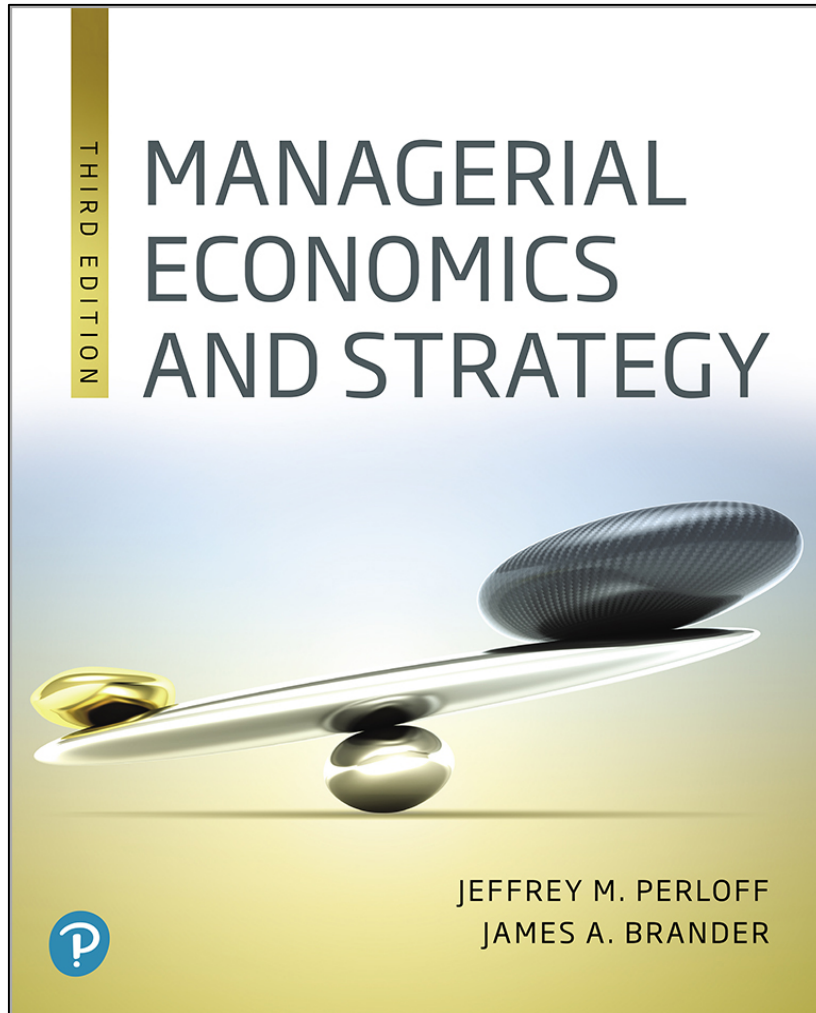


Managerial Economics and Strategy

Third Edition



Chapter 1

Introduction

Scarcity at the Bottom of Managerial Problems

Economics

- Economics is the study of decision-making in the presence of scarcity.

Managerial Economics

- Managerial economics is the application of economic analysis to managerial decision making.

Managers

- Managers make economic decisions by allocating the scarce resources at their disposal.
- They must understand the behavior of consumers, workers, other managers, and governments to make good decisions.

Learning Objectives

1.1 Managerial Decision Making

Describe the major business decisions managers face

1.2 Economic Models

Explain how economic models are useful in managerial decision making

1.3 Using Economics Skills in your Career

Illustrate how a knowledge of economics can help your career

1.1 Managerial Decision Making (1 of 5)

- There are many decisions made by managers.
 - A **production manager's** objective is normally to achieve a production target at the lowest possible cost. Of course, the manager has to use the existing factory.
 - **Human resource managers** design compensation systems to encourage employees to work hard. Of course, the manager has limited resources and employees are already in the firm.
 - A **marketing manager** must allocate an advertising budget to promote the product most effectively. Of course, the manager has a limited marketing budget.
- The **firm's top manager** must coordinate and direct all these activities.
 - Could you think on this manager's constraints?

1.1 Managerial Decision Making (2 of 5)

Profit = Revenue – Costs

- The job of the **chief executive officer** (CEO) is to focus on the bottom line: **maximizing profit**.
 - The CEO is also concerned with how a firm is positioned in a market relative to its rivals.
 - However, it is critical the CEO focuses on maximizing the firm's profit rather than beating a rival.
- Maximizing profit requires coordination.
 - The CEO orders the production manager to minimize the cost of producing the particular good or service.
 - The CEO asks the market research manager to determine how many units can be sold at any given price, and so forth.
 - It would be a major coordination failure if the marketing department sets up a system of pricing and advertising based on selling 8,000 units a year, while the production department managed to produce only 2,000.

