

# SEM 1 ECONOMICS

Nature of Economics:

Economic problem:

- Our wants are *Unlimited*
- Resources are scarce- that is the resources we have to satisfy our wants are limited
- Since we cannot satisfy all our wants with our limited resources, we must choose between them
- Therefore we need to rank our preferences- we will choose our highest preference wants first, and leave some wants unsatisfied.

*Individual wants* are the desires of each individual person.

*Collective wants* are the wants of the whole community

Key economic issues:

- What to produce? - Because our resources are limited and both individual and collective wants are unlimited, so a decision must be made on which goods or services should be produced.
- How much to produce?- This is to allocate resources efficiently and to minimise waste and maximise the satisfaction of wants.
- How to produce?- After deciding on how much to produce and economy must allocate the resources for production in the most efficient manner so least amount of resources are used, whilst maximum wants are satisfied.
- How to distribute production?- After producing the quantity, the economy must decide on how they are to distribute the good or service. The economy decides on whether they desire an equitable (even) or an inequitable (uneven) distribution of these goods or services.

*Opportunity cost* is the cost of satisfying a want when an alternative has to be forgone.

Equilibrium:

Savings	S	Investments	I
Taxation	T	Government expenditure	G
Imports	M	Exports	X

**S+T+M=I+G+X**

Leakages=Injections

- Total leakages > Total injections – there will be downturn (recession) in the level of economic activity. → falling incomes → Falling production → Rising unemployment
- Total injections > Total leakages – there will be an upturn (boom) in the level of economic activity. → Rising incomes → Rising production → falling unemployment.

Demand:

**Demand-** the quantity of a particular good or service that consumers are willing and able to purchase at a particular price at a given point in time.

**Market demand-** the demand by all consumers for a particular good or service.

*Law of demand* states that as price increases, the quantity demanded for a particular good or service will decrease.

**Factors affecting market demand-**

- The price of the good itself
- The price of other goods and services
- Expected future prices
- Changes in consumer taste and preferences
- The level of income

**The demand curve-**

Downwards slope from **LEFT TO RIGHT**

Movements ALONG the demand curve:

**Contraction** in demand occurs when there is an increase in price, which causes the quantity demanded to fall. Moves *up* the demand curve.

**Expansion** in demand occurs when there is a decrease in price, which causes the quantity demanded to rise.

Shifts of the demand curve:

**Increase in demand** is a shift of the demand curve to the right. This means consumers are willing and able to buy more of the product at each possible price than before, or consumers are willing to buy a given quantity at a higher price than before.

**Decrease in demand** is a shift of the demand curve to the left. This means consumers are willing and able to buy less of the product at each possible price than before, or consumers are willing and able to buy a given quantity at a lower price than before.

**Factors that may cause an INCREASE in demand**

- Prices of other goods and services
- Expected future prices
- Consumer tastes and preferences
- Consumer incomes
- The size and age distribution of the population

**Price elasticity of demand** measures the responsiveness of the quantity demanded of a particular product to changes in its price.

*Elastic demand* is a strong response to a change in price

*Unit elastic demand* is a proportional response to a price change (total amount spent by consumers remains unchanged)

*Inelastic demand* is a weak response to a price change

**Measuring price elasticity of demand**

*Total outlay method* is a simple way of measuring the price elasticity; it looks at the effects of changes in price on the total revenue earned by the producer.

Price ↑      Revenue ↓ = *inelastic*

Price ↑      Revenue ↓ = *elastic*

Price ↑      Revenue - = *unit elastic*

**Perfectly elastic demand** is when the demand curve is a *horizontal* straight line.

Consumers will demand an unlimited quantity at a certain price, but nothing at all at the price above of this. E.g. Luxury goods.

**Perfectly inelastic demand** is when the demand curve is a *vertical* straight line. This shows consumers are willing to pay any price in order to obtain a given quantity. E.g. addictive drugs

Factors affecting elasticity of demand:

- Whether the good is a luxury or a necessity
- Whether the good has any close substitutes
- The expenditure on the product as a proportion of income
- The length of time subsequent to a price change
- Whether a good is habit forming (addictive) or not

Supply:

**Supply** is the quantity of a good or service that all firms in a particular industry are willing and able to offer for sale at different price levels, at a given point in time.

**Market supply** of a particular product which is the sum of the *individual firm supplies* of individual producers at the various price levels.

*Law of supply* states that as price increases the quantity supplied will rise.

