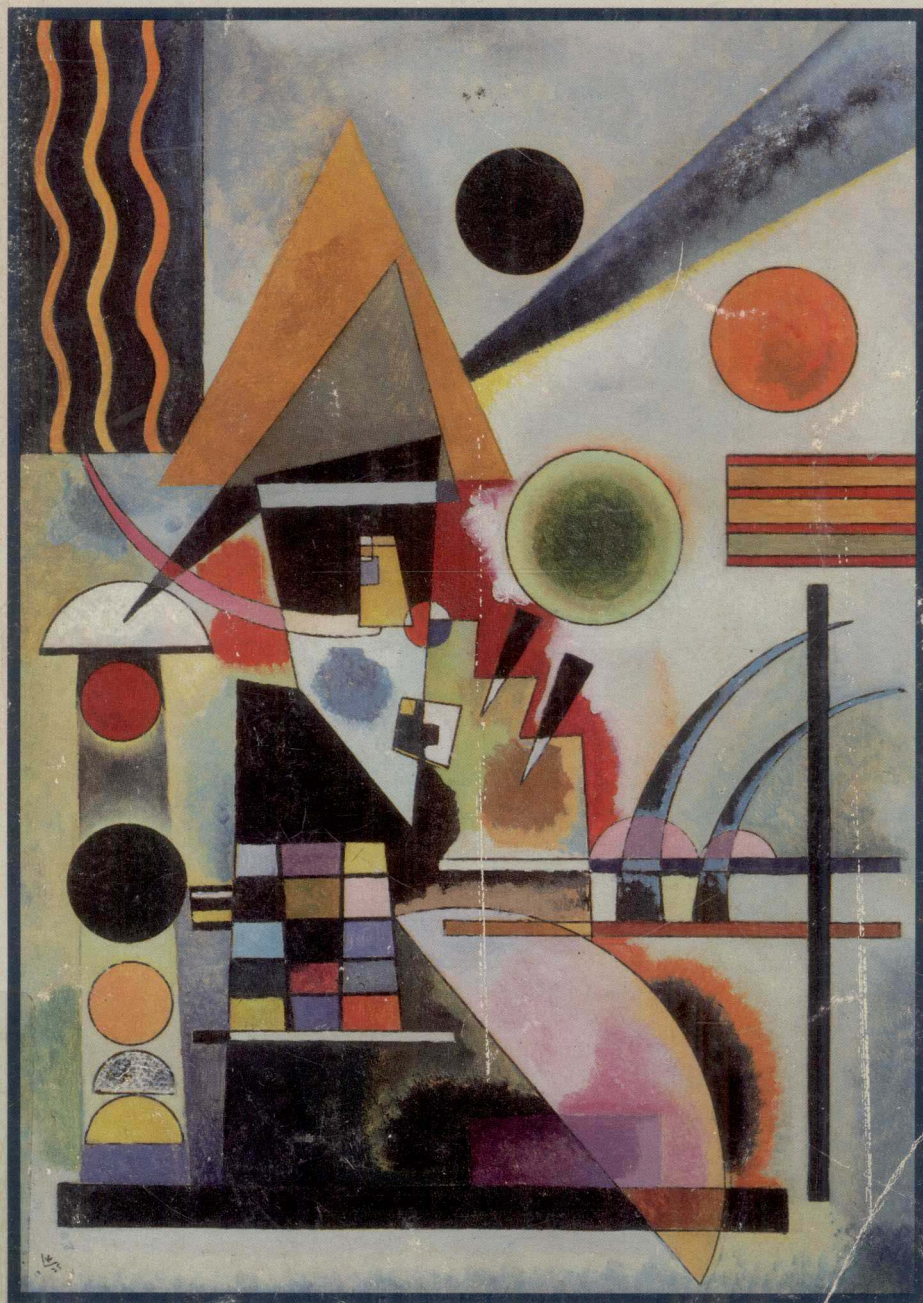


32295

MACROECONOMICS

Dolan
Lindsey



Fifth Edition

32295

MACROECONOMICS

Fifth Edition

Edwin G. Dolan

George Mason University

David E. Lindsey

Deputy Director

Division of Monetary Affairs

Board of Governors of the Federal Reserve System

The Dryden Press

Chicago New York San Francisco Philadelphia Montreal Toronto London Sydney Tokyo

Acquisitions Editor: Elizabeth Widdicombe
Developmental Editor: Rebecca Ryan
Project Editor: Karen Vertovec
Design Director: Alan Wendt
Production Manager: Barb Bahnsen
Permissions Editor: Doris Milligan/Cindy Lombardo
Director of Editing, Design, and Production: Jane Perkins

