Consumer Choice: Individual and Market Demand- Demand and Elasticity

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Contents

I) Markets and Prices

Markets and Prices

- A **competitive market** is a market that has many buyers and many sellers so no single buyer or seller can influence the price.
- The **money price** of a good is the amount of money needed to buy it.
- The **relative price** of a good—the ratio of its money price to the money price of the next best alternative good—is its **opportunity cost.**

II) Demand Side

Definition 1 **The Law of Demand**

- Other things remaining the same, the higher the price of a good, the smaller is the quantity demanded.

This means a negative relationship between prices and quantity demanded

- The negative relationship between prices and quantity demanded results from:
  - ✓ **a substitution effect**
  - ✓ **an income effect**

Definition 2 **The Substitution effect**

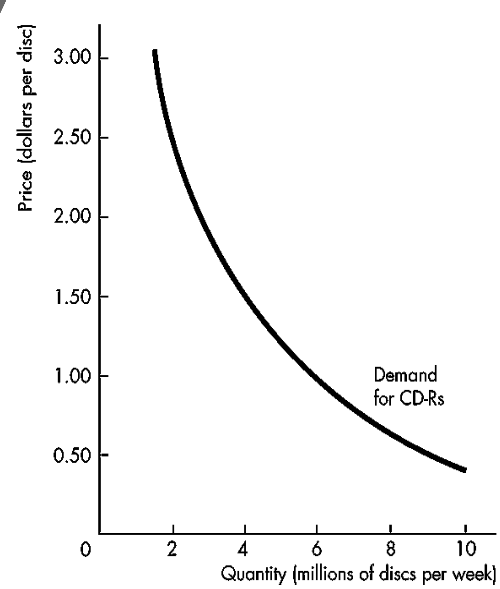
- When the **relative price** (opportunity cost) of a good or service **rises**, people seek **substitutes** for it, so the **quantity** demanded **decreases**.

Definition 3 **Income effect**

- When the **price** of a good or service **rises** relative to **income**, people **cannot afford** all the things they previously bought, so the **quantity** demanded **decreases**.

The Demand Curve

- It shows a **negative relationship** between **Prices** and **quantity demanded**
- A rise in the price, other things remaining the same, brings a decrease in the quantity demanded and a movement along the demand curve.

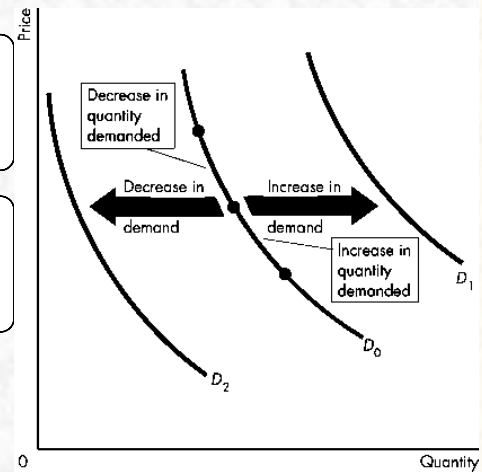


A Change in Demand

- When any factor that influences buying plans other than the price of the good changes, there is a **change in demand** for that good, so there is a new demand curve.

We have two cases:

When demand increases	➡	The demand curve shifts rightward.
When demand decreases	➡	The demand curve shifts leftward.



Factors that cause a change in demand

Expected future prices

If the price of a good is expected to rise in the future	➡	The demand curve shifts **rightward**.

Income

When income increases in case of A **normal good**	➡	The demand curve shifts **rightward**.
When income increases in case of An **inferior good**	➡	The demand curve shifts **leftward**.

Population

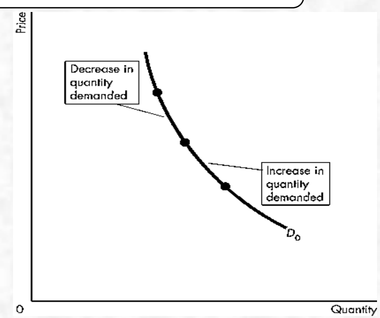
The larger the **population** ➡ The demand curve shifts **rightward**.

