Chapter Objectives

1. Outline the legal constraints on pricing.
2. Identify the major categories of pricing objectives.
3. Explain price elasticity and its determinants.
4. List the practical problems involved in applying price theory concepts to actual pricing decisions.
5. Explain the major cost-plus approaches to price setting.
6. List the chief advantages and shortcomings of using breakeven analysis in pricing decisions.
7. Explain the use of yield management in pricing decisions.
8. Identify the major pricing challenges facing online and international marketers.
**PRICING AND THE LAW**

- Federal, state, and local laws all influence pricing decisions.
- Tariffs levied on imported goods and services can help firms protect local markets.
  - Countries impose them to protect domestic suppliers.
  - Vary from product to product and from country to country.
- Government regulation also imposes costs that affect prices.
  - Some companies use regulatory cost recovery as a source of additional revenue.
PATMAN ACT

- Patman Act Federal legislation prohibiting price discrimination that is not based on a cost differential; also prohibits selling at an unreasonably low price to eliminate competition.

- Inspired by ______ competition triggered by the ______ of grocery chains.

- Price ____________—some consumers pay more than others for the same product.

  - Example: Sending ______________ of identical goods with differing prices targeted by ZIP code.

  - Avoids penalties under Robinson-Patman Act if it does not restrict competition.

  - Area of confusion because courts tend to evaluate claims on a ______-____-____ basis.
UNFAIR-TRADE LAWS

• Unfair-trade laws State laws requiring sellers to maintain minimum prices for comparable merchandise.

• Intended to protect small specialty stores from loss-leader tactics.

FAIR-TRADE LAWS

• Fair-trade laws Statutes enacted in most states that once permitted manufacturers to stipulate a minimum retail price for their product.

• Assumes a product’s price is part of its image, which the manufacturer owns.

• Laws eventually invalidated by the 1975 Consumer Goods Pricing Act.

• Term “fair trade” now applies to companies that charge higher than market rates to help farmers in poor countries earn a living wage.
• Organizational objectives and more specific marketing objectives guide the development of pricing objectives.

### Table 18.1: Pricing Objectives

<table>
<thead>
<tr>
<th>Objective</th>
<th>Purpose</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profitability objectives</td>
<td>Profit maximization</td>
<td>Microsoft’s initially high price for the Xbox 360</td>
</tr>
<tr>
<td></td>
<td>Target return</td>
<td></td>
</tr>
<tr>
<td>Volume objectives</td>
<td>Sales maximization</td>
<td>Southwest Airlines’ low fares in new markets</td>
</tr>
<tr>
<td></td>
<td>Market share</td>
<td></td>
</tr>
<tr>
<td>Meeting competition</td>
<td>Value pricing</td>
<td>Wal-Mart’s lower prices on private house brands</td>
</tr>
<tr>
<td>objectives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prestige objectives</td>
<td>Lifestyle</td>
<td>High-priced luxury autos such as Lexus and stereo equipment by Bose</td>
</tr>
<tr>
<td></td>
<td>Image</td>
<td></td>
</tr>
<tr>
<td>Not-for-profit objectives</td>
<td>Profit maximization</td>
<td>Reduced or zero tolls for high-occupancy vehicles to encourage carpooling</td>
</tr>
<tr>
<td></td>
<td>Cost recovery</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Market incentives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Market suppression</td>
<td></td>
</tr>
</tbody>
</table>
PROFITABILITY OBJECTIVES

• Consumers must be convinced they are receiving good ________ for their money.

• Intense competition results from competition for ____________ position.

• Basic formulas for ________ and __________:

\[
\text{Profits} = \text{Revenue} - \text{Expenses}
\]

\[
\text{Total Revenue} = \text{Price} \times \text{Quantity Sold}
\]

• Profit maximization Point at which the ____________ revenue gained by increasing the price of a product equals the increase in total costs.

• Target-return objective Short-run or long-run pricing objectives of achieving a ____________ return on either sales or investment.
VOLUME OBJECTIVES

• Belief that increased sales volume is more important in the long run than immediate profits.

• Can maximize sales through pricing and nonprice factors such as service and quality.

• Market-share objective—the goal of controlling a specified minimum share of the market for a firm’s good or service.

  • Example: Apple has 83 percent share of the market for digital downloads.
The PIMS Studies

- **Profit Impact of Market Studies (PIMS) project** Research that discovered a strong positive relationship between a firm’s market share and product quality and its return on investment.

- Firms with market share more than 40 percent have average return on investment of 32 percent.

- Explanation: Firms with large shares accumulate greater operating experience and lower overall costs relative to competitors with smaller market shares.