Factors affecting market supply:

- The price of the good or service itself
- The price of the other goods or service

- The state of technology
- Changes in the cost of factors of production
- The quantity of the good available
- Climatic and seasonal influence

**The supply curve** slopes *upwards* from **LEFT TO RIGHT**

Movements ALONG the supply curve:

**Contraction** in supply occurs when a decrease in price causes the quantity supplied to fall

**Expansion** in supply occurs when an increase in price causes the quantity supplied to rise.

Shifts of the supply curve:

**Increase in supply** is a shift in the supply curve to the right. This means that firms are willing and able to supply more of a product at each price level than before, or are willing to supply a given quantity at a lower price

**Decrease in supply** is a shift of the curve to the left. This means that firms are willing and able to supply less of a good at each price level than before, or firms are only willing and able to supply a given quantity at a higher price than before.

Factors that cause shifts in the supply curve:

- A fall/rise in price
- An improvement in technology/ the technology no longer being available
- A fall/ rise in costs of production
- An increase/decrease in quantity of resources available for production
- Climatic conditions or seasonal change that is more favorable to the production process.

**Price elasticity of supply** measures the sensitivity of the quantity supplied of a product to changes in price.

*Relatively inelastic* is a less than proportionate change in quantity supplied

*Relatively elastic* is a very responsive to a price change

*Unit elastic* is if quantity supplied rises by the same proportion as the price increases

**Perfectly elastic** is when the supply curve is a *horizontal* straight line. This shows that suppliers would supply an unlimited quantity of a good or service only at a particular price.

**Perfectly inelastic** is when the supply curve is a *vertical* straight line. This shows that the quantity supplied is fixed regardless of the price.

Factors affecting elasticity of supply:

- Time lags after price change
- The ability to hold and store stock ( inventory)
- Excess capacity of production

Market equilibrium:

**Market equilibrium** is the situation where, at a certain price level, the quantity supplied and the quantity demanded of a particular commodity are equal.

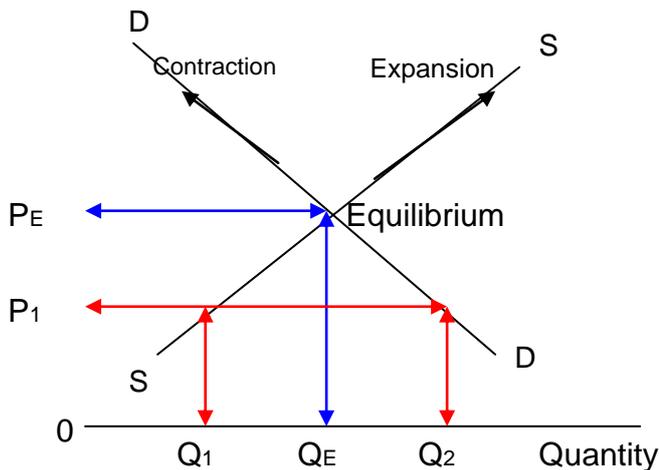
**Price mechanism** determines the equilibrium in the market. This determines at what price will the commodities be bought and sold in the market.

Establishing market equilibrium

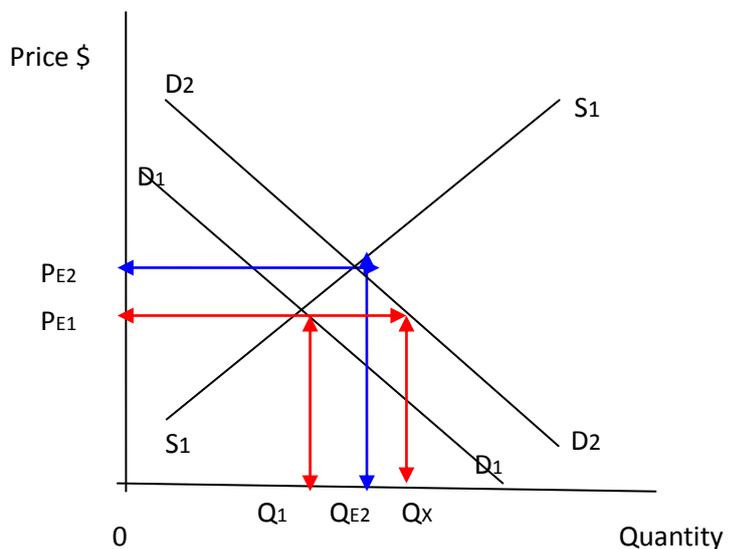
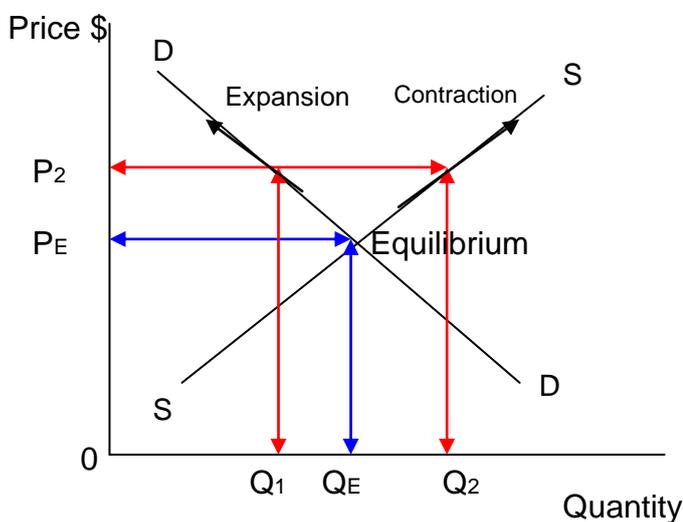
*Market equilibrium* occurs when:

