Spencer

Contemporary Economics

SEVENTH EDITION

Contemporary Economics

Milton H. Spencer

Wayne State University

With the assistance of
Timothy Tregarthen
University of Colorado at Colorado Springs

Worth Publishers, Inc.

FOR DARCY, ROBIN, AND CATHY

Contemporary Economics, SEVENTH EDITION

Copyright © 1971, 1974, 1977, 1980, 1983, 1986, 1990 by Milton H. Spencer

All rights reserved

Printed in the United States of America

Library of Congress Catalog Card No. 89-50477

ISBN: 0-87901-420-2

Printing: 6 5 4 3 2 Year: 94 93 92 91 90

Editors: Elissa M. Pinto and Toni Ann Scaramuzzo

Production: Barbara Anne Seixas Design: Malcolm Grear Designers

Art director: George Touloumes

Layout design: Patricia Lawson

Photo researcher: Elaine Bernstein

Line art: Demetri Zangos and York Graphic Services, Inc.

Typesetting: Progressive Typographers

Printing and binding: Von Hoffmann Press, Inc.

Worth Publishers, Inc.

33 Irving Place New York, New York 10003 Illustration Credits

Parts: 1 and p. xvii © Mike Malyszko/Stock, Boston; 2 and p. xix © David Shopper/Stock, Boston; 3 and p. xx © Comstock; 4 and p. xxii © Joel Gordon 1983; 5 and p. xxiii © Ken Levinson/Monkmeyer Press Photo Service; 6 and p. xxiv © Richard Wood/Taurus Photos; 7 and p. xxv © Sepp Seitz/Woodfin Camp & Associates; 8 and p. xxvii © John de Visser/Black Star; 9 and p. xxix © Ira Wexler.

Notable Economists sketches © 1988 Lindy Swartwout; p. 18 © Michael Thompson/Comstock; p. 38 © Science Photo Library/Photo Researchers; p. 60 © Will & Deni McIntyre/ Photo Researchers; p. 98 © Guy Gillette/Photo Researchers; p. 116 © Joel Gordon 1986; p. 133 Courtesy Chase Manhattan Bank, Museum of Monies of the World; p. 138 © Tom McCoy/Rainbow; p. 172 © Hiroyuki Matsumoto/Black Star; p. 192 © Alex Quesada/Woodfin Camp & Associates; p. 208 © Claus Meyer/Black Star; p. 230 © Mike Mazzaschi/Stock, Boston; p. 268 © Russ Kinne/Comstock; p. 290 © T.J. Florian/Rainbow; p. 370 © Lowell Georgia/Photo Researchers; p. 391 © Joseph Rodriguez/Black Star; p. 395 © Joel Gordon 1989; p. 402 © Wesley Bocxe/Photo Researchers; p. 418 © Yoav/Phototake; p. 446 © F.B. Grunzweig/Photo Researchers; p. 482 © Russ Kinne/Comstock; p. 504 © Robert V. Eckert, Jr./Stock, Boston; p. 518 © Van Bucher/Photo Researchers; p. 532 © Joseph Nettis/Photo Researchers; p. 548 © Coco McCoy/Rainbow; p. 562 © Jules Bucher/Photo Researchers; p. 578 © Owen Franken/Stock, Boston; p. 616 © George Hall/Woodfin Camp & Associates; p. 642 © Jacques Chenet/Woodfin Camp & Associates; p. 678 © Joel Gordon 1987; p. 693 © Daniel Sheehan/Black Star; p. 696 © Mangino/The Image Works; p. 702 left © James Balog/Black Star, right @ Anthony Suau/Black Star; p. 714 © Anthony Suau/Black Star; p. 718 © Alon Reininger/Contact, Woodfin Camp & Associates; p. 731 top © Manfred A. Kreiner/Black Star, bottom AP/Wide World Photos; p. 750 left @ Owen Franken/Stock, Boston, right © Peter Turnley 1989/Black Star; p. 754 © David Wells/The Image Works.

Contemporary Economics

Preface

Students who are taking their first course in economics in the early 1990s need to acquire many of the same tools and techniques that introductory students have learned in previous decades. Much has changed, however, not just in the discipline of economics but also in the relative importance of topics and in the most successful methods of presentation. Major changes have been made in this edition in order to offer students a modern introduction to the principles of economics while providing a solid framework of basic theory.