**MEETING COMPETITION OBJECTIVES**

- Firms sometimes set prices to match industry leaders.

- Shifts marketing mix to focus on nonprice factors.
  
  - Example: Airlines focus competition on factors such as service and comfort.
Value Pricing

• **Value pricing** Pricing strategy emphasizing benefits derived from a product in comparison to the price and quality levels of competing offerings.

• Typically works best for relatively low-priced goods and services.

• Challenge is convincing customers that low-priced brands offer quality comparable to that of a higher-priced product.

• Example: [Trader Joe’s](#) grocery chain, which sells gourmet items at closeout prices.
PRESTIGE OBJECTIVES

• Establishing a relatively high price to develop and maintain an image of quality and exclusiveness that appeals to status-conscious consumers.

• Example: Tiffany jewelry.
PRICING OBJECTIVES OF NOT-FOR-PROFIT ORGANIZATIONS

• Pricing strategy helps them achieve specific goals:
  • Profit maximization.
  • Cost recovery.
  • Market incentives that encourage increased usage.
  • Market suppression that discourages the use of certain products, such as taxes that raise the price of tobacco products.
METHODS FOR DETERMINING PRICES

• Prices traditionally determined in two basic ways:
  • Supply and demand.
  • Cost-oriented analyses.

• **Customary prices** Traditional prices that customers expect to pay for certain goods and services.
  • Companies try to balance consumer pricing expectations with the realities of rising costs.

• Pricing example: rising energy costs.
  • Rising demand and limited refinery capacity led to gasoline prices of more than $3 per gallon.
  • Rising energy costs affect businesses throughout the country through rising delivery costs.
PRICE DETERMINATION IN ECONOMIC THEORY

• Demand — the amounts of a firm’s product that will purchase at different prices during a specified time period.

• Supply — the amounts of a good or service that will be for sale at different prices during a specified period.

• Pure competition — a market structure with so buyers and sellers that no single participant can significantly influence price.

• Monopolistic competition — diverse parties exchange heterogeneous, relatively well-differentiated products, giving marketers control over prices.

• Oligopoly — relatively sellers; each has large influence on price.

• Monopoly — a market structure in which only seller of a product exists and for which there are no close substitutes
## Table 18.2: Distinguishing Features of the Four Market Structures

<table>
<thead>
<tr>
<th>CHARACTERISTICS</th>
<th>PURE COMPETITION</th>
<th>MONOPOLISTIC COMPETITION</th>
<th>OLIGOPOLY</th>
<th>MONOPOLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of competitors</td>
<td>Many</td>
<td>Few to many</td>
<td>Few</td>
<td>No direct competitors</td>
</tr>
<tr>
<td>Ease of entry into industry by new firms</td>
<td>Easy</td>
<td>Somewhat difficult</td>
<td>Difficult</td>
<td>Regulated by government</td>
</tr>
<tr>
<td>Similarity of goods or services offered by competing firms</td>
<td>Similar</td>
<td>Different</td>
<td>Can be either similar or different</td>
<td>No directly competing goods or services</td>
</tr>
<tr>
<td>Control over prices by individual firms</td>
<td>None</td>
<td>Some</td>
<td>Some</td>
<td>Considerable</td>
</tr>
<tr>
<td>Demand curves facing individual firms</td>
<td>Totally elastic</td>
<td>Can be either elastic or inelastic</td>
<td>Kinked; inelastic below kink; more elastic above</td>
<td>Can be either elastic or inelastic</td>
</tr>
<tr>
<td>Examples</td>
<td>Illinois soybean farm</td>
<td>Best Buy stores</td>
<td>Verizon Wireless</td>
<td>Waste Management</td>
</tr>
</tbody>
</table>
COST AND REVENUE CURVES

• Product’s total cost =
  total variable costs + total fixed costs.

• Variable costs change with the level of production.
  • Include raw materials and labor costs.

• Fixed costs remain stable at any production level within a certain range.
  • Include lease payments or insurance costs.

• Average total costs =
  \( (\text{variable + fixed costs}) \div \text{no. of units produced} \).

• Marginal cost—change in total cost that results from producing an additional unit of output.
THE CONCEPT OF ELASTICITY IN PRICING STRATEGY

- **Elasticity** Measure of responsiveness of purchasers and suppliers to a change in price.

- Elasticity of demand—percentage change in the quantity of a good or service demanded divided by the percentage change in its price.

- Elasticity of supply—percentage change in the quantity of a good or service supplied divided by the percentage change in its price.

- >1, said to be elastic supply or demand.

