# McConnell Brue

14

MACROECONOMICS

# MACROECONOMICS

# Principles, Problems, and Policies

Fourteenth Edition

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To Mem and to Terri and Craig

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## Macroeconomics Principles, Problems, and Policies

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## PREFACE

Welcome to the fourteenth edition of *Macroeconomics* (and its companion editions of *Economics* and *Microeconomics*), the nation's best-selling economics texts. About 4.5 million U.S. students have used this book. It has been adapted into Canadian, Australian, Italian, and Russian editions and translated into French, Spanish, and several other languages.

The resurging U.S. economy, changes in the focus of monetary policy, economic turmoil in Southeast Asia, swings in exchange rates, capitalism in Russia—what an interesting time to teach and learn economics! Clearly, those who understand economic principles will have a distinct advantage in making sense of the economy and successfully participating in it.

## WHAT'S NEW?

We thoroughly revised, polished, and updated this edition. (Using a software analogy, this is version 14.0, not 13.1 or 13.2.) The comments of over 100 reviewers motivated many of the changes and helped us create a text full of energy and innovation.

## **Highly Revised Chapters**

Three chapters in this edition are quite revised.

- Chapter 16: Extending the Analysis of Aggregate Supply. In this greatly revised chapter we introduce the distinction between short-run and long-run aggregate supply and then use that distinction to develop an "extended aggregate demand and aggregate supply model." We then use that model to analyze demand-pull inflation, cost-push inflation, and recession. In the remainder of the chapter we look at other aggregate supply topics such as the Phillips Curve and supply-side economics.
- Chapter 17: Disputes in Macro Theory and Policy. In this nearly new chapter we broaden the ideas developed in Chapter 16 to discuss modern disputes in macro theory and policy. We now use the classic Keynesian discussion of previous editions as a

historical backdrop to an examination of modern debates on (1) the sources of macro instability, (2) the extent of "self-correction" in the economy, and (3) the debate over "rules" versus "discretion." This chapter systematically examines new classical economics and introduces ideas such as misperceptions theory, coordination failures, efficiency wages, and insider-outsider relationships.

• Chapter 23: Transition Economies: Russia and China. We added a discussion of China to the previous edition's chapter on Russia. We look briefly at Marxian ideology, and the institutions, goals, and major problems of central planning, and then turn to the collapse of the Soviet economy, the elements of the Russian reform, and contemporary outcomes. Finally, we discuss the main features of market reform in China, including rapid economic growth and remaining difficulties.

## New Pedagogy

- Quick Quizzes. We added 4 multiple-choice questions as Quick Quizzes to each of the 13 Key Graphs. Each quiz relates to the content of the specific Key Graph and is written in the same style and at the same level of difficulty as the test bank questions. The correct answers are provided upside down so students can instantly measure their understanding of key concepts.
- Internet Questions. Each chapter contains two Web-Based Questions which require students to access specified Internet addresses. These questions help students apply specific economic concepts and introduce them to relevant Macroeconomic Internet sites.

## A Building-Block Approach to Macro

With the changes in this edition, we created a fully integrated building-block approach to macro theory, policy, and issues. Specifically, we

• Build the aggregate expenditures model (AE model)

- Derive aggregate demand from the AE model and develop the aggregate-demand-aggregate supply model (AD-AS model)
- Use the AD-AS model to discuss fiscal policy
- Introduce monetary considerations into the AD-AS model
- Use the AD-AS model to discuss monetary policy
- Extend the AD-AS model by distinguishing between short-run and long-run aggregate supply
- Apply the "extended AD-AS model" to macroeconomic instability, modern macroeconomic disputes, and economic growth

# Greater Emphasis on the Economic Perspective

Newly organized Chapter 1 now begins with a discussion of scarcity and choice, rational behavior, and marginal analysis. In Chapter 2 we use the ideas of marginal benefits and marginal costs to determine the optimal position on the production possibilities curve. We continue to reinforce the economic perspective in the remainder of the book in a number of discussions, including those on investment decisions and international trade theory.

## Added Directness, Reduced Formalism, Extra Human Interest Material

Our line-by-line editing adds directness and reduces formalism, but we were careful to *not* reduce the thoroughness of our explanations. Where needed, the "extra sentence of explanation" remains a distinguishing characteristic of *Macroeconomics*. Students will especially enjoy our new Last Words in Chapter 4, Pink Flamingos and "Dollar Votes;" and Chapter 23, I Think Everything Will be OK. All 23 Last Words present interesting applications with attractive modern art.

