

# Chapter 14

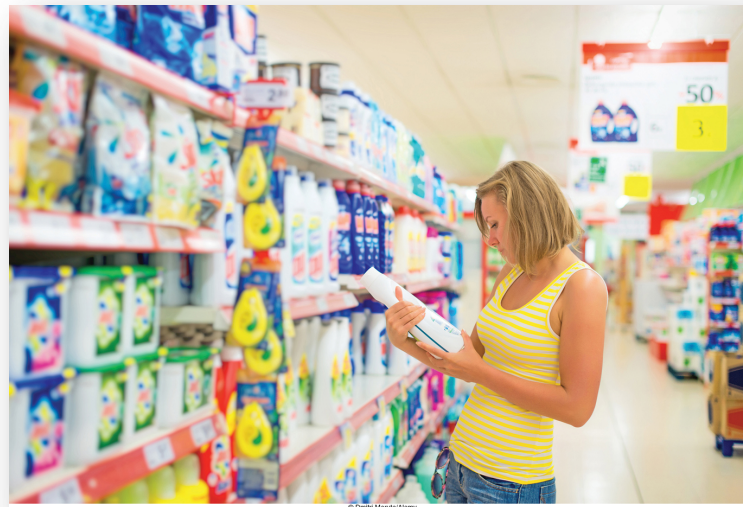
## **Pricing Concepts For Establishing Value (Part I)**

# Today's concepts

- List the four pricing orientations
- Explain the relationship between price and quantity sold
- Explain price elasticity
- Describe how to calculate a product's break-even point
- Indicate the four types of price competitive levels

# What is price?

Price is **NOT** just what you pay - it's everything that you, as a consumer, give in exchange for the product you purchase (time, effort in finding it, effort spent researching it)



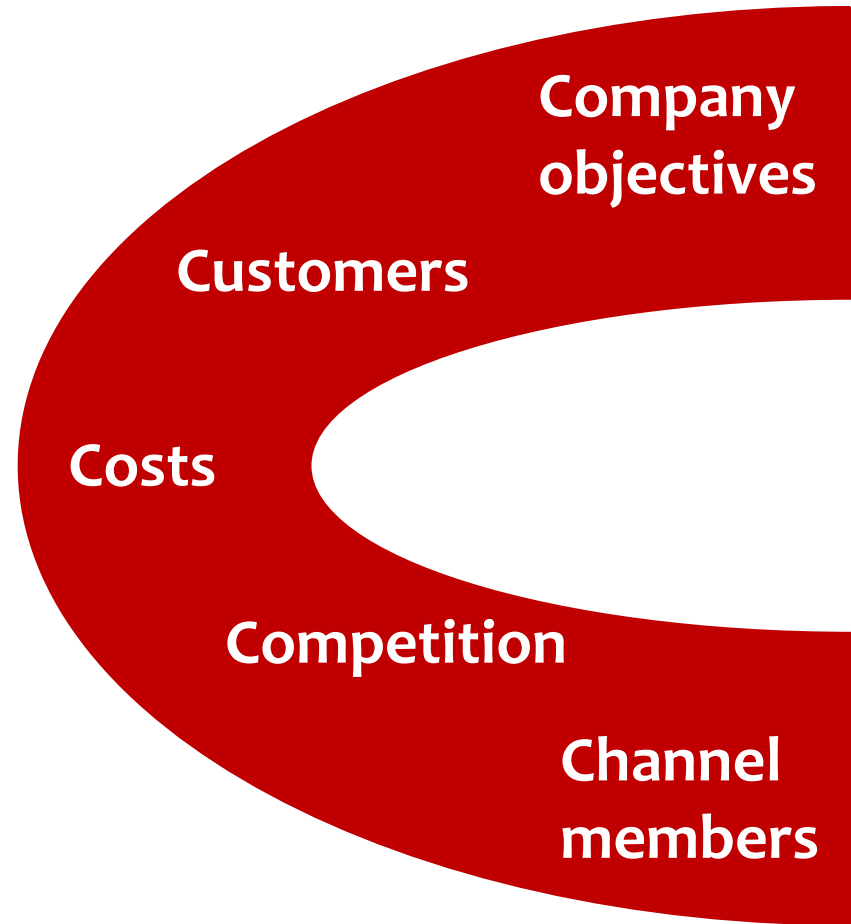
## Desperation

- How much battery is left on a traveler's cell phone can help predict whether or not people are going to accept surge pricing!





