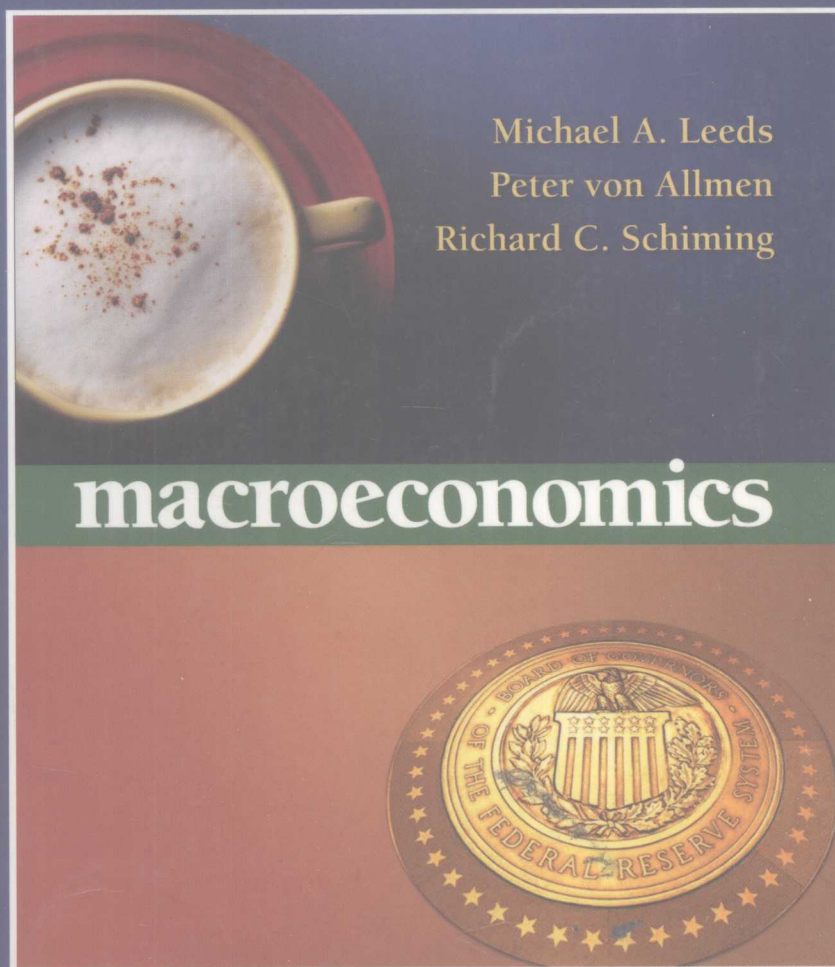


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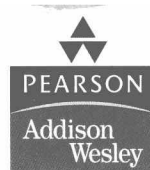
# macroeconomics

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*Temple University*

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London Toronto Sydney Tokyo Singapore Madrid  
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***For Holland and Helen Hunter, who taught me that economics is about people as well as equations. — Michael A. Leeds***

***For Barb and Jim Burnell, and Gene Pollock, whose love of economics and teaching fostered the same in me. — Peter von Allmen***

***To Patty. — Richard C. Schiming***

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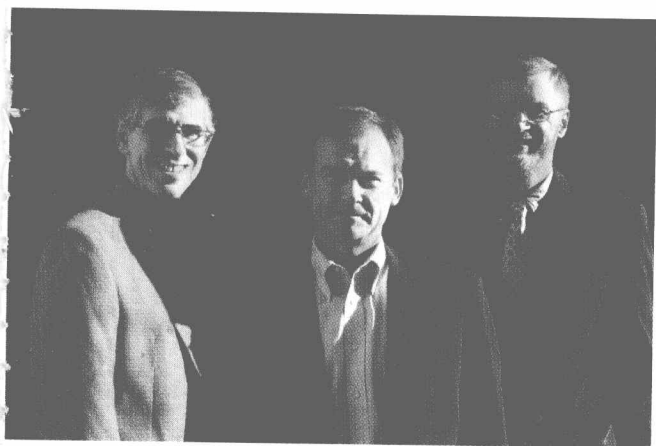
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# About the Authors



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**Richard C. Schiming** is Professor of Economics at Minnesota State University, Mankato. He received his B.A. in Economics from Valparaiso University and his Ph.D. from Ohio State University. His areas of teaching interest are macroeconomics and money and banking. His research is focused primarily on issues in economic education.



