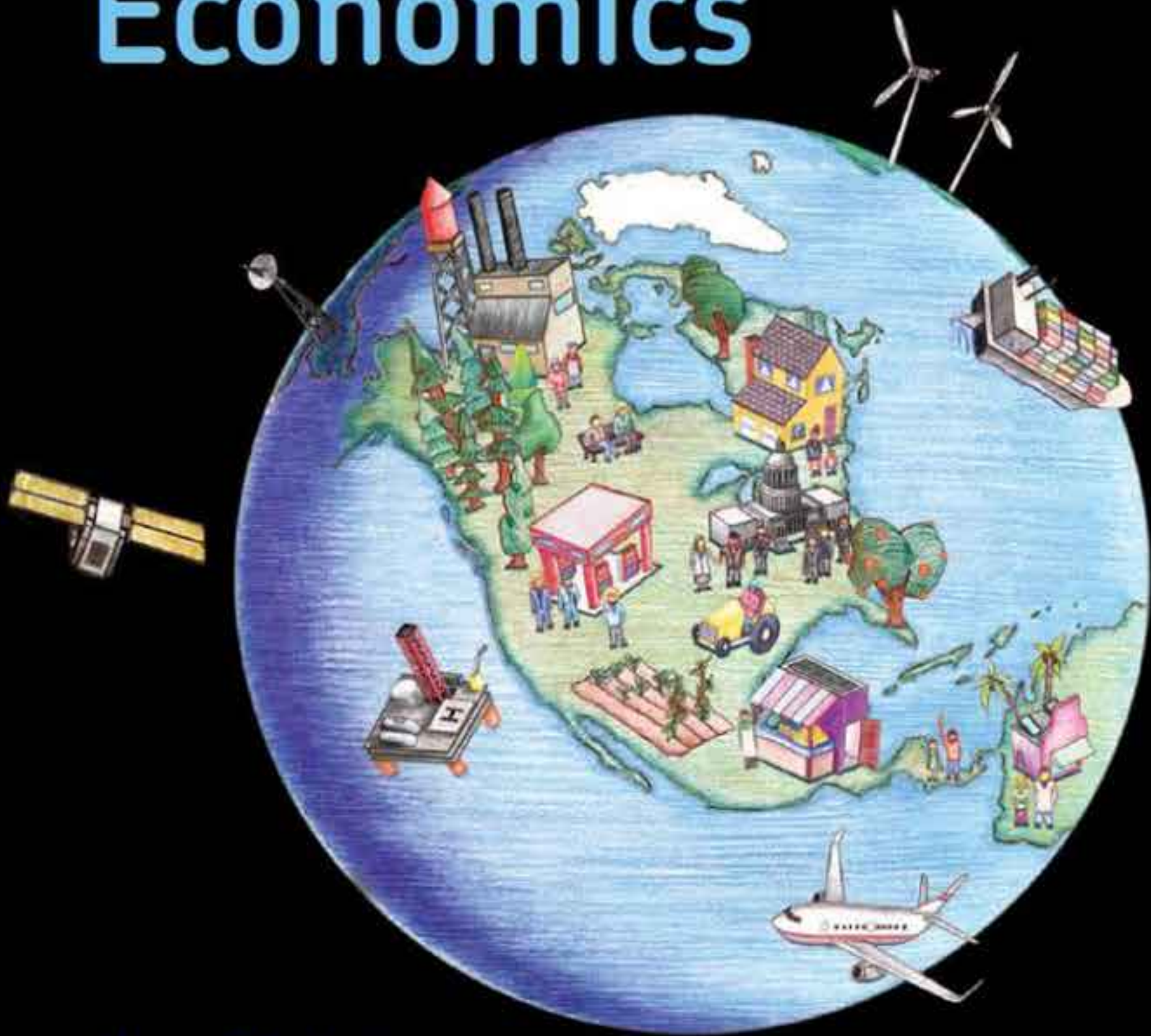


Explorations in Economics



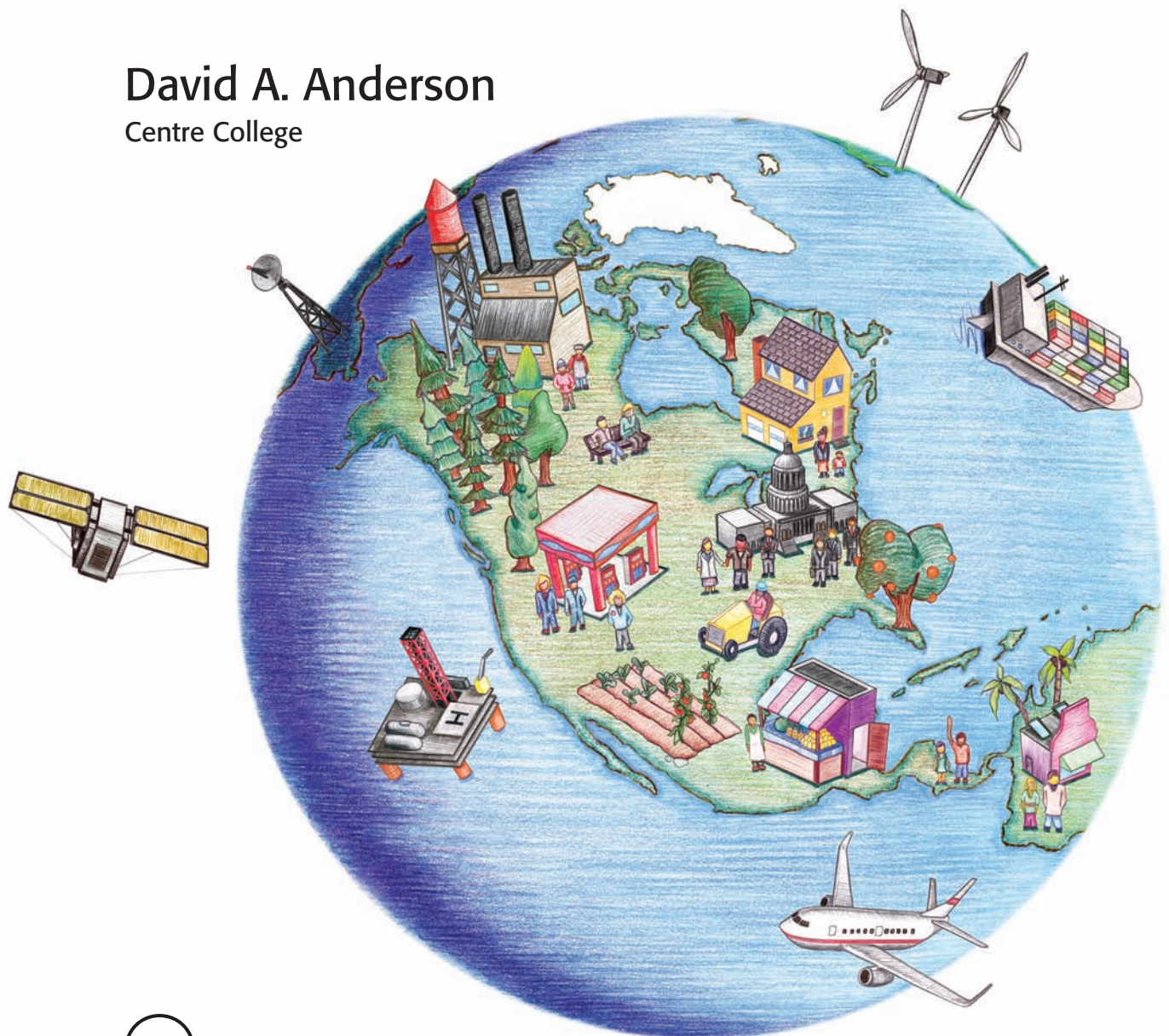
Alan B. Krueger

David A. Anderson

Explorations in Economics

Alan B. Krueger
Princeton University

David A. Anderson
Centre College



BFW/WORTH PUBLISHERS

Publisher: Ann Heath
Assistant Editor: Enrico Bruno
Associate Editor: Dora Figueiredo
Development Editor: Rebecca Kohn/Sharon Balbos
Senior Marketing Manager: Janie Pierce-Bratcher
Marketing Assistant: Rachel Sachs
Project Editor: Mark Parker Miller, Scribe Inc.
Art Director: Diana Blume
Text Designer: Tom Carling, Carling Design Inc.
Photo Editor: Cecilia Varas
Photo Researcher: Dena Digilio Betz
Production Manager: Sarah Segal
Text and Cover Illustration: Joe BelBruno
Copy Editor: Brittney Todd, Scribe Inc.
Proofreader: Daniel J. King, Scribe Inc.
Composition: Melissa Tarrao/Tim Durning, Scribe Inc.
Printing and Binding: RR Donnelley

Library of Congress Control Number: 2013930579

ISBN-10: 0-7167-0107-3

ISBN-13: 978-0-7167-0107-1

© 2014 by Worth Publishers
All rights reserved

Printed in the United States of America

First Printing

BFW/Worth Publishers
41 Madison Ave.
New York, NY 10010

highschool.bfwpub.com/economics

I dedicate this book to my parents, Rhoda and Norman Krueger,
a schoolteacher and a public accountant, who taught me the
value of education and public service.

Alan B. Krueger

To the students of today, whose economic literacy
will serve the well-being of society tomorrow.

David A. Anderson

About the Authors



ALAN B. KRUEGER

Alan B. Krueger is the Bendheim Professor of Economics and Public Affairs at Princeton University. He received a BS from Cornell University and an AM and PhD in economics from Harvard University. Krueger currently serves as chair of President Obama's Council of Economic Advisors and is a member of the president's cabinet. He previously served as assistant secretary for economic policy and chief economist of the U.S. Department of the Treasury (2009–2010) and chief economist of the U.S. Department of Labor (1994–1995). He has been a member of the Executive Committee of the American Economic Association (2005–2007) and was chief economist for the Council for Economic Education (CEE, 2003–2009). While at the CEE, Krueger helped draft the Voluntary National Content Standards in Economics and served as cochair of the committee. He was also a columnist for the *New York Times*. Among his many scholarly publications are *What Makes a Terrorist: Economics and the Roots of Terrorism* and *Education Matters: A Selection of Essays on Education*. When not in Washington, DC, Krueger lives in Princeton, New Jersey, with his wife, Lisa, a high school math teacher. They have two adult children.



DAVID A. ANDERSON

David Anderson is the Paul G. Blazer Professor of Economics at Centre College. He received his BA in economics from the University of Michigan and his MA and PhD in economics from Duke University. Anderson is a leading authority on AP Economics and currently serves as chief reader for the AP Microeconomics exam. He has authored dozens of scholarly articles and many books, including *Krugman's Economics for AP*, *Cracking the AP Economics Exam*, *Economics by Example*, *Favorite Ways to Learn Economics*, *Environmental Economics and Natural Resource Management*, *Contemporary Economics for Managers*, and *Treading Lightly*. His research is primarily on economic education, environmental economics, law and economics, and labor economics. Anderson teaches courses in each of these fields and loves teaching introductory economics. He is an accomplished runner who is making great strides toward his goal of completing a marathon in every state in the union. He lives in Danville, Kentucky, with his wife and two children.

KEY CONTRIBUTORS

JAMES CHASEY

Homewood-Flossmoor High School
Homewood, IL (retired)
Assessments and Test Bank



James Chasey earned a BA from Purdue University and an MA from the University of Illinois. As the Christa McAuliffe Fellow for Illinois, he received advanced training at the University of Chicago Graduate School of Business. He has received the Freedoms

Foundation Leavey Award, the Money Smart Award from the Federal Reserve Bank of Chicago, and the Purdue University Outstanding Education Alumni Award. He taught AP Economics and general economics at Homewood-Flossmoor High School and served as adjunct professor of economics at the College of DuPage and at Governors State University.

PEGGY PRIDE

St. Louis University High School
St. Louis, MO (retired)
Assessments and Teacher's Edition



Peggy Pride earned a BA in history and economics and an MA in business education from Southern Illinois University–Edwardsville. She retired in 2008 after a 35-year teaching career at St. Louis University High School in St. Louis, Missouri, where

she taught AP Economics. Pride served on the Test Development Committee for AP Economics from 1999 to 2004 and then as a table leader and micro question leader for 12 years. She was honored to receive the GATE Teacher of the Year Award in 2005. She was the primary author of the College Board publication *Advanced Placement Economics Teacher's Guide* and has written curriculum for the College Board and Junior Achievement.

LAURA ADAMS

Personal Finance Handbook



Laura Adams is an award-winning personal finance author. She earned a BS from the University of the South and an MBA from the University of Florida. She received the Excellence in Financial Literacy Education (EIFLE) Award from the

Institute for Financial Literacy for her book *Money Girl's Smart Moves to Grow Rich*. She is the author of several e-Books and audiobooks published by Macmillan, as well as hundreds of personal finance articles. Adams hosts the Money Girl podcast, a top-10 Internet show on iTunes that has been downloaded more than 45 million times. She is frequently quoted in the media and has been featured on national broadcast, radio, print, and online outlets.

JOSEPH BELBRUNO

Illustrator



Joseph BelBruno is an artist living and working in Los Angeles, California. He graduated from the California College of the Arts in San Francisco in 2010 with a degree in painting and drawing. *Explorations in Economics* is the first textbook

he has illustrated. In addition to this illustration work, BelBruno is an avid painter.

ELIZABETH CURTIS

Dartmouth College
Headline Economics

CONTENT ADVISORS AND SUPPLEMENT AUTHORS

DAVID BREMER

Las Lomas High School, Walnut Creek, CA
CEE and CA Standards Consultant



David Bremer has taught general economics for 15 years and also currently teaches AP Macroeconomics and Specially Designed Academic Instruction in English (SDAIE) Economics for English language learners. He earned a BS in business administration from Cal Poly, San Luis Obispo, and an MA in political science from

the University of California–Davis. Before becoming a teacher, Bremer worked in the business world for several years.

DIANNA MILLER

Florida Virtual School, FL
Teacher's Edition



Dianna Miller earned a BA in social studies education and an MA in history from the University of North Florida and a specialist in education degree from the University of Florida. She currently teaches AP Economics for Florida Virtual School, an online public school in Florida. She has served as an AP Economics reader since 2005

and is currently a table leader for AP Macroeconomics. She is the 2011 Florida Council for the Social Studies Trimble Award winner and was a finalist for the National Online Teacher of the Year Award in 2010.

