

The background of the entire cover is a blue grid pattern that recedes into the distance, creating a sense of depth and perspective. The grid lines are darker blue and become smaller as they approach the horizon.

Stanley Fischer, Rudiger Dornbusch, Richard Schmalensee

ECONOMICS

Second Edition

ECONOMICS

SECOND EDITION

Stanley Fischer
Rudiger Dornbusch
Richard Schmalensee

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ECONOMICS

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Suggested Outlines for a One-Semester Course

FIRST OPTION: One-Semester Survey Course Covering Both Microeconomics and Macroeconomics

- 1 An Introduction to Economics
- 2 Basic Concepts and Techniques
- 3 Supply, Demand, and the Market
- 4 Government in the Mixed Economy
- 5 Elasticities and Market Adjustment
- 7 Business Organization and Behavior
- 8 Production and Costs
- 9 Supply in a Competitive Industry
- 11 Imperfect Competition: Monopoly
- 23 Introduction to Macroeconomics and the Aggregate Supply/Aggregate Demand Framework
- 24 Measuring the Macroeconomy
- 25 The Determination of National Income
- 26 Money and Banking
- 27 Central Banking and the Monetary System
- 28 The Budget, Fiscal Policy, and Aggregate Demand
- 29 Money and the Economy
- 30 Aggregate Supply and the Price Level
- 36 International Trade and the Balance of Payments
- 37 Gains from Trade and Problems of Trade
- 40 Alternative Economic Systems

SECOND OPTION: One-Semester Course Emphasizing Microeconomics

- 1 An Introduction to Economics
- 2 Basic Concepts and Techniques
- 3 Supply, Demand, and the Market
- 4 Government in the Mixed Economy
- 5 Elasticities and Market Adjustment
- 6 Consumer Behavior and Market Demand
- 7 Business Organization and Behavior
- 8 Production and Costs
- 9 Supply in a Competitive Industry
- 10 The Invisible Hand: Competition and Economic Efficiency

- 11 Imperfect Competition: Monopoly
- 12 Oligopoly and Monopolistic Competition
- 13 Regulation of Economic Activity
- 14 Government and the Monopoly Problem
- 15 Production and Derived Demand
- 16 Labor Supply and Wage Determination
- 17 Human Capital and Unions
- 20 Inequality, Poverty, and Discrimination in the United States
- 22 Welfare Programs, Poverty, and Income Distribution
- 37 Gains from Trade and Problems of Trade

THIRD OPTION: One-Semester Course Emphasizing Macroeconomics

- 1 An Introduction to Economics
- 2 Basic Concepts and Techniques
- 3 Supply, Demand, and the Market
- 4 Government in the Mixed Economy
- 23 Introduction to Macroeconomics and the Aggregate Supply/Aggregate Demand Framework
- 24 Measuring the Macroeconomy
- 25 The Determination of National Income
- 26 Money and Banking
- 27 Central Banking and the Monetary System
- 28 The Budget, Fiscal Policy, and Aggregate Demand
- 29 Money and the Economy
- 30 Aggregate Supply and the Price Level
- 31 Adjusting to Supply and Demand Shifts: The Business Cycle
- 32 Unemployment
- 33 The Inflation Problem
- 34 Money, Deficits, and Inflation
- 35 Economic Growth
- 36 International Trade and the Balance of Payments
- 37 Gains from Trade and Problems of Trade
- 38 Exchange Rates and International Finance

Preface

Our aim in this second edition of *Economics* is to present the essential core of economics in a way that enables students to understand the world in which we live. Students can expect after this first course both to have learned the basic facts of economic life and to have mastered principles they can use to understand the economic changes, controversies, and policy debates they will encounter throughout their lives.

This edition follows the first in broad outline, putting micro before macro, emphasizing the fundamentals in each part, and stressing applications everywhere. But it has been totally rethought and rewritten. Chapters have been moved, added, and removed; material has been moved among chapters and within chapters; and each chapter has undergone a complete revision.

