

EE211

PRINCIPLES OF MICROECONOMICS

Topic 2: Demand, Supply, and Equilibrium

Topics

- I. Market: Meaning and components
- II. Demand
- III. Supply
- IV. Market equilibrium

I. Meaning and Components of Market

- **Market** – a place where buyers and sellers make transactions.
 - Does it need to be a physical place?
- Types of market:
 - Commodity markets
 - Factor markets
- Market structure:
 - Perfect competition
 - Monopolistic competition
 - Oligopoly
 - Monopoly

II. Demand: Buyers' Behavior

- **Demand** is a relationship between the **price (P)** and the **quantity demanded (Q_D)** by consumers that they are *willing and able to pay*.
 - **Quantity demanded** is the amount of a good or service that consumers wish to purchase during some time period.
- **Law of demand:**
 - “*Holding other things constant, if the price increases (decreases), then the quantity demanded decreases (increases).*”
 - The price and quantity demanded have inverse relationship.
 - The slope of demand is negative.

Example

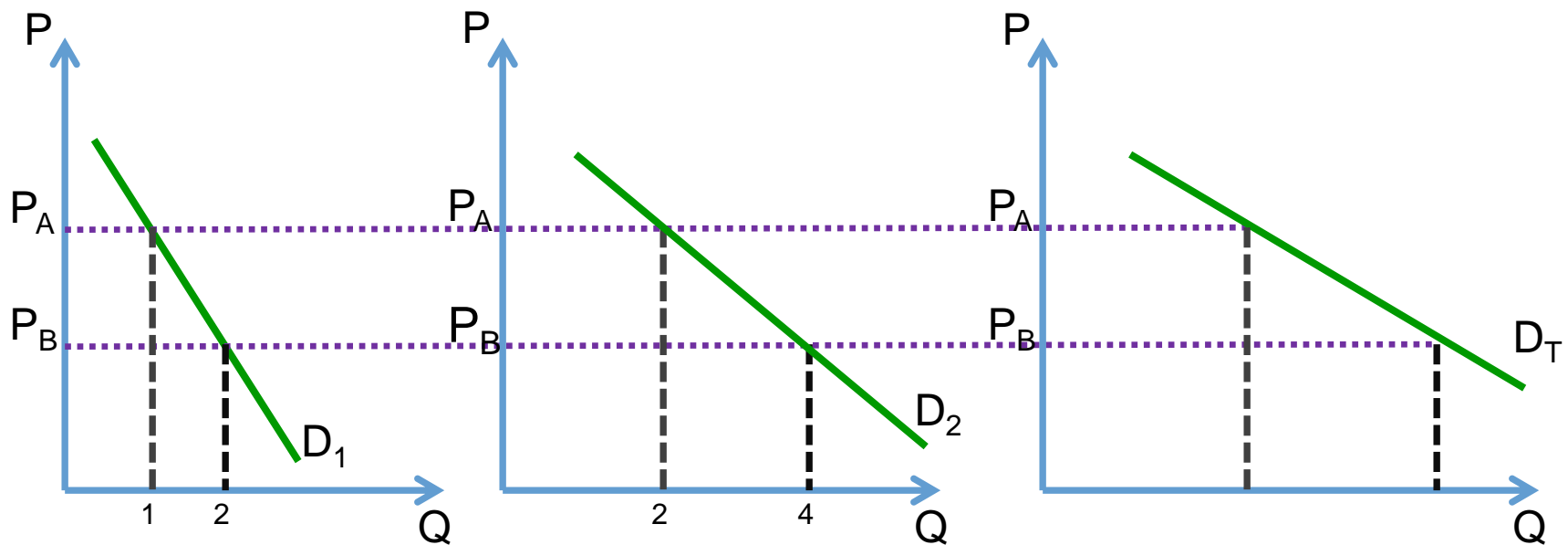
| Price | Quantity |
|-------|----------|
| 0 | 120 |
| 10 | 100 |
| 20 | 80 |
| 30 | 60 |
| 40 | 40 |
| 50 | 20 |

The Determinants of Demand

- *Price*
- Income
 - Higher income → more demand
- Taste
- Price of other products
 - Substitutes
 - Complements
- Expectations