JAMES MCCALIP

Singley Academy, Irving, TX
TX Standards Consultant



James McCalip has taught economics at Jack E. Singley Academy for 10 years. He serves as the adviser for the academy's National Honor Society. He received a BA in philosophy and religion from Dallas Baptist University and an MDiv from Southwestern Baptist Theological Seminary. He is currently enrolled in the MA program

in Economic and Entrepreneurship Education at the University of Delaware.

MIKE FULLINGTON

Port Charlotte High School, Port Charlotte, FL
Teacher's Edition



Mike Fullington earned his BS from Concordia University in Mequon, Wisconsin. He teaches AP Economics at Port Charlotte High School and is a reader for the AP Economics exam. He has been published in the Council for Economic Education's *Advanced Placement Economics: Teacher Resource Manual*. He was chosen as the 2011 Harvard Club

Teacher of the Year and was a finalist for Teacher of the Year for Charlotte County, Florida.

PAMELA M. SCHMITT

U.S. Naval Academy, Annapolis, MD
Content Advisor



Pamela M. Schmitt earned her PhD in economics from Indiana University in 2000. She is currently an associate professor of economics at the U.S. Naval Academy, where she has been the recipient of numerous teaching awards. She has worked as an AP Economics reader and table leader since 2001 and is currently serving as

chair of the ETS Test Development Committee for the AP Microeconomics exam.

DAVID MAYER

Churchill High School, San Antonio, TX
Content Advisor and Teacher's Edition



David Mayer received a BS in economics from Texas A&M University and an MA from the University of Texas at San Antonio. In addition to teaching the general economics course, he has taught the AP Economics course since 2004 and has worked as an AP Economics reader and then table leader since 2006.

David is a College Board–endorsed consultant for economics and conducts several professional development workshops and institutes each year.

DEE MECHAM

The Bishop's School, La Jolla, CA

Content Advisor

Dee Mecham joined The Bishop's School in fall 2005 after 11 years in Hawai'i, where he taught at the Kamehameha Schools and the University of Hawai'i. He has been involved in AP Reading for many years and currently serves on the ETS Test Development Committee for the AP Microeconomics exam. This year, Mecham teaches tenth,

eleventh, and twelfth graders in both general economics and AP Economics.

LESLIE PAIGE WOLFSON

The Pingry School, Martinsville, NJ

Teacher's Edition

Leslie Paige Wolfson holds an MA in economics and finance and is the author of *INSIGHTS: A New View of Economics and Nature*. She has been teaching AP Economics and Economic Principles and Issues for 18 years and coordinates her school's Financial Literacy program. She was awarded the Research Fellowship Award and the

Woodruff J. English Faculty Award for New Jersey. She has been listed in *Who's Who in American Educators* and was voted an Outstanding Woman in Education.

WOODROW W. HUGHES JR.

Converse College, Converse, GA

Content Advisor

Woodrow W. Hughes Jr. worked in the banking industry after graduating from Furman University with a BA in economics. He earned his PhD in economics from the University of South Carolina in 1989 and has been on the Converse College faculty since 1986. In 2006, he was awarded the

Kathryne Amelia Brown teaching award. Hughes is also active in the AP Economics community, having served as a reader and coauthored a number of AP publications.

ACCURACY CHECKERS**Andreas Bentz**, formerly Dartmouth College, NH**Darcy Brodison**, Coronado High School, AZ**Dixie Dalton**, Southside Virginia Community College, VA**Joyce Jacobson**, Wesleyan College, CT**Lisa Krueger**, Princeton High School, NJ**John Shea**, University of Maryland, MD**Amy Shrout**, Holy Cross College, IN

Explorations in Economics benefited from the input of hundreds of reviewers and focus group participants. A complete list may be found at the back of the book beginning on page R-1.

Brief Contents

PART 1 INTRODUCTION TO ECONOMICS

CHAPTER 1 EXPLORING ECONOMICS 1

- MODULE 1** What Is Economics? 3
- MODULE 2** Production Possibilities for a Nation 10
- MODULE 3** The World of Economics 23

CHAPTER 2 COMPARING ECONOMIC SYSTEMS 37

- MODULE 4** Using Resources to Achieve Economic Goals 39
- MODULE 5** Types of Economic Systems 49
- MODULE 6** The Modern Market Economy 62

CHAPTER 3 MAKING ECONOMIC DECISIONS 79

- MODULE 7** Understanding Costs and Benefits 81
- MODULE 8** Rational Decision Making 86
- MODULE 9** Behavioral Economics: Decision Making in Practice 94

PART 2 SUPPLY AND DEMAND: FUNDAMENTAL FORCES IN MARKETS

CHAPTER 4 THE DEMAND FOR GOODS AND SERVICES 107

- MODULE 10** Determining Demand 108
- MODULE 11** Shifts of the Demand Curve 117
- MODULE 12** Elasticity of Demand 127

CHAPTER 5 THE SUPPLY OF GOODS AND SERVICES 147

- MODULE 13** Understanding Supply 148
- MODULE 14** Shifts of the Supply Curve 158
- MODULE 15** Production, Cost, and the Profit-Maximizing Output Level 167

CHAPTER 6 PRICES AND QUANTITIES: PUTTING SUPPLY AND DEMAND TOGETHER 185

- MODULE 16** Supply and Demand 187

- MODULE 17** Changes in Supply and Demand 194

- MODULE 18** Shortages, Surpluses, and the Role of Prices 205

PART 3 MARKET EFFICIENCY AND WELFARE

CHAPTER 7 BUSINESS ORGANIZATIONS 225

- MODULE 19** Businesses and the Economy 227
- MODULE 20** Types of Businesses 233
- MODULE 21** How Businesses Grow 247
- MODULE 22** Business Ethics 255

CHAPTER 8 MARKET STRUCTURE 267

- MODULE 23** Monopoly 269
- MODULE 24** Oligopoly and Monopolistic Competition 284
- MODULE 25** Regulating Market Power 291

CHAPTER 9 MARKET FAILURE AND GOVERNMENT FAILURE 303

- MODULE 26** When the Invisible Hand Is All Thumbs: Market Failure 305
- MODULE 27** The Heavy Hand of Government: Government Failure 318

PART 4 APPLICATIONS OF MICROECONOMICS

CHAPTER 10 TAXES: THE PRICE OF A FUNCTIONING GOVERNMENT 331

- MODULE 28** Why and How Are We Taxed? 333
- MODULE 29** Responding to Taxes 342
- MODULE 30** Evaluating Taxes 350

CHAPTER 11 LABOR MARKETS 361

- MODULE 31** Labor Demand 363
- MODULE 32** Labor Supply and Labor Market Equilibrium 373
- MODULE 33** The Skills of Workers and the Quality of Jobs 384

CHAPTER 12 PERSONAL FINANCE: MANAGING YOUR MONEY 399

- MODULE 34** Finding a Job 401
- MODULE 35** Creating a Budget 405
- MODULE 36** Essential Elements of Personal Finance 413
- MODULE 37** Investing and Personal Financial Planning 426

PART 5 MACROECONOMICS**CHAPTER 13 MACROECONOMIC PERFORMANCE 441**

- MODULE 38** Measuring National Output and Income 442
- MODULE 39** Economic Growth 452
- MODULE 40** Business Cycles 468

CHAPTER 14 UNEMPLOYMENT AND INFLATION 485

- MODULE 41** Unemployment 487
- MODULE 42** Inflation 499
- MODULE 43** Unemployment, Inflation, and the Business Cycle 509

CHAPTER 15 FISCAL POLICY 519

- MODULE 44** Government Revenue and Spending 521
- MODULE 45** Deficits and the National Debt 530
- MODULE 46** Managing the Business Cycle 538

CHAPTER 16 MONEY, BANKING, AND FINANCIAL MARKETS 555

- MODULE 47** What Is Money? 557
- MODULE 48** The Banking System 565

- MODULE 49** The Role of Financial Markets in the Real Economy 576

CHAPTER 17 THE FEDERAL RESERVE SYSTEM AND MONETARY POLICY 599

- MODULE 50** The Federal Reserve System 601
- MODULE 51** The Federal Reserve and Traditional Monetary Policy 613
- MODULE 52** Extraordinary Times, Extraordinary Tools 622

PART 6 INTERNATIONAL TRADE AND DEVELOPMENT**CHAPTER 18 TRADE AND THE GLOBAL ECONOMY 633**

- MODULE 53** The Benefits of International Trade 635
- MODULE 54** Barriers to Trade 645
- MODULE 55** Foreign Exchange and the Balance of Trade 657

CHAPTER 19 ECONOMIC DEVELOPMENT AND GLOBAL CHALLENGES 671

- MODULE 56** Measuring Economic Development 673
- MODULE 57** Economic Issues in Developing Countries 685
- MODULE 58** Globalization and Its Challenges 695

Personal Finance Handbook FH-1

Skills Handbook SH-1

Glossary/Glosario G-1

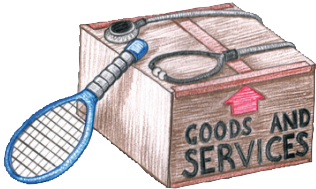
Reviewers R-1

Index I-1

Contents

PART 1 INTRODUCTION TO ECONOMICS

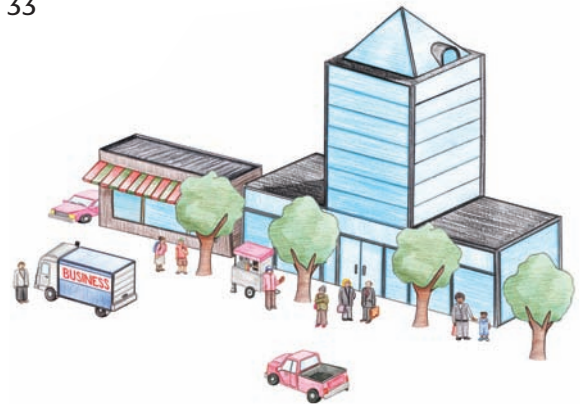
CHAPTER 1 EXPLORING ECONOMICS 1



- MODULE 1** What Is Economics? 3
Module 1 Review and Assessment 8
- MODULE 2** Production Possibilities for a Nation 10
PEOPLE IN ECONOMICS: Adam Smith 21
Module 2 Review and Assessment 21
- MODULE 3** The World of Economics 23
ECONOMICS IN ACTION: The Wages of Economics 24
PEOPLE IN ECONOMICS: Milton Friedman 26
Module 3 Review and Assessment 27
- HEADLINE ECONOMICS: It's a Man vs. Machine Recovery* 29
PEOPLE IN ECONOMICS: Ellen Hughes-Cromwick 31
Chapter 1 Review and Self-Assessment 33

CHAPTER 2 COMPARING ECONOMIC SYSTEMS 37

- MODULE 4** Using Resources to Achieve Economic Goals 39
ECONOMICS IN ACTION: The Three Basic Economic Questions and the U.S. Health Care Debate 41
Module 4 Review and Assessment 47
- MODULE 5** Types of Economic Systems 49
PEOPLE IN ECONOMICS: Karl Marx 52
ECONOMICS IN ACTION: Rationing in a Command Economy 54
PEOPLE IN ECONOMICS: Friedrich von Hayek 55
Module 5 Review and Assessment 60
- MODULE 6** The Modern Market Economy 62
Module 6 Review and Assessment 71
- PEOPLE IN ECONOMICS: Jan Švenjar* 73
HEADLINE ECONOMICS: Why Amish Businesses Don't Fail 74
Chapter 2 Review and Self-Assessment 75





CHAPTER 3 MAKING ECONOMIC DECISIONS 79

MODULE 7 Understanding Costs and Benefits 81

ECONOMICS IN ACTION: Opportunity Cost Doesn't Always Mean Dollars Paid Out 82

Module 7 Review and Assessment 85

MODULE 8 Rational Decision Making 86

ECONOMICS IN ACTION: Freakonomics and Rational Decision Making 87

Module 8 Review and Assessment 93

MODULE 9 Behavioral Economics: Decision Making in Practice 94

ECONOMICS IN ACTION: Sweden Uses Behavioral Economics to Make People Healthier 96

ECONOMICS IN ACTION: Impatience and the Adjustable-Rate Mortgage Crisis 97

Module 9 Review and Assessment 100

HEADLINE ECONOMICS: Burger King Tries Home Delivery 102

Chapter 3 Review and Self-Assessment 103

PART 2 SUPPLY AND DEMAND: FUNDAMENTAL FORCES IN MARKETS

CHAPTER 4 THE DEMAND FOR GOODS AND SERVICES 107

MODULE 10 Determining Demand 108

Module 10 Review and Assessment 115

MODULE 11 Shifts of the Demand Curve 117

ECONOMICS IN ACTION: Creating Demand for Diamonds 120

ECONOMICS IN ACTION: Conspicuous Consumption and the Demand for Goods 122

Module 11 Review and Assessment 125

MODULE 12 Elasticity of Demand 127

SHOW ME THE NUMBERS!: Calculating the Elasticity of Demand 131

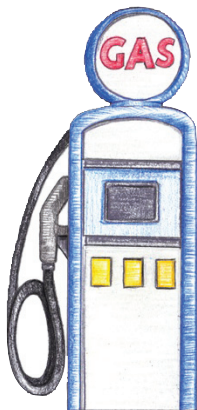
ECONOMICS IN ACTION: Lowering the Price of TV Downloads 137

Module 12 Review and Assessment 138

PEOPLE IN ECONOMICS: Jeff Bezos 139

HEADLINE ECONOMICS: Chevrolet's Centenary 141

Chapter 4 Review and Self-Assessment 142



CHAPTER 5 THE SUPPLY OF GOODS AND SERVICES 147

MODULE 13 Understanding Supply 148

Module 13 Review and Assessment 156

MODULE 14 Shifts of the Supply Curve 158

ECONOMICS IN ACTION: How Wars Shift Supply Curves 161

ECONOMICS IN ACTION: The Gasoline Pipeline Disaster in Arizona 163

Module 14 Review and Assessment 165

MODULE 15 Production, Cost, and the Profit-Maximizing Output Level 167
ECONOMICS IN ACTION: Diminishing Marginal Product in Military Battles 171
Module 15 Review and Assessment 178

HEADLINE ECONOMICS: Oranconomics 180
Chapter 5 Review and Self-Assessment 181

**CHAPTER 6 PRICES AND QUANTITIES:
PUTTING SUPPLY AND DEMAND TOGETHER 185**

MODULE 16 Supply and Demand 187
ECONOMICS IN ACTION: The Diamond-Water Paradox 191
Module 16 Review and Assessment 192

MODULE 17 Changes in Supply and Demand 194
ECONOMICS IN ACTION: Supply and Demand in a James Bond Movie 197
Module 17 Review and Assessment 203