Copy Editor: Nancy Maybloom
Indexer: Leoni McVey
Compositor: York Graphic Services, Inc.
Text Type: 10/12 Plantin Light

Library of Congress Cataloging-in-Publication Data

Dolan, Edwin G.
Macroeconomics / Edwin G. Dolan, David E. Lindsey. — 5th ed.

p. cm. Includes bibliographies and index.

1. Macroeconomics. I. Lindsey, David Earl. II. Title.
HB172.5.D65 1988 338.5—dc 19 87-33033
ISBN 0-03-020409-7

Printed in the United States of America
890-032-98765432

Copyright © 1988 by The Dryden Press, a division of Holt,
Rinehart and Winston, Inc.

All rights reserved. No part of this publication may be
reproduced or transmitted in any form or by any means, electronic
or mechanical, including photocopy, recording, or any information
storage and retrieval system, without permission in writing from
the publisher.

Requests for permission to make copies of any part of the work
should be mailed to: Permissions, Holt, Rinehart and Winston,
Inc., 111 Fifth Avenue, New York, New York 10003.

Address orders:
111 Fifth Avenue
New York, NY 10003

Address editorial correspondence:
One Salt Creek Lane
Hinsdale, IL 60521

The Dryden Press
Holt, Rinehart and Winston
Saunders College Publishing

Cover Source: Wassily Kandinsky, *Shaking Balancement*, 1925, The Tate
Gallery, London. Copyright Artists Rights Society,
Inc., New York/ADAGP 1987.

The Dryden Press Series in Economics

Asch and Seneca
Government and the Marketplace

Breit and Elzinga
The Antitrust Casebook

Breit and Ransom
The Academic Scribblers, Revised Edition

Campbell, Campbell, and Dolan
Money, Banking, and Monetary Policy

Dolan and Lindsey
Economics, Fifth Edition

Dolan and Lindsey
Macroeconomics, Fifth Edition

Dolan and Lindsey
Microeconomics, Fifth Edition

Eckert and Leftwich
The Price System and Resource Allocation, Tenth Edition

Gardner
Comparative Economic Systems

Hyman
Public Finance: A Contemporary Application of Theory to Policy, Second Edition

Johnson and Roberts
Money and Banking: A Market-Oriented Approach, Third Edition

Kaufman
The Economics of Labor Markets and Labor Relations

Kidwell and Peterson
Financial Institutions, Markets, and Money, Third Edition

Lindsay
Applied Price Theory

Link, Miller, and Bergman
Econograph: Interactive Software for Principles of Economics

Nicholson
Intermediate Microeconomics and Its Application, Fourth Edition

Nicholson
Microeconomic Theory: Basic Principles and Extensions, Third Edition

Pappas and Hirschey
Fundamentals of Managerial Economics, Second Edition

Pappas and Hirschey
Managerial Economics, Fifth Edition

Puth
American Economic History, Second Edition

Rukstad
Macroeconomic Decision Making in the World Economy: Text and Cases

Welch and Welch
Economics: Theory and Practice, Second Edition

Yarbrough and Yarbrough
The World Economy: Trade and Finance

Preface

Change Is the Only Constant

It has been a decade and a half since the authors first collaborated on an economics text. Those years have shown that in economics, change is the only constant.

Since our first effort to set forth the principles of economics for beginning students, economists have gained a better understanding of both the world at large and their own discipline. In macroeconomics, more is known about the dynamics of inflation and disinflation, the role of expectations in shaping economic behavior, and the interaction of the domestic economy with the world economy. In microeconomics, the contributions of public choice theory have lent a new perspective to many policy issues, the work of the modern Austrian school has brought new emphasis to the role of entrepreneurship, and long-established fields of economics such as antitrust policy, human resources, and income distribution have taken on new life.

But the economy has not stood still in the face of economists' improved understanding. Events have continued to pose new questions. Economists still disagree on such matters as the effects of the federal deficit, the proper strategy for monetary policy, the sources of volatility in securities prices and exchange rates, the reasons for differences in men's and women's average pay, and the effects of antipoverty policies, to name just a few areas of controversy.