# The 5 C's of Pricing



# 1. Company objectives

## Profit oriented

Target profit pricing → Set profit goal

Example:

Companywide policy that all products must provide for at least an 18% profit margin to reach a particular profit goal for the firm

- Starbucks 1% price increase in 2013

<http://www.priceintelligently.com/blog/bid/184451/How-Starbucks-Uses-Pricing-Strategy-for-Profit-Maximization>

# 1. Company objectives

## Sales oriented

Set prices to increase sales

- Generally short term strategy

Example:

Set prices very low to generate new sales and take sales away from competitors, even if profits suffer

- Launch of a new product

# 1. Company objectives

## Competitor oriented

Firms that measure themselves against their competitors

- Set prices similar to competitors

Example (generally product with little differentiation):

- Coke and Pepsi
- Airlines

# 1. Company objectives

## Customer oriented

Set prices to add value to product/services

- Set high prices to set customers perceptions, e.g., Apple, Rolex
- Could be a problem if quality is low!

Example:

Target a market segment of consumers who highly value a particular product benefit, and set prices relatively high (**premium pricing**)

- Fashion industry
- Luxury goods

# 1. Company objectives

## What's the goal of this ad?



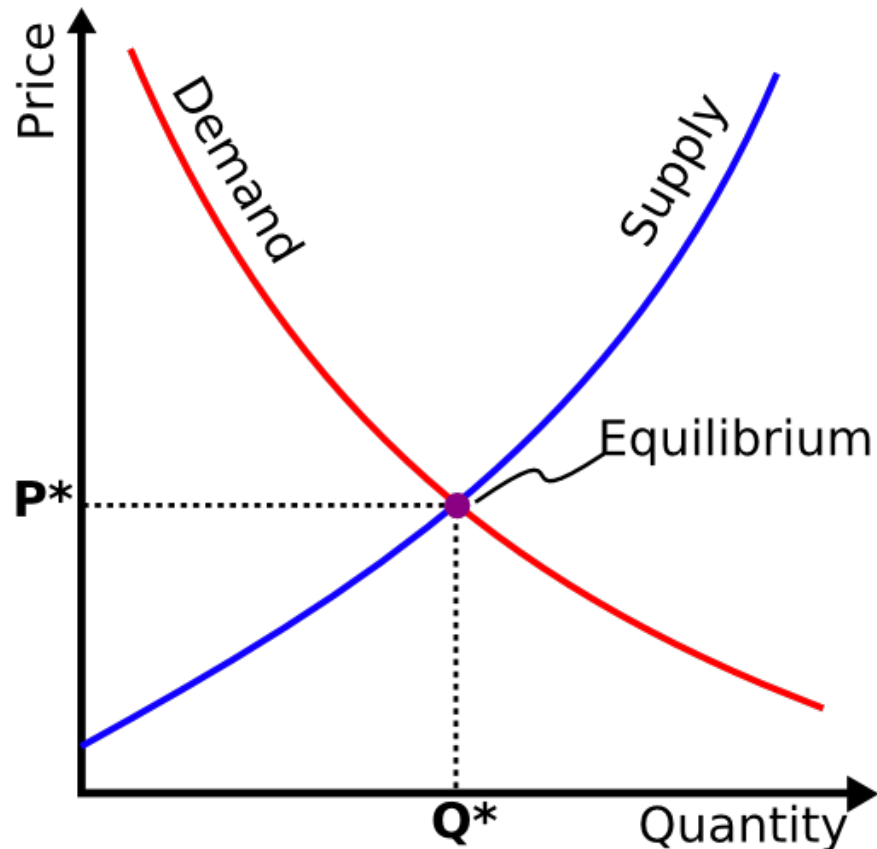
# 1. Company objectives

## What's the goal of this ad?



Plays with consumers expectation by comparing the purchase of a very familiar product to that of Zipcar

