

# LEARNING OUTCOME 2

# MODERN MIXED ECONOMY

# Market

- A place where supply and demand meet and prices are formed
- The mechanism by which buyers and sellers determine the price and quantity of a good bought and sold
- **A mechanism by which buyers and sellers interact to determine prices and exchange goods and services.**
- **The market can be organized physically e.g. marketplace, or via Internet e.g. eBay**

# Key elements of the market : price and quantity!

- **Price =**
  - the value of a good, expressed in money, represents the conditions under which people and companies voluntarily exchange various goods
  - prices are signals to the producer / consumer; if consumers are looking for more specific goods / services, the price will rise sending a signal to producers that more supply is needed (increasing the production of existing producers, but also increasing the number of new producers coming to that market)
- **Quantity of good or services** - quantities depend on prices - the lower the prices, the lower the quantity of goods offered, the higher the prices, the greater the incentive for producers to offer more goods

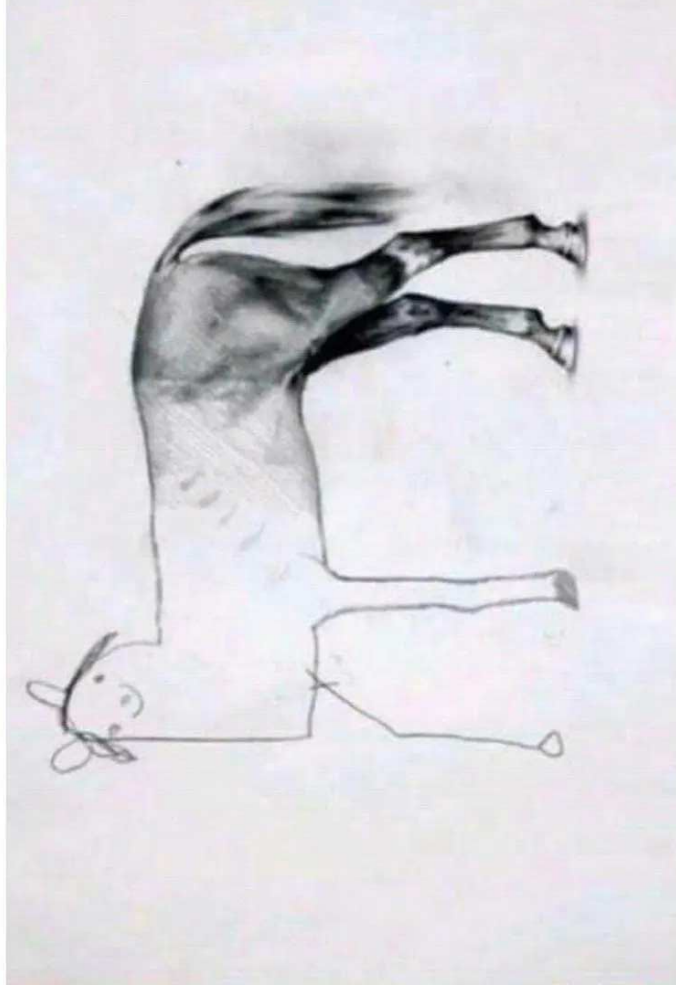
# Emergence and development of the market

- Markets arose from the need to **trade and exchange** products between **specialized producers and consumers**
- Without the market, individuals and states would be limited in their spending on what they can produce themselves
- The market allows **specialization** in the production of one or more products, and consumption of a wide range of goods and services obtained **by exchange with other countries**
- Specialization enables **the production of higher output from available resources** ( inputs ) - ie higher productivity

# Input specialization

- **Labour** - specialization is achieved when people focus on special jobs, those in which they are the best, and thus make the best use of their specific skills (eg web-site development - front end , back end , full - stack developers )
- The fact of economic life - make **the division of labour** so that specialized professionals do the smaller steps of the entire work rather than everyone doing everything but being mediocre. It allows eg. tall people to become basketball players, people who have good persuasive power to become sales experts, etc.
- Sometimes it takes many years to acquire the knowledge needed for a certain career (15 years of postgraduate study to be a neuro-surgeon with a degree)
- When is there too little specialization and when is there too much? Fachidiot (one-track specialist) or multipractitioner?