MODULE 18 Shortages, Surpluses, and the Role of Prices 205
ECONOMICS IN ACTION: Lessons from Super Bowl Sunday 210
Module 18 Review and Assessment 217

PEOPLE IN ECONOMICS: Jeff Fluhr 219
HEADLINE ECONOMICS: "Sneakerheads" Hype Shoes for Credit and Profit 220
Chapter 6 Review and Self-Assessment 221



PART 3 MARKET EFFICIENCY AND WELFARE

CHAPTER 7 BUSINESS ORGANIZATIONS 225

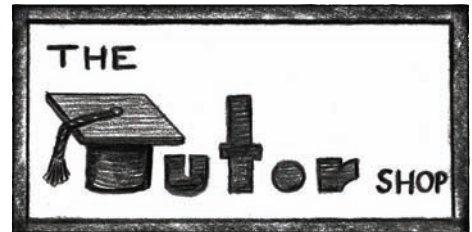
MODULE 19 Businesses and the Economy 227
ECONOMICS IN ACTION: Going Green Makes Cents 230
Module 19 Review and Assessment 232

MODULE 20 Types of Businesses 233
ECONOMICS IN ACTION: How Long Does It Take to Start a Corporation? 242
ECONOMICS IN ACTION: Franchises versus Other Chain Businesses 244
Module 20 Review and Assessment 245

MODULE 21 How Businesses Grow 247
Module 21 Review and Assessment 254

MODULE 22 Business Ethics 255
Module 22 Review and Assessment 259

HEADLINE ECONOMICS: Be an NFL Owner 260
PEOPLE IN ECONOMICS: Jeff Bezos, Part II 262
Chapter 7 Review and Self-Assessment 264



CHAPTER 8 MARKET STRUCTURE 267

MODULE 23 Monopoly 269

ECONOMICS IN ACTION: Sewing Barriers to Entry 274
 Module 23 Review and Assessment 283

MODULE 24 Oligopoly and Monopolistic Competition 284

Module 24 Review and Assessment 289

MODULE 25 Regulating Market Power 291

PEOPLE IN ECONOMICS: John D. Rockefeller 294
ECONOMICS IN ACTION: The Federal Trade Commission Clips Merger of Staples and Office Depot 295
 Module 25 Review and Assessment 297

HEADLINE ECONOMICS: A Google Monopoly Isn't the Point 298

Chapter 8 Review and Self-Assessment 299



CHAPTER 9 MARKET FAILURE AND GOVERNMENT FAILURE 303

MODULE 26 When the Invisible Hand Is All Thumbs: Market Failure 305

ECONOMICS IN ACTION: The Tragedy of the Sturgeon 309
 Module 26 Review and Assessment 316

MODULE 27 The Heavy Hand of Government: Government Failure 318

ECONOMICS IN ACTION: Electoral Pressures Influence Disaster Spending 320
 Module 27 Review and Assessment 324

HEADLINE ECONOMICS: End of Ethanol Subsidy Will Raise the Price of Gas 326

Chapter 9 Review and Self-Assessment 327



PART 4 APPLICATIONS OF MICROECONOMICS

CHAPTER 10 TAXES: THE PRICE OF A FUNCTIONING GOVERNMENT 331

MODULE 28 Why and How Are We Taxed? 333

ECONOMICS IN ACTION: The Origins of the Federal Income Tax 336
 Module 28 Review and Assessment 340

MODULE 29 Responding to Taxes 342

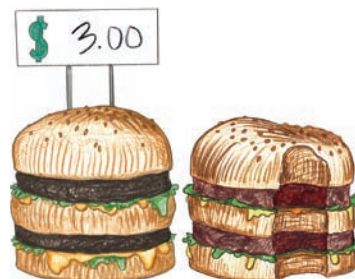
ECONOMICS IN ACTION: Why Do People Pay Taxes? 347
SHOW ME THE NUMBERS!: Marginal and Average Tax Rates 348
 Module 29 Review and Assessment 349

MODULE 30 Evaluating Taxes 350

Module 30 Review and Assessment 355

HEADLINE ECONOMICS: Both Parties Misunderstand Taxes 356

Chapter 10 Review and Self-Assessment 357





CHAPTER 11 LABOR MARKETS 361

MODULE 31 Labor Demand 363

SHOW ME THE NUMBERS!: Calculating the Elasticity of Labor Demand 370

ECONOMICS IN ACTION: How High Is the Elasticity of Labor Demand? 371

Module 31 Review and Assessment 371

MODULE 32 Labor Supply and Labor Market Equilibrium 373

ECONOMICS IN ACTION: Labor Supply and the Demise of the Feminine Mystique 377

Module 32 Review and Assessment 383

MODULE 33 The Skills of Workers and the Quality of Jobs 384

ECONOMICS IN ACTION: What's in a Name? A Test of Labor-Market Discrimination 389

Module 33 Review and Assessment 393

HEADLINE ECONOMICS: As Work Goes Global, Will Holidays Disappear? 394

Chapter 11 Review and Self-Assessment 395

CHAPTER 12 PERSONAL FINANCE: MANAGING YOUR MONEY 399

MODULE 34 Finding a Job 401

Module 34 Review and Assessment 404

MODULE 35 Creating a Budget 405

ECONOMICS IN ACTION: Payday Lending 410

PEOPLE IN ECONOMICS: Alexa von Tobel 411

Module 35 Review and Assessment 411

MODULE 36 Essential Elements of Personal Finance 413

ECONOMICS IN ACTION: Identity Theft Is Now a Federal Offense 423

Module 36 Review and Assessment 424

MODULE 37 Investing and Personal Financial Planning 426

ECONOMICS IN ACTION: Don't Miss a Good Deal 427

ECONOMICS IN ACTION: A Random Walk Down Wall Street 431

Module 37 Review and Assessment 432

HEADLINE ECONOMICS: Living to 100 434

PEOPLE IN ECONOMICS: Laura Adams 435

Chapter 12 Review and Self-Assessment 437



PART 5 MACROECONOMICS

CHAPTER 13 MACROECONOMIC PERFORMANCE 441

MODULE 38 Measuring National Output and Income 442

Module 38 Review and Assessment 450

MODULE 39 Economic Growth 452

ECONOMICS IN ACTION: U.S. States Renamed for Countries with Similar GDP 456

ECONOMICS IN ACTION: "Creative Destruction" Yesterday and Today 462

Module 39 Review and Assessment 466



MODULE 40 Business Cycles 468*ECONOMICS IN ACTION: Recession or Depression—What’s the Difference?* 471

Module 40 Review and Assessment 477

HEADLINE ECONOMICS: Downturn, Start Up 479

Chapter 13 Review and Self-Assessment 480

CHAPTER 14 UNEMPLOYMENT AND INFLATION 485**MODULE 41** Unemployment 487*ECONOMICS IN ACTION: By the Numbers: Calculating the Unemployment Rate* 489*ECONOMICS IN ACTION: The Grapes of Wrath: Migrant Farmworkers and Seasonal Unemployment* 491*ECONOMICS IN ACTION: Unemployment around the World: How Does the U.S. Stack Up?* 496

Module 41 Review and Assessment 497

MODULE 42 Inflation 499*ECONOMICS IN ACTION: Shopping for America* 501*ECONOMICS IN ACTION: Inflation around the World: How Does the United States Stack Up?* 504*ECONOMICS IN ACTION: Hyperinflation in Germany and Zimbabwe* 506

Module 42 Review and Assessment 508

MODULE 43 Unemployment, Inflation, and the Business Cycle 509

Module 43 Review and Assessment 513

HEADLINE ECONOMICS: Teenagers without Jobs May Be Missing Out on Job Skills, Future Wages 514*PEOPLE IN ECONOMICS: Laurence Meyer* 515

Chapter 14 Review and Self-Assessment 516

CHAPTER 15 FISCAL POLICY 519**MODULE 44** Government Revenue and Spending 521*ECONOMICS IN ACTION: How Do State and Local Governments Spend Their Money?* 526

Module 44 Review and Assessment 528

MODULE 45 Deficits and the National Debt 530*ECONOMICS IN ACTION: What Is the Future of Social Security?* 535

Module 45 Review and Assessment 536

MODULE 46 Managing the Business Cycle 538*PEOPLE IN ECONOMICS: John Maynard Keynes* 545

Module 46 Review and Assessment 546

HEADLINE ECONOMICS: Governments Move to Cut Spending, in 1930s Echo 548*PEOPLE IN ECONOMICS: Peter R. Orszag* 549

Chapter 15 Review and Self-Assessment 551



CHAPTER 16 MONEY, BANKING, AND FINANCIAL MARKETS 555

MODULE 47 What Is Money? 557

ECONOMICS IN ACTION: Weighed Down by Wampum 560

Module 47 Review and Assessment 563

MODULE 48 The Banking System 565

ECONOMICS IN ACTION: How Safe Is Your Money? 569

ECONOMICS IN ACTION: Electronic Banking: Online and in Your Pocket 572

Module 48 Review and Assessment 574

MODULE 49 Role of Financial Markets in the Real Economy 576

ECONOMICS IN ACTION: What Are Futures and Options? 584

ECONOMICS IN ACTION: Spending Money to Make Money: Amazon.com 587

Module 49 Review and Assessment 589

HEADLINE ECONOMICS: Battered by Economic Crisis, Greeks Turn to Barter Networks 591

PEOPLE IN ECONOMICS: Michael Lewis 593

Chapter 16 Review and Self-Assessment 595

CHAPTER 17 THE FEDERAL RESERVE SYSTEM AND MONETARY POLICY 599

MODULE 50 The Federal Reserve System 601

ECONOMICS IN ACTION: Why a Few Words by the Fed Chairman Make a Big Difference in the Financial Markets 605

ECONOMICS IN ACTION: The European Union's Central Bank 606

Module 50 Review and Assessment 611

MODULE 51 The Federal Reserve and Traditional Monetary Policy 613

ECONOMICS IN ACTION: Inflation Targeting and the Canadian Economy 620

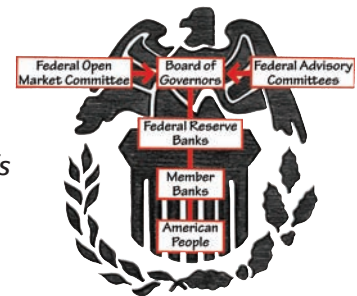
Module 51 Review and Assessment 621

MODULE 52 Extraordinary Times, Extraordinary Tools 622

Module 52 Review and Assessment 628

HEADLINE ECONOMICS: Fed to Pull Back Curtain on Members' Interest-Rate Forecasts 629

Chapter 17 Review and Self-Assessment 630



PART 6 INTERNATIONAL TRADE AND DEVELOPMENT

CHAPTER 18 TRADE AND THE GLOBAL ECONOMY 633

MODULE 53 The Benefits of International Trade 635

ECONOMICS IN ACTION: The Red Sea: Gateway to Trade 639

Module 53 Review and Assessment 644

MODULE 54 Barriers to Trade	645
<i>ECONOMICS IN ACTION: Is a Foreign Car Always a Foreign Car?</i>	651
<i>ECONOMICS IN ACTION: What Are Fair Trade Goods?</i>	654
Module 54 Review and Assessment	655
MODULE 55 Foreign Exchange and the Balance of Trade	657
<i>ECONOMICS IN ACTION: Calculating Foreign Exchange Rates</i>	660
Module 55 Review and Assessment	664
<i>HEADLINE ECONOMICS: International Trade and World Market</i>	666
Chapter 18 Review and Self-Assessment	667



CHAPTER 19 ECONOMIC DEVELOPMENT AND GLOBAL CHALLENGES 671

MODULE 56 Measuring Economic Development	673
<i>ECONOMICS IN ACTION: Women's Collectives in Developing Countries</i>	679
Module 56 Review and Assessment	682
MODULE 57 Economic Issues in Developing Countries	685
<i>ECONOMICS IN ACTION: Muhammad Yunus and Microfinance</i>	692
Module 57 Review and Assessment	693
MODULE 58 Globalization and Its Challenges	695
Module 58 Review and Assessment	703
<i>HEADLINE ECONOMICS: Drain or gain?</i>	704
<i>PEOPLE IN ECONOMICS: Esther Duflo</i>	705
Chapter 19 Review and Self-Assessment	707

APPENDICES

PERSONAL FINANCE HANDBOOK FH-1

SECTION 1: Take It to the Bank	FH-2
SECTION 2: Get Interested in Money Math	FH-7
SECTION 3: Learn to Earn	FH-11
SECTION 4: Save and Invest Money	FH-18
SECTION 5: Give Yourself Some Credit	FH-22
SECTION 6: Borrow without Sorrow	FH-26
SECTION 7: Manage Your Money	FH-30
SECTION 8: Protect Yourself from Risk	FH-36

SKILLS HANDBOOK SH-1

SECTION 1: Critical Thinking Skills	SH-2
SECTION 2: Data Bank	SH-8
SECTION 3: Atlas	SH-11
SECTION 4: Reading Graphs and Other Visual Resources	SH-15
SECTION 5: Test-Taking Skills	SH-21