### Supply - Demand Curve



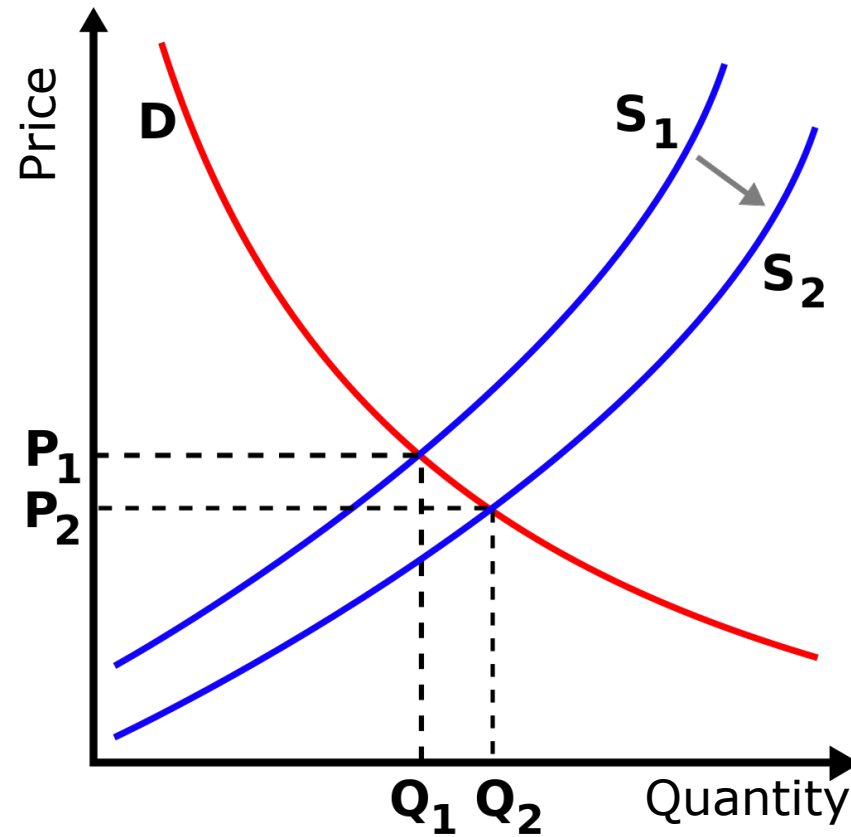
**Demand** is the quantity of a product that buyers are willing to purchase at various prices.

**Supply** is the quantity of a product that sellers are willing to sell at various prices.



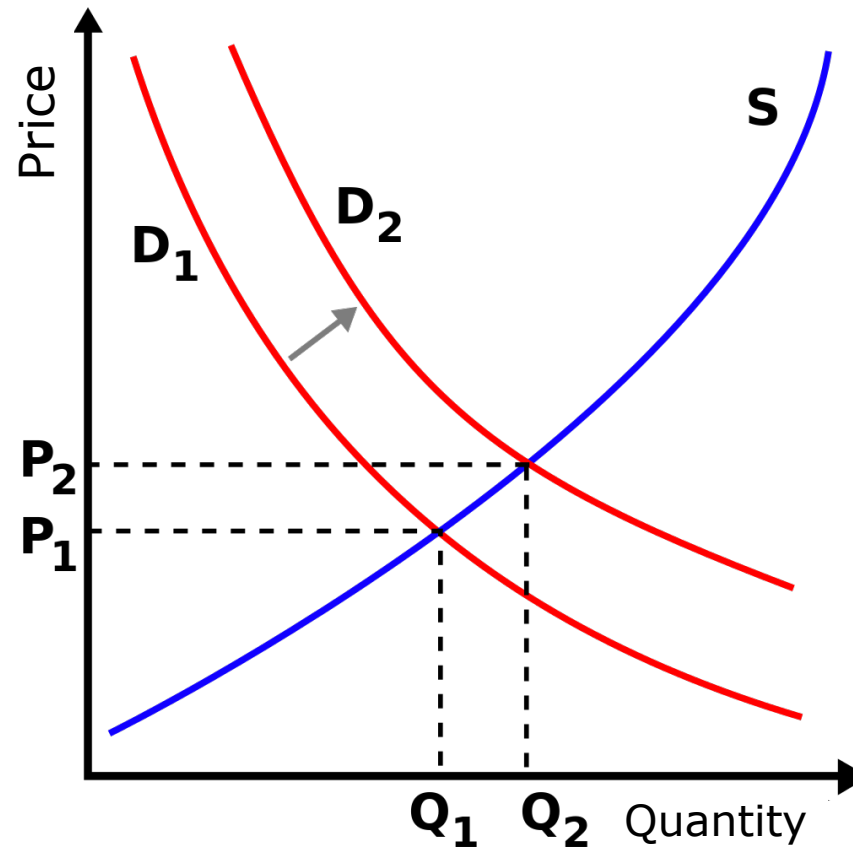
## 2. Customers

### Supply - Demand Curve: Supply shifts



## 2. Customers

### Supply - Demand Curve: Demand shifts



### **Demand curve and pricing**

- Note: not all demand curves are downward trends!
- **Prestigious product or services** have upward trends