## “What? Another ‘Principles of Economics’ Text?”

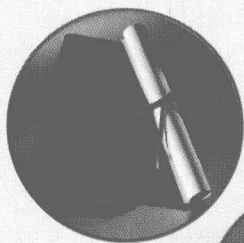
There have been so many introductory economics texts written over the years that you could not be blamed for wondering what one more could add to the mix. We have read and enjoyed any number of introductory textbooks. The same, however, cannot be said of students. The vast majority are turned off by the very qualities that first attracted us to economics. Like most people who go on to pursue an advanced degree in economics, we were drawn in by the analytical rigor and the mathematical purity. Our experience has shown that few students share this enthusiasm for the technical aspects of economics. Students still regard economics with a mixture of awe and boredom. They are cowed by its complexity and abstraction. Befuddled students tell their professors that while they understand the theory, they just don't understand all the graphs and equations that we so enthusiastically throw on the board.

## Behind Every Economics Principle Lies a Fascinating Story.

In this textbook, we introduce macroeconomics to students using an approach that has been very successful in our own teaching. Long after our students have forgotten the definitions and diagrams they memorized, they remember the stories that we tell. In addition to being serious theoreticians or policy analysts, economists are still essentially storytellers. In “field classes” that we have taught, we have found that economics can excite even reluctant students if we place the material into an appealing context. We apply this approach to introductory economics by taking great pains to present material in the context of a story taken from the news, business, history, or contemporary life at the very outset of each chapter and by continually reinforcing the application of theory to these real-world examples. How can students be motivated to master material if they cannot relate it to their lives? Students relate to the material more completely by seeing *how* economic reasoning applies even before they see the techniques themselves. This approach shows readers that economics is not just a dry set of theories but a way to view the world around them. The rhythm that stories create helps students remember the basic points both during the academic term and long after the course has ended.

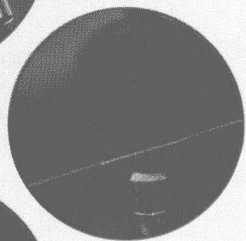


*Macroeconomics'* innovative approach to the core principles of economics is driven by an integrated learning and assessment system. The textbook builds on three pedagogical pillars for successful learning:



■ **ASSESS FOR SUCCESS.**

*Macroeconomics* treats assessment as an ongoing and essential part of the learning process. Tightly integrated tools help instructors hold students accountable for their learning.



■ **DRAW STUDENTS IN.**

*Macroeconomics* introduces concepts in the context of stories that capture students' interest and help them better understand and remember what they've read.



■ **MAKE THE CONNECTION.**

*Macroeconomics* challenges students to put economics to work as they analyze government policies, think critically about the news, and make personal decisions.

## **Overview**

Six core chapters introduce all the critical tools and concepts. Chapter 1 describes economics as an area of study and introduces key conceptual building blocks. Chapters 2 and 3 overview the U.S. economy and introduce the student to economic methodology. We introduce the basics of the critical demand and supply framework in Chapter 4 and then follow it with a treatment of elasticity in Chapter 5 that emphasizes the intuition and usefulness of elasticities. We close the introductory section with applications of the demand and supply model by considering the motivation for and effects of government intervention in markets. This discussion includes the concepts of consumer and producer surplus.

## **Measuring Macroeconomic Health**

Here we introduce students to the key features of macroeconomics: unemployment, inflation, and GDP. We open with unemployment because it is the most tangible and immediately relevant of the three concepts to students' lives. Our coverage of inflation includes recent changes in the way the Bureau of Labor Statistics calculates inflation without straying too far from the fixed market basket. Finally, the Gross Domestic Product chapter introduces students to the business cycle and fluctuations around potential GDP.

## **Aggregate Demand, Aggregate Supply, and Fiscal Policy**

Our careful and balanced look at the implications of changes in aggregate demand and aggregate supply emphasizes the basic building blocks of the standard model. Our even-handed approach to the short-run and long-run versions of the model does not side with either school of thought. In Chapter 10, we build the basic model by explaining the characteristics of both aggregate demand and aggregate supply and how they combine to determine both short-run and long-run macroeconomic equilibrium. Chapter 11 explores how changes in aggregate demand and aggregate supply explain both the short-run health of the macroeconomy and how an economy can adjust to the full employment level of output in the long run. We focus on the development of the short-run model in the context of the economic challenges of the Great Depression in Chapter 12. An appendix to Chapter 12 presents the Keynesian Cross model. In Chapter 13, we show how changing taxes and government spending can move an economy closer to the full employment level of output. We rely on aggregate demand and aggregate supply to illustrate fiscal policy. We take a close look at the causes and consequences of the federal budget deficit and national debt in Chapter 14.

## **Money and Monetary Policy**

Chapter 15 defines money by focusing on the basic principles, characteristics, and functions of money assets. We also describe bank operations in a fractional reserve world. Chapter 16 explores how banks create money by accepting deposits and making loans. We also investigate the tools of monetary policy used by the Fed in response to the 9/11 crisis. In Chapter 17, we look at the short-run and long-run roles that money plays in the macroeconomy by focusing on the impact of changes in the money supply on interest rates.

