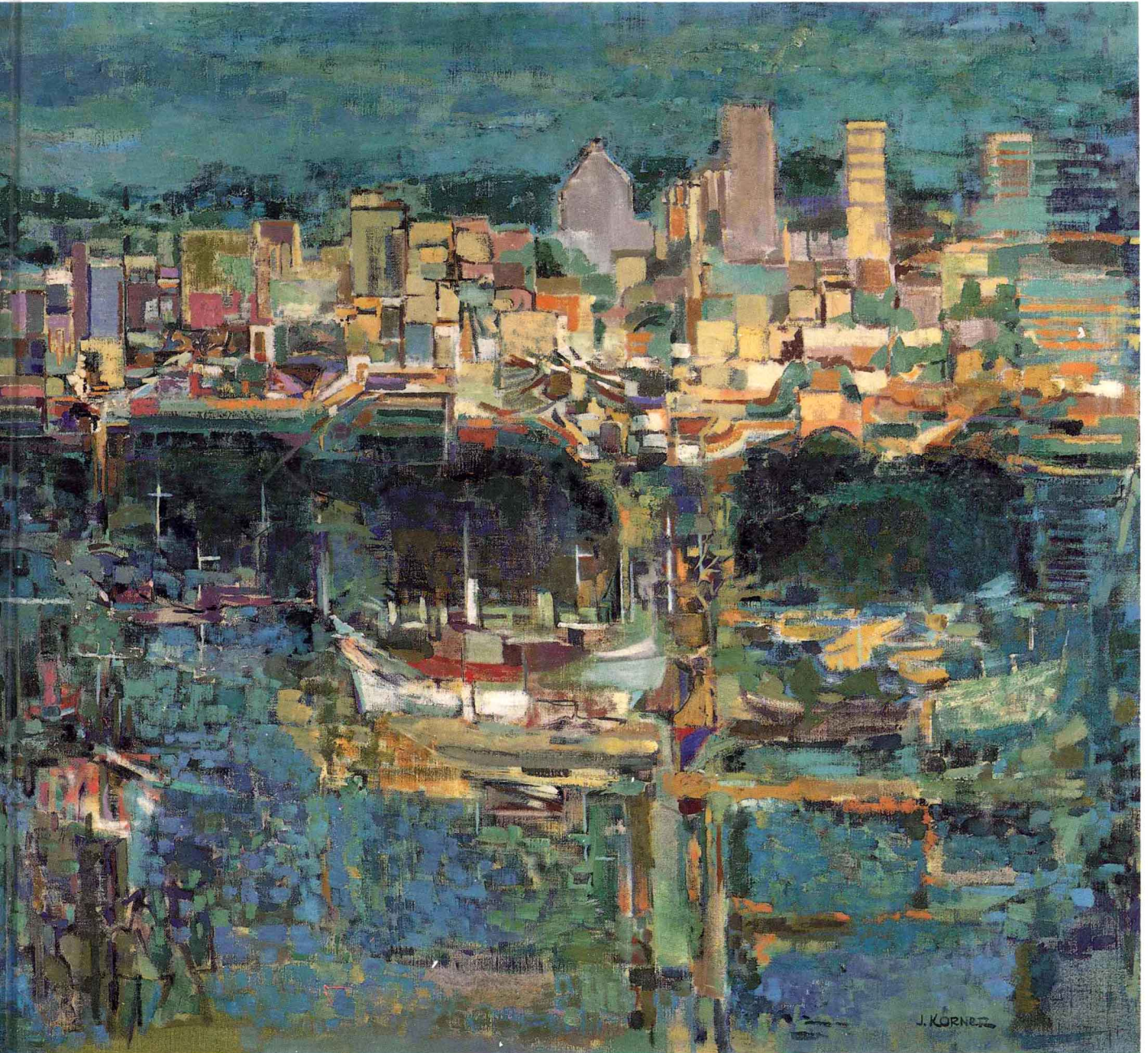


ECONOMICS

PRINCIPLES AND POLICY

THIRD CANADIAN EDITION



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ECONOMICS

Principles and Policy

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Preface

For decades, the “principles of economics” book has been expected to codify the entire discipline of economics. In recent years, this has become increasingly difficult, but also more imperative. The explosion of economic knowledge has made it impossible to put all of economics between two covers. But at the same time, more and more public policy issues either are basically economic in nature or involve important economic considerations. Intelligent citizens can no longer afford to be innocent of economics.

