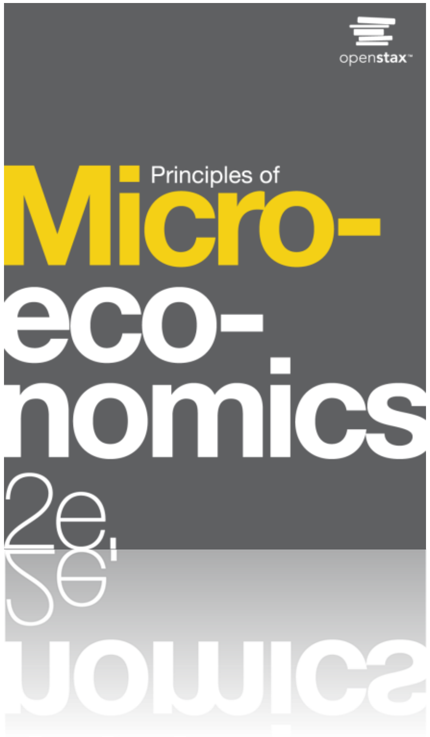
PRINCIPLES OF MICROECONOMICS 2e

Chapter 10 Monopolistic Competition and Oligopoly

PowerPoint Image Slideshow



Competing Brands?

The laundry detergent market is one that is characterized neither as perfect competition nor monopoly.

(Credit: modification of work by Pixel Drip/Flickr Creative Commons)

10.1 Monopolistic Competition

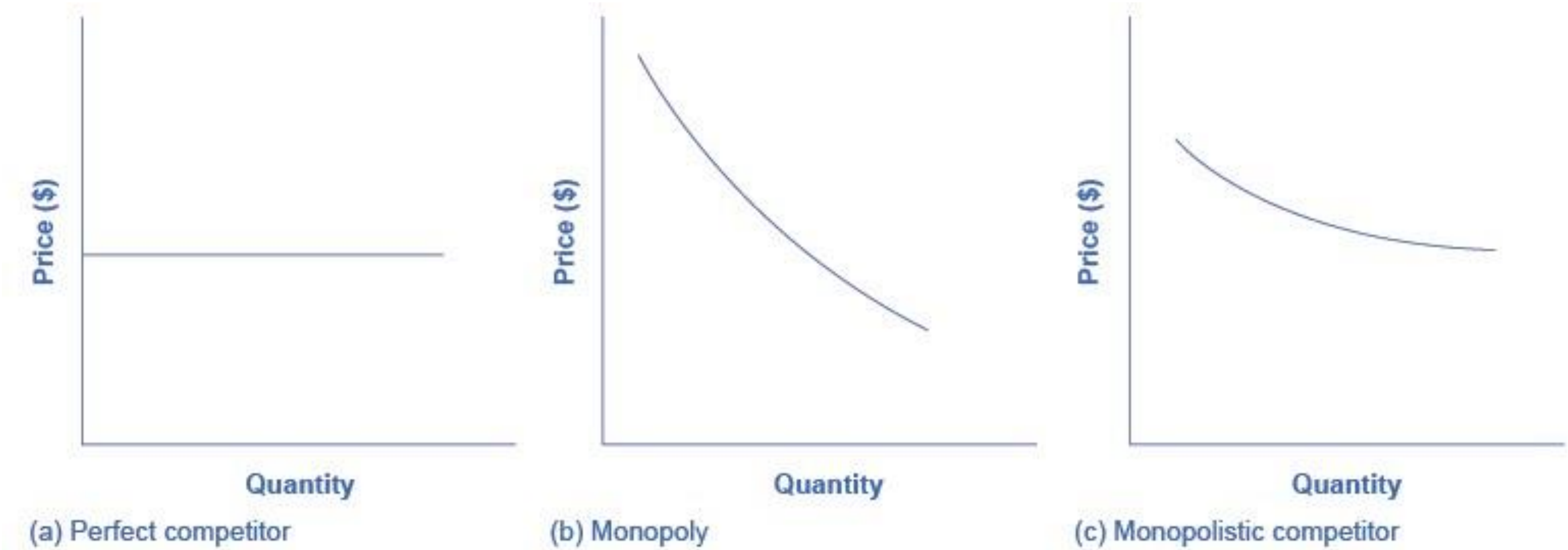
- **Imperfectly competitive** - firms and organizations that fall between the extremes of monopoly and perfect competition.
- **Monopolistic competition** - many firms competing to sell similar but differentiated products.
- **Oligopoly** - when a few large firms have all or most of the sales in an industry.

