Demand and supply

Topic 2

Agenda

- Basics of demand
- Closer look at demand
- Basics of supply
- Closer look at supply

- Part 1: Basics of demand

The law of demand

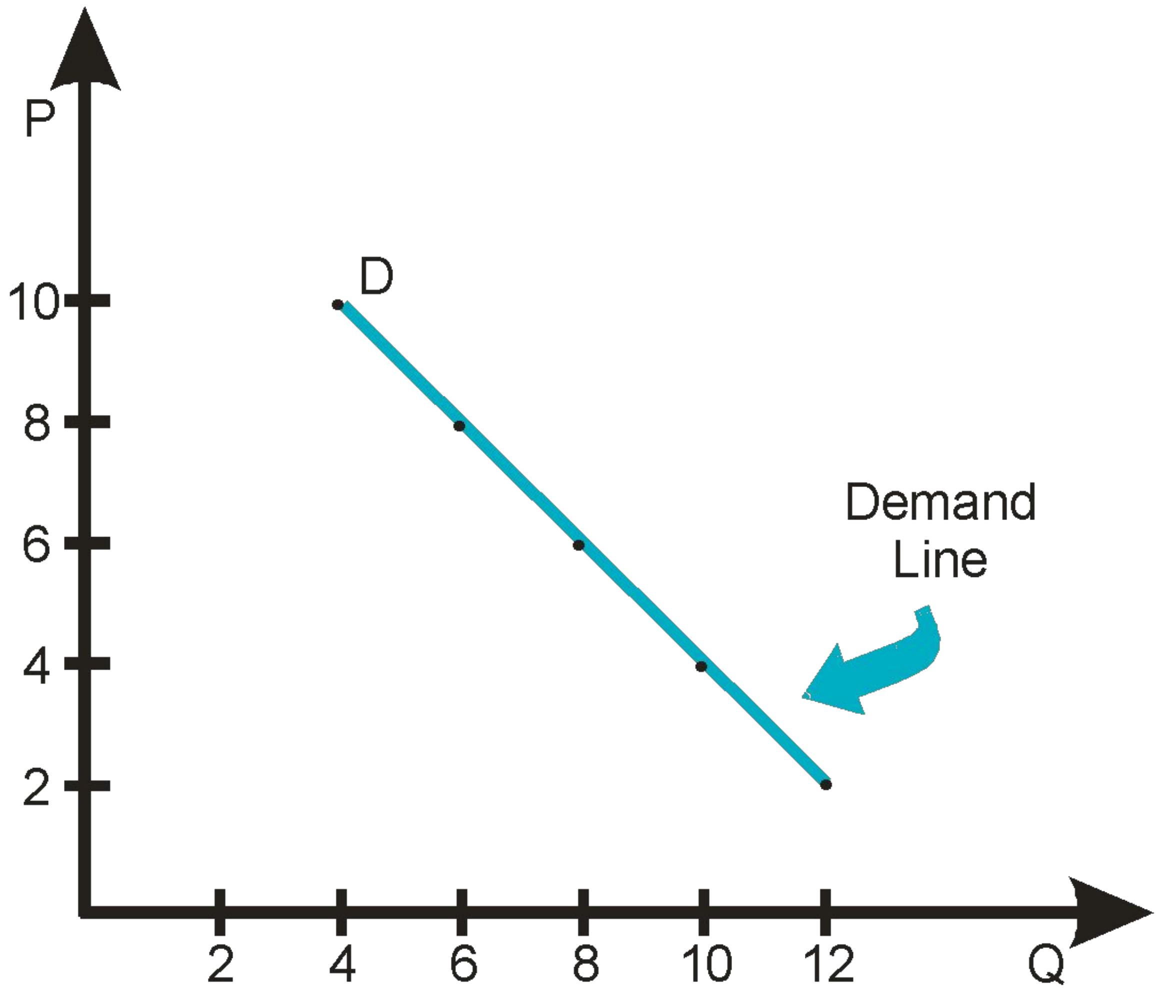
- **THE LAW OF DEMAND** states that, in general, other things being constant, the lower the price of a good, the greater the quantity of that good buyers will purchase over a given period (and conversely).

- More precisely: other things remaining the same, the higher the price of a good, the smaller is the quantity demanded; and the lower the price of a good, the greater is the quantity demanded.