This dilemma has guided the preparation of this book in two ways. First, we have studiously avoided the encyclopedic approach and abandoned the fiction, so popular among textbook writers, that literally everything is of the utmost importance. Second, we have tried to highlight those important ideas that are likely to be of lasting significance—principles that you will want to remember long after the course is over because they offer insights that are far from obvious, because they are of practical importance, and because they are widely misunderstood by intelligent laypeople. A dozen of the most important of these ideas have been selected as **12 Ideas for Beyond the Final Exam** and are called to the reader’s attention whenever they occur through the use of the book’s logo .

This method of highlighting key ideas has proved very popular with users of the previous editions of our book, many of whom have suggested that we go even farther in the direction of weeding out material of lesser importance. In this edition, we have decided to follow these suggestions. There seems to be an unwritten law that, with every new edition, a principles textbook will drift farther away from the focus that was its original *raison d’être*: New material is added, but old material has a habit of remaining in place, with the result that both readability and focus deteriorate. Because both students and instructors have told us that the comparative advantage of our textbook is precisely in its consistent focus and readability, we resolved firmly, in preparing this third edition, to avoid the common pitfall that has harmed other textbooks.

Armed with this resolve, we approached the revision process boldly, and shortened the book significantly: It now consists of thirty-two chapters as opposed to the last edition’s forty. This streamlining was not achieved by simply dropping the later chapters of the textbook for which instructors never seemed to find time in the course of the academic year. After all, those second-edition chapters contained important material on such issues as income distribution, the process of growth, problems encountered by the planned economies, and prevailing criticisms of mainstream economics. Instead, these and other important discussions have been thoroughly updated and integrated into the core material of the textbook. They need no longer be

sacrificed to time constraints along with the more peripheral material that formerly occupied the later parts of the book.

Take, for example, our new organization of material in the microeconomics portion of the textbook, which focusses heavily on what the market does well and what it does poorly, as well as on the trade-off between equality and efficiency. These fundamental issues cannot be discussed adequately without some exploration of income distribution and of the actual experiences of the planned economies. Thus, in Chapter 24, which explains how the “invisible hand” does its job in the idealized world of perfect competition, the analytical discussion is supplemented by material on the actual experience of three major economies representing different types and degrees of planning—the Soviet Union, China, and Japan. (The discussion of the Soviet Union has been extensively rewritten, and new material on Eastern Europe added.) The remarkable and extremely rapid changes taking place within Eastern Bloc countries give new immediacy to this whole set of issues—after all, the transition from planning to markets may be the most burning economic issue of our time.

Other examples of our revision strategy include the integration, in Chapter 18, of material on productivity and growth (which formerly occupied two chapters), and the weaving together of our discussions of factor pricing, the tax system, and the poverty problem into two chapters (Chapters 29 and 30) from the second edition's four. The component parts of these two new chapters are designed in such a way that students and instructors can opt either to cover the material in full or to pick and choose the parts on which they wish to concentrate.

In short, with this revision, our book focusses on the central insights of our discipline even more effectively than did the earlier editions. It would have been easy to make the book *appear* more concise and less encyclopedic, without properly integrating material that was scattered throughout the earlier editions. For example, we could have adopted a two-column text design to shorten the book significantly, but decided against this format because it leaves no room in the margins for our definitions of key terms and concepts (a feature that users have found very helpful) or for the reader's own annotations.

Readability without Sacrificing Rigour

All modern economics textbooks abound with “real-world” examples, but we have tried to go beyond this, to elevate the examples to pre-eminence. For in our view, the policy issue or everyday economic problem ought to lead the student naturally to the economic principle, not the other way around. For this reason, many chapters *start* with a real policy issue or a practical problem that may seem puzzling or paradoxical to non-economists, and then proceed to describe the economic analysis required to remove the mystery. In doing this, we have tried to utilize technical jargon and diagrams only where there is a clear need for them, never for their own sake.

