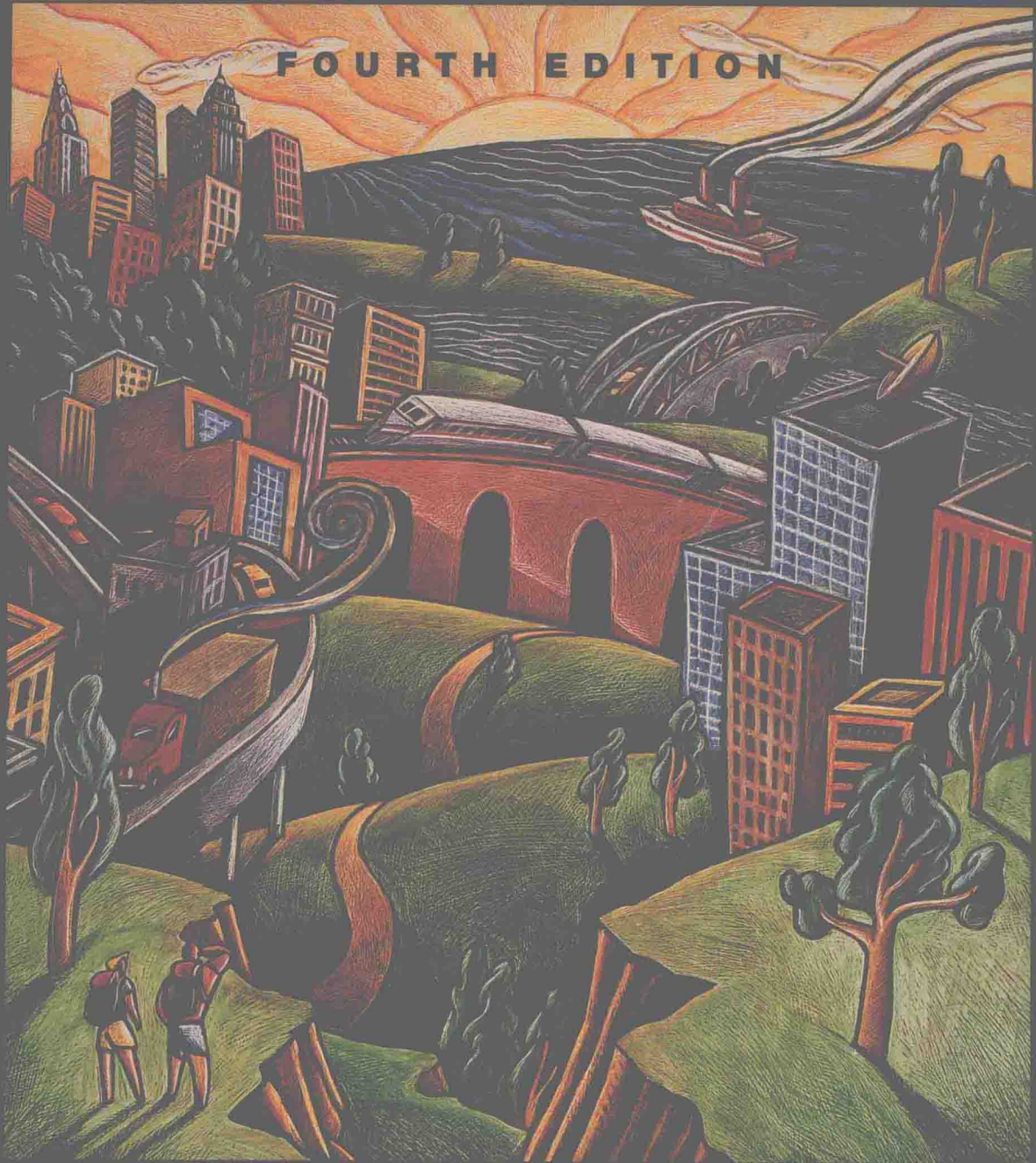


Economics



ROGER A. ARNOLD

Economics

FOURTH EDITION

ROGER A. ARNOLD

California State University, San Marcos



SOUTH-WESTERN College Publishing

An International Thomson Publishing Company

Team Director/Publisher: Jack W. Calhoun
Acquisitions Editor: John Alessi
Developmental Editors: Jan Lamar and Thomas S. Sigel
Media Technology Editor: Kurt Gerdenich
Production Editor: Peggy K. Buskey
Marketing Manager: Lisa L. Lysne
Production House: Justified Left
Composition: Parkwood Composition Service, Inc.
Photo Research: Nicholas Communications
Photo Editors: Cary Benbow and Jennifer Mayhall
Internal and Cover Design: Ellen Pettengell Design
Internal Illustrations: copyright © Jeffrey Polo
Cover Illustration: copyright © Nip Rogers

Copyright © 1998
by South-Western College Publishing
Cincinnati, Ohio

All Rights Reserved

The text of this publication, or any part thereof, may not be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, storage in an information retrieval system, or otherwise, without prior written permission from the publisher.

Library of Congress Cataloging-in-Publication Data

Arnold, Roger A.
Economics/Roger A. Arnold. —4th ed.
p. cm.
Includes index.
ISBN 0-538-88043-0 (hardcover: alk. Paper)
1. Economics I. Title.
HB171.5.A695 1997
330—dc21

97-37733
CIP

3 4 5 6 7 8 9 0 VH 6 5 4 3 2 1 0 9 8
Printed in the United States of America

ITP® International Thomson Publishing
South-Western College Publishing is an ITP Company.
The ITP trademark is used under license.

To
Sheila, Daniel, and David

PREFACE

Any principles of economics text explains the law of demand and hundreds of other topics clearly and cogently. But not all principles texts present economics topics in an interesting way. It is *how* topics are presented that determines whether a student says, “Ho-hum” or “Great stuff!” when economics is mentioned.

Economics can be either boring or exciting, depending on *how* it is presented. Economic facts, concepts, theories, policies, data, and applications are not inherently interesting. But they can be both interesting and exciting if they are presented in the right way. The trick, of course, is to find the right way.

Increasingly, I have come to believe that the right way is to use economics to *surprise* students. Many students come to the study of economics with low expectations; they think economics will be a dull and dry subject. So, students are surprised when they see that:

