



# International Economics

EIGHTH EDITION

JAMES GERBER



# **International Economics**

### **James Gerber**

San Diego State University

EIGHTH EDITION
GLOBAL EDITION



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



## **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	47!
	Suggested Readings are available at www.pearson.com/uk/	

## **CONTENTS**

Preface		13	Capital Flows and the Debt of Developing Countries (Chapters 2,	,
PART 1	Introduction and		9, and 12)	36
PARII			Latin America and the World	
	Institutions	23	Economy (Chapter 15)	36
			Export-Led Growth in East Asia	
Chapter 1	An Introduction to the		(Chapter 16)	37
	World Economy	24	China and India in the World	
Introduction: International Economic			Economy (Chapter 17)	37
Integration		24	What Do International Economists Do?	37
•	of International Economic		Vocabulary 38 • Review Questions 38	8
Integra		25		
_	owth of World Trade	26	Chapter 2 International Economic	
	and Labor Mobility	28	Institutions Since	
-	es of Contemporary		World War II	40
	ernational Economic Relations	s 30	Introduction: International Institutions	
Trade and Economic Growth		32	and Issues Since World War II	40
Twelve The	emes in International		International Institutions	40
Economics		33	A Taxonomy of International	
The Ga	ins from Trade and New Trade	2	<b>Economic Institutions</b>	41
Theo	ory (Chapters 3, 4, and 5)	33	The IMF, the World Bank,	
Wages,	Jobs, and Protection		and the WTO	41
(Cha	apters 3, 6, 7, and 8)	34	The IMF and World Bank	41
Trade D	Deficits (Chapters 9, 11, and 12)	34	The GATT, the Uruguay Round,	
Region	al Trade Agreements		and the WTO	43
(Cha	apters 2, 13, and 14)	34	<b>CASE STUDY:</b> The GATT Rounds	45
	solution of Trade Conflicts		Regional Trade Agreements	46
	apters 2, 7, and 8)	35	Five Types of Regional Trade	
	le of International Institutions		Agreements	47
	apters 2, 8, and 12)	35	<b>CASE STUDY:</b> Prominent Regional	
	ge Rates and the Macroeconom	•	Trade Agreements	47
,	apters 10 and 11)	35	Regional Trade Agreements and	
	al Crises and Global Contagio		the WTO	49
(Cha	apter 12)	36	For and Against RTAs	50

Contents 7

The Role of International Economic		<b>CASE STUDY:</b> Changing Comparative	3
Institutions	51	Advantage in the Republic of	
The Definition of Public Goods	52	Korea, 1960–2010	77
Maintaining Order and Reducing		Comparative Advantage and	
Uncertainty	53	"Competitiveness"	79
<b>CASE STUDY:</b> Bretton Woods	54	Economic Restructuring	80
<b>Criticism of International Institutions</b>	<b>56</b>	<b>CASE STUDY:</b> Losing Comparative	
Sovereignty and Transparency	56	Advantage	82
Ideology	57	Summary 84 • Vocabulary 85 •	
Implementation and Adjustment		Review Questions 85	
Costs	58	~	
<b>CASE STUDY:</b> China's Alternative to the	ne	<b>Chapter 4 Comparative Advantage</b>	
IMF and World Bank: The AIIB	59	and Factor Endowments	87
Summary 60 • Vocabulary 61 •		Introduction: The Determinants of	
Review Questions 61		Comparative Advantage	87
		Modern Trade Theory	88
PART 2 International		The HO Trade Model	88
	60	Gains from Trade in the HO Model	89
Trade	63	Trade and Income Distribution	92
Sl. 1 2 Commonative Advantage		The Stolper-Samuelson Theorem	93
Chapter 3 Comparative Advantage	<i>C</i> 4	The Specific Factors Model	95
and the Gains from Trade	64	CASE STUDY: Comparative Advantage	ge
Introduction: The Gains from Trade	64	in a Single Natural Resource	97
Adam Smith and the Attack on		<b>Empirical Tests of the Theory of</b>	
Economic Nationalism	64	Comparative Advantage	98
A Simple Model of Production		<b>Extensions of the HO Model</b>	99
and Trade	66	The Gravity Model	100
Absolute Productivity Advantage		The Product Cycle	100
and the Gains from Trade	66	<b>CASE STUDY:</b> United States–China	
CASE STUDY: Gains from Trade in	68	Trade	102
Nineteenth-Century Japan	00	Foreign Trade Versus Foreign	4.00
Comparative Productivity Advantage	-	Investment	103
and the Gains from Trade	<b>69</b>	Off-Shoring and Outsourcing	105
The Production Possibilities Curve	70 71	<b>CASE STUDY:</b> Mexico's Participation in Global Value Chains	107
Relative Prices The Consumption Possibilities Curve			
The Gains from Trade	72	The Impact of Trade on Wages and Jobs	108
Domestic Prices and the Trade Price	74	CASE STUDY: Do Trade Statistics Give Distorted Picture of Trade Relations	
		The Case of the iPhone 3G	s: 11(
Absolute and Comparative Productivity			
Advantage Contrasted	75	Migration and Trade	111
Gains from Trade with No Absolute Advantage	76	Summary 113 • Vocabulary 114 • Review Questions 115	

Chapter 5	<b>Beyond Comparative</b>		Analysis of Quotas	152
	Advantage	117	Types of Quotas	153
Introducti	on: More Reasons to Trade	117	The Effect on the Profits of Foreign Producers	153
Intraindustry Trade 1		118		
Characteristics of Intraindustry Trade 119		Hidden Forms of Protection	155	
The Ga	ains from Intraindustry Trade	2 121	CASE STUDY: Intellectual Property	156
CASE S	TUDY: United States		Rights and Trade	156
and	Canada Trade	123	Summary 158 • Vocabulary 159 •	
Trade and	Geography	124	Review Questions 159	
_	aphy, Transportation Costs, a	nd	CHAPTER 7 Commercial Policy	161
	rnal Economics of Scale	124	Introduction: Commercial Policy,	
	TUDY: The Shifting Geograp	•	Tariffs, and Arguments for	
	Mexico's Manufacturing	125	Protection	161
	al Economies of Scale	126		101
Trade a	and External Economies	127	Tariff Rates in The World's Major Traders	162
Industrial	Policy	128		162
	rial Policies and Market		The Costs of Protectionism	164
Fail		129	The Logic of Collective Action	165
	rial Policy Tools	131	<b>CASE STUDY:</b> Agricultural Subsidies	166
	TUDY: Clean Energy		Why Nations Protect Their Industries	168
	Industrial Policy	132	Revenue	168
	ms with Industrial Policies	133	The Labor Argument	169
	TUDY: Do WTO Rules Prohib		The Infant Industry Argument	170
Indi	ustrial Policies?	134	The National Security Argument	170
Summary	136 • Vocabulary 137 •		The Cultural Protection Argument	171
Review	Questions 137		The Retaliation Argument  CASE STUDY: National Security	172
Chapter 6	The Theory of Tariffs		Protection and the WTO	172
Chapter o	and Quotas	139	The Politics of Protection in the	
Introducti	on: Tariffs and Quotas	139	United States	174
	sis of a Tariff	139	Antidumping Duties	174
	mer and Producer Surplus	140	Countervailing Duties	176
	Output, and Consumption	141	Escape Clause Relief	176
	rce Allocation and Income	111	Section 301	177
	ribution	143	National Security Protection	177
	TUDY: A Comparison of	110	<b>CASE STUDY:</b> Economic Sanctions	177
	ff Rates	145	Summary 179 • Vocabulary 180 •	
	Potential Costs	147	Review Questions 180	
The La	arge Country Case	148	~	
Effective \	Versus Nominal Rates		CHAPTER 8 International Trade and	
of Prot		149	Labor and Environmenta	ıl
	TUDY: The Uruguay		Standards	181
	Doha Rounds	151	Introduction: Income and Standards	181