Overview

The four introductory chapters in Part 1 present essential material on the nature of economics (Chapter 1); the use of graphs, data, and theory in economic analysis (Chapter 2); the basic model of market supply and demand (Chapter 3); and—in an essentially new chapter (Chapter 4)—the role of government in the economy. Chapter 4 reviews how governments actually affect the economy, what economic theory says about the ideal role of government, and how governments in practice make decisions.

By the end of these first four chapters, the student should have a good idea of what economics is about, know how to read diagrams and use data, understand how markets work, and know the facts about the mixed economy. By tying the operation of markets in Chapter 3 to the economy's solution of its fundamental "how," "what," and "for whom" problems, we quickly introduce

the student to the extraordinary power of markets. By describing the potential role of the government in dealing with externalities and affecting the distribution of income in Chapter 4, we alert students to the fact that market solutions are not necessarily optimal; by describing the political economy of government decision making, we make the student aware that government solutions may also be far from optimal.

The first part serves as an introduction to either microeconomics or macroeconomics. We start with microeconomics for two reasons. First, it is conceptually easier for students to deal with a single firm or the market for a single good than with the economy as a whole. Second, we believe that macroeconomics is better understood by someone who is familiar with the way markets operate to allocate resources. However, we recognize that there are also good reasons to start with macro: It is in the news far more than is micro, and the introduction to macro provided by the circular flow diagram (introduced in Chapter 2) gives students a good idea of the general equilibrium interactions in the economy. Instructors who prefer to start with macroeconomics can move directly from Chapter 4 to Chapter 23, which introduces macroeconomics and the aggregate supply–aggregate demand framework that we develop.

Within each of the microeconomics and macroeconomics sections we start with the basic facts and principles and, once these are mastered, go on to more applied topics. By starting with and emphasizing the basics and avoiding gimmicks, we ensure that the student is well equipped to handle and, we hope, enjoy the applications. In micro we develop the competitive model fully in Part 2 and move on to imperfect competition and regulation in Part 3, the factor markets in Part 4, and the microeconomics of government in Part 5. In macro we start with aggregate demand in Part 6; then develop the

aggregate supply–aggregate demand model and discuss unemployment, inflation, and economic growth in Part 7; and conclude with five chapters on the world economy in Part 8.

In More Detail

Micro

We start Part 2 with Chapter 5, which develops the definitions and uses of the price and income elasticities of demand, along with cross elasticities. Here, as elsewhere in the book, we draw frequently on real-world data and examples—from oil to medical care to sporting goods—to clarify concepts and make sure that students know the material is useful. Chapter 6 goes behind the demand curve to show how market demand curves are built up from individual demand curves and how utility theory can be used to derive the properties of demand curves. The idea of consumer's surplus is developed, and an appendix presents indifference curve analysis.

Chapters 7 through 9 deal with business organizations and accounting and with the supply side of the market. Here we have improved the order of the material by presenting Chapter 9, dealing with supply in a competitive industry, before introducing imperfect competition. We now allow the student to develop a thorough understanding of the competitive model of the firm and market before encountering the varieties and ambiguities of imperfect competition. Chapter 10, on competition and economic efficiency, shows why competitive markets are efficient and equips the student early in the course to understand the distortions caused by imperfect competition. By simplifying the material, we have been able to present it earlier and thereby enable the student to develop a far deeper understanding of the problems of monopoly than was possible in the first edition.

In Part 3 we cover both imperfect competition and the government policies that deal with it. We start in Chapter 11 with the polar case of monopoly, giving examples of monopolies, discussing their origins and effects, and introducing the natural monopoly problem. Then, in Chapter 12, we move on to oligopoly and other forms of imperfect competition. Chapter 13 provides an overview

of government regulation, and Chapter 14 discusses government's role in dealing with monopoly. These two chapters stress the principles determining both the potential role government could play in improving the allocation of resources and its actual role. We illustrate the principles throughout with real-world examples, describing the origins and operation of regulatory agencies, the effects of airline deregulation, the government's merger guidelines, the partial deregulation of the telephone industry, and more.