Still, economics is a somewhat technical subject and, except for a few rather light chapters, this is a book for the desk, not for the bed. We have, however, made strenuous efforts to simplify the technical level of the discussion as much as we could without sacrificing content. Fortunately, almost every important idea in economics can be explained in plain English, and this is what we have tried to do. Yet, even while reducing the technical difficulty of the book, we have incorporated some elements of economic analysis that have traditionally been left out of introductory books but that are really too important to omit.

Foremost among these is our extensive treatment of prices and inflation in Parts Two through Four. For years, textbooks devoted many chapters to unrealistic, but presumably simpler, economic models, in which prices never rose. The original American edition of this book was the first introductory textbook to put inflation into the story from the very beginning, rather than as an afterthought—a practice we maintain and expand in this third Canadian edition.

Another example is our treatment of monetary and fiscal policy options for a small open economy such as Canada's. Unlike other textbooks, ours does not shy away from a full application of aggregate supply and demand analysis in this area. And instead of separating our explanation of theory from our discussion of historical policy episodes, we thoroughly integrate the two by making full and rigorous use of the analytical tools to explain the policy experiences.

A third example of our commitment to a rigorous study of central analytical issues is our treatment of the market mechanism's ability, under ideal circumstances, to allocate society's resources in the most efficient manner possible. Many introductory-textbook authors, thinking the topic too difficult for beginning students, give little more than some general hints about this important result. We offer a genuine proof and an extensive discussion of precisely what the result does—and does not—imply about the efficiency of real-world market economies.

To summarize, then, our revision has been guided by two objectives—readability and rigour. The majority of students taking a principles course in economics do not plan to specialize in the field. What they want and need is to obtain a basic level of literacy in economic affairs, so that they can think independently when evaluating public issues. A book cannot meet this need if it is too technical, and addresses itself only to those going on to advanced studies in economics. In a word, the book will fail if it is not readable. But an introductory economics textbook will also fail if it tries so hard to be accessible that it glosses over fundamental points. (After all, in economics, a little learning can be a particularly dangerous thing!) Hence, a book that purports to explain economic reasoning cannot sacrifice rigour any more than it can succeed without being readable. By combining an untiring effort to maintain the literary style that readers have appreciated in our earlier editions with a "hard line" on topic selection, we have tried to meet both objectives, and to achieve a consistent focus on central themes and rigorous analysis in the process.

Macroeconomics

Students are invariably interested in learning enough macroeconomics within an introductory course to enable them to make sense of (or at least evaluate) such things as major statements by the Governor of the Bank of Canada. This is simply not possible without an analysis that stresses the cost-increasing effects of a lower Canadian dollar, which requires an integrated analysis of aggregate demand *and* supply. We use this integrated analysis directly in our discussion of policy episodes.

The macroeconomic section of the book starts with a brief history of macroeconomic events in Canada and an initial use of the aggregate demand and supply curves (Chapter 4). In the same chapter, there is a full discussion of the costs associated with unemployment and inflation, and an explanation of how national product (gross domestic product) is measured. In other words, measurement issues relating to all the major macroeconomic variables are now contained within one chapter; furthermore, the different parts of the chapter are self-contained, so that they can be read at any time during the term of study, at the instructor's discretion. In Chapters 5 through 9, we move on to multiplier theory, fiscal policy, and the supply-side effects of tax changes. The effects of personal income-tax changes, sales tax policy, and corporate tax concessions are thoroughly examined.

Chapter 10 introduces financial considerations. Firms finance their investment expenditures in two ways: They sell stocks and bonds (this is the set of options discussed in Chapter 10), and they borrow from the banks. Chapter 11 introduces the student to the operations of the latter by explaining the money supply and the chartered banking system. The study of central banking that follows (Chapter 12) stresses that pegging the exchange rate forces the Bank of Canada to conduct "open-market operations" in the foreign-exchange market, in just the same way that it does in domestic bond markets when initiating monetary policy. The nature of the foreign-

exchange market is explained at this stage, and monetary policy and exchange-rate policy are discussed simultaneously. The chapter ends with a full discussion of several public statements issued by the Governor of the Bank of Canada concerning the viability of an independent interest-rate policy for Canada and other aspects of monetary policy.