- Quantity demanded = quantity supplied
- The market clears e.g. no excess supply
- There is no tendency to change

Price \$



When quantity demanded ( $0Q_2$ ) exceeds the quantity supplied ( $0Q_1$ ), competition for the limited quantity of goods available means that consumers will start bidding up the price. The rise in the price results in an *expansion* in supply, and a *contraction* in demand. This continues to occur as long as there is excess demand.



When the quantity supplied ( $0Q_2$ ), exceeds quantity demanded ( $0Q_1$ ). Excess supply means that firms will sell their goods off for a lower price. The fall in the price results in an *expansion* in demand, and a *contraction* in supply.

#### Changes in Equilibrium

Shifts in the supply and demand curves are caused by changes in the conditions behind supply and demand- not change in the price of the good itself.

#### **How an increase in demand can change equilibrium**

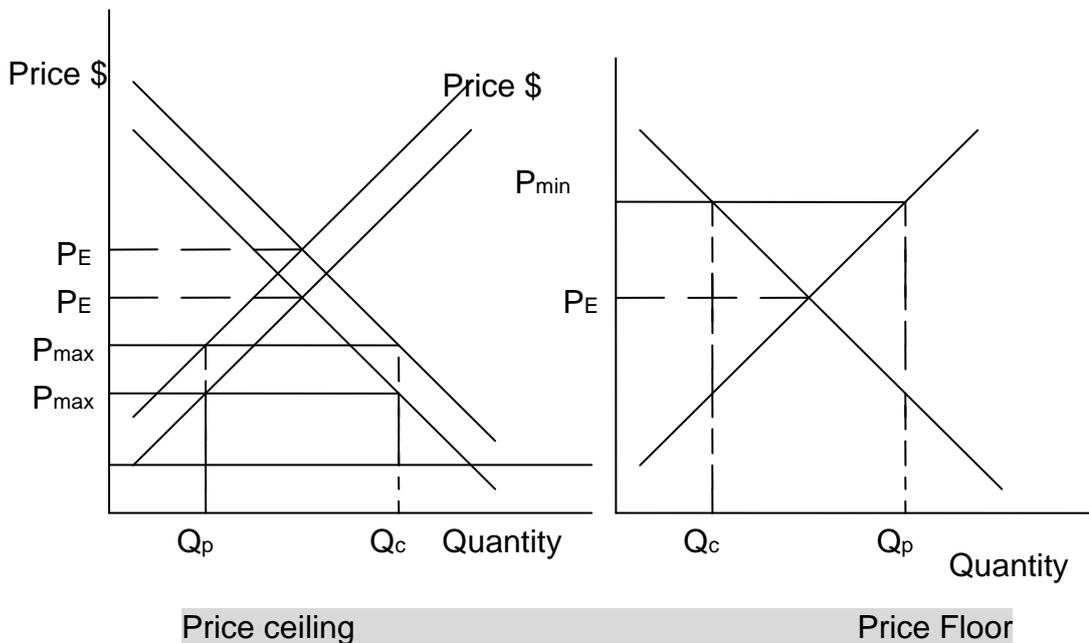
An **increase in demand** means that more of a good will be demanded at any given price.

The demand curves shifts to the right [from  $D_1D_1$  to  $D_2D_2$  ], consumers demand more goods at the old equilibrium price ( $0 P_{E1}$ ). At this price the quantity demanded ( $0Q_X$ ) exceeds the quantity supplied ( $0 Q_{E1}$ ). Competition among buyers for the limited good will force the price up causing an expansion in supply. This will continue until the market clears again at a new equilibrium price ( $0P_{E2}$ ) and quantity ( $0Q_{E2}$ ).

#### **Price intervention**

**Price ceiling** is the maximum price that can be charged for a particular commodity.

**Price floor** is the minimum price that can be charged for a particular commodity



**Government intervention in the marketplace**

- Markets can be effective at resolving the basic issues of what and how much to produce.
- The market by itself can still create unsatisfactory outcomes.
- Market prices of goods and services may be too high or too low.
- The free relationship of demand and supply may lead to some goods and services not being produced at all. Eg education, health, parks.
- When certain outcomes are not produced in an economy, this is called *market failure*.
- *Market failure* occurs because the price mechanism takes account of the private costs and benefits of production but does not take into account social costs and benefits. When this occurs the governments may intervene in the market.