## Other New Topics and Revised Discussions

Along with the changes just discussed, there are many other revisions. Here are just a few examples.

• **Part 1.** Chapter 1: Figure 1-1 and its discussion revised; new, livelier examples. Chapter 2: Improved discussion of the economic rationale for increasing costs; new applications (land-use controversies, devas-

tation from war, and emerging technologies); consolidated discussion of economic systems. Chapter 3: New examples: increased demand for sports-utility vehicles; improved fuel efficiency of aircraft engines: increased demand for salsa; buyout of haddock fishing boats; the decline in the price of pink salmon. Chapter 4: Improved discussion of consumer sovereignty; improvements to Table 4-4 on least-cost production; new Global Perspective on the Index of Economic Freedom. Chapter 5: New explicit definitions of stocks and bonds; new discussion of the principal-agent problem; new Global Perspective on government employment as a percentage of total employment for various countries. Chapter 6: Improved explanation of the most-favored nation clause.

- Part 2. Chapter 7: Changed terminology relating to Figure 7-2 (from "expanding, static, and declining economy" to "expanding, static, and declining production capacity"); simplification of the explanation of the GDP price index (new Tables 7-5 and 7-6); fuller discussion of the CPI. Chapter 8: Improved discussion of structural unemployment; revision of the discussion of Okun's law; addition to Table 8-2 of unemployment rates by education. Chapter 9: Figure 9-5 (investment demand) is now a Key Graph; new Figure 9-6 shows shifts in the investment-demand curve; new Figure 9-7 links the real interest rate, the investmentdemand curve, and the economy's investment schedule. Chapter 10: Figure 10-8 on recessionary and inflationary gaps is now a Key Graph. Chapter 11: Improved discussion of possible causes of downward price and wage inflexibility. Chapter 12: New discussion of the proposed balanced-budget requirement; clarified discussion of the crowding-out effect of fiscal policy, including criticisms of the idea.
- Part 3. Chapter 13: "Unit of account" replaces the term "measure of value;" new section on recent developments in money and banking (relative decline of banks and thrifts, globalization of financial markets, and electronic money and smart cards). Chapter 15: Expanded discussion of the Fed's targeting of the Federal funds rate; new Global Perspective 15-1 lists the names (including nicknames) of the central banks of selected nations.
- Part 4. Chapter 16: "New" chapter extends the analysis of aggregate supply. Chapter 17: "New" chapter contrasts contemporary views on macro theory

and policy. *Chapter 18*: Covers economic growth (Chapter 19 in the thirteenth edition); discusses the weak productivity gains in services; discusses the controversial idea of a "new economy." *Chapter 19*: Updated section on the policy responses to budget deficits, including the deficit reduction legislation of 1992 and the line-item veto.

• Part 5. Chapter 20: Chapter on international trade tightened. Chapter 21: Improved explanation of the balance of payments; major consolidation of the discussion of past exchange-rate systems and the section on U.S. trade deficits. Chapter 22: New world map indicating industrially advanced nations, middle-income developing nations, and low-income developing nations (Global Perspective 22-1); revised discussion of international debt difficulties, including mention of the recent IMF bailouts of the Southeast Asian economies; entirely new policy section on development. Chapter 23: Extensively revised chapter now includes discussion of the transition to markets in China as well as in Russia.

## New Last Words

Several Last Words are new; others have been revised and updated. All 23 Last Words are accompanied by new art. We continue to place these boxes at the ends of chapters, where they are least likely to interrupt readers' concentration.

The new Last Word topics are women and production possibilities (Chapter 2); consumer sovereignty, dollar votes, and plastic pink flamingos (Chapter 4); the demise of wage and price controls (Chapter 16); enterprise transition to capitalism in Russia (Chapter 23).

## **FUNDAMENTAL GOALS**

Although the fourteenth edition only modestly resembles the first, our intention remains the same: to introduce the beginning economics students to principles essential to understanding the basic economizing problem, specific economic issues, and the policy alternatives available for dealing with them. Two fortunate by-products of this objective are an ability to reason accurately and dispassionately about economic matters and a lasting interest in economics. As always,

we present the principles and problems of economics in a straightforward, logical fashion. We continue to stress clarity of presentation, step-by-step organization, and consistency of level of analysis.