The next two chapters integrate the analyses of fiscal and monetary/exchange-rate policy. Chapter 13 provides an updated discussion of the monetarist–Keynesian debate from the perspective of a closed economy. This approach allows us to outline the policy options available to the United States, whose economy has such a direct impact on our own. Chapter 14 analyzes the relative effectiveness of monetary and fiscal policies under alternative exchange-rate regimes for a small open economy such as Canada's. Several policy episodes are used to illustrate the direct importance of the economic analysis. The potential use of exchange-rate policy to limit the damage caused by foreign trade restrictions is fully discussed in Chapter 14.

The macroeconomics half of the book ends with four "issues" chapters, which can be read in any order. Each of these remaining four chapters deals with a central issue that is both highly topical and of enduring importance. The questions raised are as follows:

- *Chapter 15:* How was our international monetary system developed and why do we observe such vast swings in currency values?
- *Chapter 16:* Are large government budget deficits bad?
- *Chapter 17:* What is the nature of the trade-off between inflation and unemployment?
- *Chapter 18:* How can productivity growth be increased in both the developed and the less developed economies?

This final chapter of the macroeconomics portion of the book has been extensively revised; it focusses on the rise of the service sector in Western economies and on the consequent concern about the phenomenon often referred to as "deindustrialization."

Many of the macroeconomics chapters will look familiar to users of the previous edition, although few paragraphs have survived untouched. Some of the changes worth noting in this third Canadian edition are as follows:

- The basic algebraic treatment of multiplier derivations is now integrated into the text, rather than tucked away in appendices.
- The multiplier is now quite generally defined in terms of the slope of the "total expenditure schedule," so that whenever complicating factors are added, the unifying principle behind the changes in the multiplier formula is more apparent.
- The appendix on discounting now appears in the chapter on investment spending (Chapter 6).
- The material that explains how the central bank intervenes in the foreign-exchange market (Chapter 12) has been totally revised; it is now briefer and clearer.
- The discussion of the purchasing-power parity theory of exchange-rate determination in Chapter 15 has been expanded.

There are new or extensively revised boxed inserts on many topical issues, such as the following:

- Reforming unemployment insurance (page 89)
- How the CPI is measured (page 92)
- Corporate tax concessions (page 204)
- Changes in Canada's money (page 231)
- Reforming deposit-insurance and reserve-requirement regulations (page 245)
- Designing Europe's new central bank (page 249)

- Bank of Canada policy statements (page 264)
- Why the national debt is a burden (page 344)
- Economists versus religious leaders on macroeconomic policy (page 371)
- Labour's reaction to changes in the workplace (page 383)

Other boxed inserts fall under the rubric "At the Frontier," a feature introduced in the second edition and expanded in the third, which offers straightforward introductory descriptions of work that currently occupies the attention of academic economists. These glimpses into exciting new developments give students some awareness of the fact that economics is a living and evolving discipline, not one that is confined to the insights of the distant past. In the macroeconomics portion of the book, these boxed inserts include the following topics:

- Unemployment and inflation as co-ordination failures (page 145)
- The Lucas critique of estimated models of the economy (page 290)

All of our boxed inserts are intended to stimulate the student's interest and to demonstrate that investing a serious effort in understanding economic reasoning is a worthwhile and relevant endeavour.

Microeconomics

The discussion of microeconomics is organized around the central theme that we believe deals with the most significant lessons to be learned in an introductory economics course: what a market system does well, and what it does poorly.

Part One introduces this central theme and some of the fundamental ideas of economics (such as scarcity, opportunity cost, markets, and prices). A host of topical examples are used to illustrate these concepts and to convey the power of supply and demand analysis. They include "green" products at grocery stores, the proliferation of materials for recycling, species extinction, minimum-wage laws, rent controls, and the drug problem. Both the beginning (Chapters 2 and 3) and the end (Chapter 32) of the microeconomics portion of the book emphasize the fundamentally important issue of the environment. By starting with, and then returning to, this issue, we are able to maintain our focus on the theme of what the market does well and what it does poorly.

