Principles of

Macroeconomics

James R. Kearl

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James R. Kearl
Brigham Young University

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Address editorial correspondence to:

D. C. Heath and Company
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About the Author

Currently Professor of Economics at Brigham Young University, Professor Kearl received his Ph.D. in economics from MIT in 1975. His economic research and journal publications for the first five years centered on housing markets, mortgage instruments, liquidity, and inflation. In 1978 he did post-doctoral work in law and economics at Harvard. Since then, his research and publications have focused primarily on law and economics, income and wealth distribution, and economic mobility. He was a White House Fellow in 1983–1984, working as a special assistant to the Secretary of Defense and then as special assistant to the U.S. Trade Representative. From June 1986 to November 1989, he worked at BYU as Dean of General and Honors Education and then as Associate Academic Vice President. He returned to full-time teaching in 1991, and in 1992 received the Maeser Distinguished Teaching Award, BYU's highest teaching award.

Preface

This is a time of extraordinary change. To pick up a newspaper means to confront on a weekly basis stories of economic experimentation after the demise of communism, as well as news about one of the worst economic downturns in the industrial economies in over fifty years. The field of economics, too, has seen vast growth in knowledge in the last decade. Anyone trying to stay current by reading the leading academic journals has a difficult time at best.

I wrote this text in an attempt to capture some of the flavor and excitement of recent events. In doing so, I became aware of the burden facing all authors of new principles of economics texts: by trying to capture some of this newer knowledge, basic texts have grown into mammoth encyclopedias with entire catalogs of topics, often intimidating instructor and student alike. Most principles texts now offer a little knowledge on almost everything. Although I have failed to write the shortest book on the market, this text covers fewer topics than many of its competitors.

The approach to pedagogy reflected in this text is best summarized by two key focuses:

1. fewer topics, but topics in greater depth
2. less memorization, but more problem-solving.

In short, this text stresses *learning by doing*.

Nearly every chapter ends with worked-out sample problems that assist the student to develop analytical skills. These quantitative and qualitative sample problems are followed by an extensive range of end-of-chapter problem sets and essay questions. Hints to solving these problems are found at the end of the text. Additionally, the student workbook, written by Mark Rush of the University of Florida, is unusual in its focus on problem-solving. Professor Rush's workbook uses a rich selection of real-world data, around which he has developed a series of thought-provoking questions.

This text pays special attention to the role of incentives in influencing the behavior of people and organizations. Incentives are a fundamental idea given too little attention in other basic economics texts. Chapters 1 and 2 discuss incentives and property rights extensively, and most chapters have boxed applications called "Incentives and Behavior."

The trend in new and revised elementary economics texts is to accord a greater role to understanding international aspects of the economy. Because I endorse this trend, this text offers an early chapter (Chapter 4) on both the trade model *and* exchange rate theory—the first text to do so. With these important analytical tools established early, the student can follow international implications for standard economic theory more meaningfully as they are integrated into the body of the text.

Economic growth and problems of stagnation are also a major theme. The first and last macro chapters (Chapters 5 and 20, respectively) devote considerable attention to economic growth. Additionally, most of the chapters in-between discuss aspects of growth.

Order of Presentation

Considerable effort is made to explore the foundations of economic behavior and, particularly, the foundations of market economies. Thus Chapters 1 and 2 begin immediately with simple models that explore the consequences of scarcity for an individual, and then for a society. Responses to the opportunity costs that follow from scarcity include the foundations of economic activity—exchange and specialization. Scarcity also leads to competition, which in turn creates the potential for conflict, however. This suggests a central question for any economy or society: How can potential conflicting interests be accommodated and coordinated? Exchange and specialization are important mechanisms for coordinating competing interests. They do not occur in the abstract, however. Rather, they occur within specific institutional settings and understanding the foundations of economic activity requires a grasp of the institutional settings within which exchange, specialization, competition, and coordination occur. The introductory discussion focuses on several important institutional arrangements, including property rights, contracts, firms, intermediaries, markets, and money. Each is developed from the original exchange-and-specialization models as a response to the incentives for individuals and firms to capture the gains from exchange and specialization, to minimize transaction costs, or to overcome shirking or opportunistic behavior.