## DISTINGUISHING FEATURES

- Comprehensive Explanations at an Appropriate Level. Macroeconomics is comprehensive, analytical, and challenging yet accessible to a wide range of students. Its thoroughness and accessibility enable instructors to select topics for special classroom emphasis with confidence that students can read and comprehend independently other assigned material in the book.
- Comprehensive Definition of Economics. Because students must first understand the fundamentals, we devoted nearly all of Chapter 2 to a careful statement and development of the economizing problem and an exploration of its implications. This foundation will help put into proper perspective essential economic concepts.
- Fundamentals of the Market System. Economies throughout the world are making difficult transitions from planning to markets. Our detailed description of the institutions and operation of the market system in Chapter 4 is now more relevant than before. We pay particular attention to property rights, freedom of enterprise and choice, competition, and the role of profits because these concepts are poorly understood by beginning students.
- Early Integration of International Economics. We give the principles and institutions of the global economy early treatment. Chapter 6 examines the growth of world trade, the major participants in world trade, specialization and comparative advantage, the foreign exchange market, tariffs and subsidies, and various trade agreements. This strong introduction to international economics permits "globalization" of later macroeconomics and microeconomics discussions.
- Early and Extensive Treatment of Government. Government is an integral component of modern capitalism. This book introduces the economic functions of government early and treats them systematically in Chapter 5. The controversy over the proper role of government in stabilizing the economy is central to the macroeconomic policy chapters.

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• Emphasis on Economic Growth. This edition continues to emphasize economic growth. Chapter 2 uses the production possibilities curve to show the basic ingredients of growth. Chapter 18 discusses the rate and causes of growth, in addition to some of the controversies surrounding it. Chapter 22 focuses on the developing countries and the growth obstacles they confront. Chapter 23 looks at growth in the transition economies of the Soviet Union and China.

## ORGANIZATION AND CONTENT

Macroeconomics reflects the challenge specific topics and concepts will likely pose for average students. For instance, the theory of macro output and price-level determination are carefully treated. Here, simplicity is correlated with comprehensiveness, not brevity.

Our experience suggests that in treating each basic topic—aggregate demand and aggregate supply, money and banking, and international economics—it is desirable to couple analysis with policy. Generally, we use a three-step development of analytical tools: (1) verbal descriptions and illustrations, (2) numerical examples, and (3) graphical presentation based on these numerical illustrations.

All these considerations caused us to organize the book into five parts: Part 1: An Introduction to Economics and the Economy; Part 2: National Income, Employment, and Fiscal Policy; Part 3: Money, Banking, and Monetary Policy; Part 4: Problems and Controversies in Macroeconomics; Part 5: International Economics and the World Economy.

## ORGANIZATIONAL ALTERNATIVES

Although instructors generally agree on the content of the principles of macroeconomics course, they often differ as how to arrange the material; *Macroeconomics* provides considerable organizational flexibility. Previous users tell us they often substantially rearrange chapters with little sacrifice of continuity.

The AD-AS model is preceded by two chapters on aggregate expenditures analysis. Those who want to rely exclusively on AD-AS can omit these two chapters, supplementing the AD discussion with discussion of investment demand and the multiplier implicit within shifts of the AD curve.

## PEDAGOGICAL AIDS

Macroeconomics has always been student-oriented. The To the Student statement at the beginning of Part 1 details the many pedagogical aids. The fourteenth edition is also accompanied by a variety of high-quality supplements.

## The Supplements

• Study Guide. William Walstad—one of the world's foremost experts on economic education—prepared the fourteenth edition of the Study Guide, which many students find indispensable. Each chapter has an introductory statement, a checklist of behavioral objectives, an outline, a list of important terms, fill-in questions, problems and projects, objective questions, and discussion questions. Answers to Macroeconomics' end-of-chapter Key Questions appear at the end of the Study Guide, along with the text's Glossary.

The *Study Guide*, which is available in a separate macro edition, is a superb "portable tutor" for the principles student.

• Instructor's Resource Manual. Professor Arienne Turner of Fullerton College revised and updated the Instructor's Resource Manual. It comprises chapter summaries, listings of "what's new" in each chapter, new teaching tips and suggestions, learning objectives, chapter outlines, data and visual aid sources with suggestions for classroom use, and questions and problems. Answers to the text's end-of-chapter Key Questions are also included.

The *Manual* is again available for use with IBM-PC compatibles and MacIntosh computers. The PC version is also available in CD-ROM format. Users can print out portions of the *Manual's* contents, complete with their own additions and alterations, for use as student handouts or in whatever ways they might wish.

- Three Test Banks. Two test banks of objective, predominately multiple-choice questions and a third test bank of short-answer essay questions and problems supplement this edition of Macroeconomics.
- Test Bank I. This test bank now includes more than 5200 questions, most all written by the text authors.