The rapid pace of change in economic theory and reality makes teaching economics a challenge. Meeting that challenge requires a textbook that changes too. First, the book must bring the latest policy issues and theoretical topics into the classroom and explain them clearly. Second, the book must emphasize the ways of thinking that all economists use to attack new problems, even where they do not ultimately agree. Finally, the book must reflect ongoing innovation in pedagogical techniques so that the complexities of economics are made accessible to the beginning student.

This fifth edition of *Macroeconomics* responds to the need for change with these major innovations:

1. **Feature: Integrated international economics.** Topics in international theory and policy are covered in special sections of chapters that discuss related domestic theory and policy—for example, balance of payments accounts together with national income accounts and foreign exchange operations of the Fed together with its domestic open market operations. Because these sections are self-contained, however, those who wish to follow the traditional option of a single international unit at the end of the course may still do so. The special international sections are designated by a world map logo.
Purpose: To show how domestic economic events and policy can best be understood in the context of an integrated world economy.
Benefit: Crucial international issues are no longer crowded into the last days before the final exam.
2. **Feature: One-model macro option.** The macro chapters now offer a one-model option for teaching the theory of income determination. This permits Keynesian and classical theory, fiscal and monetary policy, and the dynam-

ics of inflation and unemployment all to be taught in an aggregate supply and demand framework. The income-expenditure model is covered in an optional chapter, Chapter 10, and an optional section of Chapter 11 for those who prefer to follow the traditional two-model approach. The accelerationist model of inflation, using inflation-adjusted Phillips curves, is found in Chapter 19, which is self-contained and also optional.

Purpose: To unify the teaching of macroeconomics within a single theoretical framework.

Benefit: Less time spent developing models, more time spent on issues and applications, including international topics.

3. **Feature: State-of-the-art pedagogy.** Enhanced teaching and learning aids and a new generic organization of boxed cases mean that the fifth edition of *Macroeconomics*, like past editions, defines the state of the art in pedagogy.

Purpose: To help students see the forest as well as the trees.

Benefit: Students who understand economics as a way of thinking rather than just a grab bag of models retain more of what they learn in the principles of economics course.

Keeping a textbook like this up to date is not simply a matter of adding new material. Selective pruning is also necessary. In deciding what to eliminate, our overriding aim has been to focus on a few key models and concepts that will unify the student's way of thinking about economics. Input from many reviewers, users, and students has helped us in this task. In some cases, topics have been deleted when they were found repetitive or were used by only a minority of instructors. Other topics no longer appear as separate chapters but are grouped with related topics elsewhere.

Edwin G. Dolan and David E. Lindsey have collaborated on every edition of this book. In this edition, Lindsey has returned to the status of full coauthor. His wide knowledge of macroeconomic theory and insider's view of the policy process complement Dolan's experience in the classroom and as a government analyst. Of course the views expressed in this book are those of the authors and do not necessarily reflect the views of the Board of Governors of the Federal Reserve System or other members of its staff. The following pages outline the approach of this book to the changing world of economics in more detail.

Organization of the Book

The Introductory Chapters

The book begins with a set of chapters that provide an overview of economics and the economy. As a group, these five chapters provide the background that students need to proceed with either a macro-first or micro-first course sequence.

Chapter 1, "What Economics Is All About," focuses on scarcity and choice as the issues that define the discipline of economics. It gives an idea of how economists, as people, think, confront disagreement, and work in academic, business, and government careers. Chapter 2, "Exchange and Production," looks at the central problems of what, how, and for whom that every economy faces. Chapter 3, "Supply and Demand," presents the basic model on which

both micro and macro chapters build, stressing reactions to disequilibrium as well as equilibrium. Chapter 4, "The Role of Business: The Firm, Financial Markets, and Corporate Control," looks at current issues, such as takeovers and insider trading, as well as traditional material relating to the organization of the firm. Chapter 5, "The Role of Government: Market Failures, Rent Seeking, and Privatization," uses the concept of market failure to discuss such topics as provision of public goods and control of externalities and uses the concept of rent seeking to explain why government failures also sometimes occur.