## **Long-Run Economic Health**

Chapter 18 explores the conflict between active and passive stabilization policies in macroeconomic theory and policy in the context of the response to the recession of 2001. Chapter 19 covers growth theory and policies designed to promote growth. We use this chapter as a link between the macroeconomic and international sections of the text by emphasizing differences in growth among countries and asking why some countries have grown faster than others. We also discuss development and how it relates to (and differs from) growth.

## **International Trade and Finance**

Chapters 20 and 21 allow instructors to cover the material without assigning supplemental readings. Chapter 20 carefully establishes the costs and benefits of trade as well as the impact of barriers to trade. We make extensive use of consumer and producer surplus to show who wins and loses from trade. Chapter 21 covers the impact of trade blocs on trade patterns.

Macroeconomics treats assessment as an ongoing piece of the learning process. Throughout the chapter, and in the **MyEconLab** Study Guide at the end of each chapter, students are directed to **MyEconLab**, the full-featured online homework and tutorial system that accompanies *Macroeconomics*.

...react to changes in tastes and preferences of consumers for the two products. In a market economy, producers have an incentive to produce gloves and mittens in quantities that best satisfy consumers.

### Effects of Changes in Demand or Supply on Equilibrium

As we saw in Figure 4.13, after an equilibrium price is established, it will not change unless surrounding conditions change. But what happens if the supply or demand curves shift? For example, in the mid-1970s, a severe cold spell in Brazil killed many coffee plants. For the next two years, Brazil's coffee production fell from 2.3 million bags to 9.3 million bags.<sup>2</sup> The frost decreased the supply of coffee, shifting the supply curve to the left and reducing the quantity available at all prices.

How would such a decrease in supply affect coffee drinkers in Burlington? To see, let's look at the leftward shift of the supply curve in panel (a) of Figure 4.14. The shift of the supply curve from  $S_1$  to  $S_2$  means that consumers want to buy more coffee than is available at the old price of \$1.25. An increase in price eliminates the shortage. The equilibrium price of coffee rises from \$1.25 to \$1.75, and the equilibrium quantity falls from 630 cups to 530 cups. Some consumers buy the same amount of coffee at the new, higher price. Others buy coffee as well, but not as much as before. Some consumers switch to substitutes such as tea and hot chocolate. Because of the negative slope of the demand curve, we can say that *all else equal, when supply decreases, the equilibrium price rises and the equilibrium quantity falls*.

The higher prices that resulted from the severe cold weather in the 1970s also had a longer-term effect on the coffee market. Over time, other nations, such as Uganda, responded to the increased coffee prices by increasing their production. Because

<sup>2</sup> Robert M. Dunn Jr., "Oranges, Coffee and Arsenic," [usinfo.state.gov/products/pubs/market/mkrsb6/](http://usinfo.state.gov/products/pubs/market/mkrsb6/)

▲ Textbook

Online Integration ►

**The Market for Anti-Malaria Drugs**

In this chapter you looked at the market for coffee. Now we will explore another example, the market for artemisinin, an extract from sweet wormwood that is an essential component of anti-malaria medication. Read the *New York Times* article "Plant Shortage Leaves Campaigners Against Malaria at Risk." The article discusses changes in the artemisinin market, as a result of a sharp growth in the demand for this drug. After reading the article, work the analysis section, which will guide you through the changes in it described in the article.

**Key Terms**

- demand
- quantity demanded
- supply
- supply curve
- equilibrium price
- supply
- quantity supplied
- equilibrium price

**Analysis**

1. What was the market for artemisinin like prior to changes in the demand?
2. What happened when the World Health Organization announced for more artemisinin?
3. What was the response of the drug's suppliers?
4. Is an alternative solution available?

**Changes in Supply**

According to the article, immediately after the W.H.O.'s forecast that the world would need 130 to 220 tons of artemisinin in 2005, the price rose to an average of \$410 per ton. Drug companies in Switzerland and India said they could not get enough of the drug at any price. Some suppliers merged or contracted and stopped selling the drug. Evidence of a shortage emerged when drug manufacturer Novartis said it could produce only about half of the 4.5 million courses of its Co-Artem drug that it had promised to deliver to the W.H.O.

Click on a tool in the graphing palette to select it. Draw all objects required by the exercise, then submit your answer.

The correct market for artemisinin is shown. Please draw and label a new supply curve in the market for artemisinin after the drug suppliers reacted to the increase in demand.

Choose a tool in the palette and follow the instructions to create your graph.

