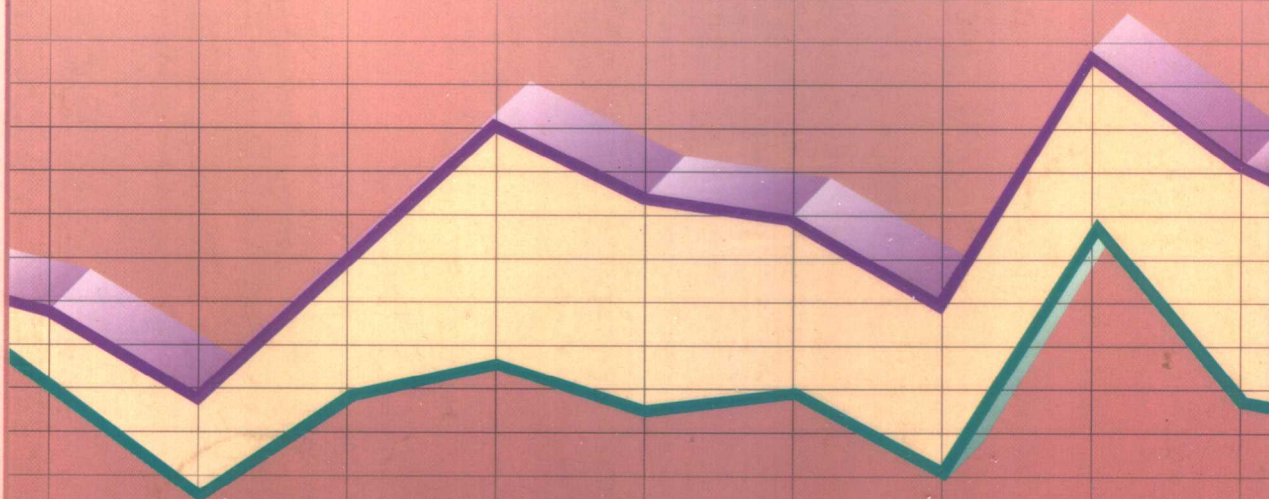


Michael M. Tansey • Lawrence F. Ziegler

STUDY GUIDE TO ACCOMPANY SCHILLER

THE MICRO ECONOMY TODAY



SIXTH EDITION

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SIXTH EDITION

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STUDY GUIDE TO ACCOMPANY SCHILLER: THE MICROECONOMY TODAY

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To the Instructor

This *Study Guide* is an important part of the complete and fully integrated textbook package called *The Economy Today*. Students who use this *Study Guide* on a continuous basis should be able to remember what they have read in their textbook and heard in your lecture. It should enable them to apply to examinations the principles they learn and, more importantly, should help them recognize the same principles at work in their daily experiences. Each section of each chapter has a particular objective, which is described in the following paragraphs.

The *Quick Review* and *Learning Objectives* sections provide summaries of the basic contents of the corresponding text chapters and outline the important areas of the *Study Guide*. Each learning objective is keyed to specific pages in the text and to specific questions and problems that follow. Look at page 2 for examples.

Economic terminology is often an obstacle to new students in economics. Thus the *Key-Term Review* and *Crossword Puzzle* sections of the *Study Guide* provide practice in the use of terminology. Both sections help the students to link economic terms to the appropriate economic concepts. The *Study Guide* reinforces the terminology by repetition. However, we have taken pains not to make the repetition burdensome. The crossword puzzles we have introduced in some of the chapters, for example, help to make the repetition fun.

The *True or False* and *Multiple Choice* sections help students advance from memorizing terminology to applying economic principles in a familiar problem-solving setting. This will help greatly in their preparation for exams.