Contents 9

Mutual			Are Current Account Deficits	
	Recognition, or Separate?	182	Harmful?	224
Labor Standards 184		<b>CASE STUDY:</b> Current Account		
Defining Labor Standards 184			Deficits in the United States	225
	TUDY: Child Labor	185	International Debt	227
Labor S	tandards and Trade	188	<b>CASE STUDY:</b> Odious Debt	228
Evidence	ce on Low Standards as a		The International Investment Position	230
Pred	atory Practice	189		
	TUDY: The International		Summary 231 • Vocabulary 232 •	
Labo	our Organization	190	Review Questions 232	
Trade and	the Environment	192	Appendix A:	
	undary and Nontransboundar		Measuring the International	222
Effec	•	192	Investment Position	233
CASE ST	TUDY: Trade Barriers and		Appendix B:	
Enda	angered Species	194	Balance of Payments Data	234
	es to Trade Measures	195	Bureau of Economic Analysis	234
	for Exports	196	International Financial Statistics	234
	ng Home Country Standards	197	Balance of Payments Statistics	235
	ng International Negotiations	198	Appendix C:	
	UDY: Global Climate Change		A Note on Numbers	235
			Cl. 1 40 Fushamus Datas and	
	201 • Vocabulary 202 • Questions 202		Chapter 10 Exchange Rates and	
neview	Questions 202		Exchange Rate	226
DADT 2	Intomotional		Systems	236
PART 3	International		Introduction: Fixed, Flexible, or	
PAKI 5		205	Introduction: Fixed, Flexible, or In Between?	236
PAKI 3		205	In Between?	236 237
Chapter 9		205		
	Finance 2	205	In Between? Exchange Rates and Currency Trading	
Chapter 9	Finance 7 Trade and the Balance		In Between?  Exchange Rates and Currency Trading Reasons for Holding Foreign	237
Chapter 9	Finance Trade and the Balance of Payments	206	In Between?  Exchange Rates and Currency Trading Reasons for Holding Foreign Currencies	<ul><li>237</li><li>238</li></ul>
Chapter 9  Introduction The Tra	Finance Trade and the Balance of Payments on: The Current Account de Balance	206 206	In Between?  Exchange Rates and Currency Trading Reasons for Holding Foreign Currencies Institutions	<ul><li>237</li><li>238</li><li>239</li></ul>
Chapter 9  Introduction The Tra	Finance Trade and the Balance of Payments on: The Current Account de Balance rrent and Capital Account	206 206	In Between?  Exchange Rates and Currency Trading Reasons for Holding Foreign Currencies Institutions Exchange Rate Risk	<ul><li>237</li><li>238</li><li>239</li></ul>
Chapter 9  Introduction The Tra The Cur Bala	Finance Trade and the Balance of Payments on: The Current Account de Balance rrent and Capital Account neces	206 206 207 207	In Between?  Exchange Rates and Currency Trading Reasons for Holding Foreign Currencies Institutions Exchange Rate Risk  The Supply and Demand for Foreign	237 238 239 240
Chapter 9  Introduction The Tra The Cur Balan Introduction	Finance Trade and the Balance of Payments on: The Current Account de Balance crent and Capital Account nees on to the Financial Account	206 206 207 207 210	In Between?  Exchange Rates and Currency Trading Reasons for Holding Foreign Currencies Institutions Exchange Rate Risk  The Supply and Demand for Foreign Exchange	237 238 239 240
Chapter 9  Introduction The Tra The Cur Balan Introduction Types o	Trade and the Balance of Payments on: The Current Account de Balance rrent and Capital Account neces on to the Financial Account f Financial Flows	206 206 207 207 210 210	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	237 238 239 240 241
Chapter 9  Introduction The Tra The Cur Bala Introduction Types of Limits of	Trade and the Balance of Payments on: The Current Account de Balance rrent and Capital Account necs on to the Financial Account frinancial Flows on Financial Flows	206 206 207 207 210 210 216	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	237 238 239 240 241
Chapter 9  Introduction The Tra The Cur Bala Introduction Types of Limits of CASE ST	Finance Trade and the Balance of Payments on: The Current Account de Balance rrent and Capital Account neces on to the Financial Account frinancial Flows on Financial Flows TUDY: The Crisis of 2007–200	206 206 207 207 210 210 216	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	237 238 239 240 241
Chapter 9  Introduction The Tra The Cur Balan Introduction Types of Limits of CASE 57 and to	Trade and the Balance of Payments on: The Current Account de Balance crent and Capital Account nees on to the Financial Account frinancial Flows on Financial Flows TUDY: The Crisis of 2007–200 the Balance of Payments	206 206 207 207 210 210 216	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	238 239 240 241 241 242
Chapter 9  Introduction The Tra The Cur Balan Introduction Types of Limits of CASE ST and to The Current	Trade and the Balance of Payments on: The Current Account de Balance rrent and Capital Account neces on to the Financial Account frinancial Flows on Financial Flows on Financial Flows TUDY: The Crisis of 2007–200 the Balance of Payments at Account and the	206 206 207 207 210 210 216 9	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	238 239 240 241 241 242
Chapter 9  Introduction The Tra The Cur Balan Introduction Types of Limits of CASE ST and to The Current Macroe	Trade and the Balance of Payments on: The Current Account de Balance rrent and Capital Account neces on to the Financial Account frinancial Flows on Financial Flows on Financial Flows TUDY: The Crisis of 2007–200 the Balance of Payments of Account and the conomy	206 206 207 207 210 210 216	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	238 239 240 241 241 242 246
Chapter 9  Introduction The Tra The Cur Bala Introduction Types of Limits of CASE ST and to The Current Macroe The National Transporter The Transporter The National Transporter The Transporter The National Transporter The National Transporter The	Trade and the Balance of Payments on: The Current Account de Balance rrent and Capital Account nees on to the Financial Account frinancial Flows on Financial Flows TUDY: The Crisis of 2007–200 the Balance of Payments at Account and the conomy tional Income and Product	206 206 207 207 210 210 216 9 217	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	237 238 239 240 241 241 242 246
Chapter 9  Introduction The Tra The Cur Bala: Introduction Types o Limits of CASE ST and t The Curren Macroe The Nat Acco	Trade and the Balance of Payments on: The Current Account de Balance rrent and Capital Account nees on to the Financial Account frinancial Flows on Financial Flows on Financial Flows tudy: The Crisis of 2007–200 the Balance of Payments of Account and the conomy tional Income and Product ounts	206 206 207 207 210 210 216 9	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	237 238 239 240 241 241 242 246
Chapter 9  Introduction The Tra The Cur Balan Introduction Types of Limits of CASE 57 and to The Curren Macroe The National	Trade and the Balance of Payments on: The Current Account de Balance rrent and Capital Account nees on to the Financial Account frinancial Flows on Financial Flows TUDY: The Crisis of 2007–200 the Balance of Payments at Account and the conomy tional Income and Product	206 206 207 207 210 210 216 9 217	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	237 238 239 240 241 241 242 246 250 252

CASE STUDY: The Collapse of Thailand's Currency, 1997–1998	260	Chapter 12	International Financial Crises	298
Choosing the Right Exchange	261		n: The Challenge to Financia	
Rate System	<b>261</b>	Integrat		298
CASE STUDY: Monetary Unions	263 265	Definition	of a Financial Crisis	299
Single Currency Areas Conditions for Adopting a Single	203	Vulnerabilit	ies, Triggers, and Contagion	302
Currency	266		bility: Economic Imbalances	302
•	200	Vulnera	bility: Volatile Capital Flows	304
Summary 267 • Vocabulary 268 •		How Cr	ises Become International:	
Review Questions 269		Cont	agion	305
Appendix:		CASE ST	<b>TUDY:</b> The Mexican Peso	
The Interest Rate Parity Condition	270	Crisis	s of 1994 and 1995	306
Chapter 11 An Introduction		Issues in C	risis Prevention	309
to Open Economy		Moral H	Iazard and Financial Sector	
Macroeconomics	272	Regu	lation	310
	212		ge Rate Policy	311
Introduction: The Macroeconomy	272		Controls	311
in a Global Setting	272		<b>UDY:</b> The Asian Crisis of	
Aggregate Demand and Aggregate			and 1998	313
Supply	273		for Crisis Management	317
Fiscal and Monetary Policies	278		the International Financial	
Fiscal Policy	278	Archited		318
Monetary Policy	279		e of the IMF	318
<b>CASE STUDY:</b> Fiscal and Monetary		_	rency and Private Sector	220
Policy during the Great			dination	320
Depression	281	CASE ST	<b>UDY:</b> The Global Crisis of 200	7 320
<b>Current Account Balances Revisited</b>	284	•	<i>324</i> • <i>Vocabulary 325</i> •	
Fiscal and Monetary Policies, Interes		Review	Questions 326	
Rates, and Exchange Rates	285			
Fiscal and Monetary Policy and the	206	PART 4	Regional Issues	
Current Account The Long Run	286 288		in the Global	
CASE STUDY: Argentina and the	200		_	227
Limits to Macroeconomic Policy	289		Economy	327
Macro Policies for Current Account	207	Chapter 13	The United States in	
Imbalances	291	Chapter 13	the World Economy	328
The Adjustment Process	291	100	•	320
CASE STUDY: The Adjustment Process			n: A Changing	220
in the United States	293	World E	•	328
Macroeconomic Policy Coordination	-/-	_	d and Context	329
in Developed Countries	294		fting Focus of U.S. Trade	222
	234	Relat		330
Summary 295 • Vocabulary 296 •			UDY: Manufacturing in	221
Review Questions 297		ine C	United States	331

