Microeconomics for MBAs

This is the first textbook in microeconomics written exclusively for MBA students. McKenzie and Lee minimize attention to mathematics and maximize attention to intuitive economic thinking, examining key questions such as "How should organizations and incentives be structured to best encourage profit maximization?" The text is structured clearly and accessibly: Part A of each chapter outlines the basic theory with applications to social and economic policies and Part B applies this basic theory to management issues, with a substantial focus on the emerging subdiscipline of organizational economics. On the publisher's website for *Microeconomics for MBAs* (www.cambridge.org/micro4mbas), the authors have provided an array of additional materials that complement the theory and applications in the printed textbook. They have placed online a "perspective" for each chapter, which provides a new line of argument or different take on a business or policy issue and which we highly recommend for ten- and fifteen-week courses. To make this edition of the textbook more workable for shorter (five- and seven-week) courses, the authors have moved coverage of more than two dozen topics to the publisher's website, listing them under "Further readings online." The textbook is also accompanied by several dozen online video modules in which Professors McKenzie and Lee give a personal tutorial on the key microeconomic concepts which MBA students need to understand, as well as elucidate complex lines of argument covered in the chapters and help students to review for tests. Throughout the text, McKenzie and Lee aim to infuse students with the economic way of thinking in the context of a host of problems that MBA students, as future managers of real-world firms, will find relevant to their career goals.

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Microeconomics for MBAs

The Economic Way of Thinking for Managers

Second Edition

Richard B. McKenzie
Dwight R. Lee

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There is only one difference between a bad economist and a good one: the bad economist confines himself to the visible effect; the good economist takes into account both the effect that can be seen and those effects that must be foreseen.

Frédéric Bastiat (1801–50).
Selected Essays on Political Economy

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Preface

Almost all (if not all) textbooks used in MBA students' first course in microeconomics are designed with undergraduate economics majors or first-year PhD students in mind. Accordingly, MBA students are often treated to a course in intermediate microeconomic theory, full of arcane mathematical explanations. The applications in such standard textbooks deal mainly with the impact of social or government policies on markets with little discussion of how managers can make better decisions within their firms in response to market forces or how market forces can be expected to affect firms' institutional and financial structures.

Much microeconomic theory simply assumes firms into existence without explanation of why they are needed in the first place. Managers and their staff are assumed to do exactly what firms employ them to do – maximize owners' profits – with no discussion of how firms' organizational structures affect incentives and how incentives affect firms' production and profit outcomes.

That is to say, little is written in standard textbooks used in MBA courses about exactly how real-world firms pursue the goal of profit maximization. And that void in microeconomics textbooks is a real problem for MBA students, for an obvious reason: MBA students have typically come back to school to learn how to improve their management skills, which involves learning about how they can improve their ability to extract more profits from the scarce resources available to the firms where they work (or the firms where they expect to move after graduation). They do not come back to school to become economic theorists. Standard microeconomic textbooks are of little value to MBA students in helping them achieve their career objectives.

MBA students stand a quantum leap apart from undergraduate students, who typically have little idea of what they want to do with their lives, and have far less real-world business experience to which they can relate. MBA students also are sacrificing far more by attending school than undergraduates and must get value for their time spent reading textbooks and attending class because of the cost of their education, in terms of both their tuition payments and the valuable work opportunities they have to set aside.

Microeconomics for MBAs breaks dramatically from the standard textbook mold. As the title suggests, we have designed this textbook with only MBA students in mind. In Part A of every chapter, we cover standard microeconomic theory in an accessible way, and we provide an array of applications to government policies which MBA students need to understand. After all, managers everywhere face the constraints of government-imposed laws and regulations that are ever-changing, and managers must work to maximize their firms' profits within those constraints. Moreover, professors in marketing, finance, accounting, strategy, and operations research who teach first- and second-year elective courses in MBA programs will expect their students to have a firm grounding in conventional microeconomic theory.

To help students learn the material covered in these pages and lectures, we have provided a set of video modules posted on the Internet that deals with three classes of topics:

(1) basic economic concepts that all MBA students should understand at some level upon entering their programs of study
(2) concepts, principles, and modes of analysis that are often hard to comprehend the first time they are presented in text or lectures
(3) topics that have a high probability of being covered in examinations.

Of course, these videos can be stopped at any time to allow for note taking, and can be replayed repeatedly.