Clear Answer Check Answer

## eThemes of the Times

A universal goal of all principles of economics courses is motivating students to read news articles and analyze the economics behind the stories. Twice per chapter, *Macroeconomics* presents an interactive news analysis problem built around timely, relevant full-text articles from the *New York Times*. The **MyEconLab** logo in the margin of the text directs students to go online. The exercises solidify students' understanding of chapter concepts. Separate preloaded quizzes in **MyEconLab** can be assigned as homework following completion of the analysis problems, providing yet another assessment opportunity for instructors.

## MyEconLab Study Guide

*Macroeconomics*' seamless integration among the textbook, assessment materials, and online resources sets new standards in the principles of economics market. Each chapter concludes with a set of problems correlated to those that students encounter online in **MyEconLab**. Even the numbering is the same, so instructors can easily assign exercises for homework or quizzes. Instructors can use **MyEconLab** to assign the end-of-chapter **MyEconLab** Study Guide exercises online—and **MyEconLab** will grade and track student work in an online gradebook.

## myeconlab STUDY GUIDE

### HERE'S HOW MyEconLab CAN HELP YOU GET A BETTER GRADE

1. Log into MyEconLab and take Practice Test chapter-A (to log in for the first time, see page 30 for instructions.)
2. Based on your test results, MyEconLab will identify the areas where you need further work and create a personal Study Plan for you.
3. Your Study Plan contains the exercises listed below and others like them that will target the specific chapter topics you need to focus on. You'll receive instant feedback and find links to tutorials, animations, and the online textbook to help you study.
4. When you're ready, go take Practice Test chapter-B and demonstrate how your results have improved.

### Section 4.1, Exercise 1

The following table shows the demand schedule for two-liter bottles of cola per day.

Price per Bottle	Quantity Demanded
\$3.00	0
\$2.50	10
\$2.00	20
\$2.50	30
\$2.00	40
\$1.50	50
\$2.00	60
\$0.50	70
\$0.00	80

- a. Use the table to graph the demand for cola.
- b. If the price of cola decreases from \$2.50 to \$2.00, how would you best describe the change?

### Section 4.1, Exercise 2

Boxed macaroni and cheese is considered by many to be an inferior good. It has many substitutes, such as various frozen dinners.

- a. What would happen to the demand for macaroni and cheese if consumer incomes rise?

- a. Use the table to graph the supply and demand curves and find the equilibrium price and quantity of pizza.
- b. Assume that during the summer, most of the students leave town. Show the probable effect on the market and on the equilibrium price and quantity of pizza.

### Section 4.3, Exercise 2

The following table lists one month's supply and demand for bushels of corn in Chicago.

Number of Bushels Demanded	Price per Bushel of Corn	Number of Bushels Supplied	Shortage or Surplus
200,000	\$0.50	87,500	
175,000	\$1.75	100,000	
150,000	\$1.00	112,500	
125,000	\$1.25	125,000	
100,000	\$1.50	137,500	
75,000	\$1.75	150,000	

The market supply and market demand schedules below describe the market for lawn tractors in Des Moines, Iowa.

Price	Quantity Demanded	Quantity Supplied
\$4000	0	4000
\$3000	1000	3000
\$2000	2000	2000
\$1000	3000	1000
\$0	4000	0

Draw the market supply and demand curves, and draw a point at the equilibrium price and quantity.

The equilibrium quantity is

The equilibrium price is

Choose a tool in the palette and follow the instructions to create your graph.

Clear Answer Check Answer

▲ Textbook

Online Integration



# DRAW STUDENTS IN

Each chapter of *Macroeconomics* introduces theory and models in the context of a story—taken from the news, business, history, or contemporary life—that is followed through the chapter. The stories engross students and improve their retention by providing context.

## Stories That Engage

In Chapter 4, for example, a trip to a coffee shop in Burlington, Vermont, adds flavor to the concepts of supply and demand while making these key tools tangible to students.



# 4

## Introduction to the Demand and Supply Framework

**M**illions of U.S. consumers could not imagine beginning the morning without partaking of the country's second largest import. This ritual occurs in homes, shops, schools, restaurants, and offices across the country. Any ideas on what this product might be? The answer is coffee.

According to the National Coffee Association, the average U.S. coffee drinker consumes three cups of coffee per day. Our love of coffee is evident all over the United States in towns and cities that are lined with cafes, doughnut shops, and specialty stores eager to satisfy coffee cravings. Starbucks, alone, offers 45 coffee flavors for the coffee enthusiast.

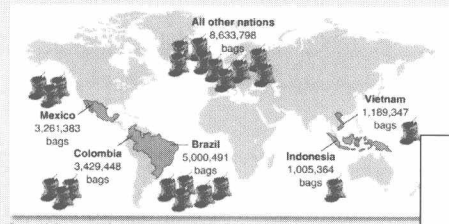
For many coffee drinkers, no other product is consumed with such passion. Coffee is a magic potion with the satisfying flavor and caffeine infusion needed to invigorate them at the start of the day. Those consumers seeking the effects of caffeine might not care whether the coffee is instant, automatic drip, or brewed at the local gas station. For others, coffee is a culinary experience. Coffee fanatics seek perfection with the aroma, acidity, body, and flavor of the coffee. Although the beans used to brew the coffee are grown thousands of miles away in countries including Colombia, Peru, and Vietnam, a quick trip through the bean grinder and the coffee machine can provide the finished product without leaving the house.