GLOSSARY/GLOSARIO G-1

REVIEWERS R-1

INDEX I-1

Special Features

ECONOMICS IN ACTION

- CH. 1 • The Wages of Economics 24
- CH. 2 • The Three Basic Economic Questions and the U.S. Health Care Debate 41
 - Rationing in a Command Economy 54
- CH. 3 • Opportunity Cost Doesn't Always Mean Dollars Paid Out 82
 - *Freakonomics* and Rational Decision Making 87
 - Sweden Uses Behavioral Economics to Make People Healthier 96
 - Impatience and the Adjustable-Rate Mortgage Crisis 97
- CH. 4 • Creating Demand for Diamonds 120
 - Conspicuous Consumption and the Demand for Goods 122
 - Calculating the Elasticity of Demand (Show Me the Numbers!) 131
 - Lowering the Price of TV Downloads 137
- CH. 5 • How Wars Shift Supply Curves 161
 - The Gasoline Pipeline Disaster in Arizona 163
 - Diminishing Marginal Productivity in Military Battles 171
- CH. 6 • The Diamond-Water Paradox 191
 - Supply and Demand in a James Bond Movie 197
 - Lessons from Super Bowl Sunday 210
- CH. 7 • Going Green Makes Cents 230
 - How Long Does It Take to Start a Corporation? 242
 - Business Franchises versus Other Chain Businesses 244
- CH. 8 • Sewing Barriers to Entry 274
 - The Federal Trade Commission Clips Merger of Staples and Office Depot 295
- CH. 9 • The Tragedy of the Sturgeon 309
 - Electoral Pressures Influence Disaster Spending 320
- CH. 10 • The Origins of the Federal Income Tax 336
 - Why Do People Pay Taxes? 347
 - Marginal and Average Tax Rates (Show Me the Numbers!) 348
- CH. 11 • Calculating the Elasticity of Labor Demand (Show me the Numbers!) 370
 - How High Is the Elasticity of Labor Demand? 371
 - Labor Supply and the Demise of the Feminine Mystique 377
 - What's in a Name? A Test of Labor-Market Discrimination 389
- CH. 12 • Payday Lending 410
 - Identity Theft Is Now a Federal Offense 423
- Don't Miss a Good Deal 427
- *A Random Walk Down Wall Street* 431
- CH. 13 • U.S. States Renamed for Countries with Similar GDP 456
 - "Creative Destruction" Yesterday and Today 462
 - Recession or Depression—What's the Difference? 471
- CH. 14 • By the Numbers: Calculating the Unemployment Rate 489
 - The Grapes of Wrath: Migrant Farmworkers and Seasonal Unemployment 491
 - Unemployment around the World: How Does the U.S. Stack Up? 496
 - Shopping for America 501
 - Inflation around the World: How Does the United States Stack Up? 504
 - Hyperinflation in Germany and Zimbabwe 506
- CH. 15 • How Do State and Local Governments Spend Their Money? 526
 - What Is the Future of Social Security? 535
- CH. 16 • Weighed Down by Wampum 560
 - How Safe Is Your Money? 569
 - Electronic Banking: Online and in Your Pocket 572
 - What Are Futures and Options? 584
 - Spending Money to Make Money: Amazon.com 587
- CH. 17 • Why a Few Words by the Fed Chairman Make a Big Difference in the Financial Markets 605
 - The European Union's Central Bank 606
 - Inflation Targeting and the Canadian Economy 620
- CH. 18 • The Red Sea: Gateway to Trade 639
 - Is a Foreign Car Always a Foreign Car? 651
 - What Are Fair Trade Goods? 654
 - Calculating Foreign Exchange Rates 660
- CH. 19 • Women's Collectives in Developing Countries 679
 - Muhammad Yunus and Microfinance 692

ECONOMICS IN ACTION

Opportunity Cost Doesn't Always Mean Dollars Paid Out

People often confuse the opportunity cost of a decision with the direct dollar cost of that decision. If you've ever missed a sports practice to take a make-up exam after school, you've experienced an opportunity cost that doesn't involve money at all. And even if you're not Ben Kaufman, the opportunity cost of attending college includes more than the cost of tuition. College students also give up the best alternative to attending college, which is typically going straight to work. Suppose you would earn \$25,000 a year in the best available job right after high school. Then the opportunity cost of attending college would be the tuition cost plus the forgone income of \$25,000 for each of four years, or \$100,000. Although it isn't actually paid out, that money you would have earned is part of the cost, too.

The first step in making good decisions is to understand that the true cost of any decision is the opportunity cost, and not just the amount of money spent as a result of the decision. This applies to life's big decisions, such as whether to attend college, and to everyday decisions, such as whether to make up an exam.



The opportunity cost of attending college is the tuition and the forgone income that you would have earned had you been working instead.

PEOPLE IN ECONOMICS

- CH. 1** • Adam Smith 21
 - Milton Friedman 26
 - Ellen Hughes-Cromwick 31
- CH. 2** • Karl Marx 52
 - Jan Švejnar 73
 - Friedrich von Hayek 55
- CH. 4** • Jeff Bezos 139
- CH. 6** • Jeff Fluhr 219
- CH. 7** • Jeff Bezos Part II 262
- CH. 8** • John D. Rockefeller 294
- CH. 12** • Alexa von Tobel 411
 - Laura Adams 435
- CH. 14** • Laurence Meyer 515
- CH. 15** • John Maynard Keynes 545
 - Peter R. Orszag 549
- CH. 16** • Michael Lewis 593
- CH. 19** • Esther Duflo 705

PEOPLE IN ECONOMICS

AN INTERVIEW WITH
Jeff Bezos, Part II

When you read books about entrepreneurship, Jeff Bezos, the founder of Amazon, is likely to be listed as one of the most successful and important entrepreneurs of all time—and you may well be reading the book on one of his devices, the Kindle. Bezos grew up in Texas and was always fascinated by inventions. The company that started in his garage in 1995 is now valued at around \$90 billion. In the following interview, Mr. Bezos, who remains CEO, president, and chairman of the board of Amazon, describes how he became an entrepreneur and his approach to business.


Is it true that you came up with the business plan for Amazon after you studied various mail order catalogues and discovered that there would be a comparative advantage for

the company Cadabra—as in “abra cadabra”—and the lawyer in Seattle exclaimed, “Cadaver?” The name got changed to Amazon a few months later.

In addition to me, the team that started Amazon included four people working for the company, software engineers primarily. The company was started in a garage of my house in Bellevue, Washington, just outside of Seattle. The garage didn’t have enough electricity so we had to siphon electricity from the rest of the house to the garage with big orange extension cords.

What advice would you have for high school students who are thinking about starting a business someday?

Make sure you get work experience first.



HEADLINE ECONOMICS

- CH. 1** • *Bloomberg Business Week*: It’s a Man vs. Machine Recovery 29
- CH. 2** • *CNN Money*: Why Amish Businesses Don’t Fail 74
- CH. 3** • *USA Today*: Burger King Tries Home Delivery 102
- CH. 4** • *The Economist*: Chevrolet’s Centenary: From 0 to 100 141
- CH. 5** • *The Economist*: Oranonomics: A War Effort Gone Wrong 180
- CH. 6** • *AP*: “Sneakerheads” hype shoes for credit and profit 220
- CH. 7** • *AP*: Be an NFL Owner: Green Bay Packers to Sell Stock for \$250, Giving Fans Chance to Buy into Team 260
- CH. 8** • *Bloomberg Business Week*: A Google Monopoly Isn’t the Point 298
- CH. 9** • *USA Today*: End of Ethanol Subsidy Will Raise the Price of Gas 326
- CH. 10** • *Bloomberg Business Week*: Both Parties Misunderstand Taxes 356
- CH. 11** • *Bloomberg Business Week*: As Work Goes Global, Will Holidays Disappear? 394
- CH. 12** • *Time*: Living to 100: As It Becomes Common, Money Regrets Follow 434
- CH. 13** • *The Economist*: Downturn, Start Up 479
- CH. 14** • *US News*: Teenagers without Jobs May Be Missing Out on Job Skills, Future Wages 514
- CH. 15** • *The New York Times*: Governments Move to Cut Spending, in 1930s Echo 548
- CH. 16** • *The New York Times*: Battered by Economic Crisis, Greeks Turn to Barter Networks 591
- CH. 17** • *USA Today*: Fed to Pull Back Curtain on Members’ Interest-Rate Forecasts 629
- CH. 18** • *The New York Times*: International Trade and World Market 666
- CH. 19** • *The Economist*: Drain or gain? 704

HEADLINE ECONOMICS



Burger King Tries Home Delivery

BY BRUCE HOROVITZ, USA TODAY

The door-to-door Whopper may soon be on the menu. Burger King, the No. 2 burger chain, has quietly begun testing home delivery of its burgers. The stores try to deliver within 30 minutes of the time a phone or online order is received. Delivery customers must live within a 10-minute drive of the store. All soft-drink orders are in bottles. And breakfast items are not delivered. Delivery times are 11 a.m. to 10 p.m.

And depending on the store (three in Maryland and one in Virginia), minimum orders vary from \$8 to \$10. The stores try to deliver within 30 minutes of the time a phone or online order is received. Delivery customers must live within a 10-minute drive of the store. All soft-drink orders are in bottles. And breakfast items are not delivered. Delivery times are 11 a.m. to 10 p.m.

McDonald’s has two restaurants in Manhattan that offer delivery only to businesses. But there are no plans to expand the service, spokeswoman Ashlee Yingling says. “And Domino’s, whose business is 70% delivery, is watching—with a smile. “We wish them luck,” spokesman Tim McIntyre says. “There is a reason that not all pizza places deliver: It isn’t easy.”



DID YOU READ IT?

1) What kinds of economic decisions are discussed in this article?
2) What factors do you think influenced Burger King’s decision to test a home delivery service?

WHAT DO YOU THINK?

1) Is it rational for consumers to choose to order delivery service from Burger King?
2) Why do you think Domino’s would claim that delivery service “isn’t easy”? What do you think this means in economic terms?

ACCEPTED FROM www.usatoday.com/money/industries/food/story/2012-01-12/burger-king-delivery/5260404/1

102

this page left intentionally blank

Figures and Tables

The graphs highlighted in blue are featured as interactive, animated graphs on the Book Companion Site.
www.worthpublishers.com/ExplorationsinEconomics1e

- FIG. 1.1 Resource Scarcity 7
- FIG. 2.1 Production Possibilities Frontier 12
- FIG. 2.2 Production Possibilities Frontier 14**
- FIG. 2.3 Opportunity Costs 16
- FIG. 2.4 Efficiency in Production 18
- FIG. 2.5 Economic Growth and the PPF 20
- TAB. 4.1 Economic Freedom 45
- FIG. 5.1 Economic Systems and Economic Goals 59
- FIG. 6.1 The Simple Circular Flow 64**
- FIG. 6.2 Government in the Circular Flow 69
- FIG. 7.1 The Budget Line 83
- TAB. 8.1 Using Rational Decision Making to Choose a Car 89
- TAB. 8.2 Comparing Marginal Benefit and Marginal Cost 91
- TAB. 9.1 Six Guidelines for Making Rational Decisions 99
- FIG. 10.1 The Law of Demand 109**
- FIG. 10.2 Income and Substitution Effects 110
- FIG. 10.3 The Demand Schedule and Demand Curve 112**
- TAB. 10.1 The Market Demand Schedule 113
- FIG. 10.4 The Market Demand Curve 114**
- FIG. 11.1 Movement along the Demand Curve versus a Shift of the Demand Curve 118**
- FIG. 11.2 A Leftward Shift of the Demand Curve 119
- FIG. 11.3 The Number of Buyers 124
- FIG. 12.1 Perfectly Elastic Demand 129
- FIG. 12.2 Perfectly Inelastic Demand 130
- TAB. 12.1 Determinants of the Elasticity of Demand 130
- FIG. 12.3 Calculating the Elasticity of Demand for Chocolate Bars 132
- TAB. 12.2 Summary of the Elasticity of Demand 134
- FIG. 12.4 Spending, Revenue, and Elasticity 135
- TAB. 12.3 Elasticity and Total Revenue 136
- FIG. 13.1 The Law of Supply 149**
- FIG. 13.2 The Supply Schedule and the Supply Curve for General Gasoline 150**
- FIG. 13.3 The Market Supply Curve 152**
- FIG. 13.4 Elasticity of Supply 154
- FIG. 13.5 Interpreting the Elasticity of Supply 155
- TAB. 13.1 Elasticity of Supply Summary Table 155
- FIG. 14.1 Movement along the Supply Curve versus a Shift of the Supply Curve 159**
- FIG. 14.2 Shifts of the Market Supply Curve 160
- FIG. 14.3 Market Supply with Three Firms 162
- FIG. 15.1 The Production Schedule and Production Function for Blade Runner Lawn Mowing Company 169
- FIG. 15.1 (repeated) 170
- TAB. 15.1 Output, Cost, Revenue, and Profit for Blade Runner Lawn Mowing Company 173
- TAB. 15.1 (repeated) 175
- FIG. 16.1 Market Equilibrium 188
- FIG. 16.2 Excess Demand 189
- FIG. 16.3 Excess Supply 190
- FIG. 16.4 How Prices Reach Equilibrium 190
- TAB. 17.1 A Review of the Factors That Shift the Demand Curve or the Supply Curve 194
- FIG. 17.1 The Demand Curve Shifts Right 195
- FIG. 17.2 The Demand Curve Shifts Left 196
- FIG. 17.3 The Supply Curve Shifts Left 197
- FIG. 17.4 The Shift Goldfinger Wanted 198
- FIG. 17.5 The Supply Curve Shifts Right 199
- FIG. 17.6 Shifts of Both the Supply Curve and the Demand Curve 200
- TAB. 17.2 Summary of Price and Quantity Changes 202
- FIG. 18.1 A Shortage or Surplus 206
- FIG. 18.2 The Effect of a Price Ceiling 207
- FIG. 18.3 The Effect of a Price Floor 208
- FIG. 18.4 The Price of a Super Bowl Ticket 211
- FIG. 18.5 Gains from Voluntary Exchange 216
- TAB. 19.1 A Sample of Small Business Innovations during the Twentieth Century 229
- FIG. 20.1 Organizational Structure of a Public Corporation 238
- FIG. 20.2 Comparing the Common Types of Business Organizations 241
- TAB. 20.1 A Summary of Advantages and Disadvantages 241
- TAB. 20.2 How Long Does It Take? 242
- TAB. 21.1 The Tutor Shop's Quarterly Income Statement 248
- FIG. 21.1 The Walt Disney Company 251
- TAB. 21.2 Top 10 Companies in the Global Economy in 2011 (Ranked by Business Revenues) 253