- Economics often occurs in the unlikelyst places.
- Economic events, far removed from them, are linked to them.
- Economic analysis is a powerful tool for understanding the world.

Economics Occurs in the Unlikelyst Places. The first way I surprise students in this fourth edition of *Economics* is to show them some of the unexpected places economics occurs. This is analogous to the idea behind a series of popular children’s books called *Where’s Waldo?* On each page in these books, among hundreds of tiny drawings, is one drawing of Waldo. The objective is to find Waldo. Children will often stare at a page for a few minutes and then excitedly exclaim, “There he is! I found him!” Then they are off to the next page.

Economics can be a little like *Where’s Waldo?* If you look at a picture—almost any picture—long enough, you will find the economics. Students expect to find economics in certain pictures: firms producing goods, households buying goods, banks making loans, governments enacting policies. But, they are surprised to find economics in a campus parking lot, in an episode of the television show “Seinfeld,” or in the competition between TV talk shows. The message students receive is clear: Economics is in many more places than they suspected and has much more relevance to their lives than they imagined.

Economic Events, Far Removed from Us, Are Linked to Us. The second way I surprise students is to show them how economic channels link events around the world to their lives. An economic action or change is like a rock thrown into a lake: It creates ripples that extend far beyond its point of origin. What happens in Japan,

Europe, Mexico, or Washington, D.C., can affect our lives immeasurably. A change in interest rates in Japan, Mexico, or Britain can affect a student's chances of getting a job after college. A change in the tax laws can affect economic growth in the country and a person's standard of living during the next twenty years. When students see the channels through which changes in one place affect them, they are surprised at first.

Then they are pleased to know how the real world affects them and want to know more. Instructors can build on this new-found motivation for learning economics.

Economics Allows Us to “Command the Heights of Genius.” James Buchanan, the Nobel Prize-winning economist, stated, “what a science [such as economics] does, or should do, is simply to allow the average man . . . to command the heights of genius.”