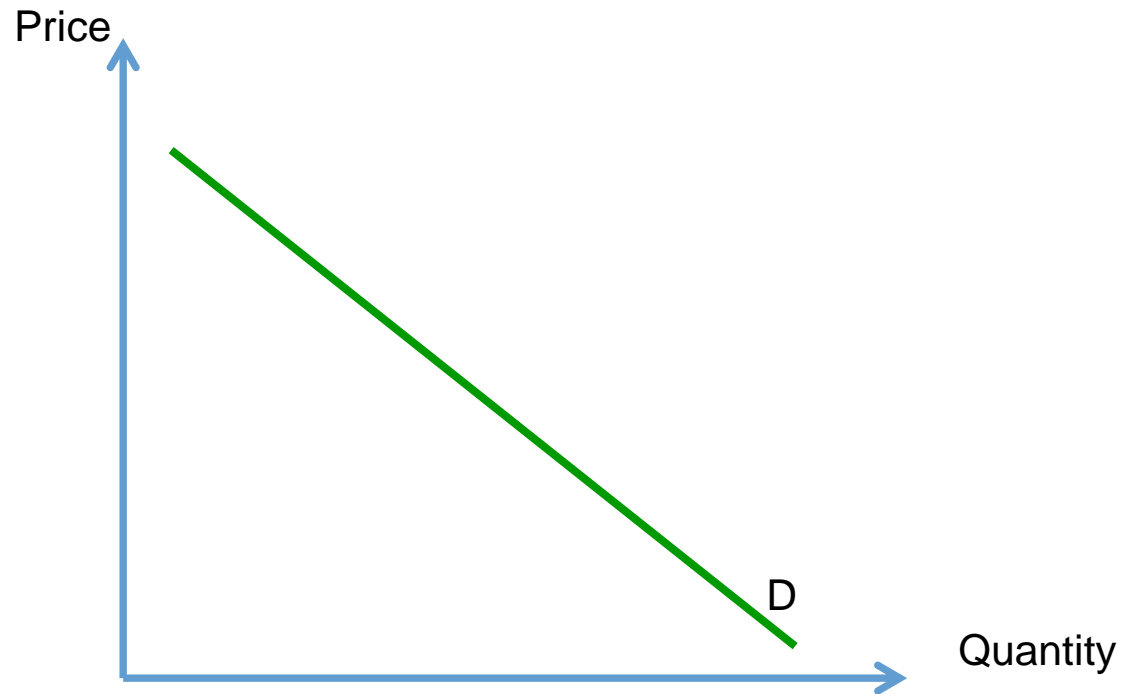
Individual and Market Demands

- Market demand can be derived from a horizontal sum of individual demands.