- FIG. 23.1** Four Types of Market Structure 270
- TAB. 23.1** Perfect Competition and Monopoly Compared 272
- TAB. 23.2** The Four Main Sources of Market Power 275
- TAB. 23.3** Revenue and Cost Schedule for MONOPOLE 277
- FIG. 23.2** The Monopoly Graph 278
- TAB. 23.4** Reservation Prices of Eight MONOPOLE Customers 279
- TAB. 24.1** Ten Highly Concentrated Industries 285
- TAB. 24.2** Features of Perfect Competition, Monopolistic Competition, and Monopoly 288
- FIG. 25.1** Staples: Prices Are Higher with Less Superstore Competition 296
- FIG. 26.1** A Tax on Consumers 311
- FIG. 26.2** A Tax on Firms 312
- TAB. 26.1** A Summary of Conditions for Market Efficiency 316
- TAB. 27.1** Spending on Lobbying Congress and Federal Agencies: Top 10 Industries 321
- FIG. 28.1** Sources of Federal Revenue, 2011 335
- FIG. 28.2** Pay Stub with Tax Deductions 337
- FIG. 28.3** State Taxes per Capita 339
- TAB. 28.1** Tax Revenue as a Share of GDP 339
- FIG. 29.1** A Tax on Buyers 343
- FIG. 29.2** A Tax on Sellers 344
- FIG. 29.3** A Tax on Buyers Is Partially Shifted to Sellers 345
- FIG. 29.4** A Tax on Sellers Is Partially Shifted to Buyers 346
- TAB. 29.1** The 2012 Federal Income Tax Schedule for Single Individuals 347
- FIG. 30.1** Average Federal Taxes as a Percent of Income, 2009 353
- TAB. 31.1** Blade Runner's Production Schedule 365
- FIG. 31.1** Blade Runner's Labor Demand Curve 367
- FIG. 31.2** The Market Labor Demand Curve 369
- TAB. 32.1** The Percentage of Men and Women Age 16 or Older in the Labor Force, 2011 374
- FIG. 32.1** The Market Labor Supply Curve 376
- FIG. 32.2** The Backward-Bending Labor Supply Curve 376
- FIG. 32.3** Percent of Men and Women Age 16 or Older Employed Each Year 377
- FIG. 32.4** Equilibrium in the Labor Market 378
- FIG. 32.5** Shifts of Labor Supply and Demand 380
- FIG. 32.6** A Minimum Wage 381
- FIG. 32.7** Fast Food Employment in New Jersey and Pennsylvania 382
- FIG. 33.1** Median Earnings by Educational Attainment 385
- FIG. 33.2** A Monopoly Union 391
- FIG. 33.3** The Effect of Occupational Licensing on Labor Supply 392
- FIG. 35.1** Personal Saving as a Percentage of Net Income, 1959–2011 408
- FIG. 38.1** The Four Basic Sectors 445
- FIG. 38.2** Expenditure Approach to Calculating GDP 446
- FIG. 38.3** The Flow of Expenditures and Income 447
- FIG. 38.4** Real and Nominal GDP in the United States 449
- FIG. 39.1** Real GDP, 1970–2010 453
- FIG. 39.2** Some Indicators of Economic Well-Being in Rich and Poor Countries 454
- FIG. 39.3** Growth in GDP per Capita in Selected Countries 455
- FIG. 39.4** U.S. States Renamed for Countries with Similar GDP 456
- FIG. 39.5** U.S. Average Annual Productivity Gains by Decade, 1960–2009 457
- FIG. 39.6** U.S. Private Sector Investment, 2011 459
- FIG. 39.7** Education Trends 461
- FIG. 39.8** U.S. Funding for Research and Development in 2009 463
- FIG. 40.1** Phases of the Business Cycle 469
- FIG. 40.2** Contraction and Expansions since 1980 470
- FIG. 40.3** The Origin of a Bubble 475
- FIG. 40.4** Housing Prices, 1975–2012 476
- FIG. 41.1** Breakdown of the Civilian, Noninstitutional Population Aged 16 Years and Older 488
- FIG. 41.2** Unemployment Rates and Contractions, 1977–2011 492
- TAB. 41.1** Unemployment Rates by Race, Age, and Educational Attainment, September 2012 494
- FIG. 41.3** State Unemployment Rates, December 2011 495
- FIG. 41.4** Unemployment Rates across the G7 Countries, 1995–2010 496
- FIG. 42.1** The Market Basket of Consumer Goods, December 2010 500
- FIG. 42.2** U.S. Inflation Rates, 1978–2011 503
- FIG. 42.3** Inflation Rates of G7 Countries, 1993–2011 504
- FIG. 43.1** Changes in Aggregate Demand 511
- FIG. 44.1** Steps in the Federal Budget Process 522
- FIG. 44.2** Federal Government Spending, 2012 523
- TAB. 44.1** The Major Federal Government Entitlement Programs 525
- TAB. 44.2** State and Local Government Spending, Fiscal Year 2010 527
- FIG. 45.1** Budget Deficits and Surpluses, 1980–2011 531
- FIG. 45.2** Public Debt, 1980–2011 531
- FIG. 45.3** Public Debt as a Percentage of GDP, 1980–2012 533
- FIG. 46.1** Macroeconomic Equilibrium 539
- FIG. 46.2** Expansionary Fiscal Policy 539
- FIG. 46.3** Contractionary Fiscal Policy 541
- FIG. 47.1** Comparison of M1 in 1998 and 2012 562
- FIG. 48.1** A Timeline of U.S. Banking 566
- FIG. 48.2** The Money Creation Process 571
- FIG. 49.1** Financial Intermediaries 577
- FIG. 49.2** The Financial System 578
- FIG. 49.3** The Inverse Relationship between Interest Rates and Bond Prices 580

- FIG. 49.4** The Inverse Relationship between Bond Prices and Current Yields 581
- TAB. 49.1** Bond Ratings 581
- TAB. 49.2** Types of Government Bonds 582
- FIG. 49.5** S&P 500, 1950–2011 586
- FIG. 49.6** Amazon.com Stock Performance, 1997–2011 588
- FIG. 50.1** The 12 Federal Reserve Districts 603
- FIG. 50.2** The Organizational Structure of the Federal Reserve 604
- FIG. 50.3** Map of the EU and Eurozone Nations 607
- FIG. 50.4** Check-Clearing Process 609
- FIG. 51.1** Money Supply and Demand 614
- FIG. 51.2** Monetary Policy in Action 616
- FIG. 51.3** The Federal Funds Rate, 2001–2011 617
- FIG. 53.1** Proven Oil Reserves of the Top 20 Nations, 2012 636
- TAB. 53.1** A Comparison of Resource Distribution in Selected Countries 640
- TAB. 53.2** Opportunity Costs for Britain and the United States 642
- FIG. 54.1** The Dramatic Decline of World Trade, 1929–1933 646
- FIG. 54.2** Regional Trade Agreements 653
- TAB. 55.1** The Effect of Supply and Demand Shifts on the Exchange Rate 658
- FIG. 55.1** Dollar-Pound Exchange Rate Fluctuations, November 2011–April 2012 661
- TAB. 55.2** The Value of the Dollar Compared to Other Currencies, December 14, 2012 661
- FIG. 55.2** Countries in the Eurozone 662
- TAB. 56.1** Per Capita GDP in Selected Countries 674
- TAB. 56.2** Comparing Characteristics of DC, NIC, and IC 676
- TAB. 56.2** Comparing Characteristics of DC, NIC, and IC (continued) 677
- FIG. 56.1** World Population Growth, 1950–2050 678
- TAB. 56.3** Comparing per Capita GNI, 2011 680
- FIG. 57.1** External Debt by Country (in U.S. Dollars) 687
- TAB. 58.1** The Top 20 Multinational Corporations in the World, 2012 702

MODULE 1

What Is Economics?

KEY IDEA: Economics deals with the choices we make, individually and as a society, under conditions of scarcity.

OBJECTIVES

- To explain what economics is and why it is important.
- To define opportunity costs.
- To differentiate between wants and needs.
- To name society's key economic resources.

You can't always get what you want!



Economics Is about More Than Money

What you're doing right now—reading this book—is the result of an economic decision. That might surprise you. When people think of *economics*, they usually think about money, complicated graphs and charts, or factories producing cars. Or they think about words like *prices*, *unemployment*, and *stocks*. Economics is about all of these things, as you will see. But it is also about you, right now, making the choice to sit down and read this book. Because economics, at its core, is about choices: **economics** is the study of choice under conditions of *scarcity*.

Scarcity exists if we desire more of something than we can have. For example, individuals face a scarcity of time, businesses face a scarcity of the materials used to make what they sell, governments face a scarcity of tax dollars, and countries face a scarcity of energy sources. A good way to understand scarcity is to think about your own life.

SCARCITY AND YOU

What is scarce for you? In other words, what do you desire that you can't have? If you would like a better cell phone, your own car, more clothes, and more time playing your favorite sport, these things are scarce for you. Behind these examples are two more basic forms of scarcity. One is the scarcity of money available for you to spend—as you know, it doesn't exactly grow on trees. The other is time. Everything you do takes time—eating, doing chores, relaxing with family or friends, going to concerts, attending events, reading, surfing the web, and your favorite: studying economics. But there are only so many hours in a day. You don't have as much time as you would like, so your time is scarce.

Each of us must deal with the scarcity of time and money. So when economists study choices, they usually focus on how people spend their time and money.



Scarcity Implies Tradeoffs

Whenever the scarcity of money or time forces you to make a choice, you face a *tradeoff*. You make a **tradeoff** when you give up one thing to get something else. For example, suppose you have \$25 to spend. You've considered

Economics is the study of choice under conditions of scarcity.

Scarcity exists if we desire more of something than we can have.

You make a **tradeoff** when you give up one thing to get something else.

Each module presents a handful of concepts central to the study of economics.

PREVIEW those concepts by reading the KEY IDEA and OBJECTIVES at the beginning of each module.

STUDY the KEY TERMS as you read. Notice that the most important vocabulary words are printed in blue and defined in the margin.

These words are also defined in the English and Spanish Glossary/Glosario appendix at the end of the book.

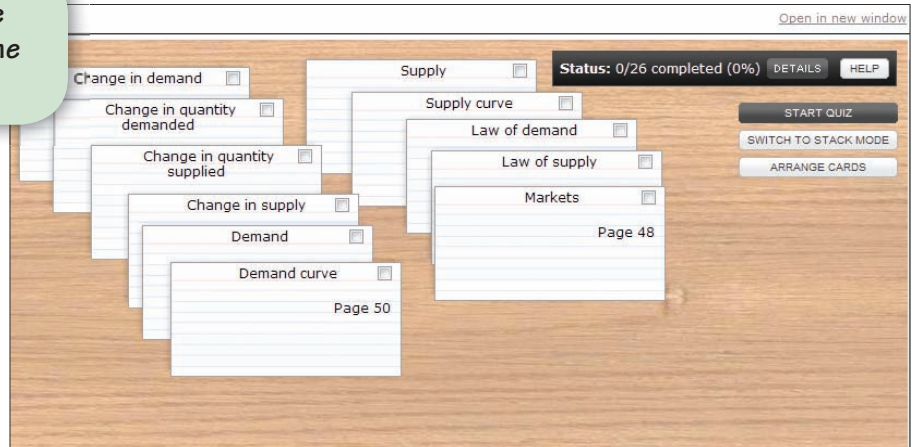
Glossary/Glosario

This Glossary/Glosario includes all of the definitions found in the margins of the text.

Cómo usar el glosario en español:
1. Busca el término en inglés que desees encontrar.
2. El término en español, junto con la definición, se encuentra en la columna de la derecha.

English	Español
A	
Absolute advantage —the ability to produce more of a good than a trading partner using a given quantity of resources.	Ventaja absoluta —la capacidad de producir más de un bien que otra persona, usando una cantidad dada de recursos.
ACH (automated clearing house) transfers —transfers between payers' and payees' accounts carried out without the use of checks on a secure electronic transfer network.	Transferencias de caja de compensación —transferencias entre las cuentas de quienes pagan y quienes reciben, efectuadas sin el uso de cheques en un red de transferencia electrónica.

PRACTICE your mastery of the language of economics with the ONLINE FLASHCARDS.



the market price is lower than the equilibrium price, there is excess demand and the market price rises. In both cases, unless something like government price controls prevents the market price from fully adjusting, it will keep moving until it reaches the equilibrium price.



DID YOU GET IT?
Why can we expect the price of a good to reach the equilibrium price?



Even though no one really needs the latest electronic gadget, prices tend to be high when long lines of customers form for gadgets that are in short supply.

STOP and think about the DID YOU GET IT? questions, which are sprinkled throughout the text and figures. If you can answer each question correctly and defend your point of view, you are on your way to mastering the content!

demand relative to supply—is the key to price determination. When there is a lot of demand for something that is in short supply, like gold, Super Bowl tickets, a Picasso painting, the relative scarcity causes the good to be expensive even though no one really “needs” it to survive. The same idea explains why many goods that are very important to us, such as food and clothing—are available at much lower prices. For these goods, prices are low because supply is high relative to demand.

are high and others are low. The relative scarcity of a good—meaning the size of

Did you ever wonder why the latest Apple product is so expensive? LOOK at the PHOTOS and READ the CAPTIONS, which review and illustrate the explanations in the text. Sometimes pictures really are worth a thousand words!

ECONOMICS IN ACTION

The Diamond-Water Paradox

WATCH OUT for CAUTION BOXES, which identify common mistakes made by economics students, like this one on page 64.



Markets Are More Than Supermarkets

It’s tempting to think of a market as a physical place, such as your local supermarket. But remember that *market* has a special meaning in economics; it refers to a group of buyers and sellers of a specific product or resource. The exchanges in a single market may take place in many different locations, including online.

YOUR TURN

Think about your favorite food (pizza? chocolate?) and your least favorite food (sushi? liverwurst?). Is your favorite food sold in many restaurants or stores? Is your favorite food easier to find than your least favorite food? If so, resources are being allocated well to serve you and others like you and you can commend your country for its answer to the first key economic question.



GET INVOLVED with the content. Spend time reflecting on YOUR TURN questions and activities, like this example from page 40. YOUR TURN questions help connect your personal experiences to the economics concept you just learned.

STUDY the FIGURES and **GRAPHS** and read the captions carefully. Many of the most important economic concepts are explained through graphs. Learning to interpret them will ensure your success in this course.

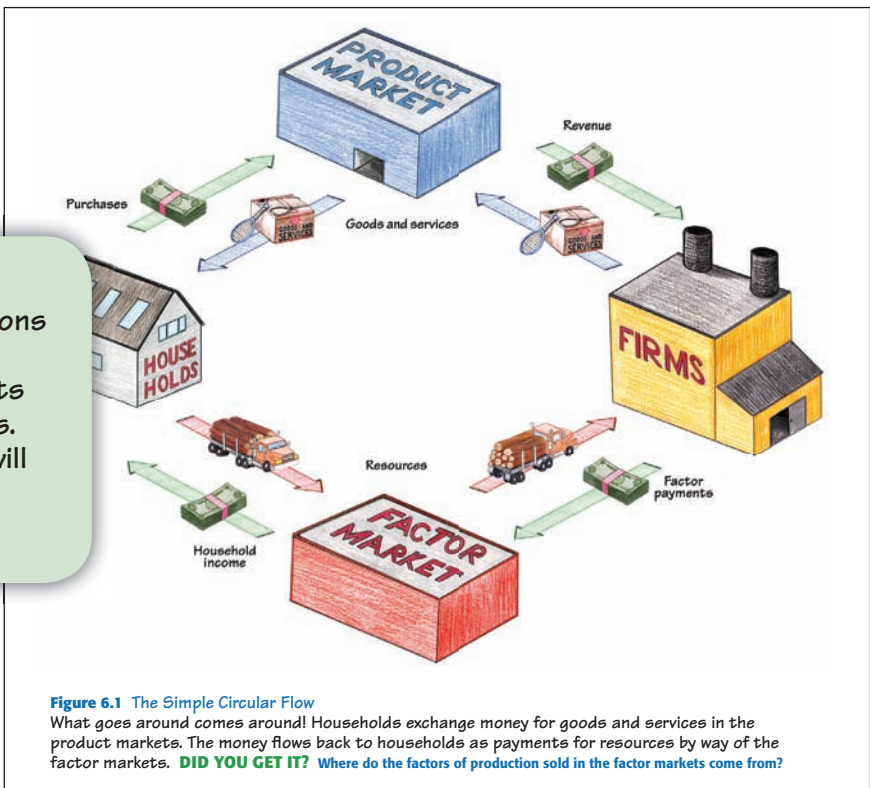


Figure 6.1 The Simple Circular Flow
 What goes around comes around! Households exchange money for goods and services in the product markets. The money flows back to households as payments for resources by way of the factor markets. **DID YOU GET IT?** Where do the factors of production sold in the factor markets come from?