Core Chapters

Integration of International Economics

The traditional structure of the macro course calls for teaching fiscal and monetary theory in a closed-economy context and then adding international topics at the end as time permits. In terms of the logic of step-by-step model building, this approach has some appeal. However, it also has a drawback: Increasingly, any newspaper article or TV news report that mentions monetary policy or the budget deficit is likely to mention the balance of payments and exchange rates in the same breath.

But if an instructor wants to bring international policy issues into the course from the beginning, the student needs an early introduction to the linkages between the domestic economy and the rest of the world. Six of the macro chapters contain special sections that serve this aim. A section in Chapter 6, "The Circular Flow of Income and Product," uses the circular flow model to show the basic linkages between the domestic and world economies. A new section in Chapter 7, "Measuring National Income and Product," outlines the balance of payments accounts as a natural extension of the domestic national income accounts. Chapter 10, "The Income-Expenditure Model," includes a section on the net export component of planned expenditure and shows how imports affect the expenditure multiplier. Chapter 13, "Central Banking and Money Creation," adds a section on the activities of the Fed's foreign exchange market operations as a follow-up to the usual discussion of its open market operations. The impact of interest rate changes on international capital flows is covered in a new section of Chapter 14, "The Supply of and Demand for Money." A section of Chapter 15, "An Integrated View of Monetary and Fiscal Policy," briefly discusses international implications of fiscal policy. These sections provide a series of stepping stones to Chapter 20, "Foreign Exchange Markets and International Monetary Policy."

Some instructors may, of course, prefer the traditional sequence in which international topics are covered at the end of the macro course. For this reason, the international sections of the various macro chapters are self-contained and clearly identified by a world map logo placed in the margin. It is possible to skip over these sections as the chapters are covered with no loss of continuity. The whole set can then be covered as a unit after Chapter 19 and before proceeding to Chapter 20.

The One-Model Option

For many years, textbooks relied on a single model for determining the level of real income: the Keynesian income-expenditure model, also known as the "Keynesian cross" or the "45° model." When the issue of inflation rose to importance in the 1970s, it became popular to supplement the income-expendi-

ture model with a flexible-price aggregate supply and demand (AS/AD) model. The Lindsey/Dolan *Basic Macroeconomics* of 1974 was one of the first principles texts to do this. But today an increasing number of instructors take the view that two models for determining real income is one too many. For one thing, it is difficult to give a clean reconciliation of the two models at the principles level. Also, time spent teaching a second income determination model is time taken away from other course objectives, such as integrating international economics more closely into the course.

Unfortunately, almost all texts to date have been written in such a way that the instructor has no choice but to use both models. Not so with this fifth edition of *Macroeconomics*. This text takes the logical next step in the evolution of the principles course *by using AS/AD as the core model for macro theory while treating the income-expenditure model as an optional supplement*. The basic income-expenditure model is presented in an optional chapter, Chapter 10. This chapter first presents the standard fixed-price version of the model and then allows prices to vary in order to show the relationship of the income-expenditure and AS/AD models. In addition, an optional section of Chapter 11 applies the income-expenditure model to fiscal policy. In both cases, the income-expenditure material is entirely self-contained. It can be taught in sequence as it appears, preserving the traditional course outline, or omitted without loss of continuity.

But what about the historical importance of Keynes and his work? Taking the one-model option in no way downplays Keynes's contributions to macroeconomic theory and policy. Quite the contrary. Chapter 9 of this edition provides a fuller discussion of the Keynesian and classical views of economic stabilization than was given in previous editions. This discussion, presented in the framework of the AS/AD model, presents Keynes's ideas as set forth in his *General Theory* more accurately than the conventional approach used in other texts. By the time students have completed Chapter 9 they will have all the tools they need, including an understanding of the expenditure multiplier, to move directly to the discussion of fiscal policy in Chapter 11.

Continuing Features

Not everything in the macroeconomics chapters is new. Many features that found favor with users of previous editions remain. One is the use of the circular flow model to introduce key macroeconomic concepts and relationships (Chapter 6). Another is the blending of monetary theory, financial institutions, and practical policy issues in Chapters 12 through 15. Still another is the optional, chapter-length treatment of the accelerationist model of inflation (Chapter 19 in this edition). Along the way, many favorite case studies have been retained and a number of new ones added.

Pedagogy

Many innovative features of earlier editions of *Macroeconomics* have become industry standards. An example is multilevel vocabulary reinforcement, with boldface terms, marginal definitions, and an end-of-book glossary. While others play catch-up, the process of innovation and refinement continues in this new edition of Dolan/Lindsey.

