improvements increased capital flows in the 1800s, as they are doing today. Transoceanic cables and radio telephony have already been mentioned, but capital flows also increased in the late 1800s because there were new investment opportunities such as national railroad networks and other infrastructure, both at home and abroad.

If we compare the size of capital flows today to the previous era of globalization, flows today are much larger but mainly because economies are larger. Relative to the size of economies, the differences are not great and may even favor the 1870 to 1913 period, depending on what is measured. Great Britain routinely invested 9 percent of its GDP abroad in the decades before 1913, and France, Germany, and the Netherlands were as high at times. For significant periods, Canada, Australia, and Argentina borrowed amounts that exceeded 10 percent of their GDP, a level of borrowing that sends up danger signals in the world economy today. In other words, it is hard to make the argument that national economies have a historically unprecedented level of international capital flows today.

While the relative quantity of capital flows today may not be that much different for many countries, there are some important qualitative differences. First, there are many more financial instruments available now than there were a century ago. These range from relatively mundane stocks and bonds to relatively exotic instruments such as derivatives, currency swaps, and others. By contrast, at the turn of the twentieth century, there were many fewer companies listed on the world's stock exchanges, and most international financial transactions involved the buying and selling of bonds.

A second difference today is the role of foreign exchange transactions. In 1900, countries had fixed exchange rates and firms in international trade or finance had less day-to-day risk from a sudden change in the value of a foreign currency. Many firms today spend significant resources to protect themselves from sudden shifts in currency values. Consequently, buying and selling assets denominated in foreign currencies is the largest component of international capital movements. For example, according to the Bank for International Settlements in Geneva, Switzerland, *daily* foreign exchange transactions in 2013 were equal to \$5.3 *trillion*. In 1973, at the end of the last era of fixed exchange rates, they were \$15 billion.

The third major difference in capital flows is that the costs of foreign financial transactions have fallen significantly. Economists refer to the costs of obtaining market information, negotiating an agreement, and enforcing the agreement as **transaction costs**. They are an important part of any business's costs, whether it

is a purely domestic enterprise or a company involved in foreign markets. Due to sheer distance, as well as differences in culture, laws, and languages, transaction costs are often higher in international markets than in domestic ones. Today's lower transaction costs for foreign investment mean that it is less expensive to move capital across international boundaries.

The volatile movement of financial capital across international boundaries is often mistakenly regarded as a new feature of the international economy. Speculative excesses and overinvestment, followed by capital flight and bankruptcies, have occurred throughout the modern era, going back at least to the 1600s and probably earlier. U.S. and world history show a number of such cases. Financial crises are not a new phenomenon, nor have we learned how to avoid them—a fact driven home by the recent subprime mortgage crisis.

#### Features of Contemporary International Economic Relations

While international economic integration has been rapid, it does not appear to be historically unprecedented. The trade-to-GDP ratio is about 50 percent higher in the U.S. economy than it was in 1890, and manufacturers and service providers are more exposed to international forces. Labor is less mobile than in 1900 due to passport controls and work permits, but capital is more mobile and encompasses a larger variety of financial forms. Prices in many U.S. and foreign markets tend to be similar, although there are still significant differences. In quantitative terms, the differences between today and 120 years ago may not be as great as many people imagine, but qualitatively, a number of additional features of the world economy separate the first decade of the twenty-first century from the first decade of the twentieth.

**Deeper Integration** High-income countries have low barriers to imports of manufactured goods. There are some exceptions (processed foodstuffs and apparel), but as a general rule import **tariffs** (taxes on imports) and other barriers such as quotas (quantitative restrictions on imports) are much less restrictive than they were in the middle of the twentieth century. As trade barriers came down during the second half of the twentieth century, three other trends began to intensify economic integration between countries. First, lower trade barriers exposed the fact that most countries have domestic policies that are obstacles to international trade. National regulations governing labor, environmental, and consumer safety standards; rules governing investment location and performance; rules defining fair and unfair competition; rules on government "buy-national" programs; and government support policies for specific industries—all have little impact on trade until formal trade barriers start to fall and trade volume increases. These policies were not implemented to protect domestic industries from foreign competition, and as long as tariffs were high and trade flows were limited, they did not matter much to trade relations. Once tariffs fell, however, many forms of domestic policies began to be viewed as barriers to increased trade. Economists sometimes refer to the reduction of tariffs and the elimination of quotas as **shallow** integration and negotiations over domestic policies that impact international trade