- <1, said to be inelastic supply or demand;

  - Example, a 10 percent increase in cigarette prices results in a 4 percent sales decline.
Determining Price by Relating Marginal Revenue to Marginal Cost

- Marginal cost
- Average total cost
- Average revenue (demand)
- Marginal revenue
- Maximized profits
- Quantity
- Dollars

Point P indicates the price level at which maximized profits occur.
Price that brings highest profit

<table>
<thead>
<tr>
<th>PRICE</th>
<th>NUMBER SOLD</th>
<th>TOTAL REVENUE</th>
<th>MARGINAL REVENUE</th>
<th>TOTAL COSTS</th>
<th>MARGINAL COSTS</th>
<th>PROFITS (TOTAL REVENUE MINUS TOTAL COSTS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$34</td>
<td>1</td>
<td>$34</td>
<td>$34</td>
<td>57</td>
<td>$7</td>
<td>(23)</td>
</tr>
<tr>
<td>32</td>
<td>2</td>
<td>64</td>
<td>30</td>
<td>62</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>30</td>
<td>3</td>
<td>90</td>
<td>26</td>
<td>66</td>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td>28</td>
<td>4</td>
<td>112</td>
<td>22</td>
<td>69</td>
<td>3</td>
<td>43</td>
</tr>
<tr>
<td>26</td>
<td>5</td>
<td>130</td>
<td>18</td>
<td>73</td>
<td>4</td>
<td>57</td>
</tr>
<tr>
<td>24</td>
<td>6</td>
<td>144</td>
<td>14</td>
<td>78</td>
<td>5</td>
<td>66</td>
</tr>
<tr>
<td>22</td>
<td>7</td>
<td>154</td>
<td>10</td>
<td>84</td>
<td>6</td>
<td>70</td>
</tr>
<tr>
<td>20</td>
<td>8</td>
<td>160</td>
<td>6</td>
<td>91</td>
<td>7</td>
<td>69</td>
</tr>
<tr>
<td>18</td>
<td>9</td>
<td>162</td>
<td>2</td>
<td>100</td>
<td>9</td>
<td>62</td>
</tr>
<tr>
<td>16</td>
<td>10</td>
<td>160</td>
<td>(2)</td>
<td>110</td>
<td>11</td>
<td>50</td>
</tr>
</tbody>
</table>
Determinants of Elasticity

- Availability of substitutes or complements.
  - If many are available, demand tends to be elastic.
- Role as a complement to another product.
  - Example: Demand for motor oil is relatively inelastic.
- Increasing number of business transactions conducted online.
  - Increases demand elasticity as consumer have more choices.
- Whether product is perceived as a necessity or luxury.
  - Example: Price changes have little effect on visits to doctors.
- Portion of a person’s budget spent on item.
  - Larger the portion, more elastic the demand.
- Demand often shows less elasticity in the short run than in the long run.
Elasticity and Revenue

- Elasticity has a strong influence on revenue.
  - Example: Should Bay Area Rapid Transit System in San Francisco raise or lower fares to increase revenues?
    - If fares decrease 10 percent, total revenue will fall unless the number of riders increases at least 10 percent.
    - If fares increase 10 percent, total revenue will fall if more than 10 percent of the riders stop using the subway.
  - Price cuts will increase revenues for products with elastic demand.
  - Price increases will increase revenue for products with inelastic demand.

PRACTICAL PROBLEMS OF PRICE THEORY

- Many firms do not attempt to maximize profits.
- Demand curves are difficult to estimate.
PRICE DETERMINATION IN PRACTICE

• Cost-plus pricing—uses a base-cost figure per unit and adds a markup to cover unassigned costs and to provide a profit.
  • Allows businesses with low costs to set prices lower competitors’ and still make a profit.

ALTERNATIVE PRICING PROCEDURES

• Full-cost pricing—uses all relevant variable costs in setting a product’s price.
  • No consideration of competition or demand for the item.
  • Method for allocating overhead is arbitrary and may be unrealistic.
• Incremental-cost pricing—attempts to use only costs directly attributable to a specific output in setting prices. Example statement:

\[
\begin{align*}
\text{Sales (10,000 units at$10)} & \quad \$100,000 \\
\text{Expenses:} & \\
\quad \text{Variable} & \quad $50,000 \\
\quad \text{Fixed} & \quad 40,000 \quad 90,000 \\
\text{Net Profit} & \quad $10,000
\end{align*}
\]

• If firm is contracted for an additional 5,000 units, the lowest possible price would be $9/unit under full-cost pricing.