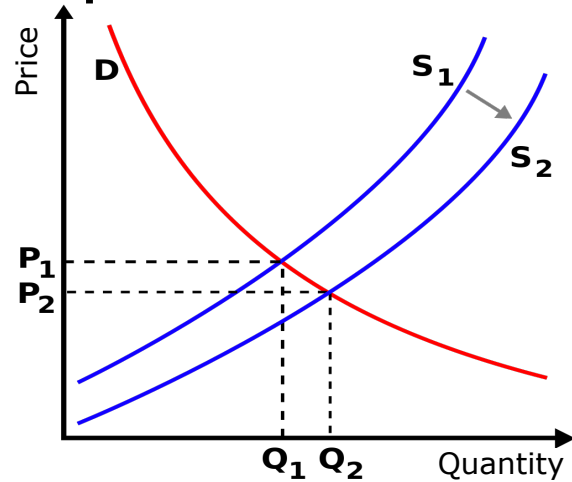
### **Price elasticity of demand:**

- How changes in price affect quantity demanded

$$\textit{Price Elasticity} = \frac{\textit{Pct. Change in Quantity}}{\textit{Pct. Change in Price}}$$

### Price elasticity of demand

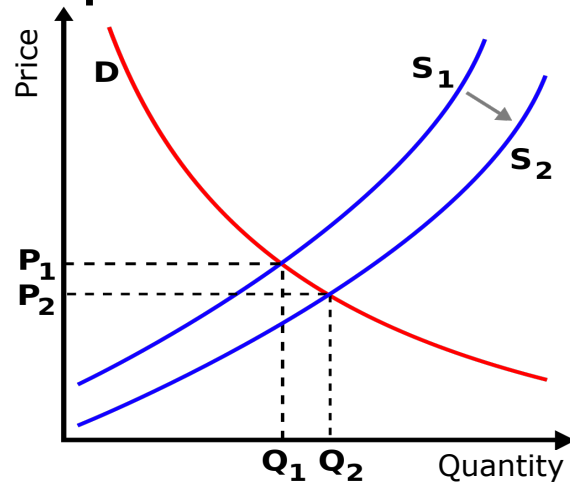
- Example



$$P_1 = \$10 \quad P_2 = \$5$$
$$Q_1 = 0.5M \quad Q_2 = 0.75M$$

### Price elasticity of demand

- Example



$$P_1 = \$10 \quad P_2 = \$5$$

$$Q_1 = 0.5M \quad Q_2 = 0.75M$$

- Pct. change Q** =  $\frac{Q_2 - Q_1}{Q_1} * 100 = \frac{0.75 - 0.5}{0.5} * 100 = 50\%$
- Pct. change P** =  $\frac{P_2 - P_1}{P_1} * 100 = \frac{5 - 10}{10} * 100 = -50\%$
- Elasticity** =  $\frac{\text{Pct. Change in Quantity}}{\text{Pct. Change in Price}} = -1$

### Price elasticity of demand

- **Elasticity = -1**
  - 1% **decrease** in price results in an **increase** of 1% in quantity demanded

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- **Elastic market** → **price sensitive**
  - Small change in price, large change in demand
- **Inelastic market** → **price insensitive**
  - Changes in prices have small or no effect on demand



### Price elasticity of demand

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**In which markets is it better to raise prices?**

## 2. Customers

Customers are generally less sensitive to primary products (**necessities**)

Elastic Demand



Inelastic Demand



### Factors influencing price elasticity

- Income effect



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### Factors influencing price elasticity

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### Factors influencing price elasticity

- **Substitution effect**
  - The greater the availability of substitutes of a product, the higher the price elasticity



### **To make effective price decisions firms must take into account costs**

- **Variable costs**
  - Vary with production volume
- **Fixed costs**
  - Unaffected by production volume
- **Total costs**
  - Sum of variable and fixed costs