When you're really a backend developer but market yourself as full-stack



# Input

- **Land** as a factor is also specialized - some land is better for growing vines, and some is better for oil exploitation
- **Capital** is also specialized - you will use a tractor to cultivate the land, a specialized robot for making chips



# How has specialization contributed to market development?

- Specialization has contributed to market development because people and entire countries have specialized in producing what they are best at.
- No country produces all the products in the world, but those in which they will make the most significant **gains from trade** - ie we specialize in producing what we are most efficient at, we consume these products both domestically and we export it to other countries, and we import product or services from other countries (which are unefficient to be produced in our countries)

# To summarize....

- Specialization and trade are the key to high living standards. By specializing, people can become highly productive in a very narrow field of expertise. People can then trade their specialized goods for others' products, vastly increasing the range and quality of consumption and having the potential to raise everyone's living standards.

# Market equilibrium

- It represents the **balance of all different buyers and sellers** through achieving a **balance of quantity and price** that satisfies the desires of both buyers and sellers.
- Too high a price (good for producers, bad for consumers) would mean saturation with goods and overproduction;
- too low a price (good for consumers, bad for producers) would cause long queues in stores and a lack of good.
- The price at which buyers want to buy exactly the quantity that sellers want to sell creates a balance of supply and demand.
- A free market can be a good creator of market equilibrium, but it doesn't have to be. That is why we have to regulate it through interventions, mostly by the state

# Advantages and disadvantages of the free market

## For

- It enables formal legal freedom and equality of citizens as entrepreneurs and consumers
- It encourages initiative, productivity and entrepreneurship
- In the given circumstances, it represents the efficient mechanism of allocation and use of rare resources – perfect competition and no market failures



## Against

- The emergence of monopolies that reduce production and increase price
- The emergence of mass unemployment
- Environmental pollution and other negative externalities
- Inequality in the distribution of income and consumption
- Cyclical movement of the economy (recession - expansion)
- Lack of care for the development of public goods



## Conclusion

**The free market mechanism is not perfect!**

# How state corrects market failures ?

Inefficiency ( monopoly , externalities and lack of public goods)

- Antitrust and antitrust laws
- Laws against pollution , regulations against smoking
- Building parks, river dams, etc.

Inequality ( uneven distribution income and wealth )

- Progressive taxation of income and property
- Aid for lower income citizens

Macroeconomic problems

- Macroeconomic problems ( business cycles , unemployment , inflation , economic rise / fall)
- Monetary policy : control of money supply, interest rates...
- Fiscal policy : taxation , subsidies , state consumption ...
- Building infrastructure : schools, roads, hospitals etc.

# Shortcomings of state regulation

- Long and slow decision making process which can create time lag
- Lack of knowledge and moral responsibility of the holders of power
- Usurpation and abuse of state power for personal gain
- Frequent changes of parties in power

# CIRCULAR FLOW OF A MARKET ECONOMY

# Circular flow of the market economy

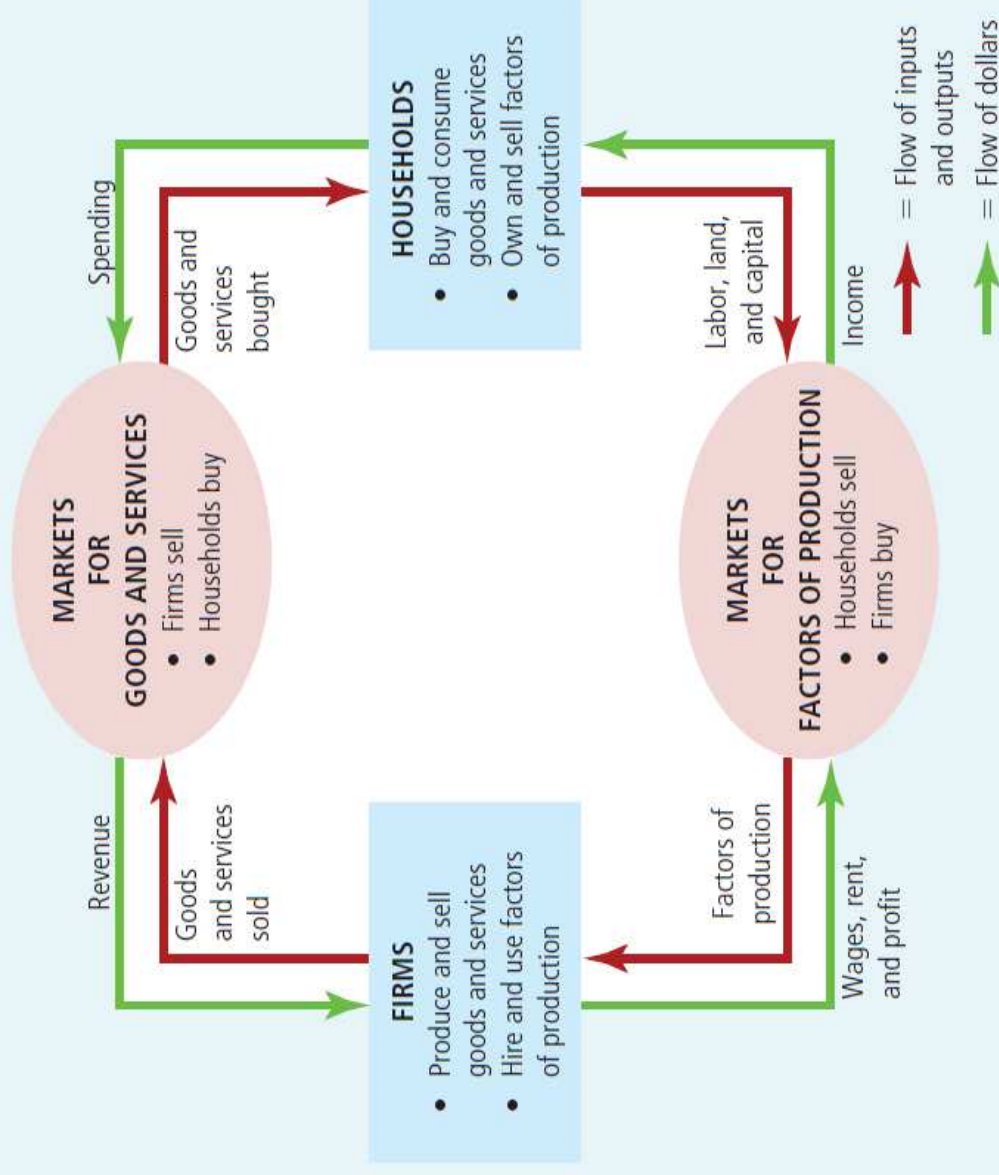
- The economy consists of millions of participants
- Each participant is engaged in economic activities - production, sales, purchases, employment, etc.
- The circular flow of the market economy simplifies thinking about all the activities of all participants in the country's economy
- It shows how the economy is organized and how the participants of the economy interact