Chapters 1 and 2 also introduce the theme of incentives: incentives that derive from the interactions of institutional arrangements, scarcity, and rivalry among individuals or firms as well as incentives that are purposefully or inadvertently determined by public policy. Thinking about, looking for, analyzing, changing, and responding to incentives is a central theme of this book, and the role of incentives is woven into the textual materials in virtually every chapter. Hence, this text's approach is not so much "Here is what might happen," but rather, "How can this be understood given the incentives and institutional structure within which individuals and firms make choices?"

Following the foundational material in Chapters 1 and 2, markets are discussed in both domestic (Chapter 3) and international (Chapter 4) settings. International trade and some international institutional arrangements (for example, the use of several different kinds of money rather than a single one and the resulting development of foreign exchange markets) are first discussed in Chapter 4, not in a concluding or optional section at some later point in the text. This early introduction allows examples throughout the text to be drawn from a wide variety of settings, not just from within the U.S. economy. It also means that policy discussions can extend from domestic consequences to the interesting, important, and illustrative international ones.

Chapter 5 poses the problems both of cycles and of growth. The costs of unemployment and inflation are outlined, as well as the importance of economic growth and of growth in productivity, so students can place the debates about stabilization policy in a broader context. Chapter 6 then covers price indices and GDP accounting.

The approach to macroeconomics is an aggregate supply-aggregate demand one. Chapter 7 provides an overview of this approach, analogous to the traditional supply-demand overview chapter in microeconomics. As with the more traditional supply-demand overview in most textbooks, this overview leaves much to be explained, but I believe that it provides a setting within which to situate the subsequent, more specific materials.

The formal analysis of cyclical behavior and policy responses begins with aggregate supply in Chapter 8. I have ordered the materials in this way for a very important reason—price level can then be included in the analysis from the beginning, not just tacked on at the end. The chapter, a challenging one, makes a clear distinction between potential real output and short-run aggregate supply and, hence, between long-run and short-run effects of aggregate demand shocks and aggregate demand policies. The distinction centers on stickiness, and the discussion focuses on alternative reasons why stickiness might be important. This approach is somewhat eclectic and emphasizes the importance of questioning why nominal wages and prices do not adjust quickly and proportionately. Chapter 9 introduces the debate about macroeconomic behavior and hence about macroeconomic policy, to which subsequent chapters return repeatedly. The chapter also introduces supply shocks and, in keeping with the theme of the importance of incentives in understanding economics, it introduces supply-side policy issues.

Aggregate demand and the role of money in the economy are developed in steps. Chapter 9 is devoted to analyzing consumption and investment; this approach assumes consumers and firms are forward-looking. Chapter 10 introduces the aggregate role of government spending and taxation, and provides an initial pass at fiscal policy. In Chapter 11, the interest sensitivity of components of aggregate demand, notably investment, is used to draw attention to the determination of interest rates in an economy. This chapter uses a traditional and simple model of fractional reserve banking and money creation, and also introduces monetary policy. Chapter 12 then asks whether a more realistic view of financial markets can change the essential aspects of monetary policy that were introduced in Chapter 11. It concludes that these changes do not occur, but in doing so, it provides a richer context within which to understand the determination of interest rates in an economy, as well as the role of the Federal Reserve.

With the basic macroeconomic model in place, the discussion of macroeconomic policy issues retraces its steps. Chapter 13 assesses unemployment; Chapter 14, inflation. The next two chapters deal explicitly with stabilization policy: Chapter 15 analyzes the practical problems of stabilization policy, including a discussion of deficit spending, crowding out, and Ricardian equivalence; Chapter 16 focuses on the technical constraints on stabilization policies, expectations, and the debate about policy rules. These chapters provide a setting within which to explore the debate among economists about macroeconomics and macroeconomic policy. In Chapter 17 on the "great debate," the approaches of policy activists and policy nonactivists are given equal play.