Contents 11

The Nafta Model		Monetary Union and the Euro	368
Demographic and Economic		Costs and Benefits of Monetary	
Characteristics of North America		Union	369
Canada-U.S. Trade Relations		The Political Economy of the Euro	371
Mexican Economic Reforms		<b>CASE STUDY:</b> The Financial Crisis	
The North American Free Trade		of 2007–2009 and the Euro	372
Agreement	339	Widening the European Union	376
<b>CASE STUDY:</b> North America's		New Members	376
Automotive Value Chain	341	<b>CASE STUDY:</b> The United Kingdom	
Trade Initiatives and Preferential		Leaves the European Union	377
Agreements	343	Future Challenges	378
<b>CASE STUDY:</b> The African Growth		Summary 380 • Vocabulary 381 •	
and Opportunity Act	345	Review Questions 381	
Jobs and Trade Agreements	346		
<b>CASE STUDY:</b> The Gravitational Pull		<b>Chapter 15</b> Trade and Policy Reform	
of the U.S. Economy	349	in Latin America	382
Summary 351 • Vocabulary 351 •		Introduction: Defining a "Latin American"	
Review Questions 352		Economy	382
		Population, Income, and Economic	
Chapter 14 The European Union:		Growth	383
Many Markets into One	353	Import Substitution Industrialization	385
Introduction: The European Union	353	Origins and Goals of ISI	385
The Size of the European Market	355	Criticisms of ISI	388
The European Union and		CASE STUDY: ISI in Mexico	389
Its Predecessors	356	Macroeconomic Instability and	20)
The Treaty of Rome	356	Economic Populism	391
Institutional Structure	357	Populism in Latin America	392
	551	CASE STUDY: Economic Populism	372
Deepening and Widening the Community in the 1970s and 1980s	359	in Peru, 1985–1990	393
Before the Euro	359	The Debt Crisis of the 1980s	394
	339	Proximate Causes of the Debt Crisis	395
The Second Wave of Deepening:	201	Responses to the Debt Crisis	395
The Single European Act	361	-	373
CASE STUDY: The Schengen	362	Neoliberal Policy Reform and the	200
Agreement The Delege Penert	363	Washington Consensus	398
The Delors Report		Stabilization Policy to Control Inflation	399
Forecasts of the Gains from the Single European Act		Structural Reform and Open Trade	400
Problems in the Implementation of	363	CASE STUDY: Regional Trade Blocs	700
the SEA	364	in Latin America	402
CASE STUDY: The Erasmus+		The Next Generation of Reforms	403
Program and Higher Education	366	CASE STUDY: The Chilean Model	405
The Third Wave of Deepening: The		Summary 406 • Vocabulary 407 •	
Maastricht Treaty	367	Review Questions 408	

<b>Chapter 16 Export-Oriented Growth</b>		<b>CASE STUDY:</b> Asian Trade Blocs	433
in East Asia	409	Is There an Asian Model of Economic	
Introduction: High-Growth		Growth?	434
Asian Economies	409	Summary 436 • Vocabulary 437 •	
Population, Income, and Economic		Review Questions 437	
Growth	411	Chapter 17 China and India in the	
A Note on Hong Kong and Taiwan	413	World Economy	438
<b>General Characteristics of Growth</b>	413	Introduction: New Challenges	438
Shared Growth	413	Demographic and Economic	.50
Rapid Accumulation of Physical		Characteristics	439
and Human Capital	414		
Rapid Growth of Manufactured		Economic Reforms in China and India	<b>443</b> 444
Exports	415	The Reform Process in China Indian Economic Reforms	444
Stable Macroeconomic Environments	416		445
The Institutional Environment	417	Shifting Comparative Advantages CASE STUDY: Why Did the USSR	440
<b>CASE STUDY:</b> Worldwide Governance	e	Collapse and China Succeed?	448
Indicators	418	-	440
Fiscal Discipline and Business–		China and India in the World	4.40
Government Relations	420	Economy	<b>449</b> 450
<b>CASE STUDY:</b> Doing Business in the		Chinese and Indian Trade Patterns Tariffs and Protection	450
Export Oriented Asian		Current Account Balances	450
Economies	420	Looking Forward	453
Avoiding Rent Seeking	422	9	
CASE STUDY: Were East Asian		Difficult Issues	455
Economies Open?	424	Services	455
The Role of Industrial Policies	426	Manufacturing	456
<b>Targeting Specific Industries</b>	426	Resources	457
Did Industrial Policies Work?	427	Multilateral Institutions Unresolved Issues	458 459
<b>CASE STUDY:</b> HCI in Korea	429	Conflict or Collaboration?	459
The Role of Manufactured Exports	430		400
The Connections between Growth		Summary 462 • Vocabulary 463 •	
and Exports	430	Review Questions 463	
Is Export Promotion a Good Model		Glossary 464	
for Other Regions?	432	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.