Odds are good that you either drink coffee regularly or have friends who do. Even though price is an important determinant of how much coffee you and your friends consume, you probably have not thought much about how the price of coffee is determined or where the coffee that you

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FIGURE 4.11

**Top Coffee-Exporting Nations, 1998–1999**  
The total number of bags of coffee exported was 22,519,831, and each bag is 60 kilograms or 132.276 pounds. Central and South American nations supply the most U.S. coffee.



Source: U.S. Department of Commerce, December 1999

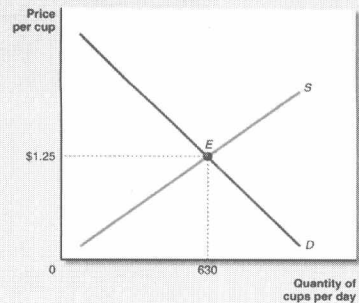
of workers in the coffee industry rise, *ceteris paribus*, the cost of producing rises as well. As a result, coffee shops are less willing to go to the expense of producing and selling output at any price than they were before the wage increase. The supply curve shifts leftward. If wages fall, the supply curve shifts rightward.

For coffee sellers, one of the primary inputs is the beans used to brew the coffee. Figure 4.11 shows the major sources of U.S. coffee imports. Most of the supply comes from Central and South American countries, including

Chapter 4 • Introduction to the Demand and Supply Framework

FIGURE 4.12

**Equilibrium in Burlington's Coffee Market**  
By combining the market demand and supply curves, we can determine the equilibrium price and quantity in the coffee market. At a price of \$1.25 per cup, the supply curve crosses the demand curve. The quantity demanded exactly matches the quantity supplied at this price, and the market clears.



today's price in the paper. Where, then, does the price come from? It turns out that the price is determined by the interaction of market forces that determine the price of coffee. These forces include the willingness and ability of consumers to purchase coffee at various prices and the willingness and ability of producers to supply coffee at various prices.

# MAKE THE CONNECTION



Within the textbook and online, *Macroeconomics* encourages students to apply economic concepts to the analysis of news, national policy debates, and personal decisions. Three techniques reinforce the material in each chapter.

## Test + Extend Your Knowledge

Students check whether they have assimilated what they have read in two *Test + Extend* segments in each chapter. Students who cannot answer the “test” portion are informed that they must go back over the material. Students who have mastered the material have the chance to apply their knowledge in a new context in the “extend” portion. Many segments link students to interesting Web sites that illustrate chapter topics and give students the opportunity to build their economic research skills

### TEST + EXTEND Your Knowledge

- 1. TEST** Explain whether and how each of the following enters the circular flow of economic activity:
- A teller's salary at Citizens Bank
  - The corporate headquarters built for the H. J. Heinz Company
  - The \$10 that a kindergartner in Pittsburgh received for her birthday from her grandfather

- 2. EXTEND** The “Country at a Glance” tables in the Data and Research section of the World Bank Web site (using the link at [www.iaw-bc.com/feeds/ch03](http://www.iaw-bc.com/feeds/ch03)) provide information on production for many countries. Use these tables to find the distribution of output among the agriculture, manufacturing, and services categories in: (a) an industrialized country other than the United States (such as Japan or the Netherlands); and (b) a developing country (such as Bolivia or Uganda). How does the distribution of output in these countries differ from one another? Why do you think they differ?

and household income. In 2003, government purchases of goods and services accounted for more than 18 percent of all U.S. economic activity. To accurately depict the U.S. economy, our circular flow model must account for the actions of government. Before discussing the role of government as a whole in the circular flow, we briefly describe the different levels of government.

#### Levels of Government

When most people speak of government, they typically mean the nation's central or federal government. In fact, there are three levels of government: the federal, state, and local.

## LifeLessons

*Sometimes, More Driving Can Help You Save On Gasoline*

Have you ever noticed that the price of gas can vary quite a bit from one state to another? In addition to federal (nationwide) gas taxes of 18.4 cents per gallon, there are state taxes ranging from a low of 8 cents per gallon in Alaska to 35.1 cents per gallon in Hawaii. These taxes are often used to pay for road maintenance. Florida and Georgia are neighboring states, yet state taxes are 12.2 cents per gallon in Georgia and 29.6 cents per gallon in Florida. The difference may be enough to entice Floridians living near the Georgia state line to bear the opportunity cost of their time (and the gasoline needed to make the trip) to drive to

Georgia to make their gasoline purchases. The resources used when consumers in Florida drive to Georgia and back to make gasoline purchases is yet another source of waste created by the tax. That is, consumers use resources (time and gasoline)—that could be otherwise employed—to make the trip across the border to pay the lower tax in Georgia. Thus, consumers should carefully consider these costs to ensure that the costs of the trip exceed the benefits. Despite the costs they impose, differences in tax rates across local governments are quite common.