Those of us who teach economics know that economics is a powerful tool for understanding the world. We know that being able to think like an economist and conduct economic analysis helps us to become more imaginative and insightful—to reach for the heights of genius.

I have found that when students first realize the doors to understanding the world that economics can open, they want to learn more economics. Economics no longer needs a salesperson; it sells itself.

Priorities in Developing the Fourth Edition

In preparing the fourth edition of *Economics*, I looked for places to surprise students and for ways to make their learning easier. I went through the third edition of *Economics* to find places I could rewrite, add, or delete material in a way that would use economics to surprise students. If I could add an example that showed them how economic changes in one place could ripple out toward them and eventually affect their lives, I added the example. If I could present economics in a setting that I assumed the reader believed no economics could be found, I presented economics in that setting. If I could think of an example or an application that showed the power of economic analysis, I incorporated the example or application in the text. Anywhere I could surprise students with economics (in the text, in the features, in the questions at the ends of the chapters), I did my best to do just that.

In addition to surprising students with economics, and thus motivating them to learn, I wanted to make it easier for them to learn. Textbook chapters usually end with a series of questions and problems for students to answer and to solve. But why wait until the end of the chapter to ask questions? Wouldn't more immediate feedback be better? With this in mind, I have added questions at certain places throughout each chapter: at the end of each section, at the end of each feature, and with certain photos. The answers to many of these questions are provided at the end of the book. By providing a series of questions (with answers) that students can use to test their knowledge of what they are reading—as they are reading—they are provided with the necessary feedback to gauge their learning.

As another aid to learning, this text has a large number of flow-chart diagrams. Flow charts are an especially effective way of presenting much of the contents of economics. Specifically, much of economics takes the form of “a change in *A* leads to a change in *B* which leads to a change in *C*, and so on.” Flow charts visually capture the essence of these types of processes.

Organization of the Fourth Edition

Section I: An Introduction to Economics. Section I discusses the key concepts and tools in economics, including scarcity, opportunity cost, efficiency, inefficiency, supply and demand, prices, and so on. Some of the economic concepts and tools discussed in this section of the text are the most powerful in economics. I presented these powerful concepts and tools first by design. In this way, students get a good idea of what economics is all about early in the course.

Section II: Macroeconomics. All the major macroeconomic topics are included: inflation, unemployment, macroeconomic measurements, macroeconomic theories and policies, and so on. The key to students learning the mass of material that makes up macroeconomics is to give them a reason to learn it. Usually, we learn best when we know *why* we need to learn something. We carefully read the instructions accompanying the unassembled tool shed because we can see the link between reading the instructions carefully and assembling the shed successfully.

Similarly, students need to understand the reasons why it is important to learn the macroeconomic material. To this end, I have placed key questions throughout the macroeconomic part of the text that emphasize the reasons why a specific topic is important. I believe this keeps students focused on learning the material.

Section III: Microeconomics. The fourth edition of *Economics* carries forward a theme developed in the second edition—that microeconomics is about *objectives*, *constraints*, and *choices*. Much of the microeconomic discussion centers around this trilogy.

Also, and perhaps more importantly, I try to give students an appreciation for how microeconomic tools can be used to answer questions such as: How much output should a firm produce? How many workers should a firm hire? Is it better to hire workers in Mexico or the United States? When should I sell a product for a price less than my purchase price?

Section IV: The World Economy. This section has two primary objectives. The first is to inform students about the details of the world economy—why countries trade, how exchange rates are established, and so on. The second objective is to explain how changes in one country can affect our lives in the United States.

The Structure of Each Chapter

Each chapter of *Economics* contains the following features and pedagogical devices:

- Opening Photo and Vignette
- Chapter Objectives
- You Will Also Learn
- Margin Definitions
- [http://](#)
- Interspersed Questions and Answers
- Thinking Like an Economist
- Three Applications Features
- Self-Tests
- Reality Check

- Chapter Summary
- Questions and Problems
- Economic Connections to You or Can You Find the Economics?