Demand schedule: an example

Price per unit ($)	Quantity demanded (units per week)
2	12
4	10
6	8
8	6
10	4

Demand curve: an example



The law of demand – things to remember

- Ceteris paribus qualification
- Shift factors of demand
- Shift along demand curve and shift of demand curve
- Quantity demanded vs. demand
- Effective demand vs. potential demand
- Time dimension

Ceteris paribus qualification

- Recall Alfred Marshall’s concept of „pound”.

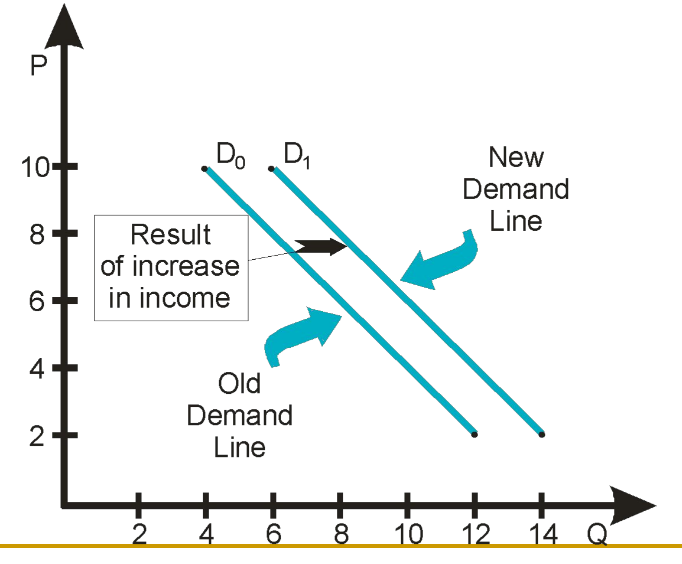
Shift factors of demand

- **SHIFT FACTORS OF DEMAND** = the things held constant when plotting demand curve; factors influencing demand (other than price).
- Basic shift factors of demand:
  - income,
  - prices of other goods (substitutes and complements),
  - preferences.

Shift factors of demand: an example

- Let's suppose that buyers' income increases.
- At each price they will demand more.

Price	Quantity demanded	
	At lower income	At higher income
2	12	14
4	10	12
6	8	10
8	6	8
10	4	6



Quantity demanded vs. demand

- **QUANTITY DEMANDED =** amount of a good that buyers are **willing and able** to purchase **over a period** at a **certain price**.

- **DEMAND** = quantity of a good which buyers are **willing and able** to purchase **over a period** at **various prices**.

Effective demand vs. potential demand

- WANTED ≠ DEMANDED in the sense we're using the term
- If you demand something, then you:
  - want it,
  - can afford it,
  - plan to buy it.
- EFFECTIVE DEMAND = consumers are willing and able to purchase
- POTENTIAL DEMAND = consumers are only willing to purchase

- Part 2: Closer look at demand

The forces behind the law of demand

- **SUBSTITUTION EFFECT** of a good's rising price: when the price of a good rises, we will substitute other similar goods for it; the good is now more expensive in relation to other goods; we switch to alternatives.

Money price vs. relative price

- **MONEY PRICE** = the number of dollars that must be given up in exchange for a good.

- **RELATIVE PRICE** = the ratio of price of one good to price of another good.

The forces behind the law of demand (cont.)

- **INCOME EFFECT** of a good's rising price: when the price of a good rises, we find ourselves somewhat poorer than before; we are not able to afford to buy so much of the good with our money as earlier; **purchasing power** of our income falls.

Nominal income vs. real income

- **NOMINAL INCOME** = income measured in terms of an amount of money (the number of dollars)

- **REAL INCOME** = income measured in terms of the quantity of goods the money can buy; in other words, it reflects **PURCHASING POWER** of the money

Relationship between income and demand

- From the point of view of the effect changing income has on demand, goods can be categorized into:
  - **normal (superior) goods**,
  - **inferior goods**.
- **INFERIOR GOODS**: low-quality, often second-hand goods that have more expensive substitutes.
- The higher buyer's income, the lower is demand for inferior goods (because we substitute better goods for them).

Relationship between prices of other goods and demand

- From the point of view of the effect prices of other goods have on demand, the goods can be divided into:
  - **substitutes**,
  - **complements**.
- **SUBSTITUTES** = alternatives, similar goods that can satisfy (better or worse) the same need.
- **COMPLEMENTS** = goods used together in order to satisfy a need.