**FIGURE 1**

**The Circular Flow**

This diagram is a schematic representation of the organization of the economy. Decisions are made by households and firms. Households and firms interact in the markets for goods and services (where households are buyers and firms are sellers) and in the markets for the factors of production (where firms are buyers and households are sellers). The outer set of arrows shows the flow of dollars, and the inner set of arrows shows the corresponding flow of inputs and outputs.



# Circular flow of the market economy (1)

- The economy is simplified, so it contains **two types of decision makers** :
  - **Households**
  - **Firms**
- They are the bearers of supply and demand

## **Characteristics of two types of decision makers:**

- **Firms**
  - They produce goods and services
  - They use or buy factors of production: land, labor, capital to produce products / services
- **Households**
  - Owners of factors of production: land, labor and capital; sell those factors to firms
  - They consumer the goods and services that firms produce

# Circular flow of the market economy (2)

- Households and firms interact in **two types of markets**
  - **Markets for goods and services**
    - Households - buyers of goods and services
    - Firms - sellers of goods and services
  - **Markets for factors of production**
    - Households - sellers of factors of production
    - Firms – buyers (buy and hire) of factors of production

# Circular flow of the market economy (3)

- Inner circuit represent the flow of inputs and goods and services produced (outputs)
- Households sell labor, land and capital to firms in the markets for factors of production
- Firms use these factors to produce goods and offer services that are sold to households in the markets for goods and services
- Factors of production flow from households to firms, and income from wages, rents and profits flows from firms to households - so for the sale of factors of production households receive income
- With this income, they can buy goods that firms produce and offer on the market

# Circular flow of the market economy (4)

- Outer part of the model is parallel flow of money
- Households spend money to buy goods and services from firms – they receive money because firms pay them for the usage of factors of production
- Firms use part of the sales revenue to pay for the usage the factors of production (workers' salaries, rent of space, rent of land etc. ... )
- The remaining income is the profit of the business owners, who are themselves members of a household
- Thus money spent on goods and services flows from households to firms, and income from wages, rents and profits flows from firms to households

[ Let's take a tour of the circular flow by following a dollar bill as it makes its way from person to person through the economy. Imagine that the dollar begins at a household—say, in your wallet. If you want to buy a cup of coffee, you take the dollar (along with a few of its brothers and sisters) to one of the economy's markets for goods and services, such as your local Starbucks coffee shop. There, you spend it on your favorite drink. When the dollar moves into the Starbucks cash register, it becomes revenue for the firm. The dollar doesn't stay at Starbucks for long, however, because the firm uses it to buy inputs in the markets for the factors of production. Starbucks might use the dollar to pay rent to its landlord for the space it occupies or to pay the wages of its workers. In either case, the dollar enters the income of some household and, once again, is back in someone's wallet. At that point, the story of the economy's circular flow starts once again.