The *Problems and Applications* sections let the students discover economic principles for themselves. Students not only learn the techniques that economists use, but they also discover the basis for the economic principles they have learned. In each chapter, a media application shows the students how to recognize the economic principles of the chapter in an In the News or World View media article from the text. If an instructor uses a media exercise from the Instructors's Manual for homework, the students can refer to one of the last applications in this *Problems and Applications* section to see how to do it. The final problem and application for many of the chapters is a data exercise in which students find data (usually from the front cover of the book), graph them, and make generalizations based on the data.

The section called *Common Errors* was introduced in the first edition of this book in 1980, and at that time it was unique to this *Study Guide*. Since then a number of competing books have begun including similar sections, a strong indicator of its usefulness to students and its popularity with instructors. It is our feeling that, semester after semester, students have difficulty with the same concepts and make the same mistakes; hence the name *Common Errors*. We've tried to draw attention to some of these problem areas and provide explanations using the appropriate economic principles. You may wish to add to those we have provided.

Another unique feature of this *Study Guide* is what we call the “media exercise.” The media exercises are contained in the *Problems and Applications* section of each chapter. Each one directs the students to reread a certain newspaper, magazine, or other media article from among those interspersed throughout the text. The students then answer a series of questions based on the article, using the economic principles they have learned in the chapter. The media exercises should help the students see economic principles at work in the world around them, and make them aware of how to get the “economics” out of a critical reading of the “news” long after they leave the economics classroom.



To the Student

This *Study Guide* is designed to be used with *The Macro Economy Today*, Sixth Edition, by Bradley R. Schiller. Working through the *Study Guide* should reinforce what you have learned in the textbook and help you to recognize economic principles in your daily experiences.

Note the following points in the various sections of each of the chapters:

- The *Quick Review* provides a brief summary of the concepts in the corresponding text chapter. If you are not comfortable with the terminology and concepts in this review, you should reread the appropriate sections of the text chapter.
- The *Learning Objectives* focus on the basic information in each text chapter and provide outlines for material to be covered in the *Study Guide*. The learning objectives are keyed to questions and problems that follow and to pages in the text. If you have difficulty with a particular idea, you can quickly find the text material and review it.
- The *Key-Term Review* and *Crossword Puzzles* give you practice in the use of terminology in the specific chapters. As a learning aid, you are encouraged to write out the definitions of the key economic terms.
- The *True or False* and *Multiple Choice* questions test your understanding of the basic economic principles discussed in the text chapter.
- The *Problems and Applications* section contains one or more real-world problems, which allow you to work out in a practical way the economic principles that you have been studying.
- Nearly all chapters contain a "media exercise" that refers you to specific newspaper, magazine, or other articles reprinted in the text. These exercises will assist you in developing your critical thinking skills.
- The *Common Errors* section identifies some of the errors that students often make and explains the correct principles. This is a very effective way to help you discover and correct your mistakes.
- *Answers* to all problems, exercises, and questions are provided at the end of each chapter of the *Study Guide*, so you can quickly check your answers and go back and review where necessary.

Acknowledgments

This is the sixth edition of the *Study Guide to Accompany the Economy Today*, and over the years, we have accumulated debts to many individuals for their help. We continue to thank the students who endured our testing of the first edition exercises. Their patience, creativity, and critical thinking prompted many of the improvements from which current students still benefit. Some even contributed their own crossword puzzles. They include Sidi Habi, Patricia Eason, Margaret Gatchell, Louise Oller, and Robin Burdette. Richard Bayer originated two excellent exercises in the macroeconomics section. These contributions have all been retained in every edition.

Bryce Jones, professor emeritus of economics, and Robert Clark, Dean of the School of Management at Rockhurst College, provided commentary and support, respectively, for the *Study Guide*, and we are grateful to them both. Raphael Arinaitwe was invaluable in organizing, preparing, and criticizing the material for this edition.

We acknowledge the support of the McGraw-Hill staff. They are terrific. We especially thank Jim Bittker, economics editor, for being responsive to our requests and for the calm and friendly manner in which he dispatched his responsibilities. Elaine Rosenberg, editing supervisor, is a real professional. We thank her for her no-nonsense approach and for her skillful management of a difficult project. Our thanks go also to Alice Jaggard who provided superb copy editing.