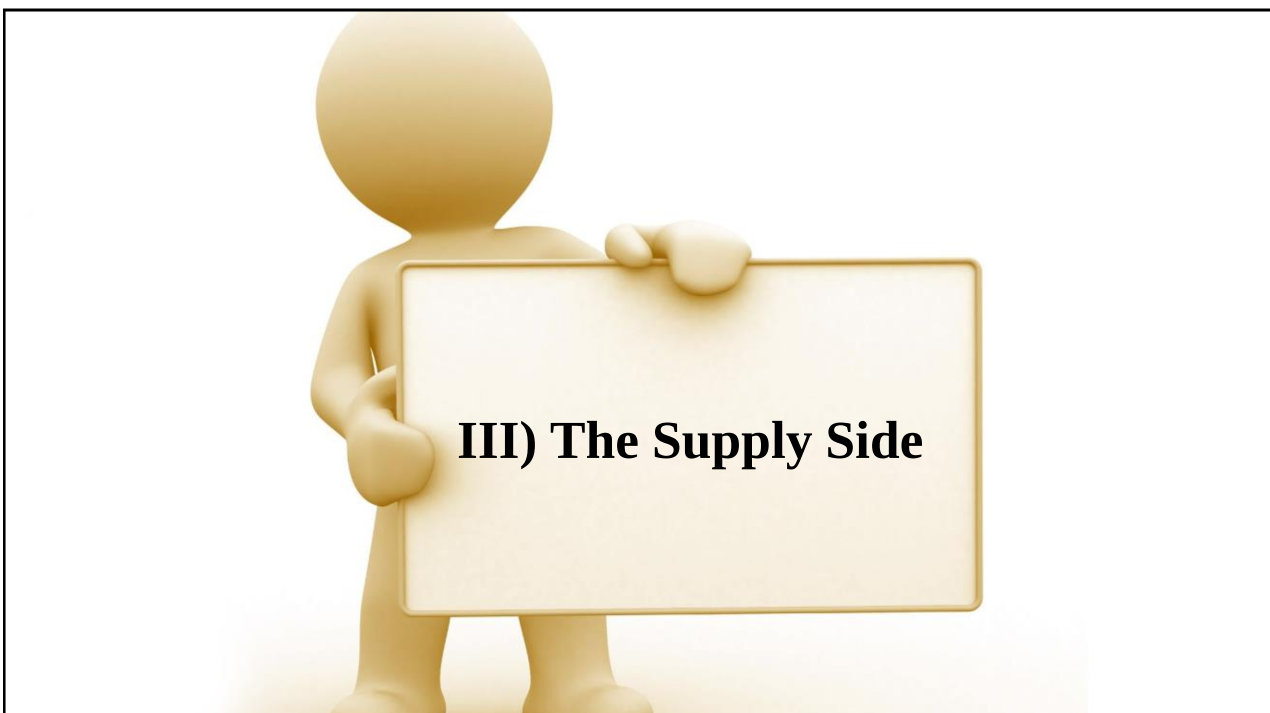
Preferences

If **preferences** are changed towards favoring the good ➡ The demand curve shifts **rightward**.

Note

When the price of the good changes and other influences on buying plans remain the same, there is a change in the quantity demanded and a movement along the demand curve.





Definition 4 The Law of Supply

- Other things remaining the same, the higher the price of a good, the greater is the quantity supplied.

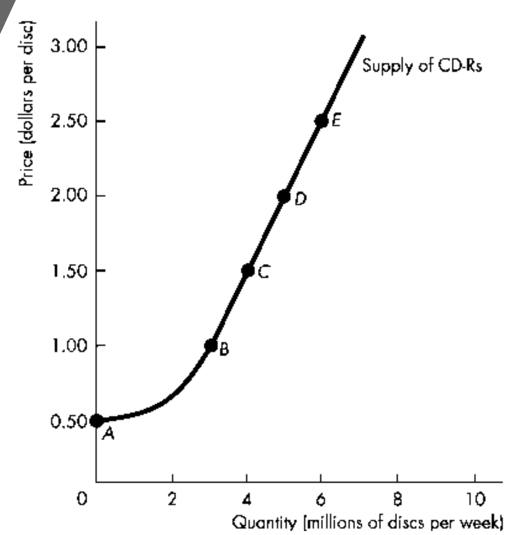
This means a positive relationship between prices and quantity supplied

- The positive relationship between prices and quantity supplied results from:

  the general tendency for the **marginal cost** of producing a good or service to increase as the quantity produced increases.