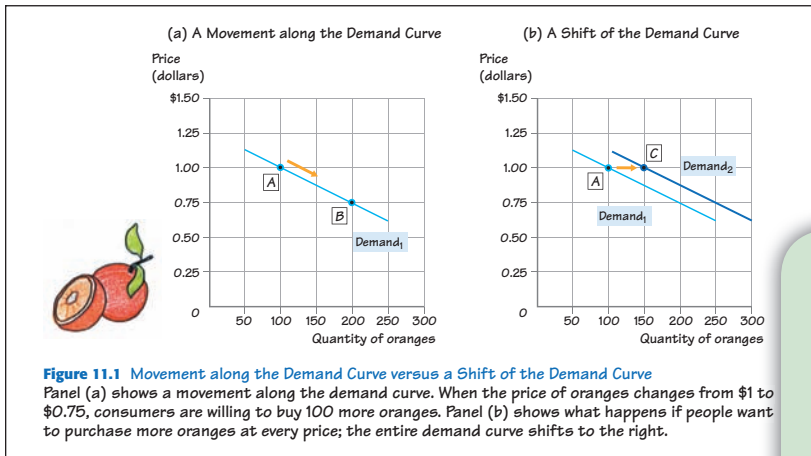


Figure 11.1 Movement along the Demand Curve versus a Shift of the Demand Curve
 Panel (a) shows a movement along the demand curve. When the price of oranges changes from \$1 to \$0.75, consumers are willing to buy 100 more oranges. Panel (b) shows what happens if people want to purchase more oranges at every price; the entire demand curve shifts to the right.

VISIT the Book Companion Site to get help with graphing.
LEARN how to read and interpret graphs with the interactive GraphExplore tool and **PRACTICE** drawing your own graphs.

Question 1

Sapling Learning

By 2030, there will be about 72.1 million persons age 65 and older in the US, more than twice their number in 2000. The figure below represents the market for professional nursing care. Move the supply and/or demand curves to describe this market by 2030. Also select the expected movements of equilibrium price and quantity.

With aging population:

Equilibrium price

- increases
- decreases
- remains constant
- change is ambiguous

Equilibrium quantity

- increases
- decreases
- remains constant
- change is ambiguous

If you need to reset the graph to its original position, click on the graph then click on the button that looks like this:

Hint Previous Give Up & View Solution Check Answer Next Exit

MODULE 13 REVIEW AND ASSESSMENT

Summing Up the Key Ideas: Match the following terms to the correct definitions.

- | | | |
|------------------------|-------------------------|------------------------|
| A. Profit | E. Supply schedule | I. Law of supply |
| B. Quantity supplied | F. Supply curve | J. Inelastic supply |
| C. Unit-elastic supply | G. Market supply curve | K. Perfect competition |
| D. Elastic supply | H. Elasticity of supply | |

- _____ 1. A condition that exists when every unit of the good sold in the market is identical, the good is produced by many firms, new firms are free to enter the market, existing firms are free to exit the market, and consumers are aware of the prices charged by the various firms.
- _____ 2. The tendency for the price and quantity supplied to move in the same direction.
- _____ 3. When the quantity supplied is moderately sensitive to price changes, such that the percentage change in the quantity supplied is the same as the percentage change in the price.
- _____ 4. A graphical representation of the supply schedule, showing the quantity supplied at each price.
- _____ 5. The total revenue a firm receives from selling its product minus the total cost of producing that product.
- _____ 6. Measures how responsive firms are to price changes.
- _____ 7. When the quantity supplied is so sensitive to price changes that it changes by a larger percentage than the price.
- _____ 8. A table that lists the quantity supplied at specified prices.
- _____ 9. A graphical representation of the quantity supplied by all firms in the market at various prices.
- _____ 10. The quantity of a good or service that firms would be willing and able to sell at a particular price over a given period of time.
- _____ 11. When the quantity supplied changes by a smaller percentage than the price.

Analyze and Explain: In the following situations, identify if the supply is **elastic** or **inelastic** and then provide an explanation for your answer.

	ELASTIC OR INELASTIC?	EXPLANATION
1. the supply of houses	_____	_____
2. the supply of a service such as car washing	_____	_____
3. the supply of computers, which producers can supply more of by next year	_____	_____
4. the supply of tickets for a professional tennis match	_____	_____

PRACTICE what you learned after you finish reading each module. Each module ends with a short set of questions for you to quiz yourself. Do the matching exercises to make sure you know the KEY TERMS. Check your understanding of the key ideas by answering the ANALYZE AND EXPLAIN and APPLY questions.

VISIT the Book Companion Site or access our SAPLING LEARNING interactive study program for lots of extra help and opportunities to practice what you've learned.

WORK lots and lots of problems with guided feedback in Sapling Learning's interactive study program so you know you are ready to ace your teacher's tests.

Question 1

Sapling Learning

By 2030, there will be about 72.1 million persons age 65 and older in the US, more than twice their number in 2010. The figure below represents the market for professional nursing care. Move the supply and/or demand curves to describe this market by 2030. Also select the expected movements of equilibrium price and quantity.

Quantity (number of nursing hours)

With aging population:

Equilibrium price

- increases
- decreases
- remains constant
- change is ambiguous

Equilibrium quantity

- increases
- decreases
- remains constant
- change is ambiguous

You need to reset the graph to its original position, click on the graph then click on the button that looks like this:

CHAPTER 5 REVIEW AND SELF-ASSESSMENT

REVIEW

Points to Remember

MODULE 13: UNDERSTANDING SUPPLY

- Profit** is the total revenue a firm receives from selling its product minus the total cost of producing it.
- The **quantity supplied** is the amount of a good that firms are willing to supply at a particular price over a given period of time.
- There is **perfect competition** in a market when there are many firms selling identical goods, firms are free to enter and exit the market, and consumers have full information about the price and availability of goods.
- According to the **law of supply**, an increase in the price of a good leads to an increase in the quantity supplied.

The **supply schedule** for a good is a table listing the quantity of the good that producers are willing to supply at various prices.

- When there is a movement along the supply curve, this is called a **change in the quantity supplied**.
- Inventory** consists of goods that are held in temporary storage.

MODULE 15: PRODUCTION, COST, AND THE PROFIT-MAXIMIZING OUTPUT LEVEL

- The **short run** is the time period in which at least one input is fixed.
- The **long run** is the time period in which all inputs are variable.
- The **marginal product** is the change in total product that results from a one-unit increase in a variable input, holding all other inputs constant.
- The **marginal product of labor** is the change in total product that results from a one-unit increase in the number of workers, holding all other inputs constant.

TEST YOURSELF after completing the modules in each chapter. **REVIEW** the POINTS TO REMEMBER for each module. This easy-to-follow outline will help fill in any gaps you may have in your notes.

ANSWER the SELF-ASSESSMENT Multiple-Choice and Constructed Response questions to make sure you understand all the material and will do well on tests.

SELF-ASSESSMENT

The following questions are the type your teacher might ask you on a quiz or a test. Answering them will help you improve your performance on class tests.

Multiple-Choice Questions

PRICE (DOLLARS)	QUANTITY SUPPLIED
\$5.00	100
4.50	90
4.00	75
3.50	55
3.00	30
2.50	0

- As the price falls from \$4.50 to \$4.00,
 - the quantity supplied decreases from 90 to 75.
 - the quantity supplied increases from 75 to 90.
- When a perfectly competitive firm shuts down in the short run, there is still the obligation to pay
 - all the variable costs, but not the fixed cost.
 - no costs at all.
 - the variable costs.
 - the fixed costs.
- Which of the following correctly defines *profit*?
 - marginal revenue minus marginal cost
 - fixed cost minus variable cost
 - marginal revenue minus marginal product
 - total revenue minus total cost

Constructed Response Question

- Complete the blank spaces in this table of costs and revenue for a typical firm:

NUMBER OF WORKERS	TOTAL PRODUCT	MARGINAL PRODUCT	FIXED COST (DOLLARS)	VARIABLE COST (DOLLARS)	TOTAL COST (DOLLARS)	MARGINAL COST (DOLLARS)	PRODUCT PRICE (DOLLARS)	TOTAL REVENUE (DOLLARS)	PROFIT (DOLLARS)
0	0				\$200		\$10		
1	20			\$60			10		
2	50			120			10		
3	70			180			10		
4	80			240			10		
5	85			300			10		
6	88			360			10		
7	90			420			10		
8	91			480			10		

- Answer these questions using the data in the chart:
 - How much are the fixed costs for this firm?
 - In what type of market does this firm sell its product? Explain.
 - At what output level does this firm maximize its profit? Explain.
 - At what point (if any) do diminishing returns set in? Explain.
 - What is the profit-maximizing output level for this firm? Explain.

SEE HOW CONCEPTS APPLY to the real world in the special boxed content that is sprinkled throughout the book

ECONOMICS IN ACTION

The Wages of Economics



Economists work in many places, including government agencies like the Central Intelligence Agency and the Bureau of Labor Statistics; consulting

Median Starting Salary for Selected Majors, College Class of 2012

COLLEGE MAJOR	STARTING SALARY (DOLLARS)
Engineering	\$58,581
Computer science	56,383
Economics	54,800
Business administration	49,200
Accounting	47,800
Math and sciences	40,939
Communications	40,022
Political science	38,400
Education	37,423

SOURCE: National Association of Colleges and Employers, "Salary Survey: Starting Salaries for New College Graduates—April 2012 Executive Summary". Available online at www.nacweb.org/salary-survey-data/?referral=research&menuID=71&nodetype=4.

DID YOU GET IT?
Why are people with training in economics valued in the workplace?

ECONOMICS IN ACTION

Lowering the Price of TV Downloads

In early 2010, Apple wanted to lower the price it charged on iTunes for downloading TV shows from \$1.99 to \$0.99 per episode. But Apple first needed permission from the TV networks that supplied the shows. Apple's managers believed that lowering the price would cause so many more people to download shows that total spending on the shows—and the total revenue of the TV networks—would rise. If they were right, the TV networks would come out ahead, and so would Apple, which kept a portion of the sales revenue for itself.

The managers at the TV networks weren't so sure. They agreed that lowering the price would increase the number of downloads, but each download would bring in less money than before. The TV executives worried that the rise in quantity demanded might not make up for the fall in price and that their total revenue would decrease.

Who was right, the managers at Apple or those at the TV networks? In making their case, the Apple managers were essentially arguing that the demand for downloaded TV shows was elastic. If that were true, then the rise in the quantity demanded would more than make up for the lower price, causing an increase in total spending on downloads and the total revenue for the networks and for Apple.

The TV networks, by contrast, were concerned that the demand for downloaded TV shows might be inelastic. If they were right, then the quantity demanded would not rise by enough to make up for the price drop, and total revenue would fall.

In February 2010, the TV networks decided to dip their toes in the water. They gave Apple permission to charge \$0.99 for certain shows only, on an experimental basis. Their goal was to determine if demand was elastic or inelastic. Based on the results, they would decide whether to allow Apple to lower the price of all TV shows. Because the networks didn't announce the revenue for specific shows, no one knows for sure how the experiment turned out. But we can make a good guess about the results, because six months after the experiment began, the networks were still charging the higher \$1.99 price on almost all their shows. This suggests that the demand for TV downloads was inelastic and that the revenue from the experimental shows fell when the price fell.



The demand for TV downloads is inelastic. That is, a price change leads to a relatively small change in the quantity of downloads demanded.

ECONOMICS IN ACTION are found in every module and show you how the economic concepts you're studying apply to the world around you.

PEOPLE IN ECONOMICS

AN INTERVIEW WITH Jeff Fluhr of StubHub

Jeff Fluhr was a cofounder of StubHub, an Internet trading website for buying and selling tickets to sporting and entertainment events. He attended Morristown High School in Morristown, New Jersey. Although he didn't take an economics class in high school, economics has had a big impact on his life. In 2007, he sold StubHub to eBay for \$310 million and looked for other ventures to start.



When did you think of the idea for StubHub?

I was a first-year student getting my MBA in business school in 2000 when I started the company. Prior to this, I had the uncomfortable experience of buying and selling tickets

people would prefer to pay a higher price rather than not go. And at higher prices, some people with tickets would prefer to sell them, because they have better things to do with the money. The higher price brings supply and demand back into balance. StubHub provides a market to create that balance.

Can you give an example?

For the Miley Cyrus concert tour that began in October 2007, tickets were first sold by Ticketmaster at \$65—far below the equilibrium price. People were not permitted to buy more than four tickets each, but all the tickets sold out within minutes anyway. Many devoted fans—even if they were willing to pay more—could not get tickets.

HEADLINE ECONOMICS

AP

**“Sneakerheads”
Hype Shoes for
Credit and Profit**



CHICAGO—They are lined up in the freezing rain, waiting patiently, stubbornly. All night. All for a few pairs of shoes. Sean Rivera is among the 60 or so die-hards on this sidewalk along Chicago’s Magnificent Mile shopping district. He looks a little crazy, smiling and squinting through fogged glasses.

It’s all part of the life of “sneakerheads,” people who spend hundreds, even thousands of dollars on shoes, many of which carry the name of professional basketball stars, past and present. Chicagoans proudly point out that it started here with Michael Jordan and his Nike Air Jordan brand.

Jesus Estrella, a blogger who has become a self-made sneaker guru on YouTube, filmed one recent melee outside a mall in Orlando, Florida. “This shoe game officially has gone bananas,” Estrella, who is known as

“JStar” in the sneakerhead community, said as he watched police arrive and then begin sending people home.