Bracketing

One of the most solidly established techniques of effective pedagogy is that of *bracketing*. Every good classroom lecturer uses bracketing in the form of “Here’s what we are going to say; here it is in detail; here is what we just said.” The textbook equivalent is chapter preview and review. Sheer volume of preview and review material counts for less than do the care with which the two are tied together and what comes between. Here are the key bracketing techniques used in *Macroeconomics*:

- Each chapter opens with a set of *learning objectives* posed in the form of issues to be addressed in the chapter. These are then used in question form to organize the *chapter summary*.
- A list of *key terms from previous chapters* appears at the beginning of each chapter. This is balanced by a list of *newly introduced terms* at the end of the chapter.
- Each chapter begins with a *lead-off case* and ends with a *case for discussion*. The first item in the *problems and topics for discussion* at the end of the chapter asks students to apply what they have learned to issues raised in the lead-off case. The case for discussion is followed by its own set of questions. (Answers to these questions are given in the *Instructor’s Manual*.)

Generic Organization of Boxed Cases

Since its first edition, *Macroeconomics* has been a leader in the use of case studies as a teaching and learning tool. In addition to the lead-off cases and cases for discussion used to bracket each chapter, numerous *boxed cases* appear within each chapter. An innovative feature of this edition is the organization of these cases into four generic categories, each with a specific purpose:

1. **Economics in the News.** Illustrates an abstract concept raised in the chapter with an actual quoted or paraphrased news item. Example: “Consumer Switch to Chicken Brings Change to Beef Industry” (Chapter 3).
2. **Applying Economic Ideas.** Uses a tool learned in the chapter for solving a problem drawn from real life. Example: “The Opportunity Cost of a College Education” (Chapter 1).
3. **Who Said It? Who Did It?** Highlights the contribution of an economist of the past or present to a key idea discussed in the chapter. Example: “Adam Smith on the Invisible Hand” (Chapter 1).
4. **Perspective.** Takes a look at a controversial issue or adds additional detail to a point raised in the chapter. Example: “A Junk Job Explosion?” (Chapter 8).

The Package

A complete support package provides instructors and students with everything they need to teach and learn economics.

Test Bank

Written by Louis Amato and Irvin B. Tucker III, both of the University of North Carolina at Charlotte, in collaboration with Edwin G. Dolan, the *Test Bank* includes more than 1,000 items. The authors have fully class-tested each item, guaranteeing a comprehensive, “teacher-friendly” selection. The *Test Bank* contains the following features.

Number and Type of Questions

The *Test Bank* offers over 1,000 multiple-choice and true/false questions. It also contains many graphical questions.

Distribution of Questions by Chapter

- Each chapter has an appropriate number of questions based on its content and length. This varies from 40 questions for the first, introductory chapter to 120 for some of the core concept chapters.
- Some questions appear in alternate forms to permit reuse.
- Questions are arranged in the approximate order of the chapter coverage of each topic.

Categorization and Coding

All questions are coded according to level of difficulty and cognitive learning type. These are E (easy), M (moderate), D (difficult), DF (definition or fact), SA (simple analysis), and CI (complex interpretation). This allows the instructor to select a spectrum of questions for testing both recall learning and concept comprehension.

Graphing Emphasis

Many questions ask students to work directly on graphs. Questions are formatted to follow the “hands-on” sample items in the *Study Guide*.

Recordkeeping Aid

The *Test Bank* contains marginal recordkeeping space for the instructor to personalize it with the date each question is used and the percentage of students who correctly answer each question.

Additional Exam and Essay Problems

The *Instructor's Manual* contains two exam and essay problems for each chapter with which to supplement tests. Exam and essay problems typically serve as excellent extra-credit test questions for more proficient students. Answers are included.

Computerized Version

The *Computerized Test Bank* (available for the Apple® IIe, IBM® PC, IBM® PC-XT, and mag tape) allows the instructor to create tests tailored to particular requirements. By using the questions stored on disk, both short quizzes and full-length exams can be quickly and easily constructed.