Part 4, covering Chapters 15 to 20, deals with the factor markets, starting with a short chapter on the principles of derived demand. This new chapter allows the principles of factor demand to be seen more clearly. Even here, we draw on real-world data on capital-labor ratios to illustrate factor substitution.

Chapters 16 and 17 discuss labor markets, examining labor supply and demand and wage determination and then considering human capital and labor unions, with plentiful use of data and examples. The labor markets are of special interest to students, who are preparing to enter them. We have found in our teaching that the material on human capital in Chapter 17 holds particular appeal; students appreciate the calculations involved in deciding whether to pursue an education and can also be relied on to challenge the view that only pecuniary returns matter.

The economics of capital and land presented in Chapter 18 is also fascinating. Present-value calculations (already introduced in Chapter 17 in discussing human capital) and discussions of when an investment is worthwhile come easily to students. By building the theory of capital around present-value calculations, we present capital theory in a way that is logical, manageable, and intuitively understandable. We extend the discussion to consider uncertainty in Chapter 19. This is an important area not generally covered in principles texts, but it is entirely accessible and deeply interesting to students because the problems of insurance and the prospects of investing in the stock market are familiar to many.

We conclude the factor markets section with a discussion of the distribution of income, poverty, and discrimination in the United States in Chapter 20. We define the Lorenz curve and present facts on the distribution of income and wealth, the incidence of poverty, and the extent of discrimination. Although this chapter is largely descriptive, we use the theory developed in Part 4 on the

factor markets to discuss the effects of changes in labor supply on wages and the distribution of income.

The two chapters in Part 5 examine the role of government both in taxing and producing and purchasing goods and services (Chapter 21) and in making transfer payments that are intended, among other things, to alleviate poverty (Chapter 22). The discussion is again a combination of description and analysis, including a careful evaluation of the current debate about the effects of welfare programs and possible reforms.

Macro

In macroeconomics, as in micro, we begin by developing the basic material clearly and completely. We start in Chapter 23 with definitions of macroeconomics and of the major macroeconomic concepts and issues. We introduce the aggregate supply–aggregate demand diagram, which has intuitive appeal to students who have absorbed the microeconomics of supply and demand from Chapter 3. We illustrate the use of the aggregate supply–aggregate demand apparatus, but we also caution that much lurks behind those curves and that we will only gradually build to a full understanding of their use, which comes in Chapters 30 and 31.

In Chapter 24 we build the discussion of national income accounting around the circular flow diagram, which was introduced in Chapters 2 and 23. National income accounting not only is essential to interpreting economic data but also is an excellent framework in which to emphasize the interactions among markets and among income, output, and spending that are the essence of macroeconomics.

In Chapter 25 we present the first fixed-price model of aggregate demand. The aim here is for students to understand how aggregate output is determined and how it reacts to shifts in demand when supply constraints are not a problem. We emphasize that the assumption that prices are fixed is a temporary one, made in order to develop the analysis, and only rarely a useful description of the way the world works.

From the simplest macro model of goods market equilibrium, we turn in Chapters 26 and 27 to money and banking, the Fed, and the assets markets. These chapters are fun to teach: Students are interested in banks to begin with, but developing understanding of what the

banks do with their deposits, how the banking system operates to affect the stock of money, and how the Fed fits into the process makes banking far less of a mystery. In Chapter 27 we describe the gold standard, show how the Fed affects the money stock, and introduce arguments for a constant growth rule for money. This makes it possible to have a preliminary discussion of monetary policy without waiting until the full aggregate supply–aggregate demand model has been developed.