In Part B of every chapter, we go where other microeconomics textbooks seldom, if ever, go with such completeness. We drop the usual assumption that firms exist and that they automatically maximize owners' profits by simply following maximization rules. Instead, we bring to the forefront of our analysis a crucial problem that firms face. This problem (dubbed the "principal–agent problem" within the economics profession and in this textbook) is that both owners and workers are more interested in pursuing their own well-being than someone else's well-being.

Owners ("principals") want to maximize their income stream and wealth through the firms they create by getting the most they can out of their employees. Similarly, managers and line workers (the owners' "agents") seek to maximize some combination of income, on-the-job perks, and job security, which are often in conflict with maximizing profits for the firm's owners. Without effective firm policies that align the incentives of owners and workers (for their mutual benefit), the work in a firm can be a self-destructive tug of war, with the demise of the firm virtually assured in competitive markets.

In this textbook, we focus MBA students' attention on thinking through the complex problems of getting incentives right. This is mainly because there is as much (maybe more) profit to be made from creatively structuring incentives as there can be made from creatively developing products for sale.

Getting hourly and monthly pay systems right is obviously an important means of aligning the interests of owners and managers. However, we also explain how firms' organizational structure, in terms of both people and finances, can affect the alignment of owners' and workers' incentives. And make no mistake about it, both owners and their employees have a stake in finding the right alignment. Workers' jobs can hang in the balance. Owners' investments can hang just as precariously on a cost-effective, balanced alignment of incentives.

Accordingly, this book places a great deal of emphasis on a field within economics that has grown rapidly in professional prominence, especially as the subject relates directly to the business world – and MBA programs: *organizational economics*, which is the study of the design of firms' organizational and financial structures using the analytical tools of microeconomic analysis. The mode of thinking presented in these pages is crucial for managers – MBAs – who want to move up their corporate hierarchy or create successful companies of their own.

On the publisher's website for *Microeconomics for MBAs* (www.cambridge.org/micro4mbas), we have provided "Perspectives" for each chapter that are highly recommended short discussions of topics related to themes in the chapters. These perspectives provide a new or different take on a business or policy issue; they can be easily streamed or downloaded by students taking longer (ten- and fifteen-week) courses. For example, everyone *knows*, don't they, that the "first mover" in any market has a competitive advantage. In the Perspective for Chapter 8, we discuss a startling observation made by management scholars: there is no first-mover advantage. Indeed, second and third movers frequently have competitive advantages, not the least of which is that they don't have to incur the costs of identifying and proving the profitability of product markets.

For longer courses, we have provided online more than two dozen "Readings" assigned to the different chapters that extend the theories and array of applications covered in the chapters. These readings can also be easily streamed and downloaded for extended reading assignments. For example, for chapter 1, we have posted the classic short article on "I, pencil," in which Leonard Read cogently observes that no one in the world knows how to make pencils totally from scratch, yet millions of pencils are produced at low cost every year. In chapter 7, we take up "opportunistic behavior." Online we have posted a discussion of a particular form of opportunistic behavior known as "the last-period problem," which covers why the problem emerges and how it can be mitigated by firm policies.

Each chapter ends with two sections. The first ending section offers practical advice that emerges from the discussions of theory and studies covered in the chapter. The second ending section, which we have dubbed "the bottom line," contains listings of "key takeaways" – succinct statements of the most important lessons to be drawn from the chapter. We understand that MBA students, you included, face serious time constraints, especially when you are working full time and have family responsibilities. "The bottom line" section is designed to focus your attention when reviewing the material covered in the chapter, with the hope that your study time will be more productive.

The scholarly and policy literature in economics and management relating to most of the topics considered in this volume is massive. We have tried to give credit where credit is due, especially when "classic," path-breaking treatments by distinguished scholars are concerned, but we have tried to hold references and footnotes in check in order that the flow of the argument is not constantly disrupted. Still, our references section at the end of the book is extensive. To smooth out the flow of the core material, we have relegated topics that will be only selectively used in classes to footnotes and to online readings.

Many textbook authors and their publishers play the development of their course books "safe" by taking up only those topics that have become fixtures in the profession's "conventional wisdom." We see such an approach as sucking the life out of a discipline and its treatment in textbooks. Topics that have not yet been fully settled through decades of professional debate can give life to a discipline, demonstrating to students that disciplines have an organic quality and are constantly evolving. As a consequence, you can expect many topics in this book to spark lively, and instructive, debates among student team members and between class members and professors in class. That is how we want the book to be received.