Example: Identify hotel's variable and fixed costs



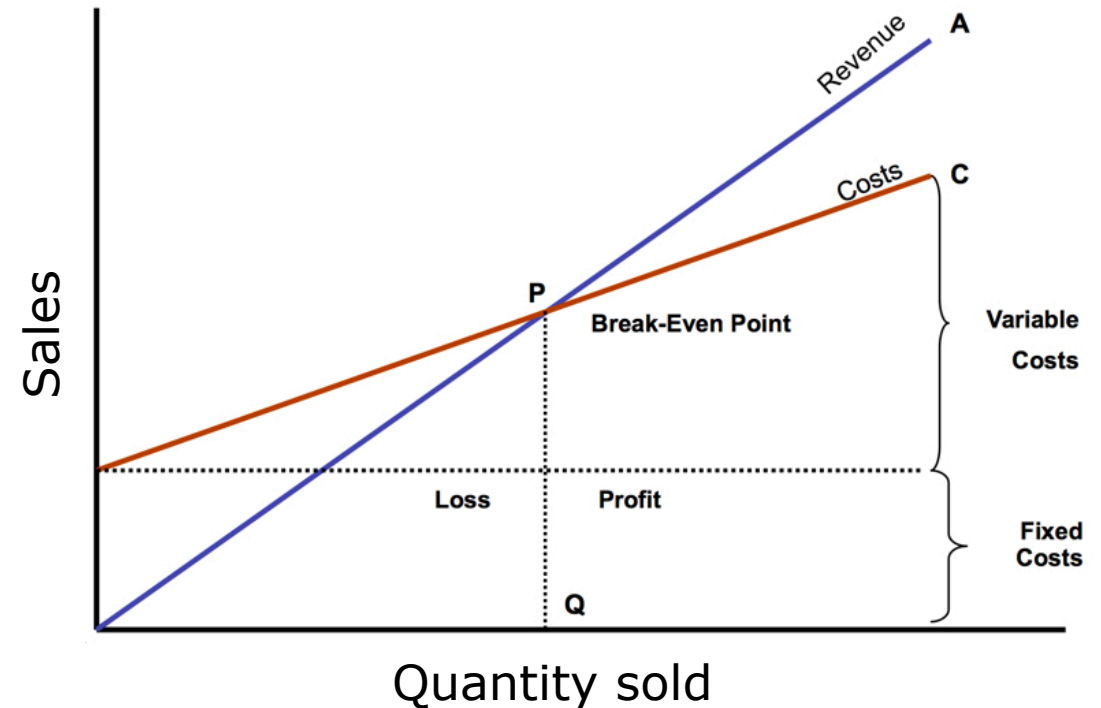
Example: Identify hotel's variable and fixed costs

<http://setupmyhotel.com/train-my-hotel-staff/front-office-training/187-fixed-cost-and-variable-cost-in-hotels.html>

## Break-even analysis

**Break-even point:** # of units to sell in order to cover the total costs

– At this point profit is zero!



### **Break-even analysis**

- Computing break even point  
Revenue = Total costs

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- Computing break even point

Revenue = Total costs

$P \times Q = \text{fixed costs} + \text{variable costs}$

$P \times Q = \text{fixed costs} + \text{variable costs per unit} \times Q$

## 3. Costs

### Break-even analysis

- Computing break even point  
 Revenue = Total costs  
 $P \times Q = \text{fixed costs} + \text{variable costs}$   
 $P \times Q = \text{fixed costs} + \text{variable costs per unit} \times Q$
- We want to find  $Q$  (**break-even units**):

$$Q = \frac{\text{Fixed costs}}{P - \text{variable cost per unit}}$$

**Contribution per unit**

### **Break-even analysis**

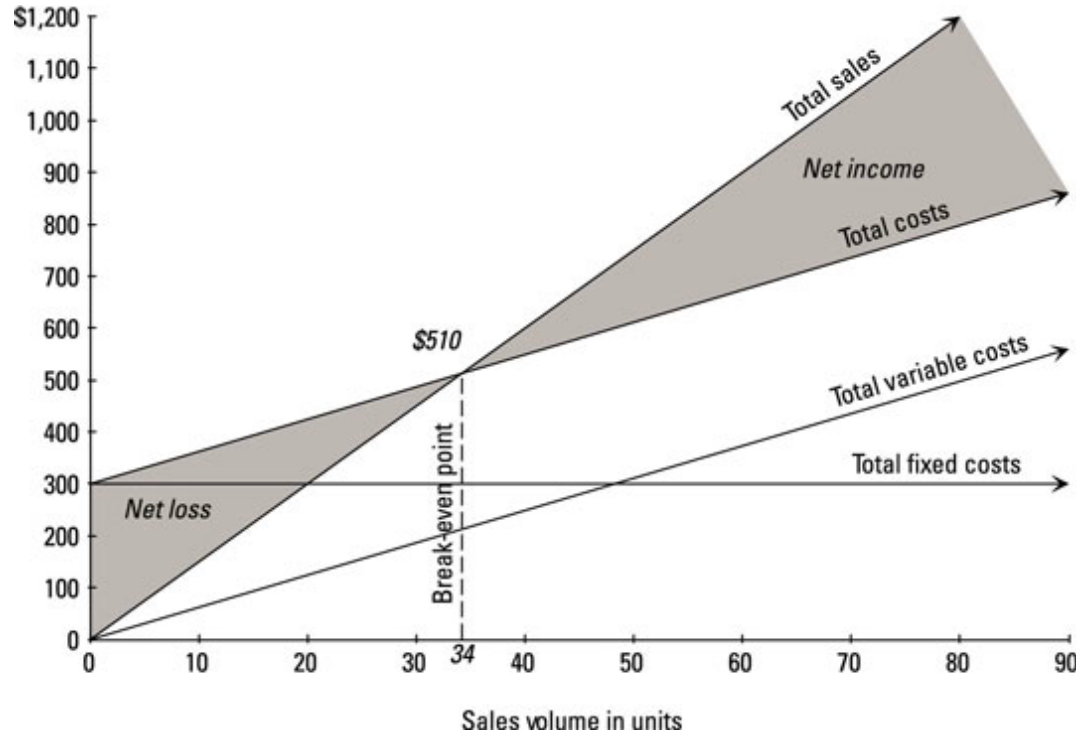
#### Example 1:

- Suppose that a company sells its products for \$15 each, with variable costs of \$6 per unit and total fixed costs of \$300

## Break-even analysis

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- Suppose that a company sells its products for \$15 each, with variable costs of \$6 per unit and total fixed costs of \$300



$$Q = \frac{\$300}{(\$15 - \$6)} = 33.3$$



### **Break-even analysis**

#### Example 2:

- Fixed cost = \$100,000
- Variable cost per unit = \$10
- Price per unit (P) = \$50

### Break-even analysis

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- Fixed cost= \$100,000
- Variable cost per unit = \$10
- Price per unit (P) = \$50

$$Q = \frac{\$100,000}{\$50 - \$10} = 2,500$$

### Break-even analysis

Computing # of units for **target profit**

- Example 3:
  - Fixed cost= \$100,000
  - Variable cost per unit = \$10
  - Price per unit (P) = \$50
  - **Firm wants a target profit of \$50,000**

### Break-even analysis

Computing # of units for **target profit**

- Example 3:
  - Fixed cost= \$100,000
  - Variable cost per unit = \$10
  - Price per unit (P) = \$50
  - **Firm wants a target profit of \$50,000**

$$Q = \frac{\$100,000 + \$50,000}{\$50 - \$10} = 3,750$$

### **Break-even analysis**

Computing profit (more generally):

$$\begin{aligned}\text{Profit} &= P \times Q - (\text{fixed costs} + \text{variable costs per unit} \times Q) \\ &= \text{Contributions per unit} \times Q - \text{fixed costs}\end{aligned}$$

## 4. Competition

Prices are affected by the presence and capabilities of competitors

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– Pure or Perfect Competition

- Large number of firms
- Homogeneous products
- Easy entry/exit
- No market power (**price taker**)
  - Firms accept the **prevailing prices**



## 4. Competition

Prices are affected by the presence and capabilities of competitors

### – Monopoly

- One firm in the market (e.g., city, regional area, and doesn't necessarily have to be an entire country)
- Unique product
- Blocked entry (e.g., limited by government)
- Significant market power





## 4. Competition

Prices are affected by the presence and capabilities of competitors

– **Oligopoly**

- Few large firms supply a sizable portion of products in the market
- Homogenous or differentiated products
- Significant barriers to entry (costly)
- The market power of a firm depends on the actions of the other firms in the industry



## 4. Competition

Prices are affected by the presence and capabilities of competitors

– **Monopolistic (imperfect) competition**

- Large number of firms
- Differentiated products—products that differ slightly but serve similar purposes → products are not perfect substitutes
- Low barrier to entry
- Some degree of market power



## 4. Competition

	Less price competition	More price competition
Fewer firms	Monopoly	Oligopoly
More firms	Monopolistic competition	Pure competition

## 5. Channel members

### **Manufacturers, wholesalers, retailers**

- They can have different perspectives on pricing strategies
- Example: Manufacturer and retailer
  - They agree on a min price to sell TVs but the retailer has too many and in order to move them, he sells them at a non-authorized price!



## Price is affected by many factors

- The **company objective** of the firm: Profit? Sales?
- Which **customers** the firm is targeting?
- Firm **costs**: variables and fixed
- **Competitions**: is there someone else selling a similar product to mine?
- **Channel members** (manufacturers, wholesalers, retailers)