Opening Photo and Vignette. Each chapter opens with a photo and a short vignette that ties the photo to the material discussed in the chapter.

Chapter Objectives. A student, starting to read a chapter, may wonder, “What topics are discussed in this chapter? What will I learn or be able to do after studying this chapter?” This feature responds to these questions and also serves as a guide to the instructor by indicating some of the many key facts, theories, policies, and concepts that will be discussed in the chapter.

You Will Also Learn. This feature motivates students and will often surprise them. It lists some of the unusual and unexpected things they will learn by reading the chapter.

Margin Definitions. All key economics terms are in bold type in the text and are defined alongside in the margins of the text. These terms and their definitions are also included in the Glossary at the back of the book.

http://. This Internet feature is placed in the margins of the text. It points students to an Internet address at which they can find information that relates to the discussion of the material in the text.

Interspersed Questions and Answers. Perhaps the best received pedagogical feature in the eight year life of *Economics* has been the Interspersed Questions and Answers. This short, unobtrusive feature seems to pack a lot of punch. Essentially, it anticipates questions students may have as they read the chapters of the text; then it answers these questions. These questions and answers are placed at natural stopping places in each chapter.

Thinking Like an Economist. The authors of principles books are quick to point out that their books teach students how to think like an economist, but they rarely tell us how they accomplish this feat. Supposedly, students will read the book and simply figure out how economists think. It is true that some students do learn how economists think by using this method, but too many do not. There is a better way to proceed. I believe that it is the author’s responsibility to explicitly point out, where possible, how economists think. I have done this throughout this book, at appropriately identified places.

Three Applications Features.

- Economics in Our Times
- Economics and the Media
- The Global Economy

In many texts, applications features are simply overgrown examples. If, in the body of the text, Real GDP is discussed and computed, an applications feature simply lists the Real GDP figures for various countries. Or, if price discrimination is discussed in the text, an applications feature focuses on examples of price

discrimination in real life. This is not a bad way to present applications features, and this text includes some of this type of applications feature. But it is a rather passive and descriptive way of presenting applications. There needs to be more.

I have tried to develop active analytical applications features. Students must use economic concepts they have learned and economic tools they have acquired to analyze something in the real world. For example, they must use the concept of the law of diminishing marginal utility or the economic tools of supply and demand to gain an insight or make a prediction.

I have also chosen the topics for the applications features carefully. Too often the topics of these features in principles books are boring. Applications features offer an opportunity to present economics topics that are off the beaten path, but, textbook authors usually stay on the main road and play it safe. They overlook the fact that a principles book is long enough to do many things. Good solid theory can be presented, policies outlined, concepts explained, tools developed, . . . and even some adventures taken. A principles text has room for unusual, exciting features, and I have done my best to provide them.

At the end of each applications feature, there is a short section titled “Think About It.” Students are asked a thought-provoking question that relates to the feature. Instructors may want to use these questions as a starting point for a class discussion.

At the end of many applications features, students will also find a short section titled “On the Internet.” This section provides students with an Internet address where they can obtain information that relates to the material discussed in the feature.

Self-Tests. Frequent feedback plays an important role in learning new material. At the end of each of the three to four sections in each chapter, students will find three to five questions that relate to the material they have just read. The answers to these questions are at the end of the book. A poor showing on a Self-Test should indicate to the student that he or she needs to reread the sectional material before proceeding.

Reality Check. There are usually three photos in each chapter. Each photo is relevant to the material discussed in the body of the chapter or in the features. One of the three photos in each chapter is followed by a question that students are asked to answer in order to test their knowledge of what they have been reading. This photo and question is titled “Reality Check.”

Chapter Summary. Each chapter ends with a detailed and categorized summary of the main topics in the chapter.

Questions and Problems. Each chapter ends with numerous questions and problems for the student to answer.

Economic Connections to You or Can You Find the Economics? *Economic Connections to You* and *Can You Find the Economics?* are short features at the end of each chapter. *Economic Connections to You* requires students to identify how economic facts, actions, and changes (discussed in the chapter) affect them. *Can You Find the Economics?* requires students to find the economic content in a setting that, at first glance, may not seem to have any economic content.