You don’t always know which shoe is going to be “the shoe” of the ones that are released, Estrella says. But often, the shoes that go the quickest are those that are “reissued”—new versions of old standards, including Air Jordans and the Nike “Mag” sneakers worn by the character Marty McFly in the movie “Back to the Future.” Consignment shops and online auctions have seen some of those shoes resell for thousands of dollars, while others sit on shelves longer and sell for less. A pair of original Air Jordans in good condition—bought by the most serious collectors—can sell today for \$4,000 to \$5,000. “Back to the Future” Mags, originally released to raise money for the Michael J. Fox

Foundation and Parkinson’s research, go for that much, or more.

Often, sneakerheads are young men in their teens, 20s and 30s, many of whom now use the Internet to show off their “kicks.” And companies like Nike are using that instant, word-of-mouth communication to their benefit, marketing experts say.

Limiting the supply—a tactic sometimes called “artificial scarcity”—also fuels the demand in an age when young people are more likely to buy products and look for status symbols. “It’s harder to get yourself different if everybody has access to the same things,” says Gary Rudman, president of GTR Consulting, which studies the habits of young consumers.

For sneakerheads, it’s about showing off your ability with your parents. An associate professor at Yale University, Estrella says, “social signaling” is a way to build status. So, in turn, limiting access to a service to create a perception of coolness. Sneakerheads have, for example, used Google and Spotify service—both of which have made some service users by invitation.

“It’s a bit of a puzzle—why would the company early on try to slow down the adoption of their product?” she says. She found that the goal for Google, with Google+, or Spotify was to eventually draw in even more members who wanted what the initial members had. Michael Carberry, marketing professor at American University in Washington, says when you factor in what it costs to design and promote the limited edition shoes, Nike may not make as much money on them as it would if they were mass produced, but the publicity they generate is priceless. “The buzz is what works for them and it just enhances the aura of Nike,” he says—and, in turn, generates more overall shoe sales to those

HEADLINE ECONOMICS boxes include articles featured in leading newspapers and economics magazines. These articles help link larger economic concepts to the world around you. Questions at the end of each article ask you to summarize and reflect on the article, like this one on page 220.

220

PEOPLE IN ECONOMICS features introduce you to both influential economists, like Adam Smith, and new names in economics, like Jeff Fluhr and Alexa von Tobel. Some of the boxes feature extensive interviews while others offer a short biographical sketch.

PEOPLE IN ECONOMICS

Alexa von Tobel, LearnVest.com

When she graduated from Harvard College, Alexa von Tobel realized that although she was about to start a job on Wall Street, she did not feel comfortable managing her own money. In fact, she had never taken a personal finance class and wasn’t sure how to deal with credit cards, insurance, and taxes. It occurred to her that many young women must be in a similar situation.

A few years later, in 2008, von Tobel took a leave of absence from Harvard Business School (to which she had since returned) to start LearnVest.com. Her



goal was to explain personal finance in clear and understandable ways, and to provide tools that would help women manage their financial situation. LearnVest offers features for tracking expenditure and budgeting, as well as tutorials on saving money and reducing debt. Users can also pay to receive advice from financial experts and enroll in online finance courses. Alexa von Tobel believes that financial planning is something that everyone should be able to do and that taking control of your finances can help you achieve your dreams.

BY PHOTO/MARTIN WOLKE



Skills Handbook

- SECTION 1:** Critical Thinking Skills
- SECTION 2:** Data Bank
- SECTION 3:** Atlas
- SECTION 4:** Reading Graphs and Other Visual Resources
- SECTION 5:** Test-Taking Skills

CHECK OUT the **SKILLS HANDBOOK** at the end of the book for study tips and information that will help you be successful in this and other courses.

Practice Reading Primary and Secondary Sources

NEW YORK NEWS
October 29, 1929

STOCK MARKET CRASHES

New York—A massive decline in stock market prices took place yesterday on the New York Stock Exchange. More than 16 million shares changed hands as buyers rushed to sell stocks. The Dow Jones Industrial Average lost 12 percent to close at just 198, down from a high of 381 in September.

Stock prices have been falling for weeks. General Electric closed the day at 210 after peaking at 396 on September 3. RCA hit 50 earlier this year but bottomed out at 26 yesterday. “I’m ruined,” investor Andrew Adams told reporters on Wall Street. “I only hope the market recovers soon.”

- CHECK YOUR UNDERSTANDING**
Answer the following questions about the practice selection to check your understanding.
1. Is the text a primary or secondary source? How can you tell?
 2. What is the main idea of this text?
 3. Restate the events of the text using your own words.

Review Section 5 as you prepare to take your first test.

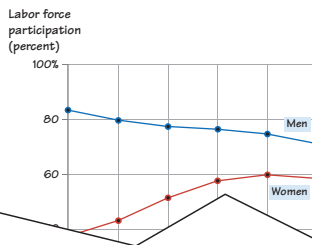
If you need a little extra help with reading articles or interpreting graphs, consult Sections 1 and 4.

SECTION 4 Reading Graphs and Other Visual Resources

READING LINE GRAPHS

Line graphs are visual depictions of numerical values. The line on the graph shows the changing levels of a certain measurement or measurements. Usually, line graphs show change over time. More than one line may appear on a graph to allow the viewer to compare and contrast data.

Prepare to Read Line Graphs
Learning how to find information on a line graph is important to reading it correctly.



SECTION 5 Test-Taking Skills

EFFECTIVELY ANSWERING A MULTIPLE-CHOICE QUESTION

Answering multiple-choice questions may seem challenging, but having a plan to address each question can make the test-taking process less intimidating.

Parts of a Multiple-Choice Question
All multiple-choice questions are set up in a similar way. Study this question to know what to expect.

The **question stem** asks the question you must answer.

Which statement best describes the circular flow of income?

Four choices give just one best

- **Read each answer choice carefully.**
Consider each answer choice one by one. Look for key words in the answer choices. Choices that include words such as *always* or *never* are often wrong.
- **Choose the best answer.**
Determine which answer choice best fits the question. Make sure that the answer choice addresses the important terms and ideas you identified while reading the question.

General Practices
Make sure that you mark your answer choice clearly and neatly. If you change an answer, be sure to completely erase your first choice. Use any time at the end of the test to double-check your earlier answers.

EFFECTIVELY ANSWERING AN OPEN-ENDED QUESTION



Personal Finance Handbook

- SECTION 1:** Take It to the Bank
- SECTION 2:** Get Interested in Money Math
- SECTION 3:** Learn to Earn
- SECTION 4:** Save and Invest Money
Give Yourself Some

PREPARE FOR THE FUTURE and learn how to manage your money by reading the PERSONAL FINANCE HANDBOOK.

ACTIVITY

Create a Resume

If you applied for a job today, what information could you list on your resume? Create a sample resume using the template below:

YOUR NAME HERE
123 Any Street, City, State, Zip Code
Phone: (000) 000-0000 | Email: yourname@youremail.com

PROFESSIONAL OBJECTIVE

State the kind of work you want to do and why you are qualified. Example: To sell technology products and services for a global electronics and experience in customer service. Write your objective here:

EXPERIENCE

Lots of activities, tips, links to useful websites, and other valuable information will help you get on the road to financial independence.

CREATE A BUDGET

Take a look at Avery's financial situation and help him create a realistic spending plan that will lead to a better financial future.

Current Situation

Avery is 24 years old and works in the mail room at a large company. His gross pay is \$2,500 per month, which gives him \$2,000 in net pay (after taxes and health insurance are taken out). He's been spending more than his take-home pay for a year and has accumulated over \$8,000 in credit card debt. Avery can't afford financing a lifestyle that he can't afford. Additionally, he is saving for retirement.

Monthly Spending*	
	AMOUNT (DOLLARS)
	\$2,000
	\$700

ACTIVITY

What Is a Job Application?

In addition to your resume, most potential employers require you to complete a job or employment application. The application can be customized by the employer, but it typically asks for personal information, references, and specifics about the job you're applying for. Submitting an

impressive resume and application will make you stand out from other applicants.

Here's a tip to save time when you're applying for a job: Complete the sample application below and make a copy to bring with you to each job interview.

Employment Application Information Sheet

POSITION APPLYING FOR:

First Name: _____ Middle Initial: _____ Last Name: _____

Current Address

Street and Apt #: _____ City: _____ State: _____ Zip Code: _____

Telephone: _____ E-mail: _____

Social Security #: _____ - _____ - _____ Driver's License #: _____ State: _____

I am an U.S. Citizen or otherwise authorized to work in the United States on an authorized basis: _____ Yes _____ No

Have you ever been convicted of a felony? _____ Yes _____ No

EMPLOYER



CHAPTER 1 & YOU On a typical weekend afternoon you probably have some tough decisions to make: will you watch a movie, hang out with friends, study for a big test, or do some odd jobs for neighbors? And with the money in your pocket, will you buy a pizza, donate to charity, download an album, or save for the future? Other tough decisions must be made at the national level. For example, should new tax dollars go toward building better schools or strengthening our national defense? And should new workers produce donuts or dream homes? This chapter explains how the tools of economics apply to tough calls like these. Even if you never make decisions about donuts or national defense, what you learn will help you make better choices at school, at home, and with the money in your pocket on a weekend afternoon.

Exploring Economics

MODULE 1: What Is Economics?

MODULE 2: Production Possibilities for a Nation

MODULE 3: The World of Economics

WHAT TO EXPECT FROM ECONOMICS

Now that you're studying economics, don't be surprised if people start asking you questions like "What's going to happen with the stock market?" If you don't know exactly what the stock market is, don't worry—you'll learn about it later in this book. But here's a secret: even if you memorized every bit of economic wisdom ever written, you still wouldn't be able to predict whether the stock market will rise or fall tomorrow. In fact, as you will learn in Chapter 12, not even the experts know what will happen to the stock market. But economics has a lot to offer. It can help you make sense of the daily news; make good decisions about your time and money; and lead a happier, more satisfying life.

How can economics do all that? Economics provides a framework for understanding the world around you. It offers a powerful set of decision-making tools for individuals, businesses, organizations, and governments. Economics can help you figure out what to do with your earnings, develop a successful business, and plan for the future. When businesses stumble, as many have recently, economics shapes policies to help workers hold on to their jobs and homes. Throughout the world, in the wake of severe weather, oil spills, and other disasters, economic forecasts help people prepare for jolts to food and energy prices.

Your study of economics will also help you evaluate messages from advertisers, the media, and the troubling number of tricksters out to capture your hard-earned money. For example, you've already read that the stock market is unpredictable, so you know to be wary of claims



Economics connects the dots between natural disasters and high food prices.

that a particular stock investment is a “sure thing.” Economic education can also boost your earnings: people with training in economics often earn high salaries because they have acquired skills valued in fields such as business, finance, and government.

Beyond that, you can expect familiarity with economics to help you become a better citizen. Before long, as a voter, a member of a household, and a participant in the life of your community, you will have opportunities to make important decisions. Economic literacy will help you navigate the swirling debates over budgets, the environment, health care, and taxes. Your exposure to economics might even inspire you to seek public office or change the world in some other way! In fact, many former presidents, members of Congress, business executives, rock stars, and philanthropists were economics majors.

An introduction to economics will not give you all the answers, but it will teach you the right kinds of questions to ask and give you a logical way to approach decision making. Ultimately, the economic way of thinking will help you explore your possibilities for success and happiness. And that’s why this book is titled *Explorations in Economics*! Let’s get started . . .



BOTTOM LINE

Economics provides a logical way for people to think about decisions at every level—personal, family, organizational, business, and governmental—and what these decisions mean for society.

MODULE 1

What Is Economics?

KEY IDEA: Economics deals with the choices we make, individually and as a society, under conditions of scarcity.

OBJECTIVES

- To explain what economics is and why it is important.
- To define opportunity costs.
- To differentiate between wants and needs.
- To name society's key economic resources.

You can't always get what you want!



Economics Is about More Than Money

What you're doing right now—reading this book—is the result of an economic decision. That might surprise you. When people think of *economics*, they usually think about money, complicated graphs and charts, or factories producing cars. Or they think about words like *prices*, *unemployment*, and *stocks*. Economics is about all of these things, as you will see. But it is also about you, right now, making the choice to sit down and read this book. Because economics, at its core, is about choices: **economics** is the study of choice under conditions of *scarcity*.

Scarcity exists if we desire more of something than we can have. For example, individuals face a scarcity of time, businesses face a scarcity of the materials used to make what they sell, governments face a scarcity of tax dollars, and countries face a scarcity of energy sources. A good way to understand scarcity is to think about your own life.

SCARCITY AND YOU

What is scarce for you? In other words, what do you desire that you can't have? If you would like a better cell phone, your own car, more clothes, and more time playing your favorite sport, these things are scarce for you. Behind these examples are two more basic forms of scarcity. One is the scarcity of money available for you to spend—as you know, it doesn't exactly grow on trees. The other is time. Everything you do takes time—sleeping, eating, doing chores, relaxing with family or friends, going to concerts or sporting events, reading, surfing the Internet, and your favorite: studying economics. But there are only so many hours in the day. You don't have as much time as you would like, so your time is scarce.

Each of us must deal with the scarcity of time and money. So when economists study choices, they usually focus on how people spend their time and money.



Scarcity Implies Tradeoffs

Whenever the scarcity of money or time forces you to make a choice, you face a *tradeoff*. You make a **tradeoff** when you give up one thing to get something else. For example, suppose you have \$25 to spend. You've considered buying a new cat, but you're fond of eating at the ice cream shop. If you spend your \$25 on a pet, you can't also spend it on banana splits. With an unlimited amount of money, you would not face a tradeoff—you could have a personal zoo and still eat ice cream every day. But because money is scarce, the tradeoff is

Economics is the study of choice under conditions of scarcity.

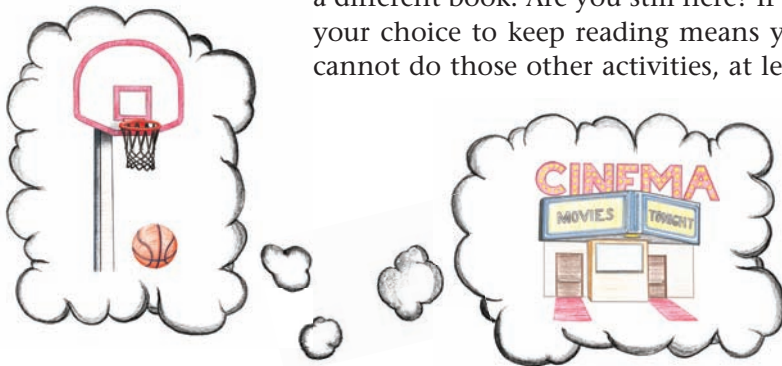
Scarcity exists if we desire more of something than we can have.