The *Computerized Test Bank* allows instructors to

- preview questions on the computer screen
- edit publisher-supplied questions and create personalized questions
- select exam questions manually or randomly

- create exam headings and determine the amount of space to be allotted each question
- scramble questions to create multiple versions of the same test
- print exams with answer keys and student answer sheets
- store exams created for future use
- produce partial hard copy of most graphs that appear in the *Test Bank*.

“Sticky-paper” versions of all graphs are also available for placement on the master copy.

Direct Service Hotline

For instructors who have any technical difficulties with the *Computerized Test Bank*, The Dryden Press/TEC offers a direct service number: 516-681-1773, 9 a.m. to 5 p.m. EST.

Instructor's Manual

The *Instructor's Manual* for *Macroeconomics* is intended to help new instructors prepare their first principles course and experienced instructors tailor their course to mesh optimally with the text. With these aims in mind, the *Instructor's Manual* includes the following features.

What's Different Here and Why

This section, found at the beginning of each chapter, helps convert the course outline and lecture notes from other texts to *Macroeconomics*, fifth edition. Changes from the fourth edition of *Macroeconomics* are noted. This section also provides technical information on the theoretical models that underlie the book.

Instructional Objectives

All elements of the *Macroeconomics* package—text, *Study Guide*, *Test Bank*, and *Instructor's Manual*—are coordinated by means of specific instructional objectives listed in each chapter of the *Instructor's Manual*. In the text, they are listed for students at the beginning of each chapter. Questions covering every topic on the list of instructional objectives are included in the *Test Bank*.

EconoGraph II

An important element of the *Macroeconomics* package is *EconoGraph II*, a computer-aided instruction program featuring interactive graphical exercises and simulations. It consists of nine computer-based lessons divided between micro- and macroeconomic topics. A special section in the corresponding chapters of the *Instructor's Manual* discusses the use of *EconoGraph II*.

Lecture Notes and Suggestions

Each chapter of the *Instructor's Manual* contains a section of lecture notes in outline form. The pages are perforated and three-hole punched to facilitate their integration with the instructor's own lecture notes. The lecture notes cover the optional appendixes as well as the chapters. In addition, they list transparency acetates that are available for use with the text. The use of the transparencies is more fully discussed in a separate transparency guide.

Examination Problems and Essays

Each chapter contains two or three suggestions for examination problems and essays. These are valuable supplements to the multiple-choice and true/false questions contained in the *Test Bank* where the teaching situation permits grading of problems and essays.

Answers to Selected Problems and Topics for Discussion

Answers are given to selected items from the “Problems and Topics for Discussion” sections of the text as well as the “Case for Discussion” sections in each chapter. Items that involve library research or ask questions that pertain to students’ personal or community situation are omitted.

Course Planning Guide

In addition to these chapter-by-chapter features, the introductory section of the *Instructor’s Manual* contains extensive suggestions on course planning to fit a wide variety of course calendars.

Study Guide

The *Study Guide* for *Macroeconomics* provides students with hands-on applications and self-testing opportunities. It reinforces the text and prepares students for exams. The *Study Guide* contains the following features.

Where You’re Going

All parts of the *Macroeconomics* package are tied together by a numbered set of learning objectives for each chapter. These learning objectives, which also appear in the text and the *Instructor’s Manual*, are given in the “Where You’re Going” section of each chapter of the *Study Guide*. A list of terms introduced in the chapter is also provided.

Walking Tour

The “Walking Tour” section is a narrative summary of the chapter and incorporates questions on key points. Students work through this material, answering the questions as they go along. Answers to the questions are given in the margins.

Hands On

This section contains graphical and numerical exercises that give students hands-on experience in working with the concepts covered in the chapter. It is particularly helpful to students who require extra work in order to master difficult graphical material. Complete solutions, including graphs, are given at the end of the chapter.

Economics in the News

Each of these sections takes the form of a brief news item with questions that relate the item to concepts covered in the chapter. Answers are found at the end of the chapter. These items are particularly valuable in preparing for essay-type exam questions. This feature is the *Study Guide* version of the case study approach used in the text and links economics to the real world.

Self Test

This section consists of 15 multiple-choice questions, which are similar in structure to those in the *Test Bank* and act as a final checkpoint before an exam. Annotated answers to the self-test items are given at the end of the chapter.

Don't Make This Common Mistake

These are special boxes, strategically placed throughout the *Study Guide*, that caution students against certain common mistakes made by successive generations of economics students. All of these mistakes are easy to avoid if the student is alerted to them.