**Preface** 

#### **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* Jeff Ankrom, *Wittenberg University* 

David Aschauer, Bates College

H. Somnez Atesoglu, *Clarkson University* 

Titus Awokuse, *University* of Delaware

Mohsen Bahmani-Oskooee, *University of Wisconsin*, *Milwaukee* 

Richard T. Baillie, *Michigan State University* 

Mina Baliamoune-Lutz, University of North Florida

Eugene Beaulieu, University of Calgary

Ted Black, Towson

University

Bruce Blonigen, *University* of Oregon

Lee Bour, Florida State University

Byron Brown, Southern Oregon University

Laura Brown, *University of Manitoba* 

Albert Callewaert, Walsh College

Tom Carter, Oklahoma City University

Srikanta Chatterjee, Massey University, New Zealand

Jen-Chi Cheng, Wichita State University

Don Clark, *University of Tennessee* 

Raymond Cohn, *Illinois* State University

Peter Crabb, Northwest Nazarene University

David Crary, Eastern Michigan University

Al Culver, California State University, Chico

Joseph Daniels, Marquette University

Alan Deardorff, *University* of Michigan

Craig Depken II, University of North Carolina, Charlotte

John Devereaux, *University* of Miami

K. Doroodian, *Ohio University* 

Carolyn Evans, *Santa Clara University* 

Noel J. J. Farley, *Bryn Mawr College* 

Ora Freedman, Stevenson University

Lewis R. Gale IV, University of Southwest Louisiana

Kevin Gallagher, Boston University

Ira Gang, Rutgers University

John Gilbert, *Utah State University* 

Benjamin H. Liebman,

Saint Joseph's University

James Giordano, Villanova Susan Linz, Michigan State Eckhard Siggel, Concordia University University University Amy Jocelyn Glass, Texas Marc Lombard, Macquarie David Spiro, Columbia A&M University University, Australia University Joanne Gowa, Princeton Thomas Lowinger, Richard Sprinkle. University Washington State University University of Texas, El Paso Gregory Green, Idaho Nicolas Magud, University Ann Sternlicht, Virginia State University of Oregon Commonwealth University Thomas Grennes, North Bala Maniam, Sam Houston Leonie Stone, State Carolina State University State University University of New York Winston Griffith, Bucknell Mary McGlasson, Arizona at Geneseo University State University Carolyn Fabian Stumph, Jane Hall, California State Joseph McKinney, Baylor Indiana University, University, Fullerton University Purdue University, Fort Wayne Seid Hassan, Murray State Judith McKinney, University Hobart & William Smith Rebecca Summary, Colleges F. Steb Hipple, East Southeast Missouri State Tennessee State University Howard McNier, San University Francisco State University Paul Jensen, Drexel University Jack Suvderhoud. University of Hawaii Michael O. Moore, George Ghassan Karam, Pace Washington University University Kishor Thanawala, Stephan Norribin, Florida Villanova University George Karras, University State University of Illinois at Chicago Henry Thompson, Auburn William H. Phillips, Kathy Kelly, *University of* University University of South Carolina Texas, Arlington Cynthia Tori, Valdosta State Frank Raymond, Abdul Khandker, University University Bellarmine University of Wisconsin, La Crosse Edward Tower, Duke Donald Richards, Indiana Jacqueline Khorassani, University Marietta College State University Ross van Wassenhove, John Robertson, University Sunghyun Henry Kim, University of Houston Brandeis University of Kentucky Community Jose Ventura, Sacred Heart College System Vani Kotcherlakota, University University of Nebraska at Jeffrey Rosensweig, Emory Craig Walker, Oklahoma University Kearnev Baptist University Marina Rosser, James Corrine Krupp, *Michigan* Michael Welker, Franciscan Madison University State University University Raj Roy, University of Kishore Kulkarni, Toledo Jerry Wheat, Indiana State Metropolitan State College University of Denver Michael Ryan, Western Michigan University Farrokh Langdana, Rutgers Laura Wolff, Southern University Illinois University, George Samuels, Sam Edwardsville Houston State University Daniel Y. Lee, Shippensburg University Chong K. Yip, Georgia Craig Schulman, University State University Mary Lesser, Iona College of Arizona

William Seyfried, Winthrop

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* 



## **PART**

# 1

# Introduction and Institutions

#### CHAPTER

# 1

# An Introduction to the World Economy

#### **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

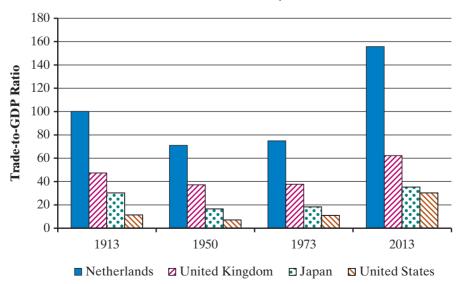


FIGURE 1.1 Trade-to-GDP Ratios for Four Countries, 1913–2013

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 as **deep integration**. Deep integration is much more contentious than shallow integration and much more difficult to accomplish since it involves domestic policy changes that align a country with rules that are created abroad or at least negotiated with foreign powers.

A second noticeable trend over the past few decades is that technologically complicated goods such as smartphones and automobiles are made of components produced in more than one country and, consequently, labels such as "Made in China" or "Made in the USA" are less and less meaningful. Low tariffs along with innovations in transportation and communication technologies have enabled firms to locate production of the different components of a sophisticated product in different countries. For example, the hardware for a 3G iPhone is produced in Germany, Korea, Japan, and the United States, and then it is assembled in China. The most valuable share of the hardware is made in Japan, but no one thinks of this device as a Japanese phone. In this case, as in many others, it is not accurate to say the product is made in one particular country since the parts come from all over and the product is the result of a multinational effort involving firms and workers from many different countries.

A third trend is the recent rise of organized movements opposed to international trade. In part, these movements are responding to the two trends cited in the previous paragraphs: deeper integration reduces national autonomy, and the movement of production processes abroad appears to threaten the well-being of national industries, communities, and families. Economic analysis that tries to separate the effects on economic security of international trade from those of changing technology is difficult and incomplete. Nevertheless, the growth of organized opposition to open trade is not the first such occurrence. During the first wave of globalization, populist movements arose in opposition to international integration and the rise of giant industrial firms. Ultimately, national governments were forced to devise ways to limit the power of industrial interests, and international integration was reversed by World War I. How the current trend of growing anti-international trade movements develops is anyone's guess.

**Multilateral Organizations** At the end of World War II, the United States, Great Britain, and their allies created a number of international organizations to maintain international economic and political stability. Although the architects of these organizations could not envision the challenges and issues they would confront over the next fifty years, the organizations were given significant flexibility, and they continue to play an important and growing role in managing the issues of shallow and deeper integration.

The International Monetary Fund (IMF), the World Bank, the General Agreement on Tariffs and Trade (GATT), the United Nations (UN), the World Trade Organization (the WTO began operation in 1995 but grew out of the GATT), and a host of smaller organizations have broad international participation. They serve as forums for discussing and establishing rules, as mediators of disputes, and as organizers of actions to resolve problems. All of these organizations are controversial and have come under increasing fire from critics who

charge that they promote unsustainable economic policies or that they protect the interests of wealthy countries. Others argue that they are unnecessary foreign entanglements that severely limit the scope for national action. (Chapter 2 examines this issue in detail.) These organizations are attempts to create internationally acceptable rules for trade and commerce and to deal with potential disputes before they spill across international borders; they are an entirely new element in the international economy.

**Regional Trade Agreements** Agreements between groups of nations are not new. Free-trade agreements and other forms of preferential trade have existed throughout history. What is new is the significant increase in the number of **regional trade agreements (RTAs)** that have been signed in the past twenty years.

The formation of preferential trade agreements is controversial. Trade opponents dislike the provisions that expose more of the national economy to international competition, whereas some trade proponents dislike preferences that favor countries included in the agreement at the expense of countries outside the agreement. The North American Free Trade Agreement (NAFTA), the European Union (EU), the Mercado Común del Sur (MERCOSUR), and the Asia Pacific Economic Cooperation (APEC) are examples of RTAs, but more than 417 have been recorded by the World Trade Organization (2016).

#### **Trade and Economic Growth**

Many people are more than a little apprehensive about increased international economic integration. The list of potential problems is a long one. More trade may give consumers lower prices and greater choices, but it also means more competition for firms and workers. Capital flows make more funds available for investment purposes, but they also increase the risk of spreading financial crises internationally. Rising immigration means higher incomes for migrants and lower labor costs or a better pool of skills for firms, but it also means more competition in labor markets and, inevitably, greater social tensions. International organizations may help resolve disputes, but they may also reduce national sovereignty by putting pressure on countries to make operational changes. Free-trade agreements may increase trade flows, but again, that means more competition and more pressure on domestic workers and firms.

In general, economists remain firmly convinced that the benefits of trade outweigh the costs. There is disagreement over the best way to achieve different goals (for example, how to protect against the harmful effects of sudden flows of capital), but the general belief that openness to the world economy is a superior policy to closing off a country is quite strong. To support this stance, economists can point to the following kinds of evidence:

- Casual empirical evidence of historical experience
- Evidence based on economic models and deductive reasoning
- Evidence from statistical comparisons of countries

While none of these is conclusive by itself, together they provide solid support for the idea that open economies generally grow faster and prosper more than closed ones.

The historical evidence examines the experiences of countries that tried to isolate themselves from the world economy. There are the experiences of the 1930s, when most countries tried to protect themselves from world events by shutting out flows of goods, capital, and labor. This did not cause the Great Depression of the 1930s, but it did worsen it, and ultimately it led to the misery and tragedy of World War II. There are also the parallel experiences of countries that were divided by war, with one side becoming closed to the world economy, and the other side open. Germany (East versus West), Korea (North versus South), and China (mainland China before the 1980s versus Taiwan and Hong Kong) are the best examples.

Economic theory generally supports these examples by suggesting the causal mechanisms that lead from trade to faster growth. Generally, the benefits of increased innovation, competitive pressure to raise productivity levels, and access to new technologies and ideas that are fostered by trade are positive factors. On the consumer side, trade provides a greater variety of goods and offers them at lower prices.

The statistical evidence of the benefits of more open economies comes from comparisons of large samples of countries over different periods. While the statistical tests of the relationship between trade policy and economic growth suffer from their own technical shortcomings, the results consistently show that more open economies grow faster. These results cannot be viewed as absolutely conclusive, but together with trade theory and the casual empirical evidence drawn from historical experiences, the available statistical analysis provides additional support for the notion that trade is usually beneficial.