Shift factors of demand: recapitulation

- **Outward shift of demand curve can be caused by**:
  - increase in income (normal goods),
  - decrease in income (inferior goods),
  - increase in prices of substitutes,
  - decrease in prices of complements,
  - change in buyers' tastes, preferences and habits to the advantage of a good.
- **Inward shift of demand curve can be caused by**:
  - decrease in income (normal goods),
  - increase in income (inferior goods),
  - decrease in prices of substitutes,
  - increase in prices of complements,
  - change in buyers' tastes, preferences and habits to the detriment of a good.

- Part 3: Basics of supply

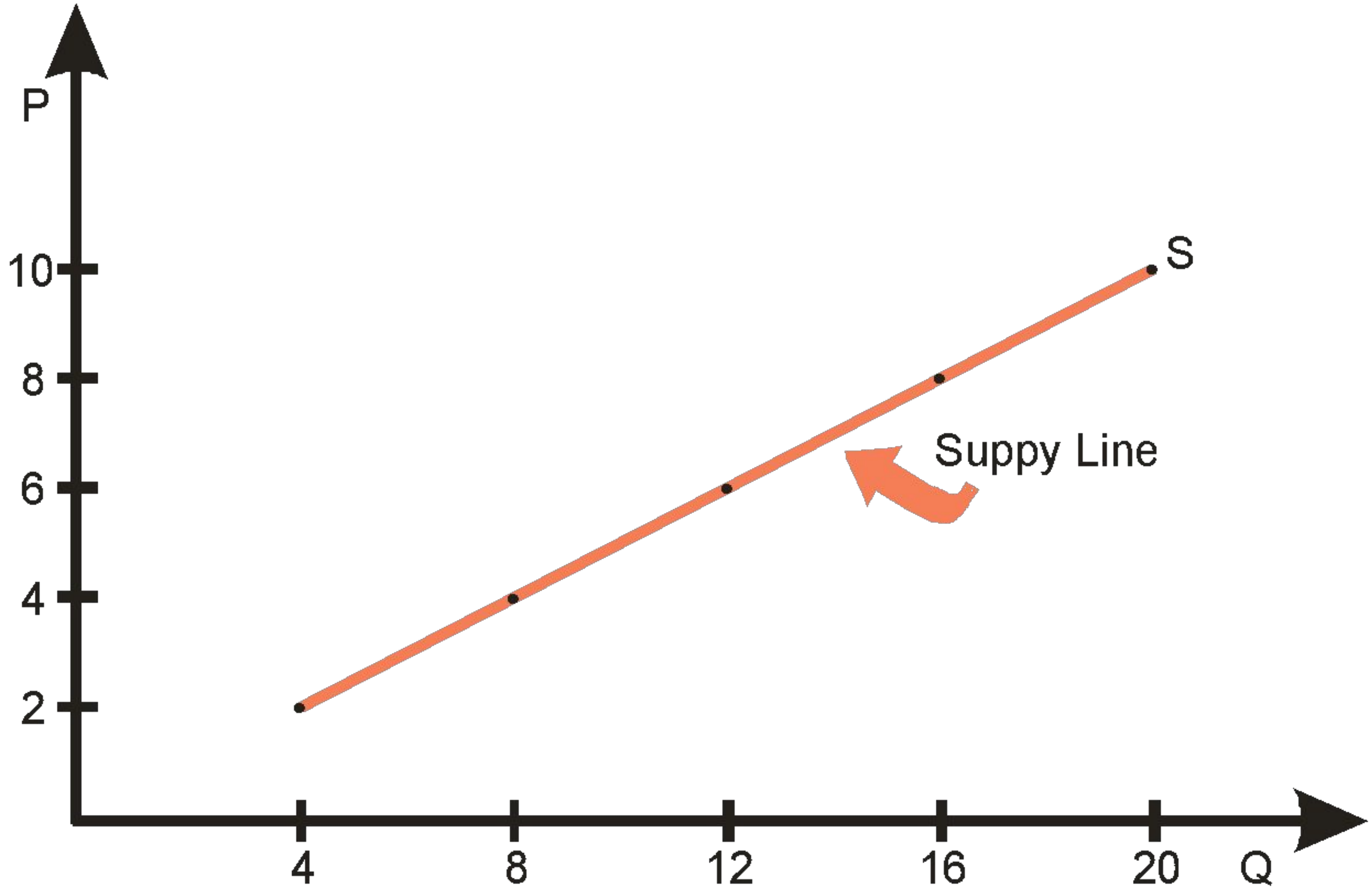
The law of supply

- **THE LAW OF SUPPLY** states that, in general, other things being constant, the lower the price of a good, the smaller the quantity of that good sellers will make available in the market over a given period (and conversely).