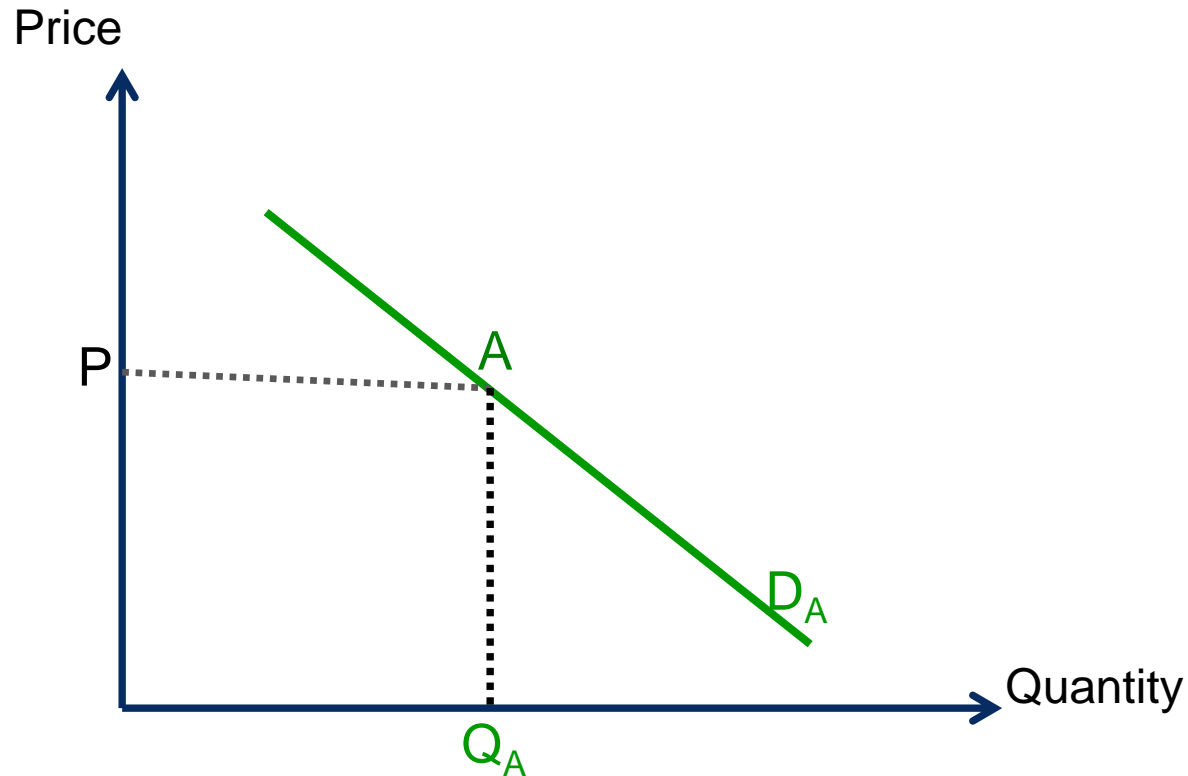


Example: Market Demand

Change in Quantity Demanded



Change (or Shift) in Demand



Extreme Cases of Demand

- Horizontal demand curve

- Vertical demand curve

II. Supply: Sellers' Behavior

- **Supply** is the relationship between **price (P)** and **quantity supplied (Q_s)** that the producer(s) is willing and able to sell.
 - **Quantity supplied** is the amount of a good or service that producers wish to sell during some time period.
- **Law of Supply:**
 - *“Given all factors being constant, if the price increases, then the quantity supplied will increase.”*
 - Price and quantity supplied have a direct relationship.
 - Slope of supply is positive.

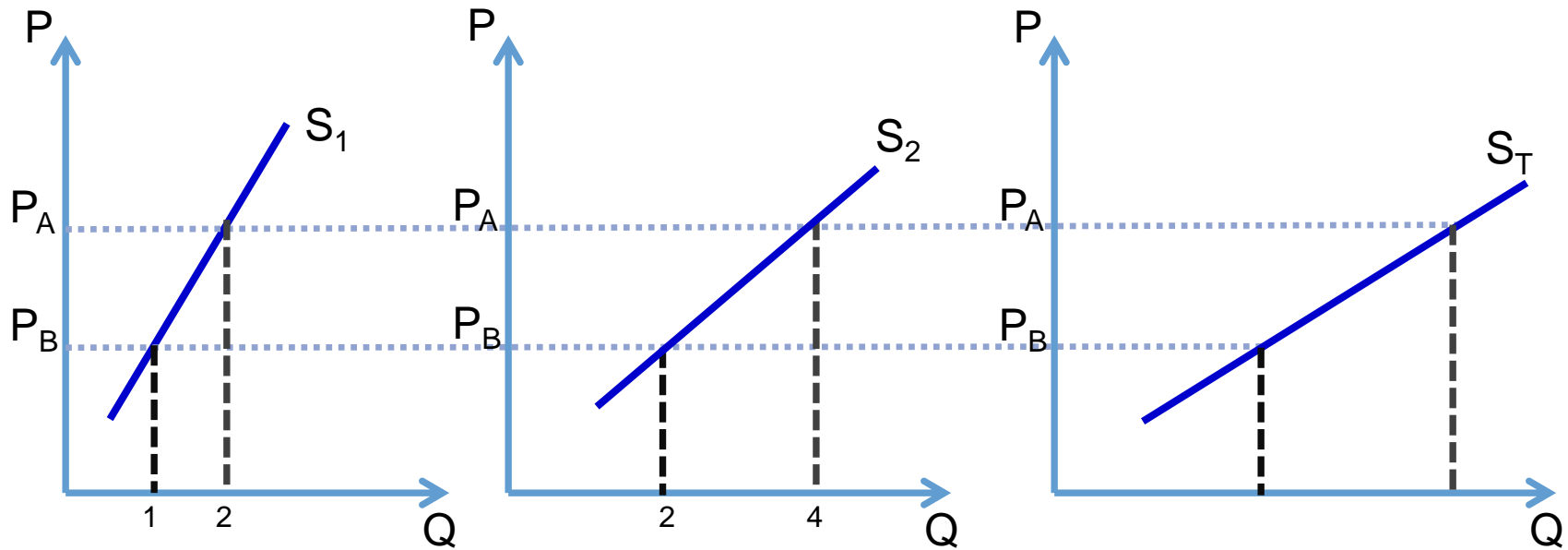
Example

| Price | Quantity |
|-------|----------|
| 0 | 30 |
| 10 | 40 |
| 20 | 50 |
| 30 | 60 |
| 40 | 70 |
| 50 | 80 |