# TWELVE THEMES IN INTERNATIONAL ECONOMICS

Each of the twelve themes discussed next are examined in the chapters that follow. These themes are overlapping and multidimensional and often go beyond pure economics. International economic analysis cannot claim the final word, but we hope it will provide you an analytically powerful and logically consistent approach for thinking about the issues raised by these themes.

#### The Gains from Trade and New Trade Theory (Chapters 3, 4, and 5)

Why is international trade desirable? We have briefly addressed this issue, and we will consider additional points as we continue. Given that economic analysis clearly demonstrates that the benefits of international trade outweigh the costs, it is not surprising that virtually all economists generally support open markets and increased trade. The benefits of international trade were first analyzed in the late 1700s and are perhaps the oldest and strongest finding in all of economics. More recently, economists have begun to analyze returns to scale within firms and industries. Under the

label "New Trade Theory," economists have demonstrated a number of new sources of national welfare improvements due to international trade and added greater sophistication to our understanding of market structure and trade effects.

#### Wages, Jobs, and Protection (Chapters 3, 6, 7, and 8)

International trade raises national welfare, but it does not benefit every member of society. Workers in firms that cannot compete may be forced to find new jobs or take pay cuts. The fact that consumers pay less for the goods they buy or that exporters hire more workers may not help laid-off workers. Increased awareness of the international economy has heightened the fears of people who feel vulnerable to change. They are concerned that wages in high-income countries must fall in order to compete with workers in low-wage countries and that their jobs may be moved overseas. One of the key challenges for policymakers is to find the right mix of domestic policies so that the nation benefits from trade without creating a backlash from those individuals and industries that are hurt.

#### Trade Deficits (Chapters 9, 11, and 12)

In 1980, a comprehensive measure of trade accounts in the United States showed that there was a slight surplus. Every year since then, the United States has had a trade deficit, and the sum of the deficits since 2000 is more than \$7.9 trillion (2001 through 2010). The United States was not the only country running deficits, but each year a country runs a deficit in its trade accounts, it must borrow from abroad, essentially selling a piece of its future output in order to obtain more goods and services today. As the United States and other countries borrowed, China, Germany, Japan, and oil producers like Saudi Arabia and Russia lent. These large imbalances in lending and borrowing played a key role in the financial crisis of 2007–2009 and the development of economic conflicts between the United States, China, and other nations.

#### Regional Trade Agreements (Chapters 2, 13, and 14)

Currently (2020) there are more than 303 regional trade agreements in force around the world, and over 150 more have been negotiated but are not yet active. There are agreements to reduce trade barriers on every continent that include some of the world's most important economies. For example, the European Union (EU) allows free movement of goods, services, capital, and people in its twenty-seven member countries and has similar agreements with several additional non-EU nations. Mexico, Chile, Canada, and, until recently, the United States are active in creating new agreements in the Americas, Asia, and Europe. The ten members of the Association of South East Asian Nations (ASEAN) have moved to create a free-trade zone, while individual countries have signed additional agreements. China has begun to build a set of extensive regional ties in Asia and beyond, and Japan has signed a trade agreement with the European

Union. The pros and cons of these and other agreements are an active area of economic analysis and will be considered in several chapters.

#### The Resolution of Trade Conflicts (Chapters 2, 7, and 8)

Commercial conflicts between nations cover a wide variety of issues and complaints. In one sense these conflicts are routine, as the WTO provides a formal dispute resolution procedure that has the assent of most of the world's nations. The WTO process does not cover all goods and services, however, nor does it say much about a large number of practices that some nations find objectionable. The ability of nations to resolve conflicts without resorting to protectionist measures is one key to maintaining a healthy international economic environment. Disputes can become acrimonious, so it is imperative that differences of opinion are not permitted to escalate into a wider disagreement. Trade wars are not real wars, but they are harmful nonetheless.

#### The Role of International Institutions (Chapters 2, 8, and 12)

The organization with the greatest responsibility for resolving trade disagreements is the WTO. The WTO came into existence in 1995 and was an adaptation of the GATT, which was created shortly after World War II. Resolving trade disputes is only one of the new roles played by international organizations. Various organizations offer development support, technical economic advice, emergency loans in a crisis situation, and other services and assistance. These organizations perform services that were not offered before World War II (development support), or that were done by a single country (lending in a crisis)—usually the world's greatest military power. They exist today only through the mutual consent and cooperation of participating nations; without that cooperation, they would dissolve. Their abilities are limited, however. They cannot prevent crises, and they cannot make poor countries rich. They are also controversial and are viewed by some as tools of the United States or as a threat to national independence. They are very likely to grow in function, however, as many international problems cannot be solved by individual nations alone.

#### Exchange Rates and the Macroeconomy (Chapters 10 and 11)

Seventeen of the twenty-seven members of the EU have adopted the euro as a common currency, and several more are preparing to join them in spite of the euro crisis that began in 2011. Panama, El Salvador, and Ecuador use the U.S. dollar. Some members of the U.S. Congress and some economists think that China artificially manipulates its currency to gain commercial advantages, and China's leaders worry that the United States might let the dollar sink in value to depreciate its foreign debt. Exchange rate systems come in a variety of forms and link the domestic economy to the rest of the world. They can help protect a country against harmful developments outside its borders, but they can also magnify and transmit those developments to the domestic economy. Exchange rates play a key role in the international economy.

#### **Financial Crises and Global Contagion (Chapter 12)**

As international trade and investment barriers declined, and as new communications and transportation systems developed, increasing quantities of capital flowed across national borders. These flows were encouraged by financial innovation and a general spirit of deregulation that held sway in much of the world from the late 1970s forward. Capital flows brought many desirable things, such as investment, new technology, and higher consumption, but they also often outpaced our ability to monitor and supervise and were frequently at the root of financial crises, including the severe global crisis that began in 2007. Economists are engaged in a broad discussion today, aimed at finding techniques for reducing the macroeconomic and financial volatility caused by capital flows without hampering the new investment and lending that they provide.

# Capital Flows and the Debt of Developing Countries (Chapters 2, 9, and 12)

In 1996, the World Bank and the IMF began a debt relief program for a group of forty-two countries labeled the *Highly Indebted Poor Countries (HIPC)*. Thirty-four of these countries are in Africa. At the same time, nongovernmental groups and celebrities, such as Bono, began to lobby successfully for a reduction in the debts of poor countries and for changes in the lending policies of rich countries. In many parts of the world, problems of extreme poverty are compounded by large foreign debts that are unlikely to be repaid and often require a constant supply of new loans to pay interest on the old ones. The search for workable solutions is complicated in the borrowing countries by economic shocks, corruption, and unsustainable economic policies. Common problems in the lending countries include unwise loans to corrupt dictators and loans for some expensive and unnecessary goods sold by rich countries.

#### **Latin America and the World Economy (Chapter 15)**

In Latin America, the 1980s are known as the *Lost Decade*. High levels of debt, deep recessions, and hyperinflation caused the region to lose a decade of growth and development. In response, many countries embarked on a profound shift in their economic policies. They opened markets, allowed increased foreign investment, signed trade agreements, and ended a long period of relative isolation from the world economy. These policy changes became known as the Washington Consensus and helped to bring an end to the Lost Decade, but few economists think the policies were successful. Growth remained relatively low in many places, financial crises continued to undermine economic gains, and traditional issues of economic fairness were largely ignored. Latin American countries have developed a wide variety of new policies and experiments as they try to reduce poverty, generate prosperity, and provide opportunity for all their citizens.

#### **Export-Led Growth in East Asia (Chapter 16)**

Throughout the late 1980s and into the 1990s, it was hard to ignore the East Asian "miracle." While some economists point out that it was not really a miracle—just a lot of hard work and sound economic policies—the growth rates of the "high-performance Asian economies" were unique in human history. Rates of growth of real GDP *per person* commonly reached 4 to 5 percent per year, with 6 to 8 percent not unusual. In 1997, an economic and financial crisis hit the region hard. Although there were lingering effects, by 2000 the economies of the region's developing countries were growing at more than 7 percent a year. One of the dominant traits of the countries in East Asia is the extent to which they are outward looking and dependent on the growth of their manufactured exports.