Supply Curve

The **supply curve** shows the positive relationship between the **quantity supplied** of a good and its **price** when all other influences on producers' planned sales remain the same.



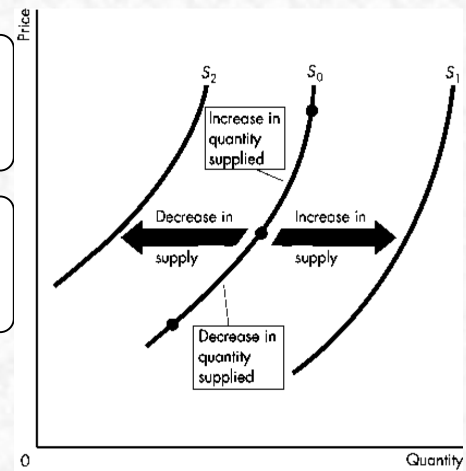
A Change in Supply

- When any factor that influences selling plans other than the price of the good changes, there is a **change in supply** of that good, so there is a new supply curve.

We have two cases:

When supply increases → The supply curve shifts rightward.

When supply decreases → The supply curve shifts leftward.



Factors that cause a change in supply

Prices of productive resources

If the **price** of **resource** used to produce a good **falls** → The supply curve shift **rightward**.

Prices of related goods produced

if the price of a **substitute** in production falls → The supply curve shifts **rightward**.

if the price of a **complement** in production rises. → The supply curve shifts **rightward**.

The number of suppliers

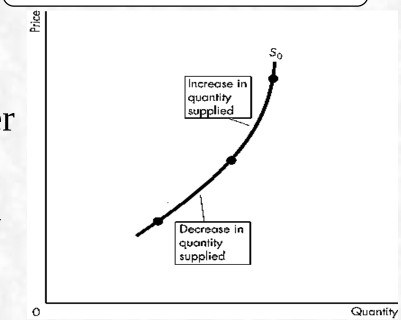
An increase in the number of suppliers → The supply curve shifts **rightward**

Technology

Advances in technology → The supply curve shifts **rightward**.

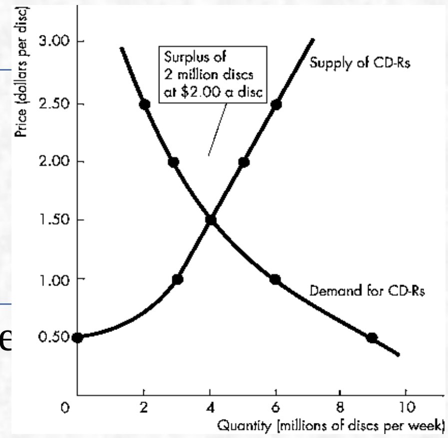
Note

When the price of the good changes and other influences on selling plans remain the same, there is a change in the quantity supplied and a movement along the supply curve.



Definition 5 **The equilibrium price**

- The **price** at which the quantity **demanded** equals the quantity **supplied**.



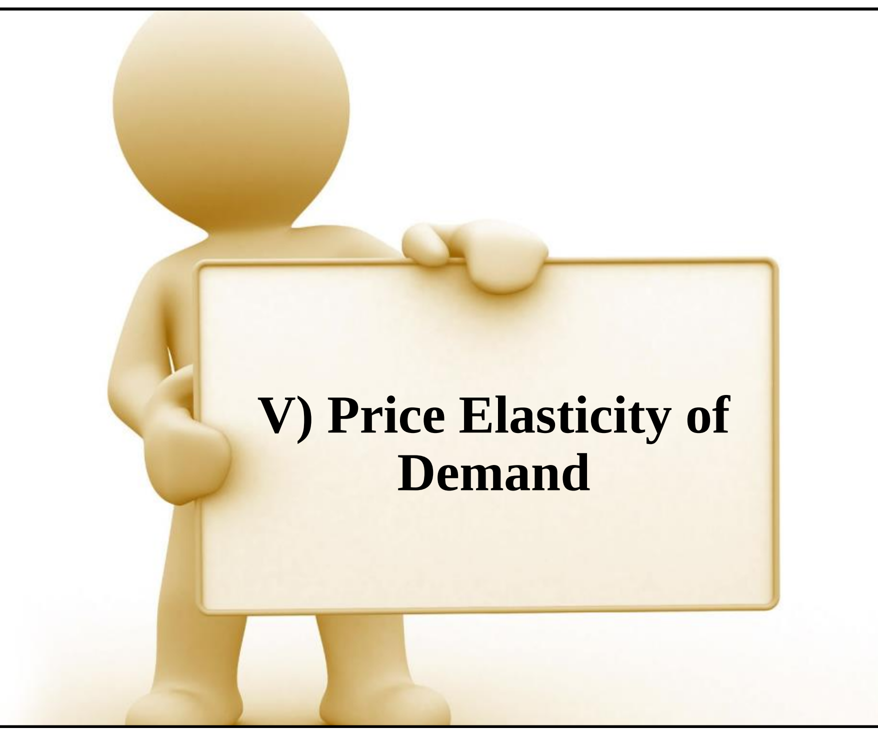
Definition 6 **The equilibrium quantity**