The Determinants of Supply

- *Price*
- Input costs
- Technology
- Number of sellers
- Expectation

Firm and Market Supplies



Change in Quantity Supplied

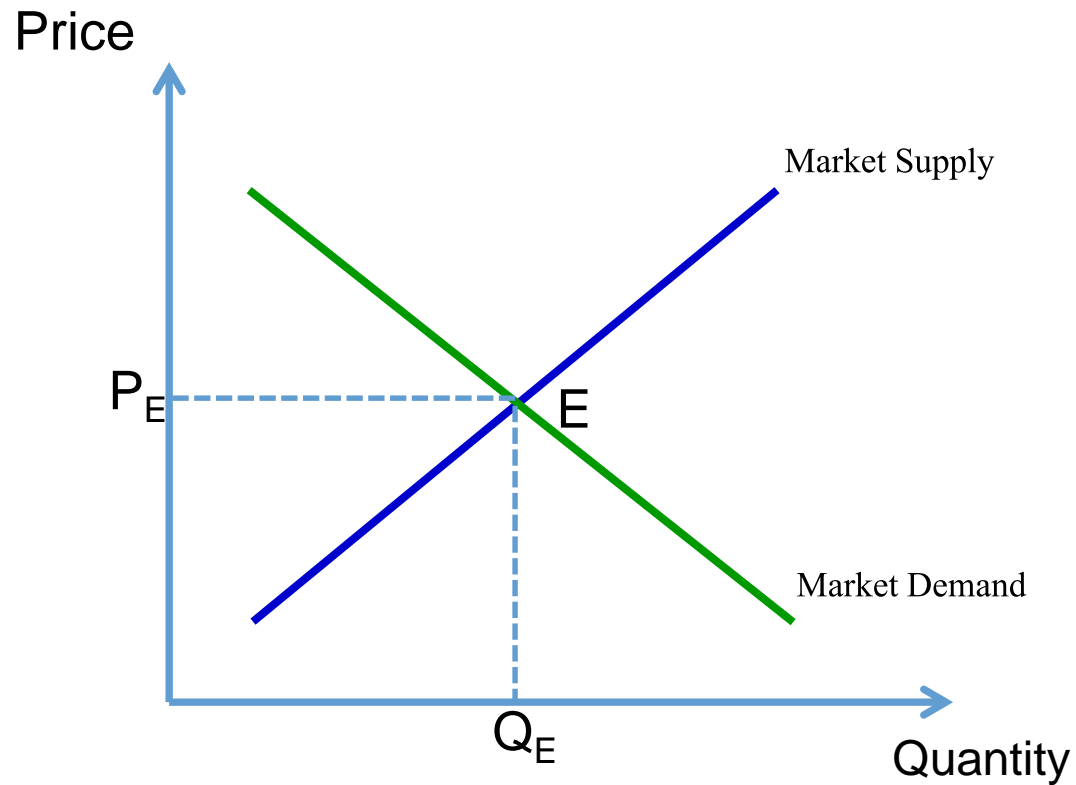
Change (or Shift) in Supply

Extreme Cases of Supply

- Horizontal supply curve

- Vertical supply curve

III. Market Equilibrium

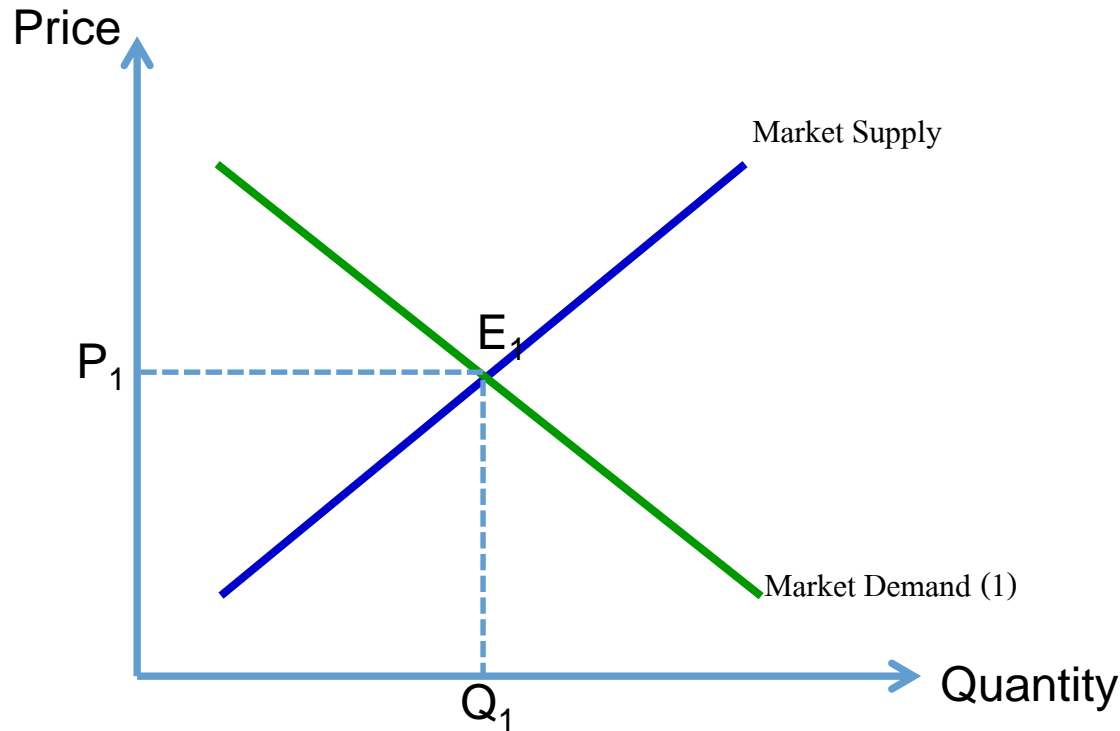


Shocking the Equilibrium and Adjustments

- When demand curve shifts.