Careers in Economics

A unique feature of the *Study Guide* is the "Careers in Economics" section. This section, written by Keith Evans of California State University, Northridge, has been updated for the fifth edition. This material should appeal to students considering a major in economics.

EconoGraph II

Created by Charles Link, Jeffrey Miller, and John Bergman of the University of Delaware, *EconoGraph II* is a computer software package for principles of economics. It consists of nine interactive tutorial lessons. These lessons include the topics students find most difficult to master, including

- supply and demand
- money expansion
- AS/AD
- Keynesian cross analysis
- cost functions
- supply under perfect competition
- monopoly.

EconoGraph II is designed for use with IBM PCs with at least 128K of memory, DOS 2.0, and a color graphics card (use with IBM compatibles is possible but not guaranteed). Features include:

1. Intensive instruction in the use of graphs, which are critical in economics.
2. Self-contained 10- to 40-minute lessons.
3. Diagnostic questions and problems in which the computer tells students what they did right or wrong.
4. Graphical manipulations in which students can plot lines and shift curves.
5. Graphs constructed in stages so that each stage can be explained and important aspects highlighted.
6. Self-paced instruction to allow for repetition and review.

GraphPac

A completely new concept in student study aids, *GraphPac* is the first graph note-taking device available to economics students. Each *GraphPac* tablet contains reproductions of all major graphs in the text with additional graph-ruled

margins. *GraphPac* allows students to take notes on key graphs without having to sketch transparency acetates, masters, or basic chalkboard drawings. The marginal graph rules provide space for students to reproduce additional graphs drawn by the instructor during a lecture. This is especially useful when the student wants to capture the effect of a shift or change in a basic graph.

GraphPac is free to students upon adoption of the text. It can be ordered by submitting the request number when placing a textbook order.

GraphPac is unique to the fifth edition of *Macroeconomics*.

Transparency Acetates

The transparency acetates are two color and computer generated. This provides maximum accuracy and readability. For complete pedagogical consistency, the color used in the graphics matches that in the text. There are more than 160 acetates of graphs from the text. Each transparency has a complete teaching note to help instructors integrate the transparency into their lectures.

Some Words of Thanks

We wish to thank the following people for their help in revising this edition:

Jack Adams, *University of Arkansas*
 Charles Bennett, *Gannon University*
 Thomas Bonsor, *East Washington University*
 David Brasfield, *Murray State University*
 Donald Bumpass, *Texas Technical University*
 William Carlisle, *University of Utah*
 James Clark, *Wichita State University*
 Avi Cohen, *York University*
 C. M. Condon, *College of Charleston*
 James Cover, *University of Alabama*
 J. R. Cowart, *Mobile College*
 Kenneth DeHaven, *Tri-County Technical College*
 Mary Deily, *Texas A&M University*
 Howard Elder, *University of Alabama*
 Charles Ellard, *Pan American University*
 Michael Erickson, *Eastern Illinois University*
 Christopher Fiorentino, *West Chester University*
 David Fractor, *California State University, Northridge*
 Gary Galles, *Pepperdine University*
 Lynne Gillette, *Texas A&M University*
 Robert Gillette, *Texas A&M University*
 Fred Graham, *University of Texas, Arlington*
 Harish Gupta, *University of Nebraska*
 James Hamilton, *University of Virginia*
 Oskar Harmon, *University of Stamford*
 Charles Hegji, *Auburn University, Montgomery*

John Holland, *Iona College*
 R. James, *James Madison University*
 Robert Jerome, *James Madison University*
 James Jonish, *Texas Technical University*
 Ebrahim Karbassioon, *Eastern Illinois University*
 Bruce Kaufman, *Georgia State University*
 Calvin Kent, *Baylor University*
 James Kyle, *Indiana State University*
 Luther Lawson, *University of North Carolina, Wilmington*
 Stephen Lile, *Western Kentucky University*
 Joseph Lin, *Louisiana State University*
 Raymond Lombra, *Pennsylvania State University*
 Don Losman, *National Defense University, Washington*
 J. L. Love, *Valdosta State College*
 David MacPherson, *Pennsylvania State University*
 Jay Marchand, *University of Mississippi*
 Benjamin Matta, *New Mexico State University*
 John Mbaku, *Kennesaw College*
 Eugene McKibbin, *Fullerton College*
 Shah Mehrabi, *Mary Washington College*
 Joseph Mesky, *East Carolina University*
 Don Meyer, *Louisiana Tech University*
 Steve Meyer, *Francis Marion College*
 Jefferson Moore, *Louisiana State University*
 J. M. Morgan, *College of Charleston*
 John Murdoch, *Northeast Louisiana University*