- The **quantity bought** and **sold** at the **equilibrium price**.

Two cases:

(1)If the price is **above equilibrium price**, the quantity supplied exceeds the quantity demanded and there is **a supply surplus**.

(2)If the price is **below equilibrium price**, the quantity demanded exceeds the quantity supplied and there is **a supply shortage**.



Definition 7 **Price Elasticity of Demand**

- A units-free measure of the **responsiveness** of the **quantity demanded** of a good to a change in its **price** when all other influences on buyers' plans remain the same.

Rule 1 **Price Elasticity of Demand**

- $Elasticity = \frac{\text{Percentage change in quantity demanded}}{\text{Percentage change in price}}$

$$= \frac{\Delta Q}{\Delta P} * \frac{P}{Q}$$

A number of Cases

Case 1

- If the **percentage change** in the **quantity** demanded **equals** the percentage change in **price**, the price elasticity of demand equals **1** and the good has **unit elastic demand**.

Case 2

- If the **percentage change** in the **quantity** demanded is **smaller** than the percentage change in **price**, the price elasticity of demand is **less than 1** and the good has **inelastic demand**.

Case 3

- If the **percentage change** in the **quantity** demanded is **larger** than the percentage change in **price**, the price elasticity of demand is **bigger than 1** and the good has **elastic demand**.

Case 4

- If the **percentage change** in the **quantity** demanded is **infinitely large** when the **price barely** changes, the price elasticity of demand is **infinite** and the good has **perfectly elastic demand**.

True/False

1) A competitive market is a market that has few number of buyers and sellers.

- False (many buyers and sellers)

2) In a competitive market, there exists no single buyer nor seller who can influence the prevailing price.

- True

3) The money price of a good is the amount of money needed to buy it.

- True

4) The relative price is a measure of an opportunity cost.

- True

5) Other things remaining the same, the higher the price of a good, the larger is the quantity demanded. .

- False (the smaller is the quantity demanded)

6) The negative relationship between prices and quantity demanded results from both a substitution and an income effect.

- True

7) When the relative price (opportunity cost) of a good or service rises, people seek substitutes for it, so the quantity demanded decreases.

- True

8) The scientific term that describes the fact that When the price of a good or service rises relative to income, people cannot afford all the things they previously bought is called a Substitution effect.

- False (the income effect)

9) The Demand Curve shows a direct association between Prices and quantity demanded.

- False (negative association)

10) When demand increases The demand curve shifts leftward.

- True

11) If the price of a good is expected to rise in the future, The demand curve shifts leftward.

- False (the demand curve shifts rightward

12) The larger the population, the larger volumes of quantity demanded at each previous price and then the demand curve shifts rightward.

- True

13) The positive relationship between prices and quantity supplied results from the general tendency for the marginal cost of producing a good or service to decrease.

- False (to increase)

14) If the price of a substitute in production falls, the supply curve shifts rightward.

- True

15) If the price of a complement in production rises, the supply curve shifts leftward.

- False (shifts rightward)

16) If the price is above equilibrium price, the quantity supplied exceeds the quantity demanded and there is a supply surplus.

- Ture

17) If the percentage change in the quantity demanded equals the percentage change in price, the price elasticity of demand equals 1 and the good has unit elastic demand.

- True

18) If the percentage change in the quantity demanded is smaller than the percentage change in price, the price elasticity of demand is less than 1 and the good has elastic demand.

- Fales (inelastic demand)

thank you