Clearly the most effective and interesting way to learn economics or any other subject is by "doing" it. This book provides students with many opportunities to be active learners of basic theory and to "practice" economics as they learn it.

An introductory text should provide students with the fundamental theory they will need to do three things:

- 1. Understand matters of public policy
- 2. Evaluate conflicting opinions
- 3. Arrive at informed conclusions

This book seeks to achieve these objectives in a number of ways. It abounds with current issues and real-world examples, and it elucidates the several sides of ongoing debates.

New Content

The Seventh Edition of *Contemporary Economics* includes a number of exciting changes that are impor-

tant to students being introduced to economics in the 1990s:

Aggregate Demand/Aggregate Supply: The General Macro Model

A fundamental change in this edition is the early development (in Chapter 7) of the aggregate demand/aggregate supply model as the *general model* for all subsequent macroeconomic chapters. This provides students with a modern foundation for all the theory that follows. Monetary economics is developed fully *before* Keynesian economics, and Keynesian analysis is given complete, balanced, and modern coverage.

"Internationalization" — Emphasis on Global Economics

A world perspective prevails throughout the book. Explanations of linkages between domestic and foreign markets are woven into the text, not simply "added on," and international repercussions of economic activity are discussed whenever appropriate. This enables students to gain an accurate understanding of how closely intertwined are international events and the U.S. economy.

Economic Growth

Economic growth is a major topic for the 1990s, and this edition contains a comprehensive chapter (Chapter 8) that will give students the understanding they

will need beyond this course. The chapter builds first on the production-possibilities curve, and then considers economic growth in terms of shifts in long-run aggregate supply, introduced in the aggregate demand/aggregate supply model developed in Chapter 7.

Today's Macroeconomic Theories

A new chapter (Chapter 17) presents a comprehensive survey of modern macroeconomic thinking. The chapter reviews and extends previously learned theories, explains how the various theories developed, and examines their relationships to each other. It also discusses the implications of policy activism versus nonactivism. This carefully balanced treatment of modern macroeconomic beliefs will help students to put into perspective much of what they've learned in the course.

Policy Analysis

This capstone chapter for the macroeconomics portion of the book (Chapter 19) uses theory in a very practical way. First, it develops a critical analysis of Reagan-era policies. Then it explores the causes of budget deficits and discusses the ongoing debate about the deficit. Finally, it takes an in-depth look at the trade deficit. This chapter shows students how the tools and insights they have acquired throughout the macroeconomic chapters are actually *used*.

Distinctive Features

Many topics have been revised and updated to reflect recent events. At the same time, this edition retains the distinctive treatment of many subjects that helps to differentiate it from other texts. Here are some examples, covering broad sections of the book:

Overview: Our Economic System

Unlike students in many other introductory courses, those beginning the study of economics often have little idea of what the subject is about. To provide the needed orientation, the first four chapters (Part 1) explain the nature and scope of economics. These chapters contain:

 A complete introduction to graphing and to the meaning and measurement of slope—greatly

- expanded from previous editions and followed by practical applications
- Early explanations of resources, scarcity, tradeoffs, and the economic goals of efficiency, equity, stability, and growth sought by all societies
- An informal and intuitive approach to the study of supply and demand
- Explanations of income distribution, measurements of inequality, and the different meanings of equity
- A comprehensive survey of the role of government in the economy

The overview chapters thus provide both an orientation and a platform for all subsequent chapters.

Macroeconomics

As previously mentioned, the aggregate demand/aggregate supply model is developed at the beginning of the presentation of macroeconomic theory in Chapter 7. *All* subsequent macroeconomic chapters make use of this model:

- It is used throughout the macroeconomic chapters (Part 2) as a *general* model of the economy.
- Monetary economics (Part 3) is developed before Keynesian economics using the aggregate demand/aggregate supply model. Modern monetary theory and policy are then examined within the framework of this model.
- Keynesian economics (Part 4) is given full coverage. The Keynesian aggregate expenditure/aggregate output model is formulated by emphasizing that it represents a special case of constant prices. The model is then linked to the aggregate demand/aggregate supply model for comparative analysis.
- A survey and extension of macroeconomic theories (Part 5), covering neo-Keynesianism, monetarism, rational expectations theory, and real business cycle theory, provides an ideal review of the theories presented in the course. This is followed by an analysis of today's most widely discussed economic problems:
 - macrodynamics of inflation, production, and employment
 - —budget and trade deficits, the *J*-curve, and issues of policy activism

Thus, every aspect of modern macroeconomics suitable for treatment in an introductory course is covered.

