# PART 1 <br> THE FIRM AND ITS ENVIRONMENT 

CHAPTER 1 Introduction, Basic Principles, and Methodology<br>CHAPTER 2 Revenue of the Firm<br>CHAPTER 3 Demand Analysis and Estimation<br>CHAPTER 4 Economic Forecasting<br>INTEGRATING CASE 1A Are There Two Markets for HCM Ovens?<br>INTEGRATING CASE 1B Omega Distributing Company I

## CHAPTER 1

## INTRODUCTION, BASIC PRINCIPLES, AND METHODOLOGY

## Chapter Outline

I. Managerial Decisions and Principles in Today's Economy
A. Ten Economic Principles for Managers
II. Economists and the Application of Managerial Economics
A. Role of Managerial Economics in Problem Solving
B. Macroeconomics, Microeconomics, and the Corporate Economist
C. Managers and Their Objectives
III. Our Approach to Problem Solving
IV. Organization of This Book
A. Other Tools for Decision Making
V. Review of Basic Demand and Supply Analysis
A. Demand and the Demand Curve
B. Supply and the Supply Curve
C. Determination of Market Price
VI. Carryover to Analysis of Other Markets
VII. Chapter Summary

## Questions

1. The central themes are:
(1) Identifying problems and opportunities,
(2) Analyzing alternatives from which choices can be made,
(3) Making choices that are best from the standpoint of the firm or organization.
2. The answer is simple. Globalization increases the number and complexity of alternative choices available to managers.
3. All of them have to do with managerial decision making or the objectives, information, and analysis necessary to make optimizing decisions.
4. The principal-agent problem is the potential for conflict of interest when one party acts as a decision-maker on behalf of another. For example, corporate managers are agents who act on behalf of shareholders. It is quite possible that the interests of the managers in their own rewards may not coincide with the interests of shareholders, thus leading managers to make decisions that enrich themselves at the expense of shareholders.
5. Some possible alternative hypotheses are:
(1) Market share maximization: generally measured by proportion of sales revenue or of total quantity sold to total market revenues or volume. (Instructor may wish to note that this generally involves producing at a level of output higher than the one that will maximize profit, something that will be demonstrated in later chapters.)
(2) Growth Maximization: Focusing on increasing the size of the firm over time. (Again, may involve some sacrifice of profit.)
(3) Maximization of managerial returns: Managers make choices that are best for their own interest, subject to keeping shareholders content. (Instructor may wish to relate to principal-agent problem.)
6. Steps that have been taken to try to harmonize the objectives of managers and shareholders include the linking stock option awards to stock performance, delaying stock option exercise by managers until stocks have risen by a certain percentage, improving disclosure of executive compensation to shareholders, and providing executive compensation committees with independent consultants.
7. The four steps are:
(1) Identification of problem or decision to be made.
(2) Statement of alternative solutions.
(3) Determination of relevant data and analysis of it.
(4) Choice of the best solution.
8. The law of demand is the proposition that price and quantity demanded are inversely related. This follows from the logical notion that consumers will buy more of a product when its price falls. (Those already buying will purchase a larger quantity per time period, and new buyers may also choose to make purchases.) The implication for the demand curve is that its slope will be negative. Note: This is supported by the theory of consumer behavior (utility maximization) as discussed later in the optional material of Appendix 2.
9. A change in quantity demanded refers to a movement along a given demand curve in response to a change in the good's own price. A change in demand refers to a shift in the demand curve caused by a change in a determinant of demand, such as income or the price of a related good (substitute or complement).
10. The short-run supply curve will generally slope upward to the right, reflecting that the cost of producing additional units of output rises with production volume. (Later on, in Chapters 5 and 6, this will be discussed more thoroughly when diminishing returns and marginal cost are examined.)
11. Quantity supplied will exceed quantity demanded. There will be a surplus, and price will fall.

## Problems

1. a. Demand curve for new cars will shift to the right.
b. Cream demand curve would shift to the left.
c. Demand curve for mopeds would shift to the right.
d. Demand curve for DVD players shifts to the right.
2. The demand curve will shift to the right, intersecting the supply curve at a higher price and a greater equilibrium quantity.
3. a. The equilibrium price is $\$ 35$ per bushel, where quantity demanded and quantity supplied are equal $(4,000$ bu. each). At higher prices, quantity supplied exceeds quantity demanded, so price will fall. At lower prices, quantity demanded exceeds quantity supplied, so price will rise.
b. The sketch should show two straight lines that intersect at $\mathrm{Q}=4,000$ and price $=\$ 35$. (Given the data in the table, the supply curve will intercept the price axis at $P=\$ 15$. If the linear demand curve is extended, it will intercept the price axis at $\mathrm{P}=\$ 55$, and its Q axis intercept will be $\mathrm{Q}=11,000$.)
c. There would be a shortage, and consumers would bid up the price of apples. When this happens, the quantity supplied by sellers (who see their inventories being depleted) will increase, given the upward-sloping supply curve represented in the table.
4. a. $\mathrm{Q}=0=1000-10 \mathrm{P} ; 10 \mathrm{P}=1000 ; \mathrm{P}=\underline{\underline{100}}$.
b. $\quad \mathrm{Q}=200=1000-10 \mathrm{P} ; 10 \mathrm{P}=800 ; \mathrm{P}=\underline{\underline{80}}$.
c. $\quad P=100-0.1 \mathrm{Q}$
d. $1000-10 \mathrm{P}=-100+10 \mathrm{P} ; 20 \mathrm{P}=1100 ; \mathrm{P}=\underline{\underline{55}} . \mathrm{Q}=1000-550=\underline{\underline{450}}$.
5. a.

|  | Quantity <br> Supplied <br> $\left(\mathrm{Q}_{\mathrm{s}}\right)$ | Quantity <br> Demanded <br> $\left(\mathrm{Q}_{\mathrm{d}}\right)$ | $\left(\mathrm{Q}_{\mathrm{s}}-\mathrm{Q}_{\mathrm{d}}\right)$ |
| :---: | :---: | :---: | :---: |
| Price | 0 | 600 | $\underline{\mathbf{- 6 0 0}}$ |
| 0 | 100 | 500 | $\underline{\mathbf{- 4 0 0}}$ |
| 20 | 200 | $\underline{\mathbf{4 0 0}}$ | -200 |
| 40 | 300 | 300 | $\underline{\mathbf{0}}$ |
| 60 | 400 | 200 | 200 |
| 80 | 500 | $\underline{\mathbf{1 0 0}}$ | 400 |

b. $P=\underline{\underline{60} ;} \mathrm{Q}=\underline{\underline{300}}$. (quantity demanded $=$ quantity supplied)
c. When $\left(Q_{s}-Q_{d}\right)$ is negative it measures a shortage, but when positive, it measures a surplus.