At this point, the discussion broadens to consider the interactions between economies caused by exports and imports. Chapter 18 deals with net exports, capital flows, foreign exchange markets, and exchange-rate determination. Chapter 19 then discusses the further constraints on domestic stabilization policy that occur because of capital flows and a flexible exchange-rate regime. This chapter concludes with the problems of the twin deficits and international debt.

Chapter 20, the concluding chapter, returns to the issues of economic growth introduced in the introductory macro chapter and analyzes the theme in a simplified approach that follows Solow's model. It considers problems of growth for less-developed countries and for those economies that are currently in transition from socialism toward a greater reliance on markets.

An introduction to reading graphs. An appendix on understanding graphs is included at the end of the text.

If you have any suggestions after using this text, please write to me.

James R. Kearl
Provo, Utah

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To the Student

You are confronted with a big book, a seemingly endless parade of definitions, and what might appear at first to be a curious approach to problems—lots of problems. It's easy to be overwhelmed by it all, by what looks like a lot of stuff to memorize. *But don't memorize!* Yes, you need to become familiar with and learn the vocabulary of economics, but you will find that easier when you see the technical terms in context. Beyond this, however, I repeat my earlier advice: Don't approach this course as one with a lot of material to be memorized. *This is a course in analysis.* Your instructor and this text are trying to get you to think *about* and think *through* problems in a particular way. In this regard, a handful of ideas and general principles are somewhat relentlessly applied in situation after situation. You will learn how to use these ideas and how to apply them in a large number of settings; that is, you'll be learning by doing. You should not approach each chapter as a new and different topic. To do so would be overwhelming. Instead, you ought to look for common threads from what has come before. If you do, the material will become much more manageable. Learning in this way is cumulative; that is, one idea builds on another and much of what you read and study is either a particular application of earlier ideas or is derived from a synthesis of those ideas. As a consequence, if you get behind or try to skip material, you will be in deep trouble—you will find things increasingly confusing. The text's conversational style is designed to engage you in a dialogue that illustrates basic ideas and invites you to anticipate what is coming next. But you will *not* learn economics just by reading! You will only learn it by working through a number of challenging problems. Again, you will only learn by doing.

Learning by doing requires lots of doing. End-of-chapter problems require problem-solving skills. Work them. Talk about them. Puzzle over them. Look for other examples of similar problems. You should note that the end-of-chapter questions are not *exactly* answered in the Selected Solutions to Questions and Problems at the end of the text. Rather, hints and leading questions invite you to "do" rather than memorize. The excellent workbook that accompanies this text develops these skills more broadly.

Beyond this, however, I believe it is important and useful to talk a lot about economics—to explain approaches and solutions to problems, policy proposals, and so forth in your own words to your friends, classmates, roommate, study group, mother, or even the mirror. Talking about economics is extraordinarily useful. First, it tests whether your ideas actually make sense. As you try to explain ideas and talk through solutions to problems, you will run into areas where you say to yourself, "I really don't know how to explain this," or, "This doesn't sound convincing." Your subsequent study can then be more focused. Second, sharing insights means that you can learn from others—how they see and explain particular issues. I believe that there is much to be learned by trying to distill and sort through a variety of perspectives. Third, talking about economics with friends or in a study group is nonthreatening; hence, it's a great place to make mistakes. A deeper understanding follows from mistakes when you explore and ultimately understand them. Finally, talking aloud about economics is a useful test for whether you really understand the material. If, after studying the material, you can't explain it to someone else, you don't really know it. In this regard, I tell my students that if they have developed a true understanding of a particular concept, idea, principle, or application, they ought to be able to give my lecture on it, albeit a week or two after I've given it.

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