Our deeper excursion into microeconomic reasoning begins with Part Five. The chapters in this part of the book acquaint students with the central analytical tools of microeconomics and use those tools to explain how both consumers (Chapters 19 and 20) and producers (Chapters 21 and 22) make decisions that best serve their own interests. The extensive revisions in these chapters often reflect the suggestions of users of the last two editions of our book. For example:

- Three different methods are now presented to explain the consumer's optimal purchase rule: (1) basic intuition, applied to an example involving two goods; (2) marginal utility theory, applied to an example involving one good (which represents a small part of the consumer's budget. This method measures utility in terms of the consumer's willingness to part with income in order to acquire the good in question.); and (3) indifference curve analysis. Instructors can select their preferred combination of methods to explain this important concept.
- The relationship among the total, average, and marginal product curves and among the three corresponding cost curves is much more clearly explained.
- The formula for a monopolist's price-over-cost markup is derived and explained.
- Much greater emphasis is placed on the trade-off between equity and efficiency throughout the microeconomics portion of the book. In several chapters, the issue is explained with the aid of graphs depicting consumer and producer surplus.

Part Six examines how the decisions of consumers and firms interact in the marketplace, and provides an extensive examination of the virtues and vices of free markets. The early chapters of Part Six (Chapters 23 and 24) extol the remarkable accomplishments of an idealized system of markets, while the later chapters (Chapters 25, 26, and 27) discuss some of the market system's principal failings, particularly in the areas of monopoly power and externality effects. Chapter 28 discusses the free-trade debate, and ends with a clear, schematic explanation of how the government's main instruments of economic policy can best be assigned to our major economic goals. In this way, Part Six sets the stage for Part Seven, in which we address several important microeconomic policy issues.

The four chapters in Part Seven are devoted to answering the following four questions of current concern:

- *Chapter 29:* What determines the distribution of income?
- *Chapter 30:* What sorts of reforms in the tax and welfare systems represent the most efficient ways of reducing the problems of poverty and discrimination?
- *Chapter 31:* How have our competition laws and our experience with government regulation of industry contributed to promoting competitive behaviour?
- *Chapter 32:* What guidance does economic analysis offer for solving the problems of pollution and resource depletion?

All four of these chapters maintain our fundamental emphasis on identifying the equity and the efficiency aspects of microeconomic policy issues. Only by exploring the implications of policy on these two fronts can we fully appreciate the differences in the views that are held on these issues. And only by stressing this distinction can we defend our preference for certain policies—that is, for the policies that promote our objectives of equity and equality with the least sacrifice of economic efficiency.

The microeconomics portion of the book is replete with topical discussions. For example, in the text there are discussions of the GST (Chapter 30), the Free Trade Agreement (Chapter 28), and the use of input–output analysis in economic planning (Chapter 24). Furthermore, there are new or revised boxed inserts on the following subjects:

- The rising cost of medical care (page 413)
- How the concept of elasticity is applied in legal battles (page 443)
- The transition to free markets in Eastern Europe (page 538)
- Government bail-outs of corporations (page 620)
- Labour-union problems (page 668)
- Agricultural marketing boards (page 722)
- Recent experience with the new Competition Act (page 745)
- Pollution (page 756)
- An economist's answer to criticisms (such as those often published by David Suzuki) of our discipline's approach to issues of environmental protection

We have also expanded our “At the Frontier” series of boxed inserts in the microeconomics sections of the book, treating subjects such as the following:

- Experimental economics (page 57)
- Game theory (page 580)
- The theory of contestable markets (page 582)
- Principal agents and asymmetric information (page 597)
- Rent-seeking (page 648)