Microeconomics

Deregulation, globalized financial trading, contestable markets, declining union membership, rapid changes in technology, and other developments are changing the way economics is practiced and taught. Microeconomic theory and policies reflect these changes, as can be seen in this edition in the following examples:

- The integrated treatment of production and cost functions, showing how the latter are derived directly from the former
- The graphic illustrations of changes in elasticityrevenue relationships along a demand curve
- A substantial treatment of utility theory with novel examples and applications, including complete diagrammatic treatment of the diamond water paradox and Lerner's equi-income theorem
- Today's views on the positive as well as negative effects of oligopoly
- An extension of factor-input theory to incorporate imperfect competition

Of course, microeconomic theory takes on more significant meaning when combined with today's complex issues and policies. This is done on an extensive scale in a number of chapters. Some of the many important topics covered include:

- Agricultural policies and decoupling proposals for the 1990s
- Public-choice theory, voting theory, and meritgoods pricing
- Industrial organization and its link to antitrust policy
- Regulation theory, pricing criteria, and deregulation policies
- Labor market analysis, discrimination, and the effects of unionization
- Privatization of social security; policies to alleviate poverty; the economics of a free market in drugs; and a study of health-care economics, including problems of adverse selection and moral hazard

I have endeavored to present every aspect of theoretical and applied microeconomics at a level suitable for introductory students.

International Economics and the World's Economies

Global economic concepts and issues are integrated throughout the text. In addition, major specialized topics of international importance are given specific attention in separate chapters. Among the distinctive ones are:

- Comparative advantage and its relation to the strategic trade policy thesis
- A self-contained explanatory model of the balance of payments and a comprehensive survey of the foreign exchange market
- Pacific Rim economic development, focusing on the economies of Hong Kong, Singapore, South Korea, and Taiwan
- Socialism in transition and the new market socialism
- Economic reforms in the Soviet Union and China, including the possible economic effects of China's recent crackdown on the pro-democracy movement

Application of Theory

Theory is the skeleton of economics, and policies are its flesh and blood. This book contains a number of features that help bring economics to life for students:

Economics Live

Timothy Tregarthen has written the "Economics Live" essays that appear at the end of most chapters. These essays apply theory to current economic problems in an interesting and engaging way, offering immediate application of the basic ideas in the chapter.

Economics at Work

"What do economists do?" students often ask. Suzanne and Timothy Tregarthen have interviewed young professionals who use economics in their work. Their essays, "Economics at Work," show stu-

dents some of the many career opportunities that exist in economics. These essays are presented topically and describe career opportunities in such diverse areas as business reporting, teaching, government work, and economic forecasting, among others.

Notable Economists: History of Thought

Economics has a long and rich intellectual heritage. Suzanne Tregarthen has written a number of essays on leading economists of the past and present. She not only describes their contributions to the field but also provides fascinating information about their personal lives.

Economics in the News

The many ways in which economics influences current events can be interesting and often surprising. Numerous brief news items, positioned at appropriate points within chapters, reinforce the practicality and relevance of the topics under discussion.

Learning and Teaching Aids

The book's learning and pedagogical features continue to be presented in a variety of useful and interesting ways. They include:

Previews

Preview material at the beginning of each chapter helps to orient students by giving them a perspective on what they're reading. Each chapter begins with Chapter Topics—a list of the main heads in the chapter and a quick guide to what the chapter is about. This is followed by a Learning Guide—a few broad questions that will give students a clear focus on what to look for when reading the chapter.

Intra-Chapter and Chapter-End Summaries

Several longer chapters contain a "Summary Thus Far" near the middle of the chapter. These provide a convenient stopping point for lectures as well as an opportunity for students to reinforce their understanding before they continue. In addition, there is a point-by-point summary of all the main ideas and concepts at the end of each chapter.