Kenneth Nowotny, *New Mexico State University*

James O'Neill, *University of Delaware*

Pat Papachristou, *Christian Brothers College*

Carl Pearl, *Cypress College*

Thomas Peterson, *Central Michigan University*

John Piscotta, *Baylor University*

J. M. Pogodzinski, *Georgia State University*

David Rees, *Mesa College*

Michael Rendich, *Westchester Community College*

D. Rogers, *LeMoyne College*

Donald Schaefer, *Washington State University*

Bruce Seaman, *Georgia State University*

Frank Slesnick, *Bellarmino College*

Phillip Smith, *Gainesville Junior College*

Ken Somppi, *Auburn University*

David Spenser, *Brigham Young University*

Henry Thomasson, *Southeastern Louisiana University*

Timothy Tregarthen, *University of Colorado, Colorado Springs*

David Tuerck, *Suffolk University*

Arienne Turner, *Fullerton College*

Steven Ullmann, *University of Miami*

K. T. Varghese, *James Madison University*

Thomas Vernon, *Clarion University of Pennsylvania*

Michael Watts, *Purdue University*

William Weber, *Illinois State University*

Don Williams, *Kent State University*

Eugene Williams, *Northwestern State University*

Ernie Zampelli, *Catholic University of America*

In addition, we would like to thank the staff of The Dryden Press for making this edition possible. They are a truly dedicated, tireless group of professionals.

Edwin G. Dolan
Great Falls, Virginia

David E. Lindsey
Arlington, Virginia

December 1987

About the Authors

Edwin G. Dolan grew up in a small town in Oregon. He attended Earlham College and then Indiana University, earning a B.A. degree from Indiana. After staying at Indiana to earn an M.A. in economics, he completed his Ph.D. at Yale University. Dolan spent the next few years teaching economics at the University of Connecticut, Dartmouth College, and the University of Chicago. He has served as a specialist in transportation regulation, both in the antitrust division of the U.S. Department of Justice and at the Interstate Commerce Commission. For the last ten years, he has taught economics at George Mason University.

David E. Lindsey comes from the university town of West Lafayette, Indiana. He received his B.A. from Earlham College and his Ph.D. from the University of Chicago, where he studied under Milton Friedman. Lindsey taught economics for several years at Ohio State University and Macalester College. He began his long-running collaboration with Dolan on their principles text while at Macalester. Since 1974 he has been on the staff of the Board of Governors of the Federal Reserve System, where he now serves as Deputy Director of the Division of Monetary Affairs.

Contents in Brief

Part One	An Overview of the Market Economy	1
Chapter 1	What Economics Is All About	2
Appendix to Chapter 1	Working with Graphs	24
Chapter 2	Exchange and Production	32
Chapter 3	Supply and Demand	50
Chapter 4	The Role of Business: The Firm, Financial Markets, and Corporate Control	80
Chapter 5	The Role of Government: Market Failures, Rent Seeking, and Privatization	102
Part Two	Introduction to Macroeconomics	127
Chapter 6	The Circular Flow of Income and Product	128
Chapter 7	Measuring National Income and Product	152
Appendix to Chapter 7	Computation of Price Indexes	175
Chapter 8	Unemployment, Inflation, and the Business Cycle	180
Part Three	A Basic Model of Macroeconomic Equilibrium	205
Chapter 9	Classical and Keynesian Theories of Income Determination	206
Chapter 10	The Income-Expenditure Model	226
Chapter 11	Fiscal Policy	254
Part Four	Monetary Economics	285
Chapter 12	Money and the Banking System	286
Chapter 13	Central Banking and Money Creation	308
Chapter 14	The Supply of and Demand for Money	334
Chapter 15	An Integrated View of Monetary and Fiscal Policy	362
Part Five	Price Stability, Employment, and Economic Growth	387
Chapter 16	Inflation in the Aggregate Supply and Demand Model	388
Chapter 17	Economic Growth and Productivity	414
Chapter 18	Strategies for Economic Stabilization	438