In Chapter 28 we discuss fiscal policy, the budget, and aggregate demand. This chapter both describes government spending and taxation in the United States and shows how to integrate them into the simplest model of income determination. We discuss the national debt and its burden and the proposed balanced budget amendment. Chapter 28 concludes with an appendix on foreign trade and income determination. This allows instructors who want to introduce trade at this point to do so, at an appropriate level. This appendix not only shows how trade fits into the basic theory of income determination but also describes the facts about the changing role of international trade in the U.S. economy.

In Chapter 29 we introduce money and monetary policy, along with investment and interest rates, into the basic model of income determination. We study the monetary mechanism by which money affects the economy and also examine the policy mix. We conclude the chapter by again emphasizing that the fixed-price assumption is made for analytic convenience, not as a general description of the real world, and that it is about to be lifted.

We develop the aggregate supply–aggregate demand model in Chapter 30, building on the aggregate demand model of Chapter 29 and a careful derivation of the aggregate supply curve. A major virtue of our approach to teaching macroeconomics is that we build up gradually to the supply–demand model, so that the student is already fully aware of what lies behind each curve when he or she uses it. We use the new apparatus both to show how price flexibility modifies the analysis of the effects of fiscal and monetary policy and to show how a shock to aggregate supply affects prices and output.

With the basic supply–demand model in hand, we go on in the remainder of Part 7 to apply the model and to examine special topics in greater depth. We use the supply–demand model in Chapter 31 to study the busi-

ness cycle, which is interpreted as resulting from shifts in the supply and demand curves. We draw the distinction between short- and long-run supply curves and discuss the role of wage and price flexibility in determining the speed with which the economy returns to equilibrium. In this context too, we examine the potential gains from and problems involved in using active stabilization policy.

Chapter 32 discusses the characteristics of unemployment and possible policies to affect both the natural rate of unemployment and cyclical unemployment. In Chapter 33 we examine inflation in more detail, concentrating on the apparent inflationary bias in the United States and in other economies. We examine also the costs of inflation, the Fisher relationship, and possible policy changes to reduce inflation. We continue the discussion of inflation in Chapter 34, which considers relations among money, deficits, and inflation. We demonstrate empirically the weakness of the often-asserted links between money growth and inflation and between deficits and inflation in periods of moderate inflation. Those links stand out clearly in hyperinflations, and we present a detailed description of the fascinating German hyperinflation of 1922–1923. That episode has attracted countless researchers, and we know from our teaching that students also find it fascinating. It is an excellent vehicle for driving home basic lessons about the causes and effects of inflation.

The problem of slowing economic growth besets all the major developed economies. Chapter 35 presents a detailed historical look at the growth process and uses the production function to organize the discussion of the sources of growth. We examine reasons for the productivity slowdown, the sources of innovation, the convergence hypothesis, and government policies to affect growth. The chapter might almost serve as an introduction to macroeconomics. Certainly the material is of enduring importance, nontechnical, and inherently interesting (exploring, for example, whether students should expect incomes to double or quadruple in their lifetimes, or perhaps even decline).

Chapters 36 through 38, dealing with international economics, continue the blend of theory and facts that is the hallmark of the book. Chapter 36 is introductory, describing both trade patterns and reasons for international trade as well as the financing of payments made in

different currencies. Chapter 37 presents both the theory of the potential gains from trade—surely one of the highlights of a principles course—and the reasons why trade appears in practice to be as much a problem as a benefit for the economy. Chapter 38, on exchange rates and international finance, clarifies the apparent mysteries of this area, which has become increasingly important for the United States. (Our treatment of these issues is now simpler than in the first edition.) These three chapters on international trade enable the student to understand most of the important international economic issues that dominate the headlines today and will continue to do so for years to come.

In Chapter 39 we describe the position of the developing countries in the world economy. These nations face particular problems because many of them are specialized primary product exporters. They face individual internal problems because of lack of capital, physical and human, and many of them also confront massive external debts. In this chapter we also discuss the world debt problem and possible solutions. Chapter 40 describes alternative economic systems presenting both Marxian theory and descriptions of the economies of socialist countries. This concluding chapter not only presents material students should know for its own sake but also, by asking them to think about alternative ways of solving the economy's "what," "how," and "for whom" problems, comes back full circle to the definition of economics and the questions with which the book began.