# Basic elements of supply and demand

# Demand

- Def. Demand is the amount of goods and services that buyers are willing to pay for at a certain price.
- The demand schedule is a table that shows the quantity demanded at each price. The demand curve, which graphs the demand schedule, illustrates how the quantity demanded of the good changes as its price varies.





# Demand schedule

- The demand schedule shows the relationship between the quantity demanded ( $Q_d$ ) and the market price ( $P$ )
- Mathematically, the demand schedule is expressed as:

$$Q_d = f(P)$$

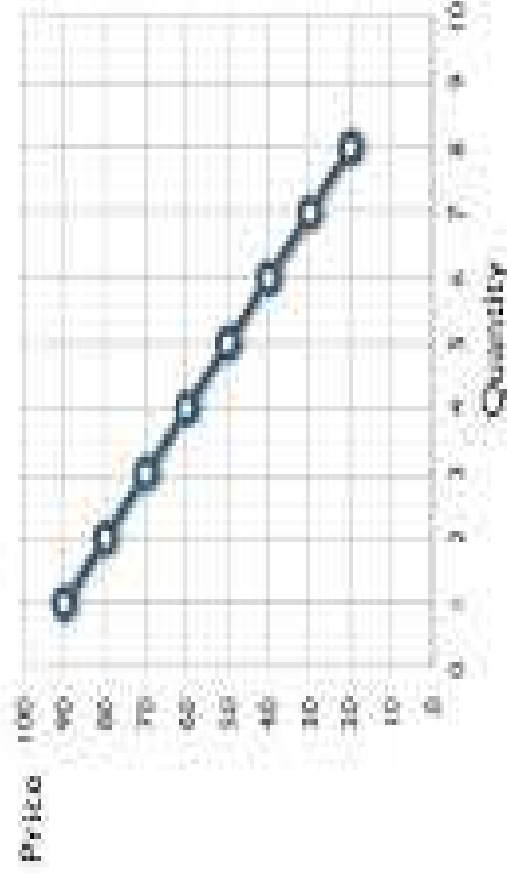
The demand schedule can be displayed algebraically, tabularly and graphically.

## Demand Schedule



## Demand Curve

Price	Quantity
90	1
80	2
70	3
60	4
50	5
40	6
30	7
20	8
10	9



# The law of downward-sloping (diminishing) demand

**When the price of a commodity is raised (and other things are held constant), buyers tend to buy less of the commodity. Similarly, when the price is lowered, other things being constant, quantity demanded increases.**

- Because a lower price increases the quantity demanded, the demand curve slopes downward.

# Why is it happening?

- Quantity demanded tends to fall as price rises for two reasons:
  - **Substitution effect** - if the price increases and our income remains the same, goods become more expensive. Consumers will substitute these goods for other similar but cheaper goods (cigarettes - tobacco)
  - **Income effect** - if there is an increase in price, and my income is the same, I am realistically poorer and I will demand less of all goods. If gasoline prices double, I have in effect less real income, so I will naturally curb my consumption of gasoline and other goods

# Substitutes and complements

**Substitutes** = are often pairs of goods that are used in place of each other, such as hot dogs and hamburgers, sweaters and sweatshirts, and cinema tickets and film streaming services.

- They are also two goods for which an increase in the price of one leads to an increase in the demand for the other

**Complements** = are often pairs of goods that are used together, such as gasoline and automobiles, computers and software.

- They are also two goods for which an increase in the price of one leads to a decrease in the demand for the other

# Factors affecting demand

- The price of the good itself – increase in price leads to decrease in demand
- Prices of substitutes and complements
- Market size (mobile sales in Turkey and Croatia - because the Turkish market is much larger than the Croatian market, more mobile phones will be sold at any price)
- Average income (the higher the income, the higher the total demand for all the goods)
- Tastes and preferences (eg Valentine's Day and the price of roses - on Valentine's Day the price of roses rises due to increased demand)
- Special influences (demand for umbrellas in rainy London is higher than in dry Cairo)

# Exceptions to the law of demand – upward sloping demand curve

## a) Giffen paradox

- a good for which an increase in the price raises the quantity demanded (inferior goods- potatoes, cheap bread etc. – goods we buy when our income is low)
- If inferior goods represent large portion of our income (which means we have low income), then increase in all prices in the market (normal and inferior goods) will lead to us consuming even more of the inferior good (e.g. price of meat goes up – normal good, we eat more potatoes- inferior goods)