#### **China and India in the World Economy (Chapter 17)**

China and India are the two largest populations in the world. Together, they account for more than a third of humanity. Throughout much of the twentieth century, however, neither country had significant impact on the world economy. Change began in 1978, when China started its dramatic shift away from isolationism. India's transformation from a relatively closed economy toward greater openness began in 1991 and has proceeded at a slower pace. Nevertheless, its sheer population size coupled with the technical excellence of its scientists and engineers has turned it into a growing force in the world economy. Low wages, competitive firms, new technologies, and innovations in transportation and communication networks have increased the presence of both countries in the world economy and given rise to new tensions and new opportunities.

#### WHAT DO INTERNATIONAL ECONOMISTS DO?

## LO 1.5 Describe the employment possibilities and occupations open to students of international economics.

International economics can be a stand-alone major or, more often, a specialty within the field of general economics. It is also frequently included within degree programs in diplomacy, international relations, international studies, and international business. Specialists in international economics have a wide range of opportunities to work at home and abroad, and in any field that requires an understanding of international finance, international trade, foreign relations, or conditions in foreign countries. This includes many of the subfields of finance, such as banking, insurance, and investing, as well as international organizations, think-tanks, governments, private companies including law firms that do business internationally, and education. Many international economists work as analysts in one capacity or another. For example, research analysts provide background on market and business conditions in foreign countries; policy analysts help governments, industries, and international organizations understand the

influence of different policies on international trade and finance or the role of policies in promoting economic development. Other possibilities include positions as market or business analysts, international trade specialists, political risk specialists, and foreign aid specialists. International economics is also excellent training to work as a journalist in the fields of international business and international affairs, and the diplomatic corps of every nation employs international economists to help gather economic information about foreign economies and to report on conditions abroad.

There are a number of reasons why international economics prepares students for many possible career opportunities. First, it requires some knowledge of the world beyond one's own country and culture. Understanding the challenges and opportunities that other countries face is an important part of the training and an invaluable asset in any organization with interests that cross national boundaries. Second, the material is rigorously analytical and requires students to master and apply abstract models in real-world contexts. Mastery of the core ideas also means an understanding of the assumptions and limits of the models without tossing out the insights they provide. In this sense, the ideas developed in international economics provide a variety of ways to examine economic conditions while maintaining a high degree of realism regarding unique and special conditions. Third, students will become knowledgeable in the reading and interpreting of charts and tables. This is a skill that is much in demand because it helps individuals communicate clearly and succinctly and makes the organization where they work more effective.

#### **Vocabulary**

deep integration shallow integration

foreign direct investment (FDI) tariffs

gross domestic product (GDP) trade-to-GDP ratio quotas transaction costs

regional trade agreement (RTA)

#### **Review Questions**

- 1.1 How can globalization and international economic integration be measured?
- 1.2 Considering the criteria used for judging the degree of integration, what can you tell about India? Is it more or less integrated than it was 20 years ago?
- 1.3 What does the trade-to-GDP ratio measure? Does a low value indicate that a country is closed to trade with the outside world?
- 1.4 Describe the changes of trade-to-GDP ratio and the composition of trade for leading industrial economies between 1910 and 1950.

- 1.5 Trade and capital flows are described and measured in relative terms rather than absolute terms. Explain the difference. Which term seems more valid—relative or absolute? Why?
- 1.6 Factor movements are one of the indicators of economic integration. With more interdependent relations between countries, labor should move easily across international boundaries. However, it is less mobile internationally today than it was in 1900. Explain.
- 1.7 What are the new issues in international trade and investment? In what sense do they expose national economies to outside influences?
- 1.8 Describe the three kinds of evidence that economists use to support the assertion that economies open to the world economy grow faster than economies that are closed.
- 1.9 Name some job opportunities available to students of international economics. What are the industries that require this expertise?

2

# International Economic Institutions Since World War II

#### **Learning Objectives**

After studying this chapter, students will be able to:

- 2.1 Classify the main types of international economic organizations with examples.
- 2.2 Identify economic circumstances in which the IMF, the World Bank, and the WTO are active.
- **2.3** Compare the different levels of integration found in regional trade agreements with examples.
- 2.4 Analyze the roles of international economic organizations.
- 2.5 Debate the pros and cons of international economic organizations.

# INTRODUCTION: INTERNATIONAL INSTITUTIONS AND ISSUES SINCE WORLD WAR II

#### LO 2.1 Classify the main types of international economic organizations with examples.

As World War II was drawing to a close, representatives from the United States, Great Britain, and other Allied nations met in the small New Hampshire town of Bretton Woods. The outcome of these meetings was a series of agreements that created an exchange rate system (which lasted until 1971); the International Bank for Reconstruction and Development (IBRD), also known as the **World Bank**; and the **International Monetary Fund (IMF)**. In 1946, two years after Bretton Woods, twenty-three nations including the United States and Great Britain began talks on reducing their trade barriers, leading to the **General Agreement on Tariffs and Trade (GATT)**, which began operation in 1948. This chapter focuses on these global economic institutions, their history, their role in the world economy, and controversies surrounding their activities.

#### International Institutions

International economic institutions are an important feature of the world economy. When social scientists try to explain the increasing integration of national economies after World War II, one of the key explanations must be the increased stability and reduced

uncertainty that these institutions help to create. Nevertheless, as international economic integration has increased, these organizations have come under more scrutiny and received much criticism. Before we look at their impact and some of the criticisms levied at them, we should define what we mean by an *institution*.

When most people hear the word **institution**, they probably think of a formal organization. However, economists tend to define institutions more abstractly. For example, the "New Institutionalists," led by economist Douglas North, have argued that organizations are not institutions in themselves but are rather the rules that govern behavior—telling us what is permissible and what is not and acting as constraints that limit our actions.

Institutions can be formal or informal. A formal institution is a written set of rules that explicitly state what is and is not allowed. The rules may be embodied in a club, an association, or a legal system. An informal institution is a custom or tradition that tells people how to act in different situations but without legal enforcement. For example, informal institutions include the rules of socializing, gift exchange, table manners, e-mail etiquette, and so on. In this chapter, the term *institution* refers to both rules and organizations.

#### **A Taxonomy of International Economic Institutions**

International economic institutions come in many shapes and sizes. They can be lobbying groups for a particular commodity or an international producer's association, the joint management by several nations of a common resource, trade agreements or development funds for a select group of nations, or even global associations. Although this chapter's focus is on global economic institutions, it is useful to look at a taxonomy of international economic institutions, from the most limited and specific, to the most general. Table 2.1 shows five main types.

#### THE IMF, THE WORLD BANK, AND THE WTO

## LO 2.2 Identify economic circumstances in which the IMF, the World Bank, and the WTO are active.

Three global organizations play a major role in international economic relations and are central to this book: the International Monetary Fund (IMF), the World Bank, and the **World Trade Organization (WTO)**. The IMF and the World Bank date from the end of World War II; the WTO began in 1995 and grew out of the GATT, which it deepens and broadens. Accordingly, it is useful to know the history and function of the GATT as well as the WTO.

#### The IMF and World Bank

During World War II, the United States, Great Britain, and several other nations held regular discussions about the shape of the postwar international economic order. They wanted to avoid the mistakes of the 1920s and 1930s, when a lack

TABLE 2.1 A Taxonomy of International Economic Institutions, with Examples

Туре	Examples
Commodity- or industry-specific organizations: These range from trade associations, to international standards-setting bodies, to powerful cartels	Oil Producing and Exporting Countries (OPEC)
	■ International Telecommunications Union (ITU)
Commissions and agencies for managing shared resources	■ International Boundary and Water Commission (IBWC)
	■ Mekong River Commission
Development funds and banks	Asian Development Bank
	■ Islamic Development Bank
International trade agreements involving a few nations (regional trade alliances or trade blocs)	North American Free Trade Agreement (NAFTA)
	■ European Union
Global organizations for trade, development, and macroeconomic stability	■ International Monetary Fund (IMF)
	■ World Bank
	■ World Trade Organization (WTO)

of international cooperation led to the complete collapse of economic relations. The culmination of these talks was the **Bretton Woods conference** held in July 1944, in Bretton Woods, New Hampshire. The agreement was largely a result of negotiations between the United States and the United Kingdom and led directly to the creation of the IMF and the IBRD, which later became the World Bank.