Comprehensive Dictionary of Economic Terms and Concepts

Each technical term and concept is defined when first introduced, and is frequently defined again when used in subsequent chapters. These definitions (and numerous others) are catalogued, usually with brief examples and cross-references, in a dictionary at the back of the book. Printed on tinted paper to make it readily accessible, the dictionary is much more than a mere glossary—it is one of the most comprehensive dictionaries of economics available today. Students find it a valuable resource.

Supplements for the Student

The Seventh Edition offers a complete package of learning tools for the student:

Study Guide

The greatly revised *Study Guide*, by Eric Blankmeyer and Jack Mogab (Southwest Texas State University) and Muriel Converse, helps students to learn the material in the text, reinforce their knowledge, and test their understanding. The *Study Guide* has been painstakingly prepared to help *all* students, from those who are having difficulty with the subject to those who can easily grasp the material and wish to test their skills to assure complete mastery. Each *Study Guide* chapter contains the following:

Key Point Review This is a concise summary of the main ideas in each chapter of the textbook.

Learning Objectives These objectives help students to identify the most important concepts in each chapter. Each objective is keyed to questions in the *Study Guide* and to page numbers in the textbook.

Key Terms Students use the terms listed at the beginning of the exercise to complete fill-in statements, and thereby review the terminology in the chapter.

Objective Test Questions A set of true-false and multiple-choice questions covers all important points in the chapter.

Problems and Applications; Questions to Think About *Problems*—many based on real-world events—are posed that challenge students to apply what they've learned to issues of current concern. There are tables to complete, graphs to be drawn and

interpreted, and exercises designed to help students consolidate their understanding of key ideas. Each *Study Guide* chapter ends with thought-provoking *questions* that require critical-thinking skills as well as knowledge of economics.

Answers to *Study Guide* questions and page references to the relevant material in the textbook are provided so that students can check their work and reread the textbook when needed.

Free Subscription to The Margin

The Margin, a widely read economics magazine, is published during the fall and spring semesters. Under the editorship of Timothy Tregarthen of the University of Colorado at Colorado Springs, it is written specifically for economics students and is available by paid subscription. However, students purchasing new copies of this edition of Contemporary Economics will receive a free subscription. Many professors report that the magazine, whether used in the classroom or read by students on their own, is a superb tool for enriching the content of economics courses. An instructor's guide helps to incorporate each issue of The Margin into the course.

Contemporary Economics Graphics Tutorial

Comprehensive tutorial software has been developed by Richard Alston and Wan Fu Chi (Weber State College) expressly for *Contemporary Economics*. These tutorials help students to learn concepts, reinforce their understanding, and develop their problem-solving skills.

Here is the basic structure of the system:

- The first set of programs covers general introductory material that can precede either the macroeconomics or microeconomics portion of the course. These programs include coverage of graphing, opportunity cost, production-possibilities curves, and the laws of supply and demand.
- The next set of programs covers basic macroeconomic theory. The programs include the aggregate demand/aggregate supply model; the income-expenditure (or basic Keynesian) model; and the uses of these models in analyzing changes in the money supply, prices, interest rates, unemployment, tax rates, and other economic variables.
- The last set of programs covers basic microeco-

nomic theory. Topics covered include elasticity, utility theory, production and cost functions, perfect competition, monopoly, and imperfect competition.

This easy-to-use software is available for use on IBM and true compatibles and Macintosh computers.

Supplements for the Instructor

Instructor's Resource Manual

The *Instructor's Resource Manual* provides a detailed outline of each chapter, which is helpful for planning lectures. This manual also contains learning objectives and suggested answers to the end-of-chapter questions and to the questions at the end of the Economics Live essays.

Test Bank

Few test banks in economics meet *all* the criteria for multiple-choice questions established by testing experts. The test bank available to adopters of *Contemporary Economics* does. For those who are interested, the criteria are listed in the preface of the *Test Bank*.

Numerous new questions have been added and others have been revised to reflect the changes in the text. There are approximately 2,500 five-choice multiple-choice questions and 400 true-false questions. More than 85 percent of the questions require analysis, application, or interpretation of concepts or data. Fewer than 15 percent require students to recall factual or descriptive information. Four ready-made model examinations covering each part of the text are also provided in the *Test Bank*.