The supplements that go along with this text are described in the following paragraphs.

Study Guide. The *Study Guide* was written by Thomas Wyrick of Southwest Missouri State University. Each chapter explains, reviews, and tests the student on important facts, concepts, and diagrams found in corresponding chapters in this book. Chapter parts include an introduction to and purpose of each chapter, a review of concepts from earlier chapters, a fill-in-the-blank review of concepts to be learned, problems and exercises, and a self-test. The *Study Guide* also comes in microeconomics and macroeconomics splits.

Test Bank. The *Test Bank* was revised by Scott Bloom of North Dakota State University. There are more than 4,000 multiple-choice questions in the test bank; approximately 20 percent are new to this edition and many have been revised.

Instructor's Manual. The *Instructor's Manual* was written by Bill Robinson of University of Nevada, Las Vegas. It offers detailed lecture assistance for this book. Chapter parts include an overview of each text chapter, a list of chapter objectives, a list of key terms, a detailed chapter outline with lecture notes, answers to end-of-chapter questions, and supplemental lecture and reading material.

Transparencies. More than 150 transparencies of key exhibits in the text are available for classroom use.

Economics on the Internet: Exercises and Activities. This supplement, popular with both students and instructors, was written by Bill Robinson of the University of Nevada, Las Vegas. Students learn how to find economic data, information, and documents using the Internet, and then engage in exercises and activities based on the information they find.

Practice Tests. The practice tests were written by the same person who revised the *Test Bank*, Scott Bloom of North Dakota State University. Each practice test allows students to test their knowledge of the chapter material before they take the assigned test in class.

Graphing Exercises in Economics. For the introductory economics student, the many graphs in economics may initially seem overwhelming. It takes time and practice to master the “language” of graphs. *Graphing Exercises in Economics* provides students with the practice they need to shorten the time it takes them to master this language. There are graphing exercises for 17 different topics, including supply and demand, the production possibilities frontier, perfect competition, monopoly, factor markets, and aggregate demand and aggregate supply.

PowerPoint Presentation Slides. PowerPoint is state-of-the-art multimedia presentation software that South-Western uses to provide professors with visual support in the classroom. Updated by John Pisciotta of Baylor University, these slides offer custom presentations to professors that contain lecture material from the corresponding textbook, including such elements as text, artwork, problems, and chapter outlines. In addition to using these custom presentations, professors who have

access to the PowerPoint software can edit the South-Western presentations or can create their own exciting presentations that include text, graphics, animation, and sound.

CNN Video. Professors can bring the real world into the classroom by using the *CNN Principles of Economics Video Updates*. This video provides current stories of economic interest. The video is produced by Turner Learning, Inc., using the resources of CNN, the world's first 24-hour, all-news network. Ask your ITP sales representative for more details.

South-Western Economics Tutorial Software. Professors and students who want a professional and functional economics tutorial package will find it here. The software is easy to use, comprehensive, and instructional.

Arnold Economics Web Site. The Arnold *Economics* Web Site (<http://arnold.swcollege.com/>) provides instructors and students with updates to the text, teaching and learning resources, and the opportunity to communicate with the author and editors of the text. All Internet addresses mentioned in the text are repeated in this site and address updates are regularly provided. The Arnold *Economics* Web Site is part of South-Western College Publishing's Economics Resource Center (<http://economics.swcollege.com/>). The Economics Resource Center provides custom-created policy debates, monthly news summaries, and cutting-edge educational resources like *Economics Alive!*, the first truly interactive multimedia CD-ROM designed especially for economics students.

Economics Alive! CD-ROM. *Economics Alive!* CD-ROM, an interactive multimedia study aid for economics, is the high-tech, fun way to study economics. Through a combination of animated presentations, interactive graphing exercises, and simulations, *Economics Alive!* brings the core principles of economics to life and drives them home in an upbeat and entertaining way. *Economics Alive!* is available as two separate CD-ROMs, *Microeconomics Alive!* and *Macroeconomics Alive!*. Ask your ITP sales representative for more details, or visit the *Economics Alive!* Web Site (<http://econalive.swcollege.com/>).