We have appended to each chapter a series of review questions that we expect will activate discussions within your student teams. In addition, we have set up a website for the book on which we will post additional readings for extended courses, as well as interesting pointers and puzzles that have occurred to us since the book went to press. We also expect to post on the website video commentaries on management issues and related economic policies that are bound to arise while you are reading this book and taking your course.

You may be interested in knowing that we – the authors of this book – have between us more than eighty years of university teaching experience, with most of our teaching careers spent in business schools. For the last twenty or so years, we both have taught *only* MBA students. That should tell you that we have a pretty good fix on our readers and their interests, not the least of which is to have a course of study that is intellectually challenging as well as having practical application.

We fully understand that MBA students don't want to be loaded down with current business "facts," if for no other reasons than "facts" can easily become dated as modern business never stays still. What students want are some good economic and business "principles" that will help them cut through the myriad facts and events business people encounter each day and that change with passing days and weeks. In no small way, the purpose of this textbook, and our classes (or any other business course worthy of academic respect), is to explore ways to *think* creatively about how business is done and can be done better, not to actually *do* business. In this regard, we take to heart an observation made by the late economist Kenneth Boulding:

> It is a very fundamental principle indeed that knowledge is always gained by the orderly loss of information; that is, by conducing and abstracting and indexing the great buzzing confusion of information that comes from the world around us into a form we can appreciate and comprehend. (1970, 2)

The way of thinking we take up in class, and that which Professor Boulding had in mind, is necessarily abstract – that is, without the clutter of many business details. We approach thinking with abstractions principally because no one's brain is sufficiently powerful to handle all the complex details of everyday business life. In no small way, productive thought requires that the complexity of business life be reduced enough to allow us to focus on the few things that are most important to the problems at hand and find meaningful relationships between those things. That is why Professor Boulding insists that knowledge can so often (if not "always") be gained only "by the orderly loss of information."

Without thinking, many business people often spurn theory on the grounds that it lacks practical value. We insist, "not so at all." The abstract way of thinking that we shall develop in this textbook has a very practical, overriding goal, which is to afford students more *understanding* of the business world than they could have if they tried some alternative approach – that is, if they tried to keep the analysis cluttered up with the "buzzing confusion" of facts MBA students leave behind in their workplaces when they set out for class.

There is another highly practical goal to be achieved by theory (or rather thinking with the use of theory). If people can *think* through business problems in some organized way, albeit abstractly, they may be able to avoid mistakes when they actually go out and do business. In economic terms, business mistakes imply a regrettable misuse and loss of firm resources – and firm profitability! *Thinking* before doing offers the prospect of reducing waste in doing business.

If this textbook, and our classes, are about *thinking* (not doing), then we – Richard McKenzie and Dwight Lee and students' other professors – have some justification for being in front of our classes. Also, if the course is about the thinking process, there must be some method for thinking through problems, business-related or otherwise. The development of that *method* is the focus of our classes and this textbook. Our goal in this volume is to develop *the economic way of thinking* in the context of a host of problems that MBA students, as current and future managers of real-world firms, will find relevant to their career goals.

We understand that some readers may worry about our emphasis on theory because they may have read theory-grounded books that seemed sterile or irrelevant, mainly because of the heavy reliance on highly technical mathematics or complicated charts. That will not be the case in this book. The first principle of economics that has guided this work is one that many readers will appreciate: *Keep the theory as simple as possible and illustrate it with real problems.* We hold to the firm belief that the first principle in any course in principles of economics should be economy in the principles that are covered. The value of a textbook or course should be judged by what can be done with the principles developed, not by how many principles are developed.

This book carries the subtitle *The Economic Way of Thinking for Managers* for a very good reason: In the following pages, we bring together a host of large and small ideas that economists have developed over the past several decades that have transformed the way we must think about the way the business world works. Readers' reactions to large and small ideas will, we expect, have changed radically by the time they have read the last words of this volume. Two of those large questions are:

- How should organizations and incentives be structured to best encourage profit maximization?
- How does the competition in the market for goods and in the market for corporate control discipline executives?

The small questions that can be addressed from studying this volume are no less important and can be just as intriguing:

- Should used cars really be expected to be "better deals" than new ones (as so many people seem to think)?