- Test Bank II. Written by WilliamWalstad, this test bank contains more than 5000 questions. All Test Bank II questions are now organized according to level of difficulty: easy, moderate, or difficult.
- Test Bank III. Also prepared by William Walstad, Test Bank III contains "constructive response" testing to evaluate student understanding in a manner different from conventional multiple-choice and true-false questions. Suggested answers to the essay and problem questions are included.

For all test items in Test Banks I and II, the nature of each question is identified (for example, G = graphical; C = complex analysis; etc.), as are the numbers of the text pages that are the basis for each question. Also, each chapter in Test Banks I and II includes an outline or table of contents that groups questions by topics. In all, more than 10,000 questions of equality give instructors maximum testing flexibility while assuring the fullest possible text correlation.

## **Additional Supplements**

- Computerized Testing. Test Banks I, II, and III are available in computerized versions, both for IBM-PC and compatibles and MacIntosh computers. These systems generate multiple tests, scrambled tests, and high-quality graphs. Developed by the Brownstone Research group, this software meets the needs of the widest spectrum of computer users.
- *Color Transparencies (Figures and Tables).* We offer over 150 full-color transparencies for overhead projectors. They include most figures and tables in *Macroeconomics* and are available on request to adopters.
- PowerPoint Presentation. Norman Hollingsworth of DeKalb College once again created our PowerPoint Presentation slides, which consist of over 1000 audio-enhanced images.
- Student Software. DiscoverEcon is available for Macroeconomics. This menu-driven software, which was developed by Gerald Nelson at the University of Illinois, gives students a complete tutorial linked to the text. Each chapter features two essay questions and a multiple-choice test. Whenever relevant, interactive graphing problems let students observe how the economic picture is altered when they select different data. Links to the Glossary and text references clarify key concepts.

Two additional interactive tutorials are available with this edition: *Macroeconomics Interactive CD-ROM* and *WinEcon*.

Developed by Charles Link and Jeffrey Miller at the University of Delaware, the *Macroeconomics Interactive CD-ROM* gives students a rich, easy-to-use menu covering core topics in introductory economics with an audio component that makes it an excellent tool for reviewing basic concepts. The tutorial has a real-world focus: Newspaper and magazine articles highlight economic concepts, and interactive videos allow students to "interview" business leaders.

WinEcon is an interactive software package offering over 75 hours of tutorial material. It includes self-assessment questions and exams, economic databases, and an economic glossary and references to leading economic texts. It is the first computer-based learning package to cover the entire first-year economics syllabus. WinEcon combines two products in one: teaching software and student tools, and WinEcon Lecturer with tests, exams, course management, and customization program. It was developed at the University of Bristol with the help of the Teaching and Learning Technology Programme Economics Consortium (TLTP), a group of eight United Kingdom university economics departments.

- Website for Students and Instructors. Our dynamic text Website can be found at <a href="http://www.mhhe.com/economics/mcconnell">http://www.mhhe.com/economics/mcconnell</a>. At the Website, students can find learning support, including answers to the text's Key Questions.
- MHLA. McGraw-Hill Learning Architecture is our on-line student tutorial and course-management program, which includes materials directly linked to McConnell and Brue, Macroeconomics, fourteenth edition.

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As indicated, the fourteenth edition benefited from a number of perceptive reviews. In both quantity and quality, the reviewers were a rich source of suggestions for this revision. These contributors are listed at the end of this Preface.

Professor Thomas Barbiero of Ryerson Polytechnical Institute provided helpful ideas in his role as coauthor of the Canadian edition of *Macroeconomics*. Also, we greatly appreciate the suggestions for improvement provided by Professor Walstad, the author of the *Study Guide*. Thanks also to Robert Jensen, who proofread the entire manuscript (twice), and William Harris of the University of Delaware, who supplied a number of new questions for Test Bank I.

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We also strongly acknowledge the newly integrated Irwin/McGraw-Hill sales staff, who greeted this edition with wholehearted enthusiasm.

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## PART 1

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#### **Gross Domestic Product**

Avoidance of multiple counting . Exclusion of nonproduction transactions • Two sides to GDP: Spending and income

## **Expenditures Approach**

Personal consumption expenditures  $(C) \bullet Gross$ private domestic investment  $(I_{\sigma})$  • Government purchases  $(G) \bullet \text{Net exports } (X_n) \bullet \text{ The GDP}$ equation:  $C + I_g + G + X_n$ 

## Income Approach

Compensation of employees • Rents • Interest • Proprietors' income • Corporate profits • Three adjustments

## Other National Accounts

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