Special Features

Stressing the Fundamentals

The teachers we remember most fondly gave us conceptual tools that we could use on our own after the course was over—along with the confidence and understanding necessary to use those tools well. We try to emulate those teachers here by developing both micro and macro cumulatively, making sure that the student understands the core material before moving on to more advanced topics. In micro we make sure that the student understands supply and demand thoroughly before we discuss noncompetitive market structures. Similarly, we set out

the principles of derived demand before going on to more detailed examinations of the factor markets. In macro we devote several chapters to the careful analysis of aggregate demand before presenting and using the complete aggregate supply–aggregate demand model.

We want the student who uses this book to be able to *do* economics, that is, to use the principles presented here effectively to analyze new problems. That is why we emphasize mastery of fundamental material so heavily and why we keep recent developments—such as game theory, rational expectations, the equilibrium approach to macroeconomics, and public choice—in perspective rather than seeking to recast economics into a new framework. That is also why we shy away from all but the briefest of biographical details about economists, dead or living.

Data and Applications

Economics is not studied for the logical beauty of its theory but rather for what it can tell us about the real world. From the start we emphasize that economics is motivated by and can be used to understand and analyze the world in which students live. We deliberately blend theory, applications, and policy discussions that bring economics across as the relevant and live social science that it is.

Whenever possible—and it is almost always possible—we illustrate the usefulness of the principles developed in each chapter by applying them to an example from the U.S. economy or the economy of a foreign country. For example, in discussing the government's macroeconomic policy mix in Chapter 29 we compare the tight money, tight fiscal policy mix of 1969–1970 with the tight money, easy fiscal policy mix of 1982–1983. In discussing protection in Chapter 37, we can draw on many recent examples, from textiles to automobiles, and we do.

We not only discuss examples to illustrate theory, we also present a good deal of data from the United States and abroad to make sure that the student has an idea of the basic facts of economic life: How large is GNP? How unequal is the distribution of income? How concentrated are U.S. industries? We discuss critical measurement problems and empirical uncertainties rather than pretending omniscience, and we stress the dual roles of

theory and empirical analysis in resolving controversies and determining desirable policy.

Comparative International Data

Our data and examples are drawn from abroad as well as from the United States. For example, in examining money growth and inflation, we look at an international cross section as well as at the U.S. time series. In discussing the role of government, we compare U.S. experience with that abroad. By opening up the foreign dimension, we give the students a broader perspective—quite appropriate in the increasingly integrated world economy—and give the instructor the opportunity to draw on a far wider set of data and experiences to illustrate the principles he or she is developing.

Boxes

There is a box or two in most chapters, presenting either case studies or material that is of interest but not necessarily in the main line of development of the chapter.

The Bottom Line

We conclude the text of each chapter with a single paragraph that succinctly summarizes its central theme, points the way to the next chapter, or both. In addition, we present a detailed summary at the end of each chapter.

Glossary

We alert students in Chapter 1 to the fact that economics has a language of its own that uses familiar words in precise but unfamiliar ways. To help them master this language, the most important definitions appear in a glossary at the end of the book.

Additional Material

Instructor's Manual, Test Bank, and Study Guide

Professor Michael Morgan of the College of Charleston has prepared a comprehensive *Instructor's Manual* to

accompany the text, an expanded *Test Bank* with 2500 questions, and a very useful *Study Guide*.

Also available from your McGraw-Hill representative or from the Business and Economics Marketing Manager, College Division, McGraw-Hill Book Co., 1221 Avenue of the Americas, New York, NY 10020, are overhead masters, overhead transparencies, and a computerized graphics-based tutorial that reviews fundamental microeconomic and macroeconomic concepts.