Differentiated Products

- **Differentiated product** - a product that consumers perceive as distinctive in some way.

- Ways for a product to be differentiated:
  - physical aspects
  - location from which it sells
  - intangible aspects
  - perceptions

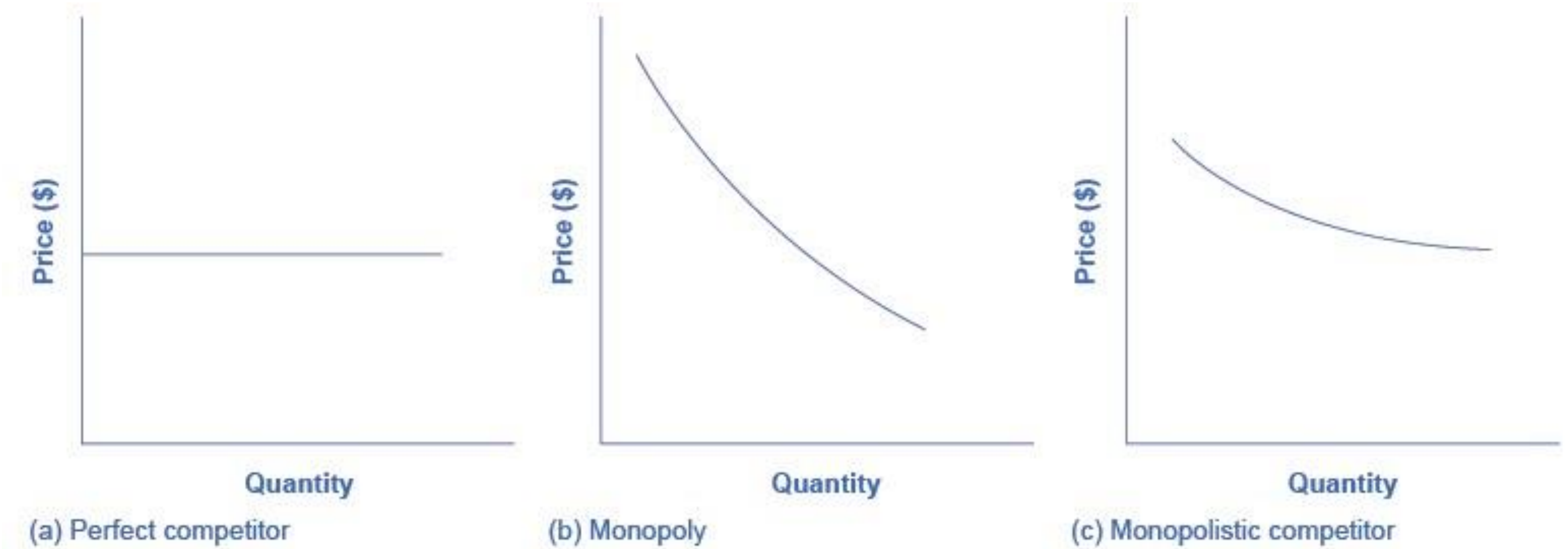
Perceived Demand for Firms in Different Competitive Settings



(a)

- The demand curve faced by a perfectly competitive firm is perfectly elastic.
- It can sell all the output it wishes at the prevailing market price.