Supply schedule: an example

Price per unit ($)	Quantity supplied (units per week)
2	4
4	8
6	12
8	16
10	20

Supply curve: an example



The law of supply – things to remember

- Ceteris paribus qualification
- Shift factors of supply
- Shift along supply curve and shift of supply curve
- Quantity supplied vs. supply
- Effective supply vs. potential supply
- Time dimension

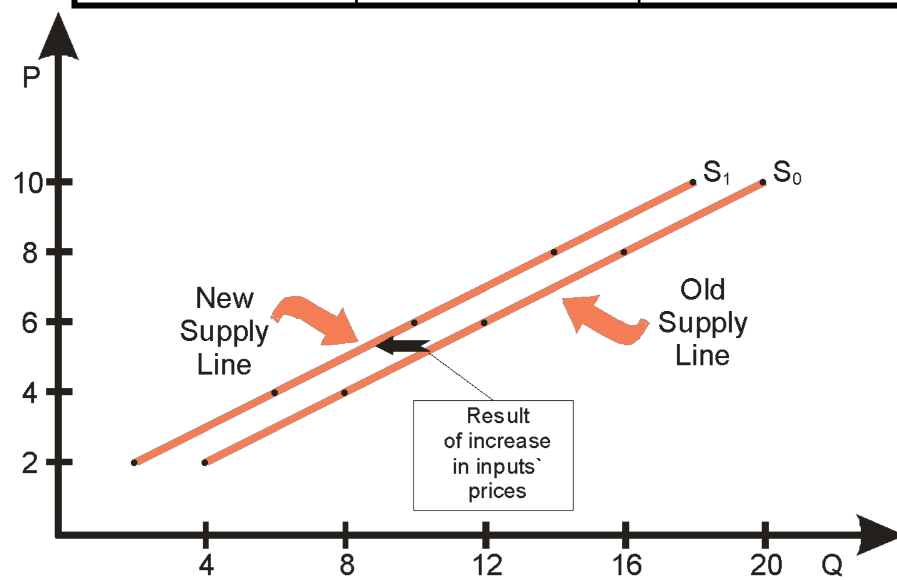
Shift factors of supply

- **SHIFT FACTORS OF SUPPLY** = the things held constant when plotting supply curve; factors influencing supply (other than price).
- Basic shift factors of supply:
  - production costs (prices of inputs),
  - changes in technology,
  - the state of nature.

Shift factors of supply: an example

- Let's suppose that prices of inputs increase.
- At each price sellers will supply less.

Price	Quantity supplied	
	At lower prices of inputs	At higher prices of inputs
2	4	2
4	8	6
6	12	10
8	16	14
10	20	18



Quantity supplied vs. supply

- **QUANTITY SUPPLIED =** amount of a good that sellers are **willing and able** to deliver in the market **over a period** at a **certain price**.
- **SUPPLY** = quantity of a good which sellers are **willing and able** to deliver in the market **over a period** at **various prices**.

Effective supply vs. potential supply

- Having the resources and technology is not enough to supply a good.

- If a firm supplies a good or service, the firm:
  - has the resources and technology to produce it,
  - can profit from producing it,
  - plans to produce it and sell it.

- Part 4: closer look at supply

Forces behind the law of supply

- The law of diminishing returns implies that producing every additional unit of a good becomes more and more expensive. To offer more goods, firms must be motivated by rising price.
- In other words, it is never worth producing a good if the price received for the good does not at least cover the marginal cost of producing it.

Shift factors of supply: recapitulation

- Outward shift of supply curve can be caused by:
  - decrease in prices of inputs,
  - improvements in technology,
  - advantageous state of nature.

- Inward shift of supply curve can be caused by:
  - increase in prices of inputs,
  - deteriorations in technology,
  - disadvantageous state of nature.