## Life Lessons

Economic principles govern the decisions by major corporations and governments that involve billions of dollars and affect millions of lives. They also apply to hundreds of decisions that individuals make in their everyday lives. *Life Lessons* examine the economics behind these everyday decisions, such as the opportunity cost of traveling to purchase low-priced gas or the benefits of being flexible when shopping for airline tickets.

## Strategy and Policy

These features delve into firm and government policies and issues—such as the effectiveness of anti-smoking efforts in Ukraine and the shopping habits of U.S. teens—and challenge students to analyze them using economic tools. Instructors can use the accompanying *Critical Thinking* questions as the basis of written assignments.

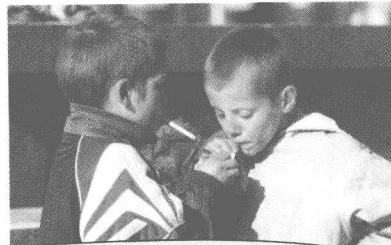
18 to 28 years old	0.37	0.42	0.24
29 or more years old	0.28	0.33	0.15



### Strategy and Policy

Getting Smokers to Quit When They're Young<sup>2</sup>

Governments around the world are concerned with cigarette smoking among teens. One reason is that smoking has well-known adverse health effects. Another is that the addictive properties of tobacco turn many teens who start smoking into long-term smokers. Historically, governments have tried to discourage smoking through taxes on cigarettes. A study by the Alcohol and Drug Information Centre in Ukraine shows how difficult this problem can be from a policy perspective. It also highlights how important it is to get young smokers to quit before they reach adulthood. Table 5.5 shows results from the study. It indicates that the price elasticity of demand for cigarettes is inelastic at all ages, but becomes more inelastic as smokers age and as



their income increases. While teen smokers have an elasticity of between 0.52 and 0.70, adults over age 28 have an elasticity of only 0.15 to 0.28. They are less than one-half as sensitive to price increases as teens.

According to the report, at current prices for cigarettes in Ukraine, a 100-percent increase in the cigarette tax would result in an 8.8-percent increase in the total cost per pack. Based on the elasticities shown, the short-run impact would be about a 6-percent decrease in teen smokers, but only a 1.32-percent decrease in high-income smokers over 28 years old. However, in the long run, the benefits of such a tax would be con-

## myeconlab

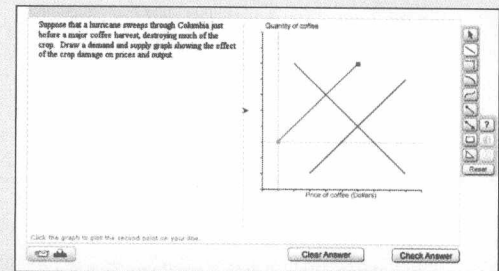
Get Ahead of the Curve

**MyEconLab**—the online homework and tutorial system that is packaged with every new copy of *Macroeconomics*—puts students in control of their own learning with study and practice tools correlated with the online, interactive version of the textbook and other media resources. Within **MyEconLab's** structured environment, students practice what they learn, test their understanding, and then pursue a Personalized Study Plan that **MyEconLab** generates for them based on their performance on practice tests.

### At the core of MyEconLab are the following features:

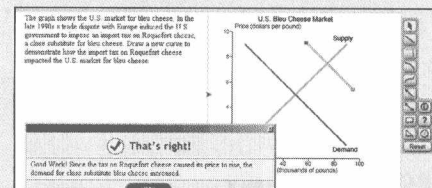
- **Practice Tests**—Practice tests enable students to test their understanding and identify the areas in which they need to do further work. Many questions ask students to work with graphs: interpreting them, manipulating them, and even drawing them. Instructors can use the supplied pre-built tests or create their own tests.
- **Personalized Study Plan**—Based on a student's performance on a practice test, **MyEconLab** generates a Personalized Study Plan that shows where further study is needed.
- **Additional Practice Exercises**—The Personalized Study Plans direct students to additional exercises for each topic. Additional practice exercises are keyed to each section of the textbook and link students to the eText with animated graphs.
- **Tutorial Instruction**—Launched from the additional practice exercises, tutorial instruction is provided in the form of solutions to problems, step-by-step explanations, and other media-based explanations.