In Appreciation

This book could not have been written and published without the generous expert assistance of many people. A deep debt of gratitude is owed to the reviewers of the first through fourth editions.

Jack Adams
University of Arkansas, Little Rock

William Askwig
University of Southern Colorado

Michael Babcock
Kansas State University

Dan Barszcz
College of DuPage, Illinois

Robert Berry
Miami University, Ohio

George Bohler
Florida Junior College

Tom Bonsor
Eastern Washington University

Michael D. Brendler
Louisiana State University

Baird Brock
Central Missouri State University

Kathleen Bromley
Monroe Community College, New York

Douglas Brown
Georgetown University

Ernest Buchholz
Santa Monica Community College, California

Gary Burbridge
Grand Rapids Junior College, Michigan

Maureen Burton
California State Polytechnic University, Pomona

Carol Carnes
Kansas State University

Paul Coomes
University of Louisville, Kentucky

Eleanor Craig
University of Delaware

Diane Cunningham
Glendale Community College, California

Wilford Cummings
Grosmont College, California

Douglas C. Darran
University of South Carolina

Edward Day
University of Southern Florida

Johan Deprez
University of Tennessee

James Dietz
California State University, Fullerton

Stuart Dorsey
University of West Virginia

Natalia Drury
Northern Virginia Community College

Lu Ann Duffus
California State University, Hayward

John Eckalbar
California State University, Chico

John Elliott
University of Southern California

Charles Fischer
Pittsburg State University, Kansas

John Gemello
San Francisco State University

Carl Guelzo
Centonsville Community College, Maryland

Jan Hansen
Univ. of Wisconsin, Eau Claire

John Henderson
Georgia State University

Ken Howard
East Texas Baptist University

Mark Karscig
Central Missouri State University

Stanley Keil
Ball State University, Indiana

Richard Kieffer
State University of New York, Buffalo

Gene Kimmett
William Rainey Harper College, Illinois

Luther Lawson
University of North Carolina

Frank Leori
College of San Mateo, California

Kenneth Long
New River Community College, Virginia

Michael Magura
University of Toledo, Ohio

Bruce McCrea
Lansing Community College, Michigan

Gerald McDougall
Wichita State University, Kansas

Kevin McGee
University of Wisconsin, Oshkosh

Francois Melese
Auburn University, Alabama

Herbert Miliken
American River College, California

Richard Miller
Pennsylvania State University

Ernest Moser
Northeast Louisiana University

Farhang Niroomand
University of Mississippi

Eliot Orton
New Mexico State University

Marty Perline
Wichita State University, Kansas

Harold Petersen
Boston College

Douglas Poe
University of Texas, Austin

Joseph Rezney
St. Louis Community College, Missouri

Terry Ridgway
University of Nevada, Las Vegas

Thomas Romans
State University of New York, Buffalo

Robert Ross
Bloomsburg State College, Pennsylvania

Keith A. Rowley
Baylor University, Texas

Anandi Sahu
Oakland University, Michigan

Richard Scoggins
California State University, Long Beach

Alan Sleeman
Western Washington University

John Sondey
University of Idaho

Shahram Shafiee
North Harris County College, Texas

Paul Seidenstat
Temple University, Pennsylvania

Robert W. Thomas
Iowa State University

Roger Trenary
Kansas State University

Richard L. Tontz
California State University, Northridge

Bruce Vanderporten
Loyola University, Illinois

Richard O. Welch
University of Texas at San Antonio

Thomas Weiss
University of Kansas

Donald A. Wells
University of Arizona

John Wight
University of Richmond, Virginia

Thomas Wyrick
Southwest Missouri State University

Second Edition Reviewers

Scott Bloom
North Dakota State University

Thomas Carroll
University of Nevada, Las Vegas