1.1 Managerial Decision Making (3 of 5)

Trade-Offs

- In an environment of scarcity, managers must focus on the trade-offs that directly or indirectly affect profits.
 - Evaluating trade-offs often involves **marginal reasoning**: considering the effect of a small change.
- How to Produce
 - To produce a given level of output, a firm must use more of one input if it uses less of another input. Example: Metal and plastic substitute each other in the production of cars. Small increments and reductions of them affect the car's weight, safety, and cost.
- What Prices to Charge
 - Consumers buy fewer units of a product when its price rises given their limited budgets. Example: When a manager can set the price of a product, the manager must consider whether raising the price offsets the loss from selling fewer units.
- Whether to Innovate
 - There are short-run and long-run profits. Example: Investment in innovation lowers short-run profit, but may raise the long-run profit.

1.1 Managerial Decision Making (4 of 5)

Other Decision Makers

- **Consumers** purchase products subject to their limited budgets.
- **Workers** decide on which jobs to take and how much to work given their scarce time and limits on their abilities.
- **Rivals** may introduce new, superior products or cut the prices of existing products.
- **Governments** around the world may tax, subsidize, or regulate products.
- Rational Maximizers and Behavioral Economics
 - To understand how others make economic decisions, most economic analysis assumes those “others” are maximizers: they do the best they can with their limited resources.
 - However, in some contexts, behavioral economics explains those “others” cannot successfully maximize for a variety of psychological reasons.

1.1 Managerial Decision Making (5 of 5)

Other Decision Makers

- Most interaction and economic decisions are done in markets.
 - A **market** is an exchange mechanism that allows buyers to trade with sellers.
 - The primary participants in a market are firms who supply the product and consumers who buy it.
 - But, government policies such as taxes also play an important role in the operation of markets.

Strategy

- A strategy is a battle plan that specifies the **actions** or **moves** that the manager will make to maximize the firm's profit when interacting with a small number of rival firms.
 - One tool that is helpful in understanding and developing such strategies is **game theory**, which we use in several chapters.

1.2 Economic Models (1 of 7)

- A **model** is a description of the relationship between two or more variables.
 - Meteorologists use models to predict weather conditions.
 - Medical researchers use models to describe and predict the effect of medications on diseases.
 - Astronomers use models to describe and predict the movement of comets and meteors.
 - Economists use economic models to explain how managers and other decision makers make decisions and to explain the resulting market outcomes.
- Managers use models to consider hypothetical situations—to use a **what-if analysis**—such as “What would happen if we raised our prices by 10%?” or “Would profit rise if we phased out one of our product lines?”
 - Models help managers predict answers to what-if questions and to use those answers to make good decisions.

1.2 Economic Models (2 of 7)

Simplifying Assumptions

- The real economic world is too complex to analyze fully. To understand it and be able to make valid predictions, economic models include only the essential issues, leaving aside complications that might disguise those essential elements.
 - Economic models can be presented in words, using graphs or mathematics. Regardless of how the model is described, an economic model is a simplification of reality that contains only its most important features.
 - Part of the skill in using economic models lies in selecting a model that is appropriate for the task at hand.
- Mini-Case: Income Threshold Model
 - To explain car purchasing behavior in China, we **assume in this model** that only income has an important effect on the decision to buy cars. Other factors are ignored, such as the color of cars.
 - If this assumption is correct, we make our analysis of the auto market simpler without losing important details. If the ignored issues are important, our predictions may be inaccurate.

1.2 Economic Models (3 of 7)

Testing Theories

- Bloore's Razor: When given a choice between two theories, take the one that is funnier.



An alternative theory.

1.2 Economic Models (4 of 7)

Testing Theories

- Economists test theories by checking whether the theory's predictions are correct.
 - One model might argue that prices will go up next quarter. Another, using a different theory, may contend that prices will fall. Which one is correct?
 - Use empirical evidence (real facts) to find out which prediction is correct.
- A **good model** makes clear predictions that are consistent with reality. A **good model** is one that is a close enough approximation to be useful.
 - It is not helpful to have simple models that make incorrect predictions or complex models that make untestable predictions. The skill is to have a model simple enough to make clear predictions but realistic enough to be accurate.
 - “If the price of a product rises, the quantity of the product demanded falls” provides a clear prediction.
 - “Human behavior depends on tastes, and tastes change randomly at random intervals” is not very useful.