Finally, we remember the late Mary Griffin, who was the project editor for the first edition. She was a relentless taskmaster who set high standards for two first-time authors. The typists for the first three editions—Nancy Bloodgood Sproba, Mildred Simms, and Cyndy Carver—were superb in the days before word processing made the task much easier. Mehrdad Setayesh, Linda Wilson, and Chandra Kalyanaraman provided assistance of a superior quality on a timely basis. Their efforts added greatly to the quality of the final product. Brett Stilwell helped with computer work and word processing on this edition. We thank Joshua Howard and Emmanuel Reyes of the Collegiate Communications Group, who provided superior production and artistic talents to this camera ready manuscript.

We continue to value the friendship of Paul Shensa, who got us started with Random House over fifteen years ago.

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SECTION I Basics

CHAPTER I

An Overview

Quick Review

Over 200 years ago, Adam Smith laid the foundations for the theory of market-based economies. As an alternative, Karl Marx later developed the rationale for centrally planned economies. The twentieth century has pitted these two concepts against each other. The fall of communist states and the adoption of market-based strategies in the nineties seems to have weighed in favor of capitalism.

The collapse of communism in the Soviet Union and Eastern Europe focused great attention on economics, the science concerned with how societies allocate their scarce resources to competing uses. The emerging consensus indicated that the market mechanism relied on in the United States and elsewhere is vastly superior to the central-planning mechanism which characterized the communist world. This result leads us to focus on two central questions?

- What forces determine economic outcomes?
- What can we do to improve economic outcomes?

To begin the study of economics, we note that the U.S. economy produces an output of over \$6 trillion per year. In the process it must allocate its land, labor, capital, and entrepreneurship to competing uses. Resources are considered scarce, even when they seem abundant, because there are not enough of them to satisfy all of society's wants. Thus, every society confronts the problem of scarcity and must somehow answer these basic questions:

- WHAT is to be produced?
- HOW should it be produced?
- FOR WHOM should the output be produced?

Because of the imbalance between society's wants and resources, choosing to produce one thing means choosing not to produce something else. Economists illustrate these choices by drawing a production-possibilities curve. This curve shows the combinations of goods and services a society could produce if it were operating efficiently and all of its resources were fully employed. The production-possibilities curve appears bowed out from the origin because of the law of increasing opportunity costs. To the economist, cost is measured by the best alternative opportunity forgone when choosing a course of action.

In the United States, our choices are determined by the market mechanism. Through the "invisible hand" of the market mechanism the production and consumption decisions of individuals directly affect the allocation of resources. Changes in relative prices (called price signals) are what make the system go. The individual decisions of households and firms are supplemented with

generous doses of public-sector activity. When the market mechanism fails to provide goods and services efficiently and equitably -- a situation called "market failure" -- the public sector must provide assistance. For example, market systems do not automatically generate pollution-control mechanisms which assure us of clean air and water. Such market imperfections must be overcome by government activity. In some economies the market mechanism has not been allowed to work. Planned (or command) economies, like that of the old Soviet Union, are good examples of this. But even in mixed economies "government failure" can make things worse.

In the study of the economy, it is useful to break economics into two categories: microeconomics and macroeconomics. Microeconomics focuses on a specific individual, firm, industry, or government agency; macroeconomics focuses on the entire economy. It should be noted that economics is not a settled body of doctrine. There is much controversy over how the economy works. That is what makes it so interesting.