- **Powerful Graphing Tool**—Integrated into the practice tests and additional practice exercises, the graphing tool lets students manipulate and even draw graphs so that they grasp how the concepts, numbers, and graphs are connected. (**MyEconLab's** powerful graphing application evaluates and grades these graphs.)

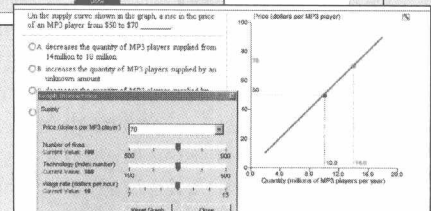


- **MyEconLab features three types of graphing problems**

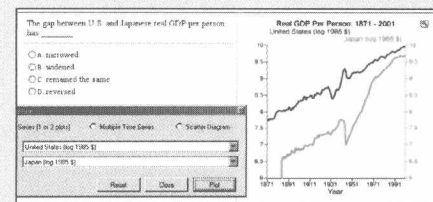
**Draw Graphs**—**MyEconLab's** Draw Graph problems automatically grade the graphs students draw.



**Model-based Graphs**—Students can change data inputs and watch graphs shift. Multiple-choice, true/false, and short-answer questions quiz students on their interpretations of the graph.



**Data Graphs**—Students can plot up to five variables against each other, giving them a clear picture of how economic indicators relate to each other.



**MyEconLab** provides flexible tools that allow instructors to easily and effectively tailor online course materials to suit their needs. Instructors can create and assign tests, quizzes, or graded homework assignments. **MyEconLab** saves time by automatically grading all questions and tracking results in an online gradebook. **MyEconLab** can even grade assignments that require students to draw a graph.

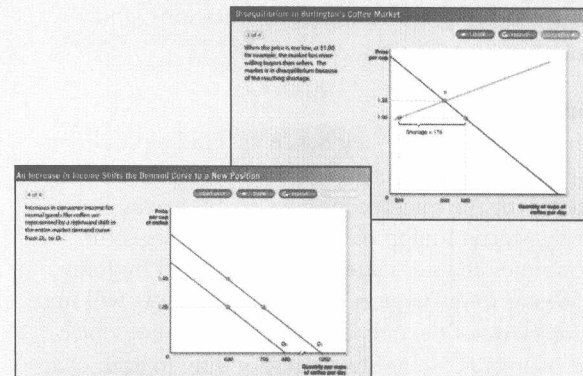


After registering for **MyEconLab**, instructors have access to downloadable supplements such as instructor's manuals, Microsoft PowerPoint lecture notes, and test banks. Test banks can also be used within **MyEconLab**, giving instructors ample material from which they can create assignments.

For more information about **MyEconLab**, or to request an Instructor Access Code, visit [www.myeconlab.com](http://www.myeconlab.com).

## Additional MyEconLab Resources

- **Textbook content**—Quick reference to specific pages of the text that correspond to each Study Plan exercise. **MyEconLab** is also available in a version that contains a full, searchable online text. Ask your Addison-Wesley representative for details.
- **eStudy guide**—The entire Study Guide in electronic format and printable.
- **Econ Tutor Center**—Staffed by qualified, experienced college economics instructors, the Econ Tutor Center is open five days a week, seven hours a day. Tutors can be reached by phone, fax, e-mail, or White Board technology. The Econ Tutor Center hours are designed to meet your students' study schedules, with evening hours Sunday through Thursday. Students receive one-on-one tutoring on examples, related exercises, and problems.
- **Research Navigator**—(CourseCompass version only) Extensive help on the research process and four exclusive databases of accredited and reliable source material including the *New York Times*, the *Financial Times*, and peer-reviewed journals.



- **Animated figures**—Over 125 figures from the textbook presented in step-by-step animations with audio explanations of the action.
- **Glossary Flashcards**—Every key term is available as a flashcard, allowing students to quiz themselves on vocabulary from one or more chapters at a time.
- **Weekly News**—Featuring a new microeconomic or macroeconomic current events article, with discussion questions posted online weekly. Instructor answer keys are available.

## Instructor's Manual

In addition to numerous ideas for enlivening your lectures, the *Instructor's Manual* provides in-depth solutions to questions and exercises from the book. Material for the microeconomics chapters was authored by Myra Moore of the University of Georgia; the macroeconomics chapter materials were written by Robert Eyler of Sonoma State University.