The IMF began operation on December 27, 1945, with a membership of twenty-nine countries. Over time, it added new members and is currently at 188 countries. The IMF provides loans to its members under different programs for the short, medium, and long term. Each member is charged a fee, or quota, as the price of membership. The size of the quota varies with the size of the nation's economy and the importance of its currency in world trade and payments. Important decisions within the IMF are made by vote with the weight of each nation's vote proportional to its quota. This gives the high-income countries of the world a voting power that is disproportionate to their population. For example, the United States alone controls nearly 17 percent of the total votes, and the seven largest high-income industrial economies (Canada, Italy, France, Germany, Japan, the United Kingdom, and the United States) control almost 45 percent. Some votes on IMF policy require a "super majority" of 85 percent, giving the United States a veto power on those particular issues. In recent years, the asymmetry in quotas and votes has been under pressure from

dynamic emerging economies that want more say in IMF policies and from advanced economies that want to increase quotas paid by other members.

The most visible role for the IMF is to intercede, by invitation, whenever a nation experiences a crisis in its international payments. For example, if a country imports more than it exports, then it may run out of foreign exchange reserves. Foreign exchange reserves are dollars, yen, pounds, euros, or another currency (or gold) that is accepted internationally. In addition, the IMF has its own currency, called an SDR, or special drawing right. SDRs are based on a country's quota and are a part of its international reserves. If a country lacks reserves, it cannot pay for its imports, nor can it pay the interest and principal it owes on its international borrowings. This is one scenario that warrants a call to the IMF. The IMF makes loans to its members, but it usually extracts a price above and beyond the interest it charges. The price is an agreement by the borrower to change its policies so that the problem cannot recur. If simple economic reforms such as a cut in the value of the currency or limits on the central bank's creation of credit are insufficient to solve the problem permanently, then the IMF usually requires a borrower to make fundamental changes in the relationship between government and markets in order to qualify for IMF funds. These requirements are known as **IMF conditionality**. For example, during the crisis of 1997–1998, the IMF was the main provider of funds and expertise to East Asia, again, with a great deal of controversy over the advice it gave and the conditions it imposed.

The IMF's resources for dealing with crises are limited. When the United States and other large economies experienced the crisis that began in 2007, IMF resources were far from adequate for addressing the issues. In 2009, the largest member countries voted to increase its resources to \$750 billion, still far below the amount necessary to stem a crisis in the United States or in other large economies. In part, this reflects the institution's asymmetry, as high-income countries are generally unwilling to give the IMF either the funds or the power to allow it to intervene effectively in their economies.

The World Bank is the other major organization that emerged from the Bretton Woods conference. It has the same membership and a similar structure. Members buy shares that convey voting rights on policy proportional to the shares. The original purpose of the World Bank was to provide financing mechanisms for rebuilding Europe at the end of World War II; however, it was soon apparent that its capital reserves were inadequate to the task. In addition, the United States found it politically preferable to have more direct control over the reconstruction funds rather than routing them through an international organization. Hence, the job of reconstruction was directed toward the newly created Marshall Plan, and the World Bank moved toward assisting development in nonindustrial economies.

#### The GATT, the Uruguay Round, and the WTO

At the end of World War II, a third global economic organization, the International Trade Organization (ITO), was proposed. If it had been created, the ITO's job would have been to establish rules relating to world trade, business practices,

and international investment. U.S. opposition killed the idea of the ITO, however, and no such organization was created until 1995. Nevertheless, in 1946, while they were still considering the idea of the ITO, twenty-three countries opened negotiations over tariff reductions. These negotiations led to about 45,000 tariff reductions affecting \$10 billion, or one-fifth of world trade. In addition, a number of agreements were made on rules for trade, with the expectation that the rules would become a part of the ITO. Both the tariff reductions and the rules were implemented in 1948; when the possibility of an ITO died in 1950, the agreements on tariffs and trade rules remained in force as a separate agreement, known as the *General Agreement on Tariffs and Trade (GATT)*. The GATT has been very successful in bringing down trade barriers gradually. One indicator is that international trade has grown over the past fifty years from 5 percent of world gross domestic product (GDP) to over 31 percent in 2011.

The GATT functions through a series of **trade rounds** in which countries periodically negotiate a set of incremental tariff reductions. Gradually, through the Kennedy Round in the mid-1960s and the Tokyo Round of the 1970s, trade rules other than tariffs began to be addressed, including the problems of dumping (selling in a foreign market below cost or below a fair price), subsidies to industry, and nontariff barriers to trade.

The GATT intentionally ignored the extremely contentious sectors of agriculture, textiles, and apparel. In addition, trade in services was ignored because it was not important. The accumulation of unresolved issues in these sectors, however, along with the increased importance of nontariff trade barriers, led to the demand for a new, more extensive set of negotiations. These demands culminated in the **Uruguay Round** of trade negotiations that began in 1986. Among other outcomes, the Uruguay Round created the World Trade Organization (1995). As of 2020, there are 164 members and twenty-four additional governments with observer status.

The WTO continues trade talks and sector-specific discussions between comprehensive rounds of negotiations. For example, in 1997, sixty-nine countries signed an agreement to open their telecommunication sectors, and another seventy agreed to significant opening in their financial services sectors. In addition, every two years, trade ministers from the member countries meet to set the WTO's policy objectives. In 2001, trade ministers meeting in Doha, Qatar, agreed to launch a new round of trade negotiations emphasizing issues of developing countries. The **Doha Round** proposed a **Doha Development Agenda** to consider trade issues of importance to developing countries. The key issues are farm subsidies and agricultural protection and trade in services. These are highly sensitive issues, and the Doha Round has reached an impasse. In all likelihood it will be the first round of trade negotiations to fail since the start of the GATT in 1947. Nevertheless, WTO member governments continue to negotiate specific issues, and outside the WTO framework, small groups of countries continue a wide range of negotiations aimed at greater market access and lower trade barriers.

The foundation of all WTO and GATT agreements are the principles of **national treatment** and **nondiscrimination**. *National treatment* is the requirement that foreign goods are treated similarly to the same domestic goods once they enter a nation's

markets. *Nondiscrimination* is embodied in the concept of **most-favored nation** (MFN) status. MFN requires all WTO members to treat each other as they treat their most-favored trading partner. In effect, this is a prohibition against discrimination. Somewhat contradictorily, MFN allows trade agreements such as the North American Free Trade Agreement (NAFTA) and the European Union (EU) even though every trade agreement causes countries to discriminate in favor of each other and implicitly against nonmembers. In theory, the WTO permits such agreements as long as they do not harm the overall level of international trade, and in practice, the WTO has never challenged the validity of a trade agreement between member countries.

#### CASE STUDY

#### The GATT Rounds

Agreements in the GATT forum to reduce trade barriers take place in rounds of negotiations. Counting the first round, there have been nine rounds of negotiations, with the Doha Round still in progress. Originally, the GATT was an international agreement and not an organization. The failure to create the International Trade Organization in 1950, however, resulted in the gradual conversion of the GATT into a de facto organization by 1960, with a permanent secretariat to manage it from Geneva. Table 2.2 lists the various rounds of negotiations.

The first five rounds were organized around product-by-product negotiations in which countries mutually cut their tariffs on specific products. Beginning with the Kennedy Round, negotiations were simplified as countries negotiated an across-the-board percentage reduction in all tariffs for a range of industrial products. One effect is that tariffs have never been uniform across countries. The goal has been to bring them all down but not to create the same tariff for all countries.

The Tokyo Round is notable because it was the first round to begin to establish rules regarding subsidies. Subsidies give an industry a competitive advantage, since the national government pays part of the cost of production, either through direct payment or indirectly through subsidized interest rates, artificially cheap access to foreign currency, or some other way. The Tokyo Round began the laborious process of creating rules in this area, one of the most important being the agreement to prohibit subsidies for exports of industrial goods (but not agricultural goods or textiles and apparel).

The subsidy issue of the Tokyo Round was carried forward into the Uruguay Round, where subsidies were defined in greater detail. The Uruguay Round accomplished many other things as well, not the least of which was the creation of the WTO as a formal organization to oversee and administer the GATT. Additional accomplishments are described in Chapter 7, which explores trade policy and trade barriers in more detail.