Computerized Test-Generation System

The questions in the *Test Bank* are available on disks (for IBM and true compatibles and Macintosh computers) for quick and easy generation of exams. Instructors can add their own questions, edit the existing questions, and print out different versions of an exam. The *Test Bank* and test-generation system include many questions that use graphs.

Color Transparencies

A full set of color acetate transparencies of the key graphs, charts, and diagrams in the text is available to adopters for use on an overhead projector.

Acknowledgments

As always, it's a pleasure to acknowledge the help and cooperation I've received in the preparation of this book. A special expression of thanks goes to Timothy Tregarthen. He helped to create the plan for revision, wrote several chapters, and played a major role in the development of others. He also contributed new chapter-end discussion questions and wrote the Economics Live essays. Grateful thanks go also to Suzanne Tregarthen. She wrote the essays on Notable Economists and collaborated with Tim in writing the Economics at Work profiles.

Over the life of this book, I have benefited from the advice and criticisms of hundreds of dedicated teachers and scholars. I cannot list them all here, nor can I list all of the students whose comments have helped to shape and improve the book. But I am grateful for the many suggestions, over the years, from so many people. I do want to mention and thank those who reviewed substantial portions of this edition and shared their classroom experiences with me:

M. P. ARYA, Edison Community College SUE HART ATCHESON, Mt. San Antonio College CARL J. AUSTERMILLER, Oakland Community College, Farmington

CARSON BAYS, East Carolina University
GEORGE S. BOHLER, Florida Community College,
North Campus

MARY W. BONE, Pensacola Junior College THOMAS P. BRESLIN, Trenton State College LILIAN BRONER, Oakland Community College, Highland Lakes

CHARLES A. CAMPBELL, Mississippi State University

VICKY CHIU-IRION, Kapiolani Community College

BETSY JANE CLARY, College of Charleston BRUCE R. COFER, Louisiana College

JOE B. COPELAND, University of North Alabama LARRY A. DAELLENBACH, University of Wisconsin, La Crosse

DAVID C. EDMONDS, University of Southwestern Louisiana

DENNIS L. FOSTER, University of Hawaii, Manoa RICHARD T. GERUSON, La Salle University CHARLES C. GILLETTE, University of Northern Iowa RALPH T. GREEN, Texas Woman's University PETER GUTMANN, Baruch College, City University of New York

MARTIN D. HANEY, Portland Community College, Sylvania

J. WILLIAM HOBAN, Waubonsee Community College

James H. Holcomb, University of Texas, El Paso Walter L. Johnson, University of Missouri, Columbia

JACK KLAUSER, Chaminade University, Hawaii BARBARA KNEESHAW, Wayne County Community College

B. STARR MCMULLEN, Oregon State University
H. RICHARD MOSS, Ricks College
JOHN NEAL, Lake Sumter Community College
ARTHUR T. PETERSON, Middlesex County College
MUNIR QUDDUS, University of Southern Indiana
TERESA RILEY, Youngstown State University
MARK C. ROBERTS, Michigan Technological University

HENRY D. RYDER, Gloucester County College ZÉNA A. SELDON, University of Wisconsin, La Crosse

CALLA WIEMER, University of Hawaii, Manoa VICTOR G. WIXOM, Manatee Community College JEFFREY J. WRIGHT, Lenoir-Rhyne College

Thanks are also due to instructors who participated in focus-group meetings on the sixth edition. Their feedback was helpful in planning the changes for this edition.

ERIC ANDERSON, Old Dominion University
WILLIAM A. DONNELLY, University of Wisconsin,
La Crosse

RICHARD T. GERUSON, La Salle University
JAMES H. HOLCOMB, University of Texas, El Paso
JOHN A. MILLER, Wheaton College
JACK MOGAB, Southwest Texas State University
JAMES NORDYKE, New Mexico State University
TERESA RILEY, Youngstown State University
SIAMACK SHOJAI, Manhattan College
ROBERT THOMAS, Iowa State University
WILLIAM ZIMMER, Montgomery County Community College

Milton H. Spencer September 1989

Suggested Outlines for One-Semester Courses

Recommended chapters.Optional chapters, time permitting.