- If competitive markets are expected to "clear" (with quantity demanded equaling quantity supplied), why are so many queues observed in grocery stores and at concerts?
- If queues are not mutually beneficial to buyers and sellers, then why aren't they eliminated?

Readers who think that these questions have simple, obvious, pat answers need to read on.

We expect that readers will end this book the way our students end our courses: changed for life in the way they see the business world around them. But then that is what MBA students typically want – or should want – from every course in their MBA programs. Readers have our best wishes for the journey of a lifetime.

This book was developed over the past two decades as we taught our microeconomics courses for our MBA students at our respective universities. Our students have made innumerable and invaluable suggestions for improvement in the book, and we are indebted to them. We are also indebted to Oxford University Press for allowing us to draw freely from our previously published book with the Press, *Managing Through Incentives*. All excerpts from that book have been substantially revised and updated for inclusion in this textbook.

In redeveloping this textbook for the second edition, we continued to listen to the advice of our students and to professors who used the first edition of this textbook around the world. We note the following major changes:

- First and foremost, we have sought to update the book to account for new research findings and recent world economic events, including the recession that emerged from the meltdown of the housing mortgage-backed securities markets. Readers will find far more attention given to the "moral-hazard problem" (to be explained in the book) that is bound to emerge when business ventures are highly leveraged. In various chapters of this new edition, we explain how the moral hazard and leverage have been at the foundation of the financial and economic turbulence that began to emerge in late 2007 and continued as this new edition went to press.
- Second, with the added material, we have taken pains to economize on examples. Again, we understand that MBA students are hard pressed to find time to do the reading for their courses.
- Third, microeconomics courses in MBA programs vary in length, from five to fifteen weeks. We have sought to make the book more flexible. We have included enough material in the twelve chapters to take up more than a quarter-length course. With the addition of the available online perspectives and readings, we have provided enough material for a full semester-length course. Short

courses of five and seven weeks can be developed by covering the first four chapters, plus some combination of chapters 6, 7, 9, and 10 (which will cover competitive product and labor markets and monopoly product markets with attention to pricing strategies under markets for "normal" and "network" goods).

- Fourth, we understand that the microeconomics course is a prerequisite for second-year courses in global business and foreign residentials. In the first edition, international economics was literally at the back of the book. In this edition, we have placed international topics in chapter 5 where we note the interplay of environmental and international economic forces in an ever more integrated world economy.
- Fifth, most courses remain organized around a printed textbook. With all students having ready access to the Internet, we have made the printed textbook a component – albeit an important one – in a broader course-delivery system that relies heavily on the delivery of the full sweep of course materials through the Internet. Accordingly, professors will find a wealth of easily accessible resource materials on the publisher's website for the textbook. The materials include:

  - "Perspectives" for each chapters (see the list of perspectives that follows this preface)
  - additional "readings" (see the list of topics covered in the list of further readings online that follows this preface): the online readings will allow for continuing updating of the course materials as readings on current economic and management topics become available after the second edition of the textbook is released
  - fifty-eight video modules that students can stream or download to their computers (see the list of topics covered on the website)
  - student self-tests for each chapter
  - a testbank of over 1,500 multiple-choice questions that can be accessed by adopting instructors
  - an electronic version of the textbook that can be downloaded to laptops and electronic readers (such as the Kindle)
  - video and print commentaries on current economic and management topics that will be written and posted by the authors as the textbook is used through the years of the second edition
  - an electronic "room" in which users of the textbook from different universities around the world can interact with each other and the authors on a continuing basis.

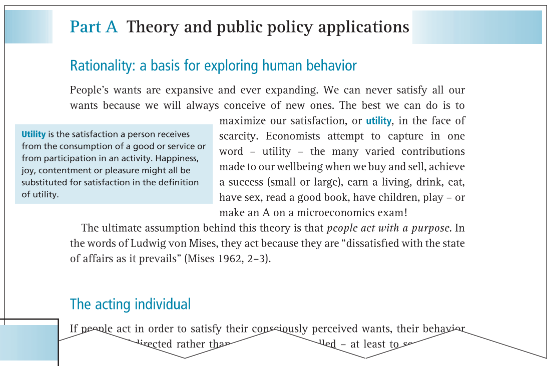
Throughout the revision, we have kept our eye on the key distinguishing feature of the book: it is designed specifically for MBA students. We have tried to fortify that feature by making sure that discussions of organizational and incentive issues in the second half of each chapter draw on the economic principles developed in the first half.