Canada and the Rest of the World

In both the macro and micro sections of the book, the material on the openness of the Canadian economy is given centre stage. Perhaps the most popular feature of the previous editions of this book, as we noted earlier, is the full integration of macroeconomic theory with the discussions of policy episodes in a way that properly emphasizes the fact that monetary policy and exchange-rate policy are one and the same thing. In the microeconomics sections, the material on comparative advantage and tariff policy is not tucked away, but appears in the core set of chapters on the pros and cons of free markets. Also, since the legal approaches to limiting market power (that is, regulation and competition laws) have met with rather limited success, it is frequently stressed that tariff cuts can be used to make Canadian markets contestable. Thus, tariff policy is discussed as one among several instruments for stimulating competition. Of course, the gains from international trade do not depend solely on Canada's small domestic markets and incomplete exploitation of the economies of large-scale production. The principle of comparative advantage in the standard situation of constant costs is fully explained in Chapter 28, which also contains two important new sections: One discusses the advantages and disadvantages of the Free Trade Agreement with the United States and the other explains the proper assignment of policy instruments to goals, as noted earlier.

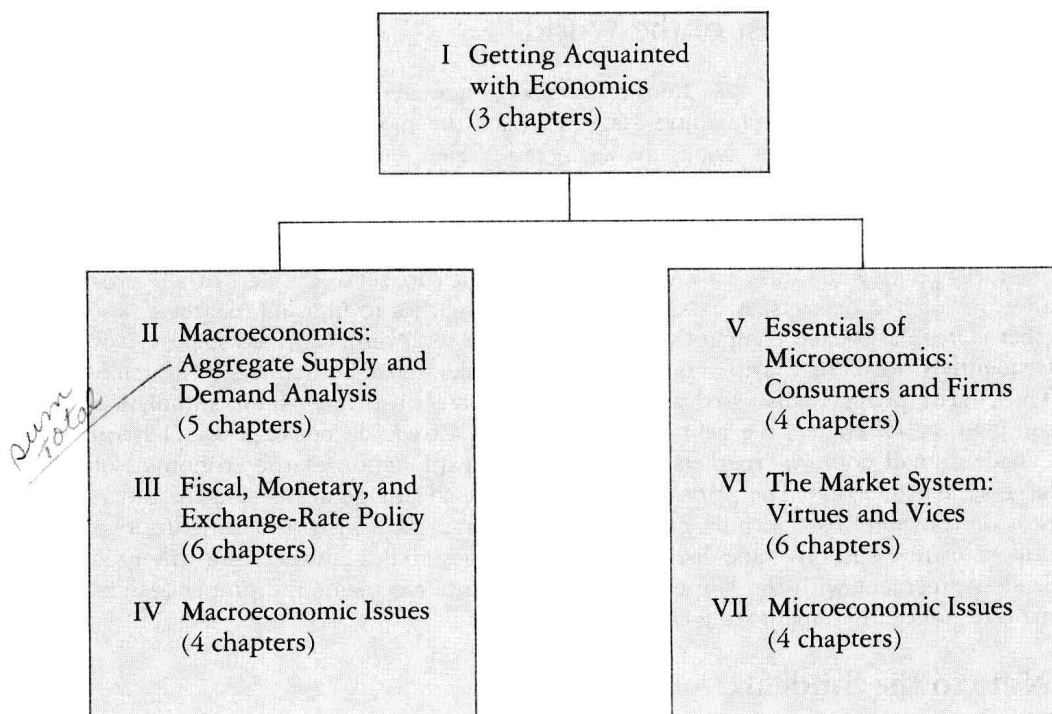
Note to the Student

Most courses will begin with Part One, where we have touched most of the traditional bases while keeping the introductory materials briefer than they are in most other texts. Courses dealing with macroeconomic theory and policy in the first term will proceed next to Parts Two through Four, while courses commencing with microeconomics will skip to Parts Five through Seven.

Whatever the nature of your course, we would like to offer one suggestion. Unlike some of the other courses you may be taking, principles of economics is cumulative—each week's lesson builds on what you have learned before. You will save yourself a lot of frustration (and also a lot of work) if you keep up on a week-to-week basis. To help you do this, there is a chapter summary, a list of important terms and concepts, and a selection of discussion questions at the end of each chapter. In addition to these aids, many students will find the *Study Guide*, designed specifically to accompany this text, helpful as a self-testing and diagnostic device. When you encounter difficulties in the *Study Guide*, you will know which sections of the text you need to review.