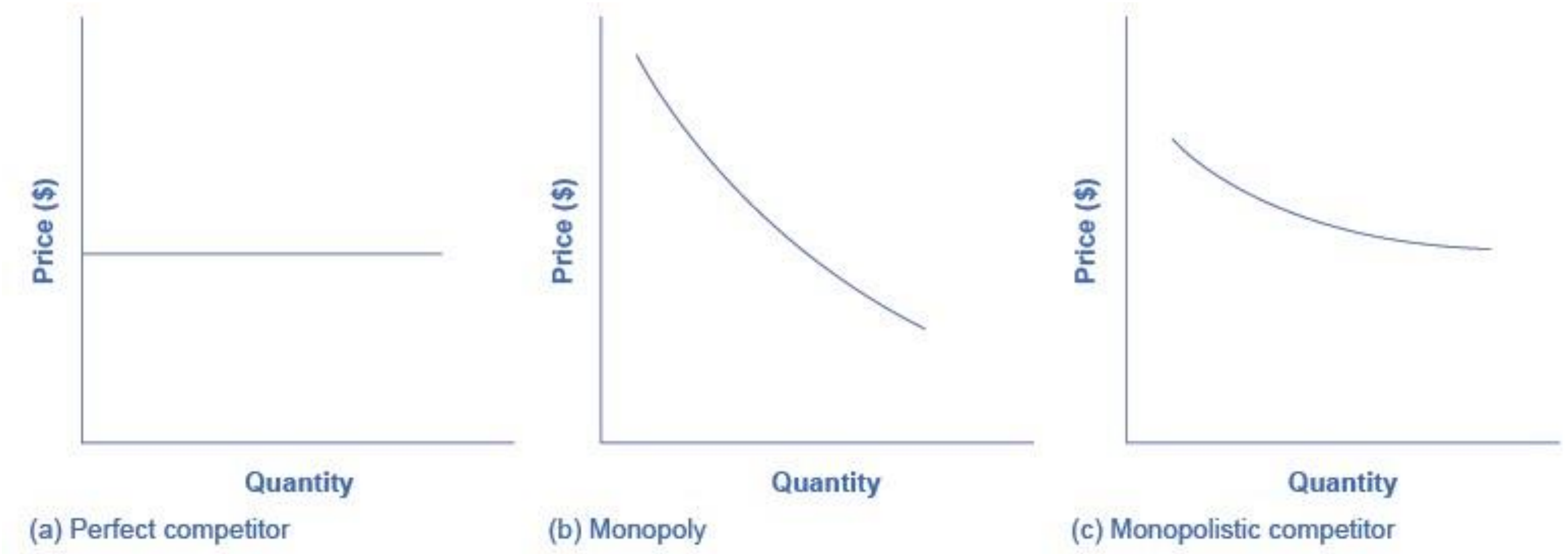
Perceived Demand for Firms in Different Competitive Settings



(b)

- The demand curve faced by a monopoly is the market demand.
- It can sell more output only by decreasing the price it charges.

Perceived Demand for Firms in Different Competitive Settings



(c)

- The demand curve faced by a monopolistically competitive firm falls in between.

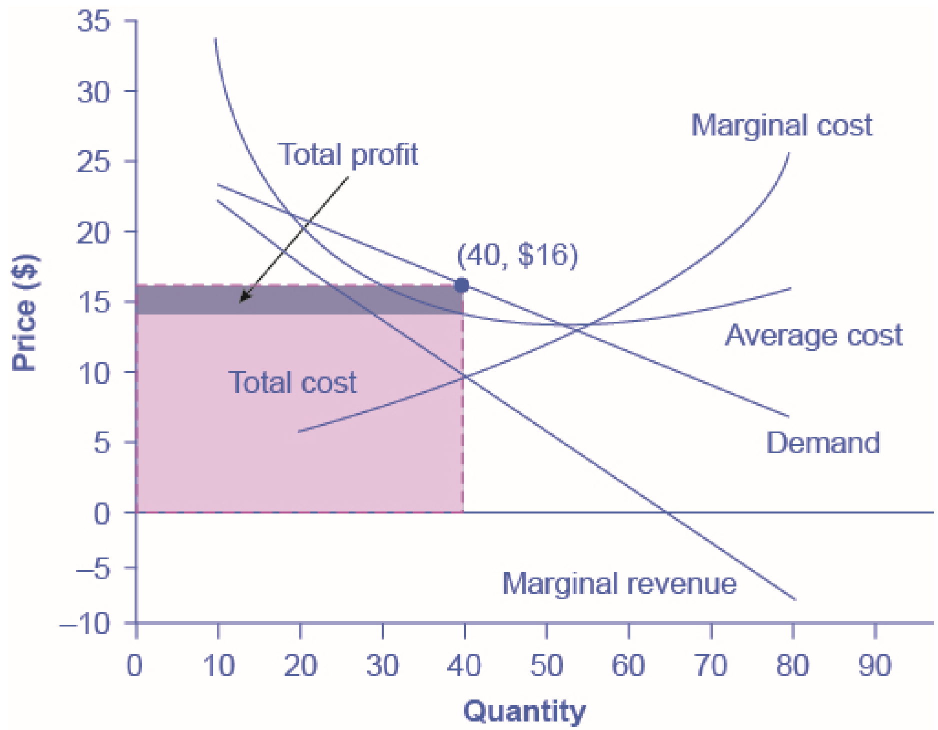
How a Monopolistic Competitor Chooses Price and Quantity

- The monopolistically competitive firm decides on its profit-maximizing quantity and price in much the same way as a monopolist.

- A monopolistic competitor, like a monopolist, faces a *downward-sloping* demand curve,

- It will choose some combination of price and quantity along its perceived demand curve.