The *Instructor's Manual* contains:

- chapter overviews
- chapter outlines
- learning objectives to provide instructors with a bird's-eye view
- in-depth lecture launchers with innovative ideas for engaging and motivating students
- tips on circumventing common student errors
- ready-to-assign questions for class discussion and activities
- answer keys for the *Test + Extend* exercises, *Strategy and Policy* critical thinking questions, and end-of-chapter problems

## Study Guide

With exercises to reinforce key concepts and helpful learning tools, the *Study Guide* is an essential companion to the text. Material for the microeconomics chapters was authored by Morris Knapp of Miami Dade College; the macroeconomics chapter materials were written by John Krieg of Western Washington University. Students will find helpful overviews of the chapter contents, learning objectives, and listings of key terms corresponding to each chapter. Checkpoint tips advise students on common conceptual pitfalls related to chapter contents and build their graph-building and interpretation skills. The Self-Test, which includes fill-in-the-blank, true/false, multiple-choice, and problem-based questions, provides the additional exercises students need to cement their understanding of key concepts. Sample midterm and final exams provide a final check before critical points in the semester.

## Test Banks

Four printed test banks—two each for the microeconomic and macroeconomic volumes—provide a wealth of testing material. The top-notch question-writing team includes Emil Berendt of Friends University, S. Hussain Ali Jafri of Tarleton State University, Leonie Stone of SUNY Geneseo, Laura A. Wolff of Southern Illinois University Edwardsville, and Anthony Zambelli, Cuyamaca College. Each chapter offers a wide selection of multiple-choice, short-answer, and essay questions. Questions have been accuracy-checked and vetted with real students.

## Instructor's Resource Disk with Microsoft PowerPoint Lecture Presentation, Computerized Test Banks, and Instructor's Manual

Compatible with Windows and Macintosh computers, this CD-ROM provides numerous resources. The Microsoft PowerPoint Lecture Presentation was developed by Michael Youngblood of Rock Valley College. Work key figures and graphs from the text into your lectures with these customizable slides. The CD features graphs from the text and outlines key terms, concepts, and figures. For added convenience, the CD also includes the Microsoft Word files of the entire *Instructor's Manual* and computerized *Test Bank* files. The easy-to-use testing software (TestGen with QuizMaster for Windows and Macintosh) is a valuable text preparation tool that allows professors to view, edit, and add questions.

## Overhead Transparencies

Incorporate important figures and graphs into your course with this selection of full-color overhead transparencies.

## Study Card

This handy laminated reference card contains key definitions, concepts, equations, and graphs.

In addition to access to **MyEconLab**, the student's ultimate online tool that is automatically packaged with each text, the following supplementary materials are available to aid and enhance students' mastery of concepts:

### **Economist.com Edition**

The premier online source of economic news analysis, Economist.com provides your students with insight and opinion on current economic events. Through an agreement between Addison-Wesley and *The Economist*, students can receive a low-cost subscription to this premium Web site for 12 weeks, including the complete text of the current issue of *The Economist* and access to *The Economist's* searchable archives. Other features include Web-only weekly articles, news feeds with current world and business news, and stock market and currency data. Professors who adopt this special edition will receive a complimentary one-year subscription to Economist.com.

### **Wall Street Journal Edition**

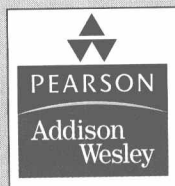
When packaged with this text, Addison-Wesley offers students a reduced-cost, 10- or 15-week subscription to the *Wall Street Journal* print edition and the *Wall Street Journal Interactive Edition*. Adopting professors will receive a complimentary one-year subscription to both the print and interactive versions.

### **Financial Times Edition**

Featuring international news and analysis from journalists in more than 50 countries, *The Financial Times* will provide your students with insights and perspectives on economic developments around the world. For a small charge, a 15-week subscription to *The Financial Times* can be included with each new textbook. Adopting professors will receive a complimentary one-year subscription, as well as access to the online edition at FT.com.

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For today's student on the go, we've created a highly portable version of *Macroeconomics* that is three-hole punched. Students can take only what they need to class, incorporate their own notes, and save money! Each Books à la Carte text arrives with a laminated study card, perfect for students to use when preparing for exams, plus access to **MyEconLab**.

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# Acknowledgments

When we first agreed to write this text, it quickly became clear that none of us fully understood the magnitude of a two-semester principles book, even though two of us had already been through the process of writing a text before. We are indebted to countless others for pitching in with their hard work and innovative ideas. First and foremost, we are thankful for our excellent team at Addison-Wesley. Denise Clinton and Sylvia Mallory provided strategic input at critical junctures throughout the project. Peg Monahan helped shape early drafts and kept us mindful of our audience every step of the way. Adrienne D'Ambrosio championed the project within the editorial group and personally directed many of the market development activities. Stephen Frail's economics forums and grasp of market nuances were incredible assets. Dottie Dennis provided expert market research and administrative support. We benefited from Dona Kenly's market development efforts. Above all, special thanks goes to Senior Development Editor Rebecca Ferris-Carusio, whose diligence, expertise, and guidance in developing the manuscript were incredible; she is the best development editor in the business.

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