Contents in Brief

PART 1 Overview: Our Economic System		1	PART 3 Monetary Economics: Money, Banking, and Monetary Policy	
2	Introduction: Getting Started in Economics Our Mixed Economy: Resources, Goals, and Institutions The Laws of Supply and Demand: The Price System in a Pure Market Economy The Private Sector — Household, Business, Foreign The Public Sector — Government: Public Choice and Taxation	2 20 43 64 80	 9 Money, Financial Markets, and the Banking System 10 Banking Institutions: Money Creation and Portfolio Management 11 Central Banking: Tools of Monetary Policy 12 Money and Prices: Understanding Monetary Policy 	176 195 214 232
	RT 2 e Macroeconomy	101	PART 4 Keynesian Economics: Unemployment, Fiscal Policy, and Macroeconomic Equilibrium	251
	National Income and Wealth: Measuring the Nation's Economic Health	102	13 Lapses from Full Employment: Introduction to Keynesian Economics	252
6	Monitoring the Economy: Business Cycles, Unemployment, and Inflation	121	14 Income and Employment Determination: The Income-Expenditure and Income-	
7	The Self-Correcting Economy: Aggregate		Price Models	270
	Demand and Aggregate Supply	140	15 Fiscal Policy and the National Debt	292
8	Economic Growth: Increases in Long-Run		16 Money, Interest, and Macroeconomic	
	Aggregate Supply	157	Equilibrium	310

PART 5 Macroeconomics Today: Ideas, Issues, and Policies	323	PART 8 Microeconomics Today: Ideas, Issues, and Policies	55
17 Today's Macroeconomic Theories: Keynesianism, Monetarism, Rational		29 Our Farm Problem: Agriculture in Transition30 Public Choice and Merit-Goods Pricing:	55
Expectations Theory, and Real Business Cycle Theory	324	Improving Public-Sector Efficiency	56
18 Dynamics of Inflation, Output, and		31 Industrial Organization and Antitrust: Structure, Conduct, Performance, Policy	58
Unemployment	338	32 The Economics of Regulation	60
19 Policy Analysis: Recent American Domestic and International Experiences	350	33 Human Resources: Labor Markets, Discrimination, Unions	61
		34 Economics of Social Problems: Insecurity,	0
		Poverty, Drugs, Pollution	63
		Supplement: Economics of Health Care	65
PART 6			
Supply and Demand: The Laws of Production and Cost	373		
Troduction and Cost	3/3		
20 Working with Supply Depart and		PART 9 International Economics and the	
20 Working with Supply, Demand, and Elasticity: Some Practical Applications	374	World's Economies	66
21 Looking Behind the Demand Curve:			
Utility and Consumer Demand	404	35 International Trade: The Commerce	
Supplement: Indifference Curves	420	of Nations	66
22 Costs of Production	429	36 International Finance: The Payments	
		of Nations 37 Economic Development: The Less	68
		Developed and Newly Industrializing	
PART 7		Countries	69
Economics of the Firm: Price and		38 Marxism and Socialism	72
Output Determination	449	39 Market Socialism and Economic Reform: The Soviet Union and China	73
23 Perfect Competition: Criteria for		Index	75
Evaluating Competitive Behavior	450	Dictionary of Economic Terms and Concepts	D-
24 Monopoly Behavior: The Other End	457		
of the Competitive Spectrum	467		
25 The Real World of Imperfect Competition	487		
26 Hiring the Factors of Production: Marginal Productivity and Income Distribution	506		
27 Determination of Factor Prices	520		

535

28 Stability, General Equilibrium, and Welfare Economics

Contents

PART 1 Overview: Our Economic System



Introduction: Getting Started in Economics	2
	1111
What Is Economics About?	2
"Micro" and "Macro"	3
Working with Theories and Models	3
Common Fallacies in Reasoning	4
The Language of Graphs	7
The Basic Ideas	7
Extending the Basic Ideas	10
Using Letters in Place of Numbers	10
Independent and Dependent Variables	10
Movements and Shifts	10
Graphing Unrelated Variables	12