Example: How a Monopolistic Competitor Chooses its Profit Maximizing Output and Price



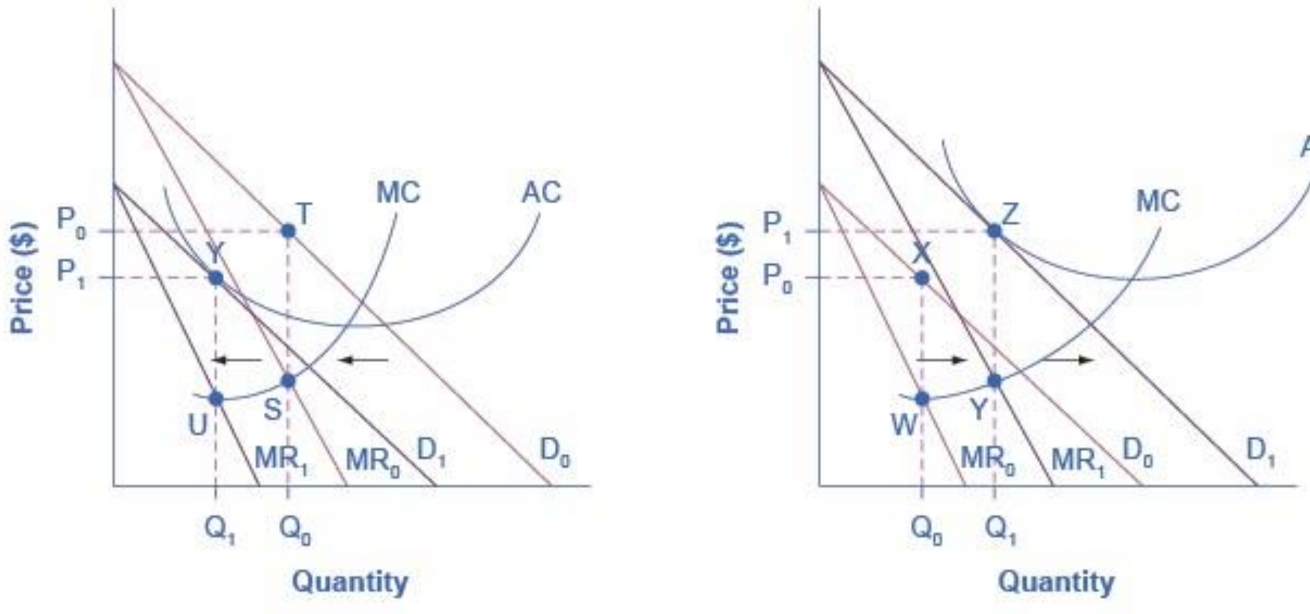
- To maximize profits, a firm would choose a quantity, Q, where MR = MC.
- Here it would choose a quantity of 40 and a price of $16.

Monopolistic Competitors and Entry

- If one monopolistic competitor earns positive economic profits, other firms will be tempted to enter the market.

- The entry of other firms into the same general market <u>shifts the demand curve</u> that a monopolistically competitive firm faces.

Monopolistic Competition, Entry, and Exit



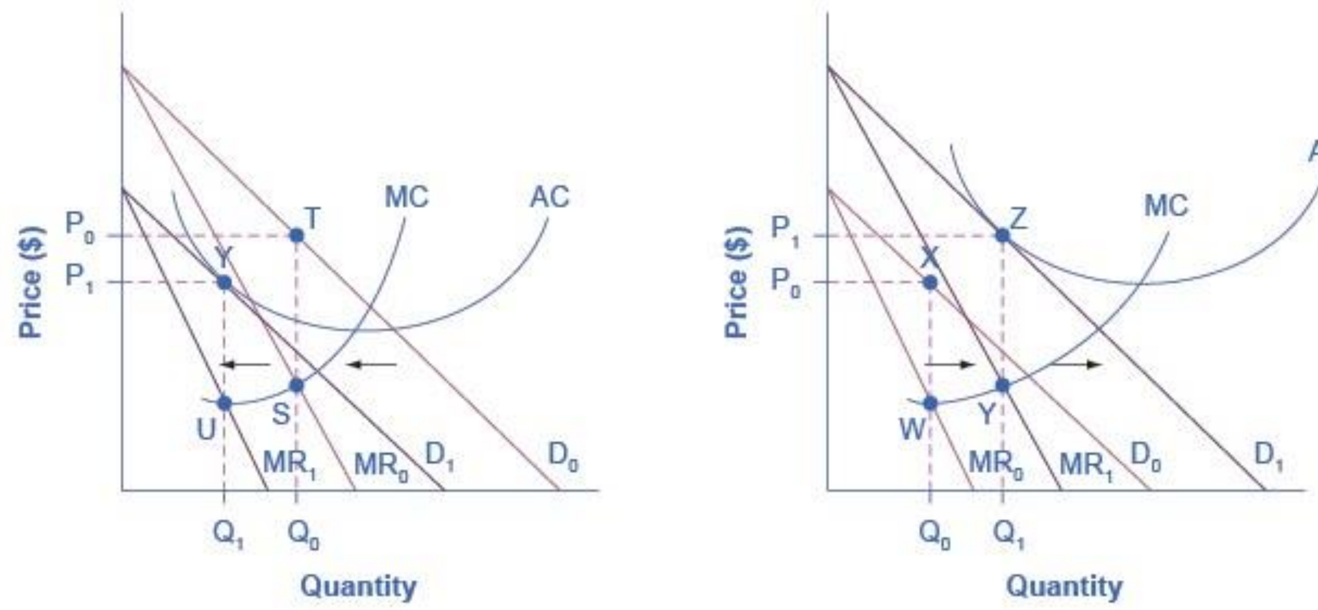
(a) Profit induces entry; shift to zero profit