Learning Objectives

After reading Chapter 1 and doing the following exercises, you should:	True or false	Multiple choice	Problems and applications	Common errors	Pages in the text
1. Understand that economics is the study of how to allocate society's scarce resources -- land, labor, capital, and entrepreneurship.	1	1-3, 4, 6, 19		1	1-6
2. Know that scarcity results because resources are not sufficient to satisfy all of society's wants.	3, 4	4, 5, 7		4	6-10
3. Be able to define and illustrate opportunity costs using a production-possibilities curve.	2, 5	5, 7-10, 14	1, 2	4	10-12
4. Understand the law of increasing opportunity costs.	12, 17	14-16	1		12-13
5. Be able to demonstrate efficiency, growth, unemployment, and underemployment using a production-possibilities curve.	12-15, 21	11, 12	1		13-15
6. Know why every economy must answer the same basic questions -- WHAT, HOW, FOR WHOM.	10	13			15-16
7. Be able to distinguish macroeconomic issues from microeconomic issues.	16	17, 18, 23			19-20
8. Be able to describe how the market mechanism seeks to allocate society's resources to their highest valued uses.	7-10	6			16-18
9. Be aware that there is much serious debate and controversy over how the economy works.	11-16			1-3	20-21
10. Be able to discuss the tradeoffs inherent in the "peace dividend."			2, 3		21-24
11. Understand the role of venture capitalists.		22, 24, 25			7, 14
12. Be able to describe the mixed economy and distinguish market failure from government failure.	6, 19, 20	20-22			17-18

Key-Term Review

Review the following terms; if you are not sure of the meaning of any term, write out the definition and check it against the Glossary in the text.

capital
ceteris paribus
economic growth
economics
efficiency
entrepreneurship
factors of production
government failure
laissez faire

macroeconomics
market failure
market mechanism
microeconomics
mixed economy
opportunity cost
production-possibilities
scarcity

Fill in the blank following each of the statements below with the appropriate term from the list above.

1. A Latin phrase meaning "all other things being equal" is _____. 1. _____
2. The branch of economics that focuses on the activities of individual decision-making units is _____. 2. _____
3. When economists say that to have more schools we must give up houses, they are illustrating the principle of _____. 3. _____
4. When market prices signal what goods and services should be produced, the allocation of resources is being accomplished by the _____. 4. _____
5. Those things that are transformed into final goods and services desired by society are _____. 5. _____
6. The branch of economics that focuses on the behavior of the entire economy is _____. 6. _____
7. A curve showing the various combinations of goods and services that a society can produce with its scarce resources is a _____ curve. 7. _____
8. _____ is a factor of production that is produced using society's scarce resources. 8. _____
9. Opportunity costs arise in every society because of the problem of _____. 9. _____
10. The science that studies how societies allocate scarce resources is _____. 10. _____

- | | |
|---|-----------|
| 11. Some resource allocation in the United States is done through the public sector, indicating that we have a _____. | 11. _____ |
| 12. Where there is an increase in real output, there is _____. | 12. _____ |
| 13. Society's pollution problem is an example of _____. | 13. _____ |
| 14. Public-sector intervention that fails to improve economic outcomes is an example of _____. | 14. _____ |
| 15. The factor of production that is most concerned with risk taking is called _____. | 15. _____ |
| 16. For Adam Smith's <i>invisible hand</i> to work most effectively requires a _____ attitude on the part of society. | 16. _____ |
| 17. "Getting the most from what you've got" represents the idea of _____. | 17. _____ |

True or False: Circle your choice.

- | | | |
|---|---|--|
| T | F | 1. Karl Marx developed the economic rationale for market-driven economies in <i>Das Kapital</i> . |
| T | F | 2. Students do not pay tuition in elementary school, so in this case education is a free good from society's point of view. |
| T | F | 3. Goods are scarce because society's desire for them exceeds society's ability to produce them. |
| T | F | 4. If a commodity has a market price that is greater than zero, it must be scarce. |
| T | F | 5. A production-possibilities curve can be drawn only if a scarce resource prevents production of as much as we want of a commodity. |
| T | F | 6. The market-directed or price-directed economy is capable of solving the problems created by pollution without intervention by government. |
| T | F | 7. The U.S. economy is referred to as a mixed economy because a large fraction of our resources are allocated by the public sector (government). |
| T | F | 8. When a factory pollutes the air we breathe, this situation is known in economics as market failure. |
| T | F | 9. In the U.S. market system, the government gives the signals for deciding how to use resources. |
| T | F | 10. Prices signal the answer to the WHAT, HOW, and FOR WHOM decisions in a laissez faire economy. |