## b) Veblen effect

- Veblen good is a type of luxury good for which the demand for a good increases as the price increases (snobbery, status symbols, e.g. very expensive cars, champagnes etc. )
- If the price would go down, demand would also decrease

## c) Speculation - Market bubbles

# Supply

- Supply is the amount of a good that sellers are willing and able to sell
- table that shows the relationship between the price of a good and the quantity supplied, holding constant everything else that influences how much of the good producers want to sell - **supply schedule**





# Supply schedule

- The supply schedule can be mathematically expressed as:

$$Q_s = f(P)$$

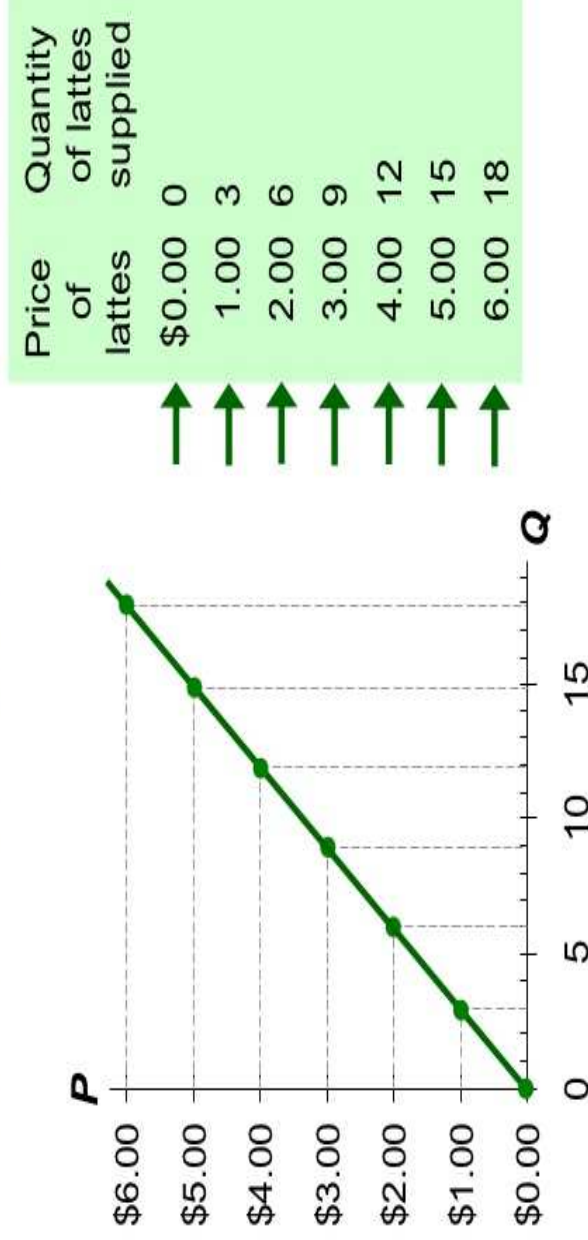
$Q_s$  = quantity supplied (offered)

$P$  = market price

- The supply schedule can be displayed algebraically, tabularly and graphically.

The curve relating price and quantity supplied is called the **supply curve**. The supply curve slopes upward because, other things being equal, a higher price means a greater quantity supplied.

## Starbucks' Supply Schedule & Curve



THE MARKET FORCES OF SUPPLY AND DEMAND

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# The law of supply

- **Other things being equal, when the price of a good rises, the quantity supplied of the good also rises, and when the price falls, the quantity supplied falls as well**

# Factors affecting the supply



- Technology (e.g. robotics) – Technology reduces firms' costs, the advances in technology raise the supply of a product (firms can produce more at lower costs).
- Input prices - When the price of one or more of these inputs rises, producing any product is less profitable, and firms supply less of it. If input prices rise substantially, a firm might shut down and supply no product at all. - (labour costs in Asia vs Europe)
- Prices of related goods (vehicle producers can switch between producing cars and trucks)
- State policy (quotas / tariffs) – Raising quotas/tariffs will lower supply of products
- Number of sellers – the more the sellers, the greater the supply
- Special conditions (weather in agriculture) – bad weather hitting crops can decrease supply of it

# Market equilibrium

- If supply and demand are equal in the market, market equilibrium is reached.
- At the equilibrium point, buyers are willing to buy as many goods as sellers are willing to offer.
- Condition of market equilibrium :  $S = D$
- The price formed at market equilibrium is the **equilibrium price**, and the quantity sold at that price is the **equilibrium quantity**.