Larry Cox
Southwest Missouri State University

Diane Cunningham
Los Angeles Valley College

Emit Deal
Macon College

Michael Fabritius
University of Mary Hardin Baylor

Frederick Fagal
Marywood College

Ralph Fowler
Diablo Valley College

Bob Gilette
Texas A & M University

Lynn Gillette
Indiana University, Indianapolis

Simon Hakim
Temple University

Lewis Karstensson
University of Nevada, Las Vegas

Abraham Kidane
California State University, Dominguez Hills

W. Barbara Killen
University of Minnesota

J. David Lages
Southwest Missouri State University

Anthony Lee
Austin Community College

Marjory Mabery
Delaware County Community College

Bernard Malamud
University of Nevada, Las Vegas

Michael Marlow
California Polytechnic State University, San Luis Obispo

Phil J. McLewin
Ramapo College of New Jersey

Tina Quinn
Arkansas State University

Terry Ridgway
University of Nevada, Las Vegas

Paul Snoonian
University of Lowell

Paul Taube
Pan American University

Roger Trenary
Kansas State University

Charles Van Eaton
Hillsdale College

Mark Wheeler
Bowling Green State University

Thomas Wyrick
Southwest Missouri State University

Third Edition Reviewers

Carlos Aguilar
University of Texas, El Paso

Rebecca Ann Benakis
New Mexico State University

Scott Bloom
North Dakota State University

Howard Erdman
Southwest Texas Junior College

Arthur Friedberg
Mohawk Valley Community College

Nancy A. Jianakoplos
Colorado State University

Lewis Karstensson
University of Nevada, Las Vegas

Rose Kilburn
Modesto Junior College

Ruby P. Kishan
Southeastern Community College

Duane Kline
Southeastern Community College

Charles A. Roberts
Western Kentucky University

Bill Robinson
University of Nevada, Las Vegas

Susan C. Stephenson
Drake University

Charles Van Eaton
Hillsdale College

Calla Wiemer
University of Hawaii at Manoa

Richard O. Welch
The University of Texas at San Antonio

Fourth Edition Reviewers

Uzo Agulefo
North Lake College

Kari Bataglia
University of North Texas

Scott Bloom
North Dakota State University

Harry Ellis, Jr.
University of North Texas

Mary Ann Hendryson
Western Washington University

Eugene Jones
Ohio State University

Ki Hoon Kim
Central Connecticut State University

James McBrearty
University of Arizona

John Panagakis
Onondaga Community College

Bill Robinson
University of Nevada, Las Vegas

George E. Samuels
Sam Houston State University

Ed Scahill
University of Scranton

Charles Van Eaton
Hillsdale College

Thomas Wyrick
Southwest Missouri State University

I want to thank each of the following persons for his work on the supplements that are part of the *Economics* package: Thomas Wyrick for writing the *Study Guide*, Scott Bloom for writing the *Test Bank* and *Practice Tests*, and Bill Robinson for writing *Economics on the Internet: Exercises and Activities* and the *Instructor's Manual*.

There are many persons at South-Western College Publishing to whom I owe a deep debt of gratitude for all the hard work and creative talent they brought to this project. These persons include Jack Calhoun, team leader for Business Law and Economics; John Alessi, Acquisitions Editor for Economics; Peggy Buskey, Production Editor; Jan Lamar, Developmental Editor; Kurt Gerdenich, Media Technology Editor; Lisa Lysne, Marketing Manager for Economics; Thomas Sigel, Developmental Editor; Sharon Smith, Production Editor; Jennifer Mayhall, Art Director; and Cary Benbow, Photo Manager. I also wish to thank Barbara Sheridan, copyeditor, of Sheridan Publications Services, and Rebecca Roby, production coordinator, at Justified Left.

My deepest debt of gratitude goes to my wife, Sheila, and to my two sons, Daniel, nine years old, and David, seven years old. They make my life and work joyous.