- T F 11. The task of economic theory is to explain and predict the economic behavior of economic resources.
- T F 12. One reason that the production-possibilities curve is bowed out is that more production means the economy is less efficient in producing output.
- T F 13. If the economy is fully and efficiently employing its resources, then the only way to acquire more of one good is to accept less of something else.
- T F 14. If the economy is inside the production-possibilities curve, then more can be produced from the same amount of resources.
- T F 15. Technological advance shifts the production-possibilities curve inward.
- T F 16. When the economy experiences reduced resource availability, then the production-possibilities curve shifts inward.
- T F 17. Microeconomics focuses on the economy as a whole.
- T F 18. The opportunity cost of a good can be measured as the absolute value of the slope of a production-possibilities curve for the good.
- T F 19. Pollution is a government failure, not a market failure.
- T F 20. Pollution is an example of a market failure.
- T F 21. An inequitable distribution of income can result from either market failure or government failure.
- T F 22. The economy achieves the greatest efficiency when it is inside the production possibilities curve.

Multiple Choice: Select the correct answer.

- _____ 1. Adam Smith wrote:
- (a) *The Wealth of Nations*, which provided the rationale for centrally planned economies.
 - (b) *The Wealth of Nations*, which described the virtues of market-based economies.
 - (c) *Das Kapital*, which provided the rationale for centrally planned economies.
 - (d) *Das Kapital*, which described the virtues of market-based economies.
- _____ 2. Which of the following best describes the subject matter included in principles of economics?
- (a) How the economy allocates its scarce resources.
 - (b) How households make decisions.
 - (c) How governments make choices about resources.
 - (d) How society purchases resources.

- _____ 3. Which of the following best describes the term "resource allocation"?
- (a) Which goods and services society will produce with available factors of production.
 - (b) How society spends the income of individuals based on resource availability.
 - (c) How society purchases resources, given its macroeconomic goals.
 - (d) How individual market participants decide what to produce given fixed resource constraints.
- _____ 4. The best description of the focus of economic studies is:
- (a) For whom resources are allocated to increase efficiency.
 - (b) How society spends the income of individuals.
 - (c) How resources are allocated to fulfill society's goals.
 - (d) What resources are used to produce goods and services.
- _____ 5. In economics, what does scarcity mean?
- (a) When there is a shortage of a particular good, the price will fall.
 - (b) A production-possibilities curve cannot accurately represent the tradeoff between two goods.
 - (c) Society's desires exceed the want-satisfying capability of the resources available to satisfy those desires.
 - (d) None of the above.
- _____ 6. Which of the following *best* describes the most important way that resources are allocated in the U.S. economy?
- (a) By tradition.
 - (b) By command.
 - (c) By markets.
 - (d) By government.
- _____ 7. Which of the following are considered scarce in the U.S. economy?
- (a) Hamburgers.
 - (b) Automobiles.
 - (c) Petroleum products.
 - (d) All of the above.
- _____ 8. I plan on going to a \$5 movie this evening instead of studying for an exam. The total opportunity cost of the movie:
- (a) Depends on how I score on the exam.
 - (b) Is \$5.
 - (c) Is what I could have purchased with the \$5 plus the study time I forgo.
 - (d) Is the forgone studying I could have done in the same time.
- _____ 9. The opportunity cost of installing a traffic light at a dangerous intersection is:
- (a) Negative, since it will reduce accidents.
 - (b) The cost of the stoplight plus the cost savings from a reduction in the number of accidents.
 - (c) The time lost by drivers who approach the intersection when the light is red.
 - (d) The best possible alternative bundle of other goods or services that must be forgone in order to build and install the traffic light.
- _____ 10. The frequently used phrase "time is money" is a way of stating:
- (a) The idea of opportunity cost.
 - (b) Everyone has a price.
 - (c) People work for free.
 - (d) Money is an economic goal.