Measuring Slope	12
Straight Lines and Curved Lines	14
Time Series Graphs	15
Conclusion: Learning by Doing	16
ECONOMICS LIVE	
Will Studying Help You In Economics? It Depends	18
CHAPTER 1	
Our Mixed Economy: Resources, Goals, and Institutions	20
and institutions	20
	1111
Factors of Production: Resources of Our	
Economic System	20
The Economic Problem: Scarcity, Choice, and Cost	22
	22
Economic Systems Returns to Owners of Resources	23
Returns to Owners of Resources	23
Goals of Our Economic System: What Do	
We Want To Accomplish?	24
Efficiency: Full Employment of Resources	24
Equity: Fairness or Economic Justice	25
Stability: Steady Average Price Level	25
Growth: Rising Output per Person	25
Establishing a Mix of Goals	25
Conclusion: Decisions Involve Trade-Offs	26
The Great Questions: What? How?	
For Whom?	27

xvii

What Goods and Services Should a Society Produce—and in What Quantities? How Should Resources Be Organized for Production? For Whom Shall the Goods Be Produced?	27 27 27	"Invisible Hand" at Work: Lab Experiments Test Old Economic Rule ECONOMICS AT WORK	52
Society's Production Possibilities Law of Increasing (Opportunity) Costs	28 29	Kristin Graves ECONOMICS LIVE Deform a Number Shortweet History Wagner	58
Capitalism and Our Mixed Economy Institutions of Capitalism Conclusion: Our Mixed Economy The Circular Flow of Economic Activity ECONOMICS IN THE NEWS	33 33 37 40	R _x for a Nursing Shortage: Higher Wages CHAPTER 3 The Private Sector — Household, Business, Foreign	60
Soviet Health Care's Critical Condition	30	The Household Sector: Income, Wealth,	111
Adam Smith ECONOMICS LIVE Outer Space: The Scarce Frontier	32	A Look at the Facts Measuring Inequality and Explaining the Facts Conclusion: Be Wary of the "Facts"	64 65 67 70
CHAPTER 2 The Laws of Supply and Demand: The Price System in a Pure Market Economy	43	The Ethics of Distribution Contributive Standard Needs Standard Equality Standard Conclusion: An "Optimal" Distribution?	71 71 72 72 74
What Do We Mean by Demand? Demand Schedules and Demand Curves The Law of Demand Market Demand Is the Sum of Individual Demands	44 44 45 46	The Business Sector: Organization and Size The Proprietorship The Partnership The Corporation Business Size and Problems of Bigness	74 74 75 75 75
What Do We Mean by Supply? Supply Schedules and Supply Curves	46 47	The Foreign Sector: International Trade and Finance	77
The Law of Supply Supply and Demand Together Make a Market Buyers and Sellers in the Marketplace	48 48 49	Median Income in U.S. Rises, Poor Lose Ground, Study Says	71
Two Kinds of Changes Involving Demand Changes in the Quantity Demanded Changes in Demand An Important Distinction	50 50 50 50	Wassily Leontief	73
Two Kinds of Changes Involving Supply Changes in the Quantity Supplied Changes in Supply Summing Up: Another Important Distinction	54 54 54 56	The Public Sector — Government: Public Choice and Taxation	80
Combined Changes in Demand and Supply	56	of Government	80
The Market Economy: Is It "Good" or "Bad"? Some Real-World Imperfections Relevant Even If Not Realistic	56 59 62	Promotion and Regulation of the Private Sector Provision of Social Goods Conclusion: Achieving Efficiency Through the Market	818182