*(continued)* 

The extra mountain			
Round	Year	Number of Participants	
Geneva I	1947	23	
Annecy	1949	13	
Torquay	1951	38	
Geneva II	1956	26	
Dillon	1960-1961	26	
Kennedy	1964–1967	62	
Tokyo	1973–1979	102	
Uruguay	1986–1993	105	
Doha (WTO	) 2001–	164	

#### **REGIONAL TRADE AGREEMENTS**

**TABLE 2.2** The GATT Rounds

## LO 2.3 Compare the different levels of integration found in regional trade agreements with examples.

Regional trade agreements (RTAs) between two or more countries are another important institution in the world economy. Many of these have familiar names, such as NAFTA and the EU. Regional agreements can be classified into one of five categories, as shown in Table 2.3; however, they often combine elements from a couple of the categories.

**TABLE 2.3** Five Types of Regional Trade Agreements

Type of Agreement	Characteristics
■ Partial trade agreement	Free trade in the outputs of one or a few industries
■ Free-trade area	<ul><li>Free trade in outputs (goods and services)</li></ul>
■ Customs union	Free trade in outputs plus a common external tariff
■ Common market	<ul><li>Custom union plus free movement of inputs (capital and labor)</li></ul>
■ Economic union	<ul> <li>Common market plus substantial harmonization of economic policies, including a common currency</li> </ul>

#### **Five Types of Regional Trade Agreements**

RTAs are bilateral (two countries) or plurilateral (several countries). The WTO is not an RTA because it is worldwide in scope and not just regional. In trade jargon it is called a *multilateral* agreement because it includes, potentially, all the countries of the world. Some plurilateral agreements are quite large, such as the EU, which has twenty-eight members, or the proposed free-trade area of the Pacific, called the Asia Pacific Economic Cooperation group, which has twenty-one.

#### CASE STUDY

#### **Prominent Regional Trade Agreements**

Each of the five levels of integration is an example of a different kind of regional trade agreement (RTA), or **trade bloc**. The question naturally arises as to how many agreements there are and whether they are beneficial or harmful for the world economy. The simple question of how many is difficult to answer precisely. Many of the agreements do not fit neatly into any of the five categories, so it is not clear they should be counted. That is, should all partial agreements be counted when they are not quite free-trade areas yet they have elements of free trade, customs unions, and even common markets? In addition, many of the agreements either exist on paper only (have no real effect) or have yet to be fully negotiated and/or implemented. Until there is substantial implementation, there is always the possibility that the agreement will collapse because opening an economy inevitably generates opposition from uncompetitive sectors.

Countries that have signed the GATT are obligated to notify the GATT secretariat when they form an RTA. According to the WTO, since the implementation of the GATT in 1948, it has been notified of nearly 700 RTAs. Many are no longer in force or have been superseded by newer agreements, but 303 RTAs were active in 2020. Most of the functioning agreements were started in the 1990s or 2000s.

The second question posited earlier—are agreements beneficial or harmful?—is even more difficult to answer. A 1995 study by the WTO concluded that in most cases "regional and multilateral integration initiatives are complements rather than alternatives." Broadly speaking, the WTO sees these agreements as helping it to further reduce trade barriers. This view is not shared by all economists, however, as any regional agreement must favor the interests of its members over the interests of outsiders. In other words, there is an element of discrimination that goes against the WTO's fundamental principle of equal treatment (most-favored nation). Preferential treatment for members of the *(continued)* 

<sup>&</sup>lt;sup>1</sup>© 1995 World Trade Organization

trade agreement causes most regional trade agreements to destroy some of the trade between their members and nonmembers. The WTO recognizes this problem but argues that as long as a regional agreement creates more new trade than it destroys, the net result is beneficial. In addition, the WTO sees the regional trade agreements as places where countries can try out new arrangements, some of which will be eventually incorporated into the larger, global agreement.

Nearly all WTO members belong to at least one RTA, and many countries belong to several. For example, Mexico is a member of NAFTA (Canada-Mexico-United States), but in 2000 it entered a free-trade agreement with the EU. It has also signed free trade and other agreements with other countries, including Chile, Japan, Israel, and Costa Rica, among others. Table 2.4 lists some of the RTAs currently in force. Among the best known are the EU, the EFTA, the NAFTA, MERCOSUR in South America, the ASEAN Free Trade Area in Southeast Asia, and COMESA in Eastern and Southern Africa. There are many more, however, ranging from tariff agreements on a subset of output, to common markets and economic unions. The dates in parentheses are the dates of implementation of the agreements.

**TABLE 2.4** Prominent Regional Trade Blocs

Region/Trade Bloc	Objective
Africa	
COMESA—Common Market for Eastern and Southern Africa (1993)	Common market
ECOWAS—Economic Community of West African States (1975)	Common market
Asia	
AFTA—ASEAN Free Trade Arrangement (1992)	Free-trade area
APEC—Asia-Pacific Economic Cooperation (1989)	Free-trade area
Europe	
EFTA—European Free Trade Association (1960)	Free-trade area
EU-European Union (1957)	Economic union
Middle East	
ACM-Arab Common Market (1964)	Customs union
GCC—Gulf Cooperation Council (1981)	Common market
Western Hemisphere	
MERCOSUR – Southern Cone Common Market (1991)	Common market
NAFTA—North American Free Trade Area (1994)	Free-trade area

Sources: Data from Harmsen and Leidy, "Regional Trading Arrangements," in International Trade Policies: The Uruguay Round and Beyond. Volume II: Background Papers. Washington, DC: IMF, 1994. The WTO, "Regionalism." Geneva: The World Trade Organization, © James Gerber.

A **partial trade agreement** is the least comprehensive RTA. It occurs when two or more countries agree to drop trade barriers in one or a few economic sectors, such as steel, autos, or any other line of production. Partial trade agreements are used when countries are reluctant to open all sectors but they desire free trade for a limited set of goods.

As more goods are included in the partial trade agreement, it begins to look more like a **free-trade area**. One example is NAFTA, but there are many others, such as the European Free Trade Area (EFTA) and the U.S.-Israel Free Trade Agreement. In a free-trade area, nations trade goods and services across international boundaries without paying a tariff and without the limitations imposed by quotas, which are direct limits on imports. In reality, however, most free-trade areas such as NAFTA do not allow completely free trade. Nations usually reserve some restrictions for particularly sensitive items. For example, as part of its efforts to protect its culture, Canada limits the number of U.S. television programs that Canadian television stations may purchase. With a free-trade area, nations usually keep their own health, safety, and technical standards and may deny entry of imports if they do not meet national standards.

The next level of integration is called a **customs union**. A customs union is a free-trade area plus a **common external tariff** toward nonmembers. By 1968, the EU (then called the European Economic Community) had become a customs union, and in today's economy, MERCOSUR (Brazil, Argentina, Uruguay, Paraguay, and Venezuela) aspires to become one. As with free-trade areas, many items are usually left out of the agreement. In the European case, for example, each nation retained its own tariffs and quotas with respect to Japanese autos. Common markets are the next level beyond customs unions. A **common market** is a customs union plus an agreement to allow the free mobility of inputs, such as labor and capital. The clearest example is the EU in the 1990s. The three NAFTA countries have elements of a common market (without the common external tariff) because they allow capital to move freely around the region. NAFTA also grants relatively free movement to certain types of white-collar labor, such as architects, business consultants, and others.

The final level of economic integration is an **economic union**. An economic union is a common market with substantial coordination of macroeconomic policies, including a common currency, and harmonization of many standards and regulations. The clearest examples are the states of the United States or the provinces of Canada. The BENELUX Union of Belgium, the Netherlands, and Luxembourg is an example of separate nations that have formed a union, and the EU is in the process of becoming an economic union, with the euro as its common currency and, at some point, with a common defense policy, common citizenship rights, and a common fiscal policy.

#### **Regional Trade Agreements and the WTO**

When a WTO member signs an RTA, it is obligated to notify the WTO. Since 1948, nearly 700 agreements have been listed with the WTO, with a majority of the notifications having occurred since 1990. Not all of these notifications resulted in active trade agreements, but as of 2020, 303 separate agreements were actively in force.