BASIC MARKET ELEMENTS

Supply
Demand
Price
Competition

- What is supply?

Supply

- Aggregate supply represents the sum of all intended producers on the market

- Individual supply is the supply of one producer

- Market supply – is the supply of one homogeneous product supplied by several producers, it’s the supply in the market of one commodity

Supply Function and Supply Curve

- Supply has two variables: quantity of output (Q) and unit price of output (P)
- Relation between market price and supplied quantity is expressed mathematically by the supply function and graphically by the supply curve
- The supply curve has always the same direction, it is declined from right upper corner to left lower corner in the Cartesian coordinate system. Only the scope and curvature changes, the extreme case of the supply is horizontal or vertical straight line.
- The supply is therefore the demonstration of suppliers behavior. Producer's goal is maximization of profit with minimization of costs

Supply Curve

Law of Supply

- According to the law of supply:
  - Rising prices invokes the rise of supply
  - The price drop results in decreasing supply
  - This formulation of law suggest that the price *P* is considered as the determining (independent) variable while the quantity *Q* is dependent on the price
- The term supply differs from term supplied quantity
  - Supply is illustrated by the whole supply curve
  - Supplied quantity is graphically represented as a point on this curve. It is a quantity corresponding to given price (e.g. the quantity Q_2 corresponds to the price P_2)
- Factors affecting the supply
  - The price of good
  - Production costs (an influence of technical progress and prices of inputs)
  - Market organization (embargo, custom duties)
  - Specific factors (change of production conditions – e.g. climatic conditions)

Law of Supply

Demand

- Demand is the plan expressing different amounts of a product buyers are willing and able to buy at possible prices
    - *The aggregate (total) demand* is defined as the amount of all goods the buyers demand and the prices that buyers are willing to pay
    - *The individual demand* is the demand of one buyer or also the demand for the products of only one producer
    - *The market demand* is demand for one type of product

Demand Function and Demand Curve

- In every moment there's certain relation between the market price and the quantity that buyers are willing to buy
- The demand has two variables: the quantity of good (Q) that consumers want to buy and the price (P) as the determining variable, from which the demanded quantity is derived
- Demand curve is always inclined from the left upper corner to the right lower corner in the Cartesian coordinate system
- This shape express the inverse proportion of price (P) to quantity (Q)
- when P decreases $\longrightarrow$ Q increases

Demand Curve

Law of Demand

- Law of demand says: if the price of certain good rises (under unchanged conditions), the buyers tend to purchase less amount of this good. Similarly, if the price decreases, then the demanded quantity increases
    - Example: if water is too expensive the consumer demand only necessary water for drinking, while the price has dropped, consumers buy some extra water, e.g. to irrigate the plants

- Factors affecting the demand:
    - Price of good
    - Average income
        - increase of average wage results in increasing demanded quantity vice-versa
        - Change of prices of substitutes and complements
        - substitution goods replace the regarded goods in consumption
    - Change in population (increasing number of citizens → increased demand)
    - Change's in people's preferences
        - advertisement etc.

Formation of Market Equilibrium

- Equilibrium price: Market is in equilibrium when the demand is equal to the supply. The price at which the good is traded with an equilibrium of demand and supply is called the equilibrium price.

- Market price is the real price of good on the market.

  - If the supply of goods exceeds the demand at the moment $\longrightarrow$ market price is too high $\longrightarrow$ surplus of goods

  - In order to get rid of this surplus and to sell the whole output producers have to lower the price

  - If the demand of goods exceeds the supply at the moment $\longrightarrow$ market price is to low $\longrightarrow$ shortage of goods

The Change of Equilibrium Point

Formation of Market Equilibrium

- By this way market all the time inclines to the equilibrium price and the equality of demand and supply.
- **Government can regulate** some markets by means of setting minimum or maximum prices of goods or services
  - In the case of maximum price we refer to price ceiling (price ceilings often cause shortage off goods since producers aren't willing to produce sufficient quantity at these low prices)
  - In the case of minimum level we refer to price floor (in this case usually a surplus of product occurs in the market since suppliers tend to supply more then demanded, e.g. agricultural products)

Price Elasticity of Demand

- Price elasticity of demand describes the sensitivity of demanded quantity on the change in price

- Coefficient of price elasticity of demand

$$E_D = \frac{\text{\% change in quantity demanded}}{\text{\% change in price}}$$

- Types of elasticity:
  - Unit elasticity demand $E_D=1$
  - Price inelastic demand $E_D<1$
  - Price elastic demand $E_D>1$
  - Perfectly elastic demand $E_D=\infty$
  - Perfectly inelastic demand $E_D=0$

Price Elasticity of Demand

Competition

- Definition:
  - Competition can be described as some independent actions taken by the producer who pursue augmentation of its profit or at least preventing the drop of profit (in the worst case)
  - Competition is a kind of contest in which the competing sellers supply their goods at prices stated by themselves and try to attract independent buyers to assess their goods positively and buy them
- Competition of demand and supply
  - It is an interaction of demand and supply in the market, the competition across the market
  - Producers want to sell their outputs with the highest possible profit X buyers want to buy as cheap as possible
  - Interest of producers and consumers is contradictory
- Competition on the demand side
  - Reflects the interaction of individual consumers’ interests
  - The meaning of competition on the demand side increases especially in a situation when the demand exceeds the supply and there’s a shortage of goods in the market
- Competition on the supply side

Types of Competition

- Price and Non-price competition
  - Price competition results in voluntary cutting down the prices of goods and services by producers. Every producer hopes that other competitors cannot go to this low price level >> goal is the control over the market
  - Non-price competition is attracting the consumer in some other way then via price, e.g. by quality improvements, providing special services, better sale conditions, etc.

- Perfect and Imperfect competition
  - Perfect competition works on such market where no firm or consumer is so large and powerful to influence the market price on its own
  - Non-perfect competition is the competitive situation in any market where the conditions necessary for prefect competition are not satisfied (at least one supplier is to enough large to influence the market price)
  - Monopoly is defined as a persistent market situation where there is only one provider of a product or service
  - Oligopoly is a market form in which market or industry is dominated by a small number of sellers (oligopolists)
  - Monopsomy is a market form with only one buyer, called "monopsonist", facing many sellers

Types of Competition

Type of competition	Number and size of firm	Product characteristic	Branch of economy	Enter and exit the branch
Perfect				
Monopolistic competition				
Oligopoly				
Monopoly				