How to use this book

Chapter structure

Each chapter is split into two parts:

Part A of every chapter covers the microeconomic theory needed for MBA programs and looks at the way theory is applied to the government policies that future managers need to understand.


Part A Theory and public policy applications

Rationality: a basis for exploring human behavior

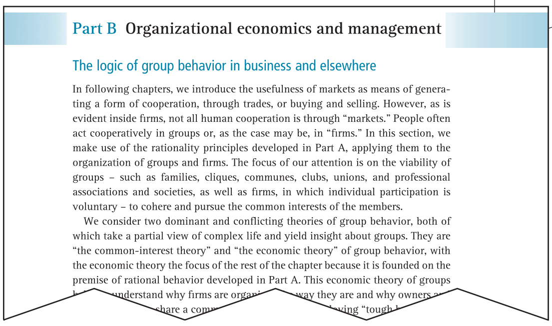
People's wants are expansive and ever expanding. We can never satisfy all our wants because we will always conceive of new ones. The best we can do is to maximize our satisfaction, or **utility**, in the face of scarcity. Economists attempt to capture in one word – utility – the many varied contributions made to our wellbeing when we buy and sell, achieve a success (small or large), earn a living, drink, eat, have sex, read a good book, have children, play – or make an A on a microeconomics exam!

Utility is the satisfaction a person receives from the consumption of a good or service or from participation in an activity. Happiness, joy, contentment or pleasure might all be substituted for satisfaction in the definition of utility.

The ultimate assumption behind this theory is that *people act with a purpose*. In the words of Ludwig von Mises, they act because they are "dissatisfied with the state of affairs as it prevails" (Mises 1962, 2–3).

The acting individual

If people act in order to satisfy their consciously perceived wants, their behavior


Part B Organizational economics and management

The logic of group behavior in business and elsewhere

In following chapters, we introduce the usefulness of markets as means of generating a form of cooperation, through trades, or buying and selling. However, as is evident inside firms, not all human cooperation is through "markets." People often act cooperatively in groups or, as the case may be, in "firms." In this section, we make use of the rationality principles developed in Part A, applying them to the organization of groups and firms. The focus of our attention is on the viability of groups – such as families, cliques, communes, clubs, unions, and professional associations and societies, as well as firms, in which individual participation is voluntary – to cohere and pursue the common interests of the members.

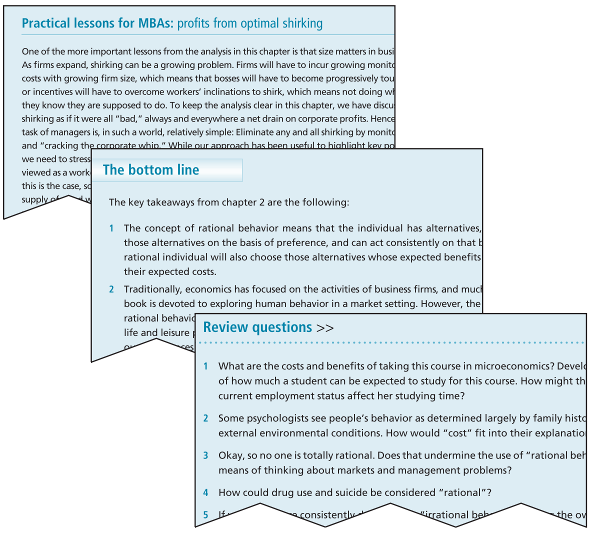
We consider two dominant and conflicting theories of group behavior, both of which take a partial view of complex life and yield insight about groups. They are "the common-interest theory" and "the economic theory" of group behavior, with the economic theory the focus of the rest of the chapter because it is founded on the premise of rational behavior developed in Part A. This economic theory of groups

Part B of every chapter applies the basic theory developed in Part A to management issues. The discussion emphasizes *organizational economics*, which is the study of the design of firms' organizational and financial structures using the analytical tools of microeconomic analysis.

Understanding organizational economics is crucial for managers – MBAs – who want to move up their corporate hierarchy or create successful companies of their own.

To help you learn and remember

Practical lessons for MBAs at the end of every chapter are new to this edition and offer useful advice to MBA students that emerges from the discussions of theory and practice covered in every chapter.