Note to the Instructor

The ordering of chapters in the book is based on courses that treat macroeconomics before microeconomics, but it lends itself equally well to courses that reverse that sequence. The macroeconomic analysis is found in Parts Two through Four. The microeconomics material occupies Chapters 2 and 3 and Parts Five through Seven. Because our *detailed* study of microeconomics does not begin until Chapter 19, it may appear to readers that the book shortchanges microeconomics. In fact, no such problem exists. There are fifteen chapters in the macroeconomics block, fourteen chapters in the microeconomics block, and three chapters in the introductory section (Part 1). Since two of the chapters in Part 1 discuss microeconomic material (scarcity and choice and an initial pass at supply and demand analysis), the book actually contains *more* chapters on microeconomics. The following chart summarizes the book's basic structure:



Given that a reasonable pace for covering material is roughly one chapter per week on average, the following suggested course outlines should be suitable for many teaching situations.

OUTLINE FOR A ONE-TERM COURSE IN MICROECONOMICS

Chapter Number	Material Covered
✓ 1	Methodology
✓ 2	Scarcity and choice
3	Basic supply and demand
19	} Consumer theory
20	
21	
22	} Theory of the firm
23	
24	Perfect competition
25	Laissez faire versus planning
25	Monopoly
✓ 27	Other sources of market failure
28	Comparative advantage and free trade

Plus any *two* of the following:

29	Income distribution
30	Tax reform
31	Competition policy
32	Environmental issues

OUTLINE FOR A ONE-TERM COURSE IN MACROECONOMICS

Chapter Number	Material Covered
1	Methodology
3	Basic supply and demand
4	Measuring macroeconomic performance
5	Multiplier analysis, fiscal policy, aggregate demand and supply, the self-correcting mechanism
6	
7	
8	
9	
11	Money and banking
12	
13	Integration of fiscal, monetary, and exchange-rate policy
14	

Plus any *two* of the following:

15	International policy co-ordination
16	The deficit
17	Phillips curves
18	Productivity and growth

Chapters 10 and 26 have been omitted from these course outlines. Chapter 10, on firms and the stock market, can (and most probably will) be read by students on their own. It is not demanding analytically, and most students are very interested in the subject. Chapter 26, on monopolistic competition and oligopoly, can be included by instructors who wish to place extra emphasis on theory, but its inclusion would necessitate the exclusion of one of the microeconomic "issues" chapters. However, it should be noted that the latter four chapters are divided into self-contained sections to allow instructors to focus on particular issues without having to cover the complete chapter. For example, the topic of regulation occupies half of Chapter 31, and that of pollution occupies half of Chapter 32; this material can be combined to create the equivalent of one chapter, to the exclusion of the other sections in Chapters 31 and 32.

Two things should be clear from our sample course outlines: (1) the book works very well for instructors who prefer to start their courses with microeconomics; (2) it is structured to accommodate the time constraints that confront most instructors.

Concerning the *Study Guide*, and whether you should recommend it for your students, we offer the following advice. Since such a guide should be especially useful for the student who is having difficulty, the core material in our *Study Guide* is pitched at a fairly basic level. However, in contrast to previous editions, we have added a number of much more challenging questions this time, so that the *Study Guide* will be of greater value to the more advanced students as well. Every chapter now has two practice tests, each of which contains both true/false and multiple-choice questions. The first test is more basic, while the second is more challenging. More-advanced students who are fairly confident that they understand the material may want to skim the Chapter Review, the Basic Exercises, the Definition Quiz, and the first practice test, and concentrate their attention on the more difficult practice test and the

Supplementary Exercises. By structuring the *Study Guide* in this way, we have tried to ensure that students of varying levels of ability will be able to benefit from this learning aid. As instructors, we know that even the best students can benefit from extra practice. Judging by the comments we have received from users, we expect that the introduction of a more challenging practice test and some additional, more difficult, Supplementary Exercises in each chapter will be a welcome addition to the *Study Guide*.

As with previous editions, a computerized *Test Bank* is available for the use of instructors. The third edition of this teaching aid has been significantly expanded. Also available is a fully revised *Instructor's Manual* and a set of *Transparency Masters*.