Spillovers, Market Failure, and Public Choice	83	Calculating and Interpreting GNP	103
Redressing Spillovers	83	Is GNP a Measure of Society's Well-Being?	107
Conclusion: Efficiency and Public Choice	85	Conclusion: GNP and Social Welfare	108
Public-Sector Budgeting	86	Two Ways of Looking at GNP	108
Public Overspending and Public Choice	86	GNP from the Expenditure Viewpoint: A Flow-of-Product Approach	109
Our Tax System	88	GNP from the Income Viewpoint: A Flow-of-	10.
Taxes on Income	88	Costs Approach	112
Taxes on Wealth	91		
Taxes on Activities	93	Examining the Nation's Income Statement Gross National Product to Net National Product	113
Theories of Taxation	93	Net National Product to National Income	114
Principles of Tax Equity	93	National Income to Personal Income	114
Real-World Compromises	94	Personal Income to Disposable Personal Income	114
Tax Shifting and Incidence: Direct and		SHOW STANDARD STANDARD BY THE ARE	
Indirect Taxes	96	Wealth of a Nation: How Much Is America Worth?	115
ECONOMICS IN THE NEWS		America Worth:	11:
U.S. Lags Behind in Going Private	82	NOTABLE ECONOMISTS	
ECONOMICS IN THE NEWS		Simon Smith Kuznets	106
Skyscraper Surtax	85	ECONOMICS AT WORK	
Sky scraper Surtax	65	Ray Mataloni, Jr.	110
NOTABLE ECONOMISTS		CONCOVER BUY TO CANCELLE	
John Kenneth Galbraith	90	ECONOMICS LIVE	
ECONOMICS AT WORK		Estimating GNP: A Leakproof Lockup?	116
Mike Anderson	92		
ECONOMICS LIVE			
Taxes and Babies	98		
Takes and babies	76	Fig. 1 Constitution and another any	
		CHAPTER 6	
PART 2		Monitoring the Economy: Business Cycles,	
The Macroeconomy	101	Unemployment, and Inflation	121
		<u> </u>	1111
		Business Cycles: A Long History	
		of Fluctuations	121
		Output and Price Fluctuations During Business Cycles	122
		Tracking the Economy	126
UAYA		Conclusion: Reduce Instability	126
			120
		Unemployment	126
		Types of Unemployment	128
		Measuring Unemployment: Who Are the Unemployed?	128
		Full Employment and "Natural" Unemployment	129
		Conclusion: Costs of Unemployment	130
CHAPTER 5		Inflation	132
National Income and Wealth: Measuring		Types of Inflation: Is Our Nation Inflation-Prone?	132
the Nation's Economic Health	102	Who Loses from Inflation? Who Gains?	132
		Measuring Inflation: The Declining Value	
Gross National Product: The Broadest		of Money	134
Measure of a Nation's Output	102	Conclusion: The Need for Price Stability	136

NOTABLE ECONOMISTS William Stanley Jevons	124	Natural Resources Labor Capital Investment and the Pole of Saving	162 162 162
ECONOMICS AT WORK Larry Chimerine	131	Capital Investment and the Role of Saving Technology	165
ECONOMICS LIVE	420	Assessing the Sources of Growth "All Other Things"	165 165
Hard Choices: Trading Inflation for Recession	138	Growth and Aggregate Supply	166
CHAPTER 7 The Self-Correcting Economy: Aggregate Demand and Aggregate Supply	140	Can This Go On? The Malthusian Caution Diminishing Returns and Exploding Population Conclusion: Prospects for Growth	167 168 170
Supply and Demand: Micro Foundations	1111	ECONOMICS LIVE Explaining the Great Slowdown	172
of Macroeconomics Market Clearing: Flexible Versus Sticky Prices Price Flexibility and Market Competition	141 141 142		
Early Classical Macroeconomics Aggregate Expenditure = Aggregate Income or Output	142	PART 3 Monetary Economics: Money, Banking, and Monetary Policy	175
All Savings Are Invested All Prices Are Flexible	144 144	5549	
Today's Macroeconomics The Aggregate Demand Curve The Long-Run Aggregate Supply Curve Combining the Curves What About the Short Run?	145 146 147 149	C Leases (N	
Shifts of the Curves Changes in Aggregate Demand Changes in Aggregate Supply	151 151 153	1 KILO 101.2 528	
Inflationary and Recessionary Gaps Conclusion: Closing the Gaps; Self-Correcting Adjustments	154 154	CHAPTER 9	
NOTABLE ECONOMISTS Jean Baptiste Say	148	Money, Financial Markets, and the Banking System	176
Conclusion standard and standar	anu	Meaning and Functions of Money Medium of Exchange	176 177
CHAPTER 8		Measure of Value	177
Economic Growth: Increases in Long-Run Aggregate Supply	157	Standard of Deferred Payments Store of Value	177 177
The Nature and Significance of		Measuring Money M1: Narrow-Transactions Money—	178
Economic Growth Measuring Growth	158 158	The Basic Money Supply M2: Medium-Range Money	178 178
Productivity and Growth	159	M3: Wide-Range Money	180
Growth Rates: The Power of Small Differences	160	L: Liquid and Near-Liquid Assets	180
The Rule of 72	161	Conclusion: Money Is a Spectrum of Assets	180
Sources of Economic Growth	161	Financial Markets	181