- ____ 11. Which of the following events would cause the production-possibilities curve to shift *inward*?
- (a) The labor supply grows.
 - (b) New factories are built.
 - (c) A technological breakthrough occurs.
 - (d) None of the above.
- ____ 12. Which of the following events would cause the production-possibilities curve to shift *outward*?
- (a) The economy grows.
 - (b) A new, strong plastic is developed for use in building houses.
 - (c) More women enter the labor force.
 - (d) All of the above.
- ____ 13. The market mechanism in the United States generates a distribution of income that is viewed as:
- (a) Equal, since everyone gets the same income.
 - (b) Equitable, since public policy does not tamper with it.
 - (c) Both equal and equitable, since they mean the same thing.
 - (d) Inequitable, apparently, since we change it through the activities of the public sector.
- ____ 14. The *slope* of the production-possibilities curve provides information about:
- (a) The growth of the economy.
 - (b) Technological change in the economy.
 - (c) Opportunity costs in the economy.
 - (d) All of the above.
- ____ 15. The bowed-out shape of the production-possibilities curve indicates:
- (a) Increasing opportunity costs.
 - (b) Pollution.
 - (c) Market imperfections.
 - (d) A mixed economy.
- ____ 16. The law of increasing opportunity cost explains:
- (a) How everything becomes more expensive as the economy grows.
 - (b) The shape of the production-possibilities curve.
 - (c) Inflation.
 - (d) All of the above.
- ____ 17. Which of the following are major macroeconomic goals of the economy?
- (a) Full employment.
 - (b) Control of inflation.
 - (c) An equitable distribution of income.
 - (d) All of the above.
- ____ 18. Macroeconomics focuses on the performance of:
- (a) Individual consumers.
 - (b) Firms.
 - (c) Government agencies.
 - (d) None of the above.

- _____ 19. The most likely source of the failure of communism in the Soviet Union was the problem of:
- (a) Inadequate land, labor, and capital.
 - (b) Centralization of decision making.
 - (c) Devastation from World War II.
 - (d) The focus on too few social goals.
- _____ 20. The collapse of communism is evidence of:
- (a) Government failure.
 - (b) Market failure.
 - (c) The failure of a mixed economy.
 - (d) *Ceteris paribus*.
- _____ 21. Which of the following is a government failure?
- (a) Bureaucratic delays.
 - (b) Shortages.
 - (c) Inefficient incentives.
 - (d) All of the above.
- _____ 22. Which of the factors of production are centrally planned, command economies most likely to underestimate or ignore?
- (a) Capital.
 - (b) Labor.
 - (c) Land.
 - (d) Entrepreneurship.
- _____ 23. Which of the following groupings contains a term which does not belong?
- (a) Unemployment, unfair income distribution, pollution.
 - (b) Public laws (regulation), taxes, centralized government planning.
 - (c) Macroeconomics, microeconomics, mixed economies.
 - (d) Bureaucratic delays, shortages, inefficient incentives.
- _____ 24. Reread the World View article "Free Enterprise Blooms in Wenzhou, China, Out of the Party's Sight." The article best illustrates:
- (a) The success of Karl Marx's view of market-based economies.
 - (b) Market failure.
 - (c) The concepts described in *The Wealth of Nations*.
 - (d) None of the above.
- _____ 25. Reread the In the News article "The Peace Dividend." Implicitly, the article is suggesting the opportunity cost of one person's nursing home care in terms of Phoenix air-to-air missiles is:
- (a) 1/35.
 - (b) 35.
 - (c) \$1 million.
 - (d) None of the above.