Once again, our textbook is available in separate, paperback *Microeconomics* and *Macroeconomics* editions. The introductory chapters (Part One) and the chapter on free trade are included in both volumes. Users of these split editions will have no difficulty locating material in the textbook's ancillaries, as the chapter and page numbers in the paperback volumes conform exactly to those used in the combined text.

In trying to improve the book from one edition to the next, we rely heavily on our own experiences as teachers. But our experience using the book is small compared with that of the community of instructors who have been and who will be using it. If you encounter problems, or have suggestions for improving the book, we urge you to let us know by writing to Bill Scarth in care of the publisher. Such letters are invaluable, and we are glad to receive them, even if they are critical.

With Thanks

Finally, and with great pleasure, we turn to the customary acknowledgments of indebtedness. Some of these have been accumulating now through five American editions of the book. The many American instructors whose comments were invaluable in planning this edition have been individually listed in the fifth American edition. Friends and colleagues who have made helpful suggestions directly for the Canadian editions include: John Burbidge, Don Dawson, Martin Dooley, Jim Johnson, Mel Kliman, Wayne Lewchuk, Andy Muller, Gord Myers, Les Robb, Byron Spencer, Mike Veall, and Doug Welland of McMaster University; Doug Burgess of Burgess-Graham Securities; Michael Hare of the University of Toronto; Tom Powrie, Brian Scarfe, and Sten Drugge of the University of Alberta; Hugh Young of the Department of Finance in Ottawa; Tony Myatt and Charles Waddell of the University of New Brunswick; Peter Kennedy of Simon Fraser University; Waclaw Dajnowiec of Ryerson Polytechnical Institute; Irwin Gillespie of Carleton University; Jack Guthrie of Camosun College; Robert Allan of the University of British Columbia; Lionel Ifill of Algonquin College; Ted Horbulyck of the University of Calgary; Chris Debresson of Concordia University; John Sayre of Capilano College; Mary-Ann Dimond and Robert Dimond of Brock University; Maurice Boote of Trent University; John Farrugia of Mohawk College; Arnold Frenzel and Peter Sinclair of Wilfrid Laurier University; Rob Jeacock and Raimo Marttala of Malaspina College; Thierry Neubert of John Abbott College; and Bram Cadsby of the University of Guelph. We wish to thank all of these individuals, as well as the many students who took the time to send their comments and suggestions to the publisher. Many of the suggestions made by instructors and students alike have been incorporated into this third edition. We are particularly indebted to Don Dawson of McMaster University, who provided thorough and invaluable input for the chapter on industrial organization.

The book you hold in your hand was not done by us alone. The fine people at Harcourt Brace Jovanovich, Canada, worked tirelessly and effectively to turn our manuscript into the book you see. Valuable help was contributed by Sarah Duncan, Scott Duncan, Sue Ann Becker, Denise Wake, Riça Night, Jack Steiner, Nick Owocki, and Elizabeth Stone. Most important has been the tireless support of our editor and

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And finally, there are our wives, Hilda Baumol, Madeline Blinder, and Kathy Scarth. They have helped us in so many ways. Their patience, good judgment, and love have made everything go more smoothly than we had any right to expect. We deeply appreciate their invaluable support.

William J. Baumol

Alan S. Blinder

William M. Scarth

Publisher's Note to Students and Instructors

This textbook is an important part of your course. If you are a student, it will greatly contribute to your present and future studies. If you are the instructor, you chose this textbook from among many as the best one for you and your students. The authors and publishers appreciate this acknowledgment of the considerable time and money we have invested to ensure the book's high quality.

If you are a student, we hope you will find this textbook an invaluable companion in meeting the objectives of your course. As well, it will become an excellent addition to your personal library.

Please remember that this is a copyrighted work and, as such, any photocopying means that the authors lose royalties that are rightfully theirs. This loss will discourage them from writing another edition of this textbook or other books. If this happens we all eventually lose—authors, publishers, instructors, and students.

We are very interested in your reactions to the book, so be sure to send us the stamped reply card at the end of the text. Your input helps us continue to publish high-quality books for your course.

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