You make a **tradeoff** when you give up one thing to get something else.



Using your time to study today will have big payoffs in the future.

The **opportunity cost** of a choice is the value of the next-best alternative given up when that choice is made.



The movies or shooting hoops? What you give up is part of the opportunity cost of a choice.

necessary: you can't have your cat and eat banana splits, too.

Choices involving time have tradeoffs, too. For example, right now, you've made a choice to read this book. Even if a teacher or parent told you to read it, you still chose to do it rather than face the consequences of disappointing them. But you could be using your time in many other ways instead, like watching television, talking to friends, or reading a different book. Are you still here? If so, your choice to keep reading means you cannot do those other activities, at least

for now. That's the tradeoff involved in choosing to read this chapter.

Economists are interested in how people like you respond to tradeoffs. If you're wise, you consider the consequences of choices that arrive far into the future. For example, your choice to read this chapter is part of a larger decision to become more educated. Your education, in turn, will help determine the types of jobs you can obtain, your lifestyle, and your understanding of the world around you.

Next we'll look at more aspects of tradeoffs that wise decision makers never neglect.



DID YOU GET IT?

Name a good that is scarce for you. What tradeoff must you make to get it?

OPPORTUNITY COST

As you study economics, you'll learn valuable new ways to think about some familiar concepts. One of these concepts is *cost*. For example, if you go to a movie, what does it cost you? You might be tempted to say that the cost is what you pay for the ticket. If the price of the ticket is \$10, that's the cost of going to the movie.

Economics uses a more complete way of thinking about cost, called *opportunity cost*. The **opportunity cost** of a choice is the value of the next-best alternative given up when that choice is made. The opportunity cost captures the full tradeoff involved in a choice.

What is the opportunity cost of seeing a movie? The \$10 price of the ticket is part of the opportunity cost. If you pay for a movie ticket, you will have \$10 less to spend on other things. In addition to scarce money, the movie uses up some of your scarce time. If you do not go to the movie, you can spend both your money and your time on something else. The activity that you would give up for the movie is part of its opportunity cost.

Let's be more specific. What would you do with that time if you did not see the movie? Would you go to the mall

with friends? Practice basketball? Study? If you didn't see the movie, you would choose the best of these other options. Suppose the best alternative would be to practice basketball. Then to see the movie you must give up practicing basketball during that time. You don't actually give up a trip to the mall or study time, because you would not have chosen those activities anyway. The basketball practice you do give up is one part of the opportunity cost of the movie. The other part is the \$10 you actually pay for the ticket.

Because opportunity cost is central to the economic way of thinking, you will see the concept in many chapters of this book. Always remember that the opportunity cost of a choice is whatever you must give up for the choice, not just the amount of money you spend. If a choice uses up time, the next-best alternative for using that time is part of the opportunity cost.



DID YOU GET IT?

What is your opportunity cost if you go to the movies tonight?

SCARCITY AND SOCIETY

In addition to choices for individuals, economics deals with choices for *society*. By **society**, we mean any collection of people who share a common bond, such as those living in the same city or country. Tradeoffs for society arise from scarcity, just as they do for individuals. To understand what scarcity means to society, we must first consider our desires and how we attempt to satisfy them.

Needs and Wants

Everyone in a society has **needs** that must be met for survival. These include food, water, and shelter. In addition, we have **wants**—things we desire that are not essential. A television is an example of a want. Your life might be less fun without a television, but you don't need it to survive. People often confuse needs and wants. Do you ever say that you “need” something—a haircut, a candy

bar, a new outfit—that you could live without? If so, an economist would say you really meant “want.” You want a candy bar. You need enough food to stay alive.

It is vitally important to satisfy needs, but most of the tradeoffs in our society involve wants. That's because our needs are limited but our wants are unlimited. No matter how well we live, we can usually think of ways to live better. You can probably imagine having a more luxurious home, a snazzier bike, nicer clothes, and so on. *Economies* form as societies seek to satisfy their needs and wants. An **economy** is a system for coordinating the production and distribution of *goods* and *services*.

Goods and Services

Goods are physical items produced in an economy. Jeans, tennis rackets, popcorn, cars, and even houses are goods. **Services** are activities produced in an economy. A doctor's exam, a teacher's lesson, and a beauty treatment are all services. Services are used up at the same time they are produced, leaving no physical object behind.

When a doctor checks your throat or listens to your heart, you are receiving medical services. True, the doctor uses some goods during the examination, such as a tongue depressor and a stethoscope, but the checkup itself is a service. You cannot put the checkup in a bag and carry it home.

You use many services every day—perhaps more than you think. The teacher in your economics course provides educational services. If you ride the bus to school, your driver provides transportation services. The janitor at your school provides cleaning services. Your phone and computer wouldn't be the same without phone and Internet service providers. And your favorite musicians provide entertainment services. You may also benefit from services provided by waiters, lifeguards, police officers, plumbers, government officials, and mechanics, among others. Most of the discussions of goods in this book apply

An **economy** is a system for coordinating the production and distribution of goods and services.



Goods are physical items produced in an economy, such as jeans, tennis rackets, popcorn, cars, and homes.

Services are activities produced in an economy, such as education, entertainment, and health care.

A **society** is a collection of people who share a common bond, such as those living in a city, a country, or even the entire world.

Needs are minimal requirements of things such as food, water, and shelter that are necessary for survival.

Wants are things that are desired but are not essential to life.

Many teenagers have jobs that provide a service, such as baby-sitting.



Labor is the time and effort people contribute to the production process.

Capital is anything long lasting that is created by humans for use in production.

Physical capital is any long-lasting good that is used to make other goods or services.

Human capital refers to the skills and knowledge of workers.

Resources are the basic elements from which all goods and services are produced.

Entrepreneurship is the willingness of people to organize, operate, and assume the risks involved with business ventures.

Land is anything drawn from nature for use in the production of goods or services.

equally to services, although sometimes the services category goes unmentioned for the sake of brevity.



DID YOU GET IT?

What is the difference between a need and a want?

SCARCE RESOURCES

To create any good or service, we must tap into our limited supply of *resources*. In economics, the term *resources* has a very specific meaning: **resources** are the basic elements from which all goods and services are produced.

Economists classify resources into four types: *land*, *labor*, *capital*, and *entrepreneurship*. Let's take a closer look at each.

1. Land describes anything drawn from nature for use in the production of goods or services. This includes the fields where strawberries are grown and the properties where Taco Bell restaurants are built. Land also includes the *natural resources* found on or under the ground, such as the forests used to make books, the water sprayed to irrigate cotton

fields, the oil refined to make gasoline, and the iron ore smelted to make steel.

2. Labor is the time and effort people contribute to the production process. Labor is provided whenever a farmer plants strawberries, a cook makes a burrito, a lumberjack cuts down a tree, or an engineer designs an irrigation system.



3. Capital is anything long lasting that is created by humans for use in the production of other things. There are two types of capital: **Physical capital** is any long-lasting *good* that is used to make other goods or services. Examples include tractors, pans, axes, irrigation systems, and oil refineries. Although oil itself is used to fuel everything from tractors to chain saws, it is not considered capital because it is used up in the production process. **Human capital** refers to the skills and knowledge of workers. If you've ever tried to drive a tractor, cook a fancy meal, or cut down a tree, you know these acts take more than time and effort. People with more skills and knowledge produce better results. If you have surgery, fly in an airplane, or eat out, the human capital of the people providing the service matters to you!

4. Entrepreneurship is the willingness of people to organize, operate, and assume the risks involved with business ventures. Entrepreneurs bring together the land, labor, and capital to produce goods and services that satisfy our needs and wants. Although most towns have the land, labor, and capital required for a Taco Bell restaurant, they will have no restaurant unless there is an entrepreneur willing to make it happen. Entrepreneur

Glen Bell opened the first Taco Bell in Downey, California, in 1962. Among other examples of entrepreneurs, Oprah Winfrey started the giant media company Harpo (Oprah spelled backward), Larry Page and Sergey Brin founded Google, and Mark Zuckerberg created Facebook.

The term **inputs** is used to describe the four types of resources, along with anything made with these resources that is in turn used to make something else, such as cement, steel, lumber, and plastic. Because all inputs are either resources or made with resources, it is safe to say that resources are the building blocks of every good and service you consume.

Society's Tradeoffs

We've seen that to address some of our needs and wants, we must use resources to produce goods and services. The more resources we have, the more goods and services we can produce. Unfortunately, we cannot wave Harry Potter's magic wand and make resources appear out of thin air. Instead, we are limited by the availability of resources. At any point in time, a country has a given number of people who can provide labor, a set amount of land, fixed amounts of physical and human capital, and only so many entrepreneurs. Countries, like people, face a scarcity of resources.



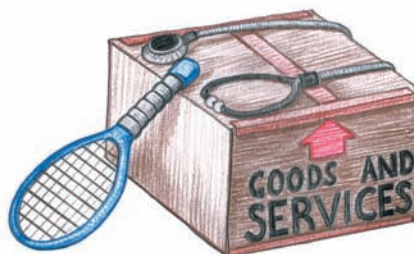
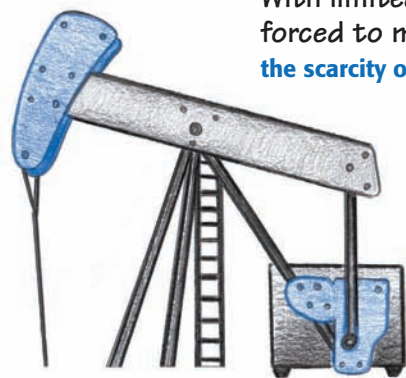
Writer, producer, and TV personality Tyra Banks is president and chief creative officer of Bankable Enterprises. After Banks became a successful entrepreneur with her show America's Next Top Model, she enrolled in a program at Harvard Business School. It's never too late to develop your human capital further!

Resource scarcity forces every society to make tradeoffs. If more resources are committed to the production of one good or service, fewer resources remain for making other things. To make more bicycles, the manufacturers would need more rubber for the wheels, metal for the frames, and space for the factories, and thus more land. They would also need more capital in the form of machinery to make bicycle frames and parts, labor for assembling and selling the bicycles, and entrepreneurs to organize the bicycle-making businesses. The resources used in the bicycle industry would be drawn away from the production of other things such as computers and cars. So the decision to have more bicycles means we must give up something else.

Inputs include the four types of resources—land, labor, capital, and entrepreneurship—along with anything made with these resources that is then used to make something else, such as cement, steel, lumber, and plastic.

Figure 1.1 Resource Scarcity

With limited resources and unlimited wants, society is forced to make tradeoffs. **DID YOU GET IT?** How does the scarcity of resources affect society's ability to satisfy its wants?



Resource scarcity



Limited ability to produce goods and services



Limited ability to satisfy unlimited wants



Even if a country buys goods from other countries, it still faces scarcity and tradeoffs. Imagine you buy a bicycle made in Canada. That bicycle was made using Canadian resources instead of U.S. resources. Did we escape a tradeoff by getting the bicycle in a different country? Not at all. Purchases across international borders go both ways! The U.S. dollars used to purchase Canadian goods are likely to return home as Canadians purchase U.S. goods. The result is really a trade: Canada provides bicycles to the United States in exchange



for goods made in the United States using U.S. resources. So to obtain the bicycle from Canada, we end up using some of our own resources to make goods for Canadians—resources that could otherwise have been used to produce something else. In general, a country cannot escape the scarcity of resources and the tradeoffs it creates. The next module takes a closer look at these tradeoffs.



DID YOU GET IT?
Name the four types of resources.

MODULE 1 REVIEW AND ASSESSMENT

Summing Up the Key Ideas: Match the following terms with the correct definition.

- | | | | |
|---------------------|-------------|---------------------|---------------------|
| A. Economics | F. Needs | K. Resources | P. Human capital |
| B. Scarcity | G. Wants | L. Land | Q. Entrepreneurship |
| C. Tradeoff | H. Economy | M. Labor | R. Inputs |
| D. Opportunity cost | I. Goods | N. Capital | |
| E. Society | J. Services | O. Physical capital | |

- _____ 1. Exists if we desire more of something than we have.
- _____ 2. Physical items produced in our economy.
- _____ 3. The willingness of people to organize, operate, and assume the risks involved with business ventures.
- _____ 4. The four types of resources, along with anything created from these resources that is then used to make something else (e.g., cement, steel, lumber, and plastic).
- _____ 5. The study of choice under conditions of scarcity.
- _____ 6. The term for what happens when you give up something to get something else.
- _____ 7. The value of the next-best alternative.
- _____ 8. The skills and knowledge of workers.
- _____ 9. Anything long lasting that is created by humans for use in production.
- _____ 10. Any collection of people who share a common bond, such as those living in the same city or country.
- _____ 11. Minimal amounts of food, water, and shelter necessary for survival.
- _____ 12. Activities produced in an economy.
- _____ 13. Things we desire that are not essential.
- _____ 14. A system for coordinating the production and distribution of goods and services.
- _____ 15. The time and effort people contribute to the production process.
- _____ 16. Anything drawn from nature for use in the production of goods and services.

_____ 17. Any long-lasting good that is used to make other goods or services.

_____ 18. The basic elements from which all goods are produced.

Analyze: After you finish this chapter, you might want to take inventory of the scarce resources you own. Classify each of the following items as **land, labor, physical capital, human capital, entrepreneurship**, or **not counted as a scarce resource**.

CLASSIFICATION

- 1. the tools you own _____
- 2. the area in your yard where you plant vegetables _____
- 3. the lawn mower you purchased to cut the grass _____
- 4. gasoline purchased to run the lawn mower _____
- 5. the workers hired to build the planting beds in the garden _____
- 6. the knowledge and skills acquired in your college degree program _____
- 7. the money in your pocket _____
- 8. the water and fertilizer used in your garden _____
- 9. the organizational skills you possess and use in the operation of your business to sell the vegetables you grow _____
- 10. the effort you exert in tending your garden _____

Apply: List an opportunity cost for each of the following activities.

OPPORTUNITY COST

- 1. completing this problem set _____
- 2. watching television tonight _____
- 3. going to bed early _____
- 4. playing a high school sport _____
- 5. having an after-school job _____
- 6. going to school after high school _____
- 7. going to work directly out of high school _____