 - E.g. Income changes, price of related products changes
- When supply curve shifts
 - E.g. Technology improves.
- When both demand and supply curve shift.

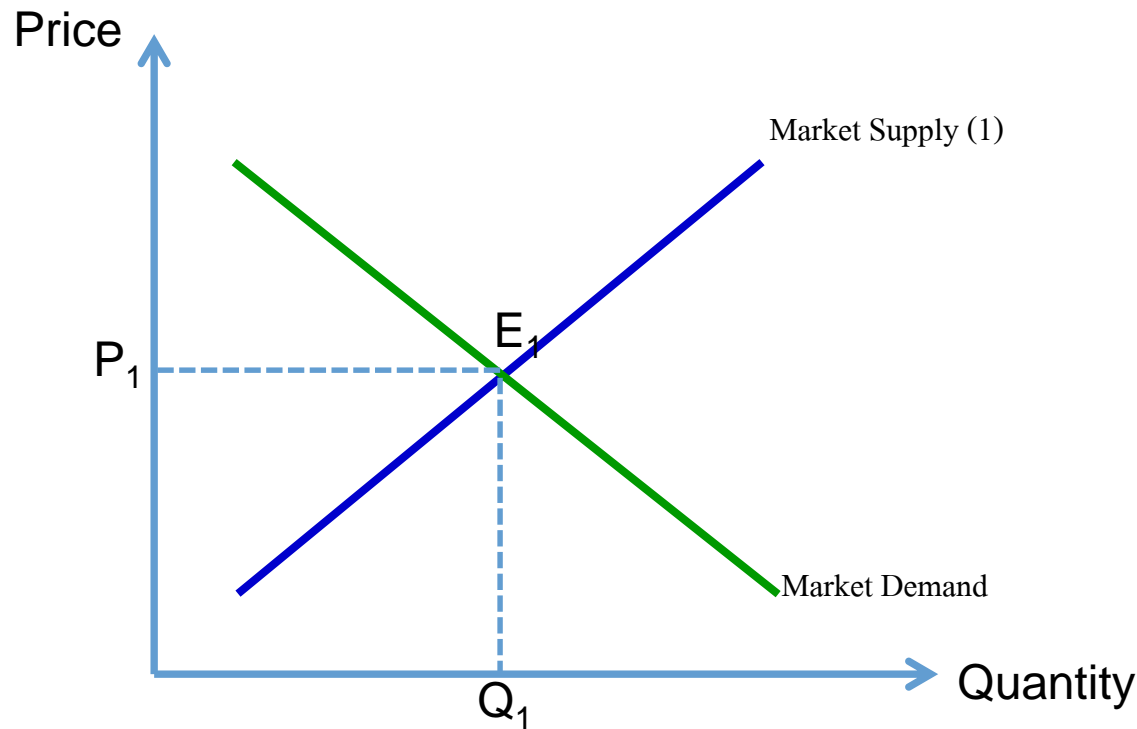
Market Equilibrium: When Demand Curve Shifts

- Suppose the consumers' income increase.



Market Equilibrium: When Supply Curve Shifts

- Suppose the price of input decreases.



Market Equilibrium: When Both Demand and Supply Shift.