**Quantity intervention**

*Externalities* – the costs of production which are not taken into account, in the operation of price mechanism

*Positive Externalities*- is an unintended positive outcome of an economic activity, whose value is not reflected in the operation of price mechanism. e.g. public parks, transport, museums.

*Negative Externality* –The negative outcomes of production which are not considered. E.g. pollution and environmental damage.

Problem	Government action	Impact
Market price too high	Price ceiling	Reduces price, quantity shortage (disequilibrium)
Market price too low	Price floor	Increases price, quantity excess (disequilibrium)
Market quantity too high (negative externality)	Taxes	Increase equilibrium price, reduces equilibrium quantity
Market quantity too low (positive externality)	Subsidies	Reduces equilibrium price, increase equilibrium quantity
Market does not provide good or service (public good)	Government provides good or service	Government must collect taxation revenue to finance its supply of public good

**The Market Economy:**

*Market economy (laissez-faire)* - all major economic decisions are made by individuals and private firms, who are both motivated by self interests. This leads little or no *public goods* being produced which will lead to market failure. Under this system, most resources are owned by private sector.

*Centrally planned economy*-Government planners make economic decisions. Public ownership of resources means the government allocates resources as it sees fit, and individuals have little choice or influence on the economy.

*Consumer Sovereignty*- Consumers will decide what goods and services will be produced. Consumers determine the answer to the question of what to produce and how much should be produced

- not absolute

Aims to solve economic problems:

- What to produce
- How much to produce
- How to produce
- How to distribute the production

Consumers and business:

Factors that influence the decision about whether to spend or save:

- Cultural factors
- Personality factors
- Expectations of the future
- Any specific future spending aims
- Tax policies
- Availability of credit

Factors influencing individual consumer choice

- The level of income
- The price of the good itself
- The price of substitute and complement goods
- Consumer taste and preferences
- Advertising

Sources of income

- Wages from labour
- Rent from land
- Interest from capital
- Profit from entrepreneurial skills.

Social Welfare

- Unemployment benefits
- Disability allowance
- Family allowance
- Austudy

Business in the market economy

*Productivity*- refers to how much we produce with a given quantity of resources, per unit of time.

Productivity contributes to an improvement in our *Standard of living* in several ways:

- Less wastage of our scarce resources
- Lower production costs and higher profits for the business firm
- A lower inflation rate
- Higher income
- Improved international competitiveness of our industries

*Specialisation*- where the factors of production are used more intensely for a smaller number of production processes.

*Firm*- an organisation involved in using entrepreneurial skills to combine factors of production to produce a good or service for sale.

*Industry*- Firms involved in making a similar range of items that usually compete with each other.

Production decisions:

- What to produce – links to the skills and experience of the operator and the industries where there is a strong consumer demand. Also The specific business opportunities and the amount of capital required to start the business.
- How much to produce – based on its assessment of the level of consumer demand and its ability to convert that demand into sales of its items.
- How to produce- depends on the relative efficiency of the four factors of production.

#### Goals of the firm:

- Maximising profits
- Meeting shareholder expectations
- Increasing market share
- Maximising growth
- **Satisficing behaviour**

**Economies of scale**- are experienced when average costs per unit of production fall as the size of output grows.

**Average cost**- Is the cost per unit of production, obtained by dividing the total cost of producing a certain level of output by the total quantity produced.

#### *Internal economies and diseconomies of scale*

**Internal economies of scale** are when a firm attempts to produce a large scale of production in order to minimise costs.

E.g.

- By becoming larger, the firm is better able to take advantage of specialisation of labour by breaking up the process of production into different stages. Specialisation allows firms to employ less workers to produce the same level of output.

- A large firm will be able to invest in more efficient capital equipment. More efficient capital equipment allows less human capital to be employed and will improve productivity with the more capital and less labour to produce the same level of output.

**Internal diseconomies of scale** are the disadvantages of becoming too big, where production costs begins to increase.

E.g.

-Management can lose touch with the day-day running of the firm and inefficiency can increase. When the firm becomes too large there are few signs of organisation, so the efficiency of the firm decreases and resources are wasted and hence less output will be produced.

*Technical optimum*- Is the most efficient level of production for the firm. At this point average costs of production are at the lowest possible level. This is the point where it has taken maximum advantage of internal economies of scale without having to suffer excessive internal diseconomies of scale.

#### External economies and diseconomies of scale

*External economies and diseconomies of scale*- Are advantages and disadvantages which lie completely outside the firm's control and have nothing to do with its level of production.

*External economies of scale*- Are cost saving advantages that accrue to a firm because of outside influences, and not the result of the firm changing its own scale of operations.

E.g.

Increasing localisation of industry generally means that all firms in particular region would enjoy certain cost saving advantages such as locating near a highly populated area with a supply of