Practical lessons for MBAs: profits from optimal shirking

One of the more important lessons from the analysis in this chapter is that size matters in busi… As firms expand, shirking can be a growing problem. Firms will have to incur growing monito… costs with growing firm size, which means that bosses will have to become progressively tou… or incentives will have to overcome workers' inclinations to shirk, which means not doing wh… they know they are supposed to do. To keep the analysis clear in this chapter, we have discu… shirking as if it were all "bad," always and everywhere a net drain on corporate profits. Hence… task of managers is, in such a world, relatively simple: Eliminate any and all shirking by monito… and "cracking the corporate whip." While our approach has been useful to highlight key po…

The bottom line

The key takeaways from chapter 2 are the following:

1 The concept of rational behavior means that the individual has alternatives, … those alternatives on the basis of preference, and can act consistently on that b… rational individual will also choose those alternatives whose expected benefits … their expected costs.

2 Traditionally, economics has focused on the activities of business firms, and muc… book is devoted to exploring human behavior in a market setting. However, the …

Review questions >>

1 What are the costs and benefits of taking this course in microeconomics? Devel… of how much a student can be expected to study for this course. How might th… current employment status affect her studying time?

2 Some psychologists see people's behavior as determined largely by family histo… external environmental conditions. How would "cost" fit into their explanatio…

3 Okay, so no one is totally rational. Does that undermine the use of "rational beh… means of thinking about markets and management problems?

4 How could drug use and suicide be considered "rational"?

The **bottom line** is a list of "key takeaways" – short statements of the most important lessons to be drawn from the chapter.

Review questions at the end of each chapter are designed to encourage discussions of the key concepts.

This book is part of an integrated package of text and online materials which collectively deliver the information MBAs need to build a working knowledge of microeconomics.

Additional material online

Online Perspective

Perspectives provide a new or different take on a business policy or issue related to themes in the chapters. These are listed between Parts A and B of each chapter and are referred to at relevant points in the text.

R

Readings offer more on the theory and range of applications covered in the chapters and are referred to throughout the book. A list of appropriate readings is provided at the end of each chapter.

V

Video modules feature the authors and reinforce your understanding of:

- basic economic concepts that all MBA students should understand at some level upon entering their programs of study
- concepts, principles, and modes of analysis that are often hard to comprehend the first time they are presented in text or lectures
- topics that have a high probability of being covered in examinations.

Review questions are multiple choice questions for each chapter that students can use to test whether they have understood the material covered.

Video and print commentaries about current topics in economics and management and **links** to useful newspaper and journal articles provide up-to-date exposure to how microeconomic theory is relevant in our day-to-day world. New commentaries will be posted at intervals.

For instructors we also provide:

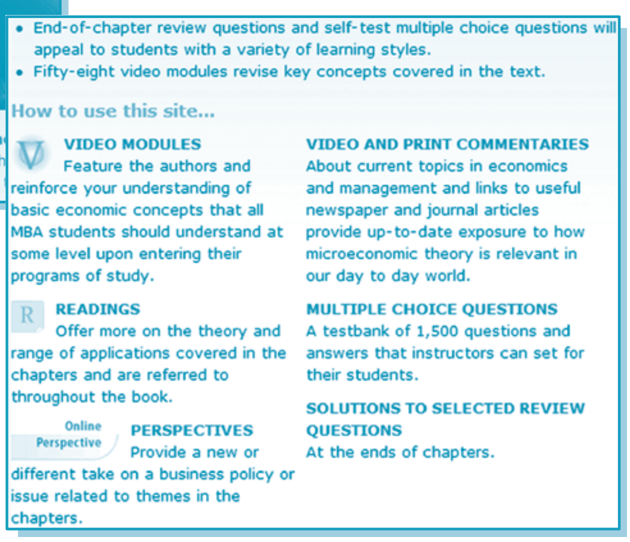
Multiple choice questions: a testbank of 1,500 questions and answers that instructors can set for their students.

Solutions to selected review questions at the ends of chapters.

Figures and **tables** from the book that instructors can incorporate into lecture slides and presentations.

- This book is now more flexible for courses of different lengths.

Our suggested use:
For 10+ week courses
Use all twelve chapters
For 7 week courses
Use chapters 1–4/5, as well as chapters 6, 7, 9, and 10
For 5 week courses
Use chapters 1–5 and chapter 10



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