• Under incremental-cost pricing, prices above $5/unit are permitted:

\[
\begin{align*}
\text{Sales (10,000 at$10; 5,000 at$5.10)} & \quad $125,500 \\
\text{Expenses:} & \\
\quad \text{Variable} & \quad $75,000 \\
\quad \text{Fixed} & \quad 40,000 \quad 115,000 \\
\text{Net Profit} & \quad $10,500
\end{align*}
\]
BREAKEVEN ANALYSIS

• **Breakeven analysis** Pricing technique used to determine the number of ________ that must be sold at a specified price to generate enough revenue to cover total cost.

  • Point at which total ________ = total ________, expressed in units or dollars.

  Breakeven Point (in units) = \( \frac{\text{Total Fixed Cost}}{\text{Per-Unit Contribution to Fixed Cost}} \)

  Breakeven Point (in units) = \( \frac{\$40,000}{\$5} \) = 8,000 units

  Breakeven Point (in dollars) = \( \frac{\text{Total Fixed Cost}}{1 - \text{Variable Cost per Unit Price}} \)

  Breakeven Point (in dollars) = \( \frac{\$40,000}{1 - (\$5/\$10)} \) = \( \frac{\$40,000}{0.5} \) = $80,000
Target Returns

• Most managers include a targeted profit in their analyses:

\[
\text{Breakeven Point (including specific dollar target return)} = \frac{\text{Total Fixed Cost + Profit Objective}}{\text{Per-Unit Contribution}}
\]

\[
\text{Breakeven Point (in units)} = \frac{\$40,000 + \$15,000}{\$5} = 11,000 \text{ units}
\]

Evaluation of Breakeven Analysis

• Easily understood by marketers and nonmarketers.
• Assumes that costs can be divided into fixed and variable categories.
• Assumes that per-unit variable costs do not change at different levels of operation.
• Cost-based model that does not consider demand.
THE MODIFIED BREAK-EVEN CONCEPT

- Modifications that account for demand are necessary for effective pricing.
- Demand considerations include:
  - Degree of price elasticity.
  - Consumer price expectations.
  - Existence and size of specific market segments.
  - Buyer perceptions of strengths and weaknesses of substitute products.

- **Modified breakeven analysis** Pricing technique used to evaluate consumer demand by comparing the number of products that must be sold at a variety of prices to cover total cost with estimates of expected sales at the various prices.
<table>
<thead>
<tr>
<th>Price</th>
<th>Quantity Demanded</th>
<th>Total Revenue</th>
<th>Total Fixed Cost</th>
<th>Total Variable Cost</th>
<th>Total Cost</th>
<th>Break-even Point (Number of Sales Required to Break Even)</th>
<th>Total Profit (or Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$15</td>
<td>2,500</td>
<td>$37,500</td>
<td>$40,000</td>
<td>$12,500</td>
<td>$52,500</td>
<td>4,000</td>
<td>$(15,000)</td>
</tr>
<tr>
<td>10</td>
<td>10,000</td>
<td>100,000</td>
<td>40,000</td>
<td>50,000</td>
<td>90,000</td>
<td>8,000</td>
<td>10,000</td>
</tr>
<tr>
<td>9</td>
<td>13,000</td>
<td>117,000</td>
<td>40,000</td>
<td>65,000</td>
<td>105,000</td>
<td>10,000</td>
<td>12,000</td>
</tr>
<tr>
<td>8</td>
<td>14,000</td>
<td>112,000</td>
<td>40,000</td>
<td>70,000</td>
<td>110,000</td>
<td>13,334</td>
<td>2,000</td>
</tr>
<tr>
<td>7</td>
<td>15,000</td>
<td>105,000</td>
<td>40,000</td>
<td>75,000</td>
<td>115,000</td>
<td>20,000</td>
<td>(10,000)</td>
</tr>
</tbody>
</table>
• **Yield management** Pricing strategy that allows marketers to vary prices based on such factors as demand, even though the cost of providing those goods or services remains the same.

  • Example: Varying prices for tickets for a Broadway show based on day, time, and seat location.
  
  • Example: Varying availability of restricted and nonrestricted airline tickets in the months and weeks before the flight to maximize revenues.
GLOBAL ISSUES IN PRICE DETERMINATION

• Prices must support the company’s broader goals.

• Firms use four domestic pricing strategies:
  • Profitability—if company is a price leader.
  • Volume—expose foreign markets to competition when trade barriers are lowered.
  • Meeting competition—important in Europe where common currency has led to price convergence.
  • Prestige—valid when products are associated with intangible benefits, such as high quality, exclusiveness, or attractive design.

• Also often have a fifth objective: price stability.
  • Especially important for producers of commodities who are more susceptible to fluctuating prices than producers of value-oriented products.