(b) Loss induces exit; shift to zero profit

(a)

- At P_0 and Q_0, the monopolistically competitive firm shown in this figure is making a positive economic profit.
- This is clear because if you follow the dotted line above Q_0, you can see that price > AC.
- Positive economic profits attract competing firms to the industry, driving the original firm's demand down to D_1.
- At the new equilibrium quantity (P_1, Q_1), the original firm is earning zero economic profits, and entry into the industry ceases.

Monopolistic Competition, Entry, and Exit, Continued



(a) Profit induces entry; shift to zero profit (b) Loss induces exit; shift to zero profit

(b)

- In (b) the opposite occurs.
- At P_0 and Q_0, the firm is <u>losing money</u>.
- If you follow the dotted line above Q_0, you can see that AC > price.
- Losses induce firms to leave the industry.
- When they do, demand for the original firm rises to D_1, where once again the firm is earning <u>zero economic profit</u>.

Monopolistic Competition and Efficiency

- The long-term result of entry and exit in a perfectly competitive market:
  - Firms sell at the price level determined by the lowest point on the AC curve.
  - *Displays productive efficiency*: goods are produced at the lowest possible average cost.

- In monopolistic competition, the end result of entry and exit:
  - Firms end up with a price that lies on the downward-sloping portion of the AC curve, not at the very bottom of the AC curve.
  - Thus, monopolistic competition *will not be productively efficient*.

10.2 Oligopoly

- **Oligopoly** - when a small number of large firms have all or most of the sales in an industry.

  - If oligopolists compete hard, they act similarly to perfect competitors, *driving down costs* and leading to *zero profits* for all.
  - If oligopolists collude with each other, they may act like a monopoly, and succeed in *pushing up prices* and earning consistently *high levels of profit*.

Discussion Question: What are examples of oligopolies?

Collusion and Cartels

- **Collusion** - when firms act together to reduce output and keep prices high. They do this by:
    - holding down industry output,
    - charging a higher price,
    - and dividing the profit among themselves.

- **Cartel** - a group of firms that have a formal agreement to collude to produce the monopoly output and sell at the monopoly price.

The Prisoner’s Dilemma

- **Game theory** - a branch of mathematics that analyzes situations in which players must make decisions and then receive payoffs based on what other players decide to do.

- **Prisoner’s dilemma** - a scenario in which the gains from cooperation are larger than the rewards from pursuing self-interest.

Choices		**Prisoner B**	
		Remain Silent (cooperate with other prisoner)	Confess (do not cooperate with other prisoner)
Prisoner A	Remain Silent (cooperate with other prisoner)	A gets 2 years, B gets 2 years	A gets 8 years, B gets 1 year
	Confess (do not cooperate with other prisoner)	A gets 1 year, B gets 8 years	A gets 5 years B gets 5 years

The Oligopoly Version of the Prisoner's Dilemma

Choices		Firm B: Hold Down Output (cooperate with other firm)	Firm B: Increase Output (do not cooperate with other firm)
Firm A	Hold Down Output (cooperate with other firm)	A gets $1,000, B gets $1,000	A gets $200, B gets $1,500
	Increase Output (do not cooperate with other firm)	A gets $1,500, B gets $200	A gets $400, B gets $400

- **Duopoly** - an oligopoly with only two firms.