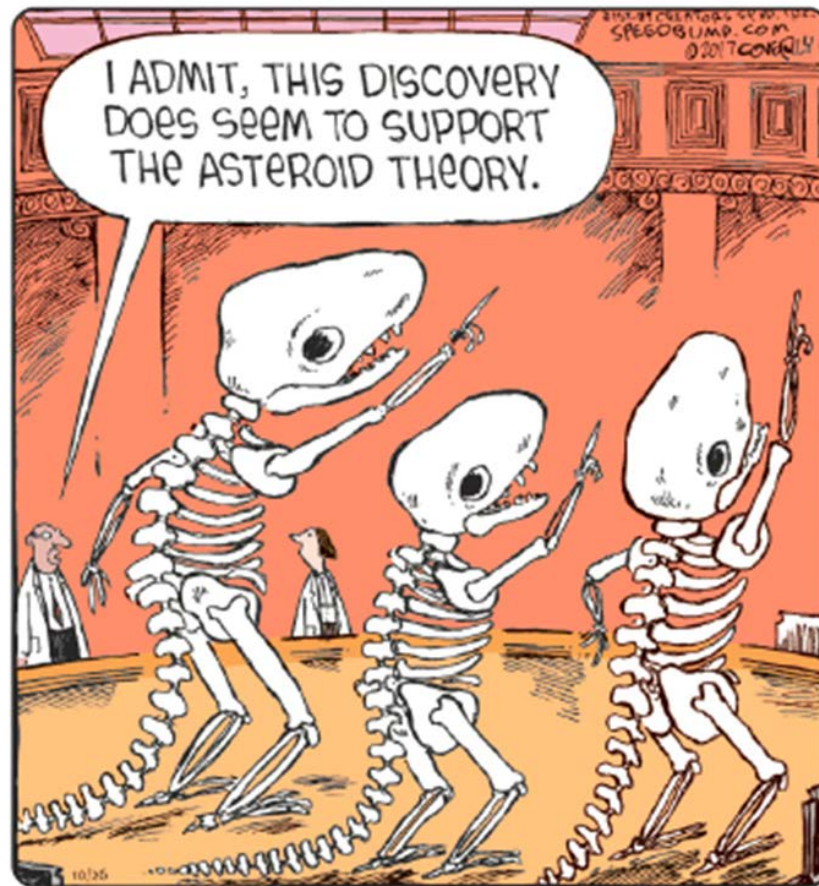
1.2 Economic Models (5 of 7)

Positive and Normative Statements

- A **positive statement** concerns what **is** or what **will** happen and **describes** reality.
 - A testable hypothesis about matters of fact such as cause-and-effect relationships
 - “If we double the amount of sugar in this soft drink, we will significantly increase sales to children.”
 - **Positive** does not mean that we are certain about the truth of our statement; it indicates only that we can test the truth of the statement.
- A **normative statement** concerns what somebody believes **should** happen and **prescribes** a course of action.
 - A belief about whether something is good or bad
 - “The government should tax soft drinks so that people will not consume so much sugar.”
 - A normative statement cannot be tested because a value judgment cannot be refuted by evidence.
- Good economists and good managers emphasize positive analysis.

1.2 Economic Models (6 of 7)

Positive and Normative Statements



1.2 Economic Models (7 of 7)

New Theories

Why does economics continually evolve?

- Because economists always try to improve their understanding of the world around them.
 - For instance, traditional theory assumes decision makers always maximize. But, the new theory of **behavioral economics** studies how psychological biases and cognitive limits can prevent managers and others from optimizing.
- Because economists have to develop new ways to think about **disruptive innovations**.
 - For instance, the internet is a disruptive innovation that has transformed retailing, media, and payment methods allowing two groups of users to interact in these new online markets. The **two-sided markets** theory has been important to the evolution and governmental policies toward these markets.

1.3 Using Economics Skills in Your Career

- This book will help you to develop skills in economic analysis that are crucial in business decision making.
 - Assessing financial investment options at financial institutions.
 - Setting prices or planning other actions based on formal analysis, such as spreadsheet-based economic modeling.
 - Using economic skills in a variety of jobs because economic decisions come up everywhere in business.
- All readers will benefit from familiarity with the application of economics presented in this book.
 - Economic skills help to predict the likely outcomes from government actions and other events.
 - Economic skills are also relevant for the analysis of personal decisions, such as investment or educational choices.

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