Split Volumes

This text is also available in two paperback volumes. The microeconomics volume contains Chapters 1 through 22 of this text, along with Chapter 37 on the gains from trade. The macroeconomics volume contains Chapters 1 through 4 as introductory material and then Chapters 23 through 40.

Alternative Courses and Orders of Chapters

On page xxxi we set out three options for a one-semester course. Although the book begins with microeconomics, the instructor who prefers to do so can begin with macroeconomics after Chapter 4 and then return to micro.

Acknowledgments

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For this second edition we want to acknowledge the members of the McGraw-Hill team, especially Elisa Adams, whose professionalism, thoroughness, and good humor have kept us going. Larry Goldberg managed the book through the press with impressive efficiency. This book is much the better for their help and for the help of the many others we have already mentioned and thanked.

Finally, we should make clear that we are each fully and equally implicated in the virtues and faults of this book and the companion volumes, *Introduction to Microeconomics* and *Introduction to Macroeconomics*.

Stanley Fischer
Rudiger Dornbusch
Richard Schmalensee

Postscript

For this edition we have been fortunate to add Richard Schmalensee as a third author. Dick's touch, insights, and experience are evident throughout the book, but especially in the microeconomics sections. It has been a pleasure for us to work with him.

Rudiger Dornbusch
Stanley Fischer

To the Student

Welcome! We wrote this book to help you learn the fundamental principles on which all economics is built. These are principles with which you can understand the changing economic world in which you will live the rest of your life. This book introduces theories, facts, and examples that will help you think systematically about economic issues and problems that you read about and encounter directly every day.

Economics is not a field in which there is always an argument in favor of every possible viewpoint. There *are* right and wrong answers to some questions, but there is also uncertainty about others. One of our aims is to show why economists understand some issues and not others and to explain disagreements that do exist. In choosing the examples and applications, and especially in policy discussions of often controversial topics, we have tried to develop this perspective—first making the issue clear, then analyzing the different viewpoints, and finally not hesitating to say which of them do not make sense. For instance, our discussion of protection in Chapter 37 shows that there are some—very few to be sure—economic arguments that do favor protection of domestic industry against foreign competition; it also shows that many of the most common arguments cannot be supported by logic or evidence.

We hope that by the end of the course you will understand how economists analyze policy issues and problems and that you will be able to analyze economic controversies on your own. Fortunately, the fundamental economic principles generally give the essentially correct answer to most economic problems. More advanced material in economics usually refines but does not reverse the conclusions reached on the basis of the core principles presented in this text.

How to Study

There is a world of difference between reading about economics and actually *doing* and understanding eco-

nomics. Doing economics means using the theories and facts you have learned in order to answer for yourself questions about the choices that you encounter in your daily life, or in reading, or in thinking about the economy around you.

To do economics, you have to learn *actively*; reading is not enough. Question the text at every step. If we say, “Thus X must be true,” be sure you see why. If the text makes three points, be sure after reaching the third point that you remember the first. Above all, when we apply theory, follow the application with care—the applications reinforce the text both by taking you through the theory again and by showing how it relates to the real world.

In learning actively, use your own input. When a line is drawn one way, ask why. See whether it can be drawn differently, and find out what happens when it is. Solve the problems at the end of each chapter. At the end of each part ask yourself what was the point and what you have learned. And to make sure you are right, you may want to jump ahead to the chapter summary.

Study Guide

Professor Michael Morgan of the College of Charleston has prepared an excellent *Study Guide* that accompanies the textbook. It briefly reviews each chapter and then provides many questions that reinforce the material of the chapter and help you learn it actively. The questions in the *Study Guide* in effect take you through the analysis of the chapter step by step.

Anyone who works through the *Study Guide* in conjunction with the text can be sure that she or he understands the material in this book.

Dig in and enjoy!

Stanley Fischer
Rüdiger Dornbusch
Richard Schmalensee

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