Roger A. Arnold

Contents in Brief

AN INTRODUCTION TO ECONOMICS 1

PART 1 Economics: The Science of Scarcity 1

CHAPTER 1 What Economics Is About 1

APPENDIX A Working with Diagrams 23

CHAPTER 2 Fundamentals of Economic Thinking: Within the Production Possibilities Frontier (PPF) 32

CHAPTER 3 Supply, Demand, and Price 51

MACROECONOMICS 81

PART 2 Macroeconomic Fundamentals 81

CHAPTER 4 Three Economic Goals and Three Economic Measurements 81

CHAPTER 5 Aggregate Demand and Aggregate Supply: In the Short Run 114

PART 3 Macroeconomic Stability, Instability, and Fiscal Policy 139

CHAPTER 6 *AD-AS* in the Long Run and the Self-Regulating Economy 139

CHAPTER 7 Economic Instability: A Critique of the Self-Regulating Economy 153

CHAPTER 8 Fiscal Policy 179

PART 4 Money, the Economy, and Monetary Policy 202

CHAPTER 9 Money and Banking 202

CHAPTER 10 The Federal Reserve System 220

CHAPTER 11 Money and the Economy 239

APPENDIX B A More Complete Monetarist Model 268

CHAPTER 12 Monetary Policy 277

PART 5 Expectations, Growth, International Issues, and the Budget 299

CHAPTER 13 Expectations Theory and the Economy 299

CHAPTER 14 Economic Growth: Resources, Technology, and Ideas 325

CHAPTER 15 International Impacts on the Economy 341

CHAPTER 16 Taxes, Deficits, and Debt 362

MICROECONOMICS 385

PART 6 Microeconomic Fundamentals 385

- CHAPTER 17** The Logic of Consumer Choice 385
- APPENDIX C** Budget Constraint and Indifference Curve Analysis 403
- CHAPTER 18** Elasticity 411
- CHAPTER 19** The Firm 435
- CHAPTER 20** Production and Costs 453

PART 7 Product Markets and Policies 478

- CHAPTER 21** Perfect Competition 478
- CHAPTER 22** Monopoly 505
- CHAPTER 23** Monopolistic Competition and Oligopoly 526
- CHAPTER 24** Government and Product Markets: Antitrust and Regulation 552
- CHAPTER 25** Agriculture: Farmers' Problems, Government Policies, and Unintended Effects 574

PART 8 Factor Markets and Related Issues 591

- CHAPTER 26** Factor Markets: With Emphasis on the Labor Market 591
- CHAPTER 27** Wages, Unions, and Labor 613
- CHAPTER 28** The Distribution of Income and Poverty 632
- CHAPTER 29** Interest, Rent, and Profit 658

PART 9 Market Failure and Public Choice 678

- CHAPTER 30** Market Failure: Externalities, Public Goods, and Asymmetric Information 678
- CHAPTER 31** Public Choice: Economic Theory Applied to Politics 703

THE WORLD ECONOMY 721

PART 10 International Economics: Theory and Policy 721

- CHAPTER 32** International Trade 721
- CHAPTER 33** International Finance 741
- CHAPTER 34** International Economic Development 772
- CHAPTER 35** Capitalism and Socialism: Two Views of the World, Two Economic Systems 786

SELF-TEST APPENDIX 809

GLOSSARY 835

PHOTO CREDITS 848

INDEX 849

Contents

AN INTRODUCTION TO ECONOMICS 1

PART 1 Economics: The Science of Scarcity 1

CHAPTER 1

What Economics Is About 1

Five Questions about Economics 2

What Is Economics? 2

What Do Economists Study? 2

Is There an Economic Way of Thinking? 3

Why Study Economics? 3

Can the Study of Economics Help Us Understand Our World? 4

Thinking Like an Economist 5

Thinking in Terms of Scarcity and Its Effects 5

Thinking in Terms of Opportunity Cost 6

Thinking in Terms of What Would Have Been 7

Thinking in Terms of Costs and Benefits and Decisions Made at the Margin 8

Economics in Our Times Why Young Rock Stars, Movie Stars, and Fashion Models
Rarely Go to College 9

Thinking in Terms of Unintended Effects 10

Thinking Like an Economist 11

Economists Build and Test Theories 12

What Is a Theory? 12

Building and Testing a Theory 13

How Do We Judge Theories? 14

Scientific Thinking 15

The Association-Causation Issue 15

Economics and the Media Jerry Seinfeld Builds a Theory, George Tests It 16

The Fallacy of Composition 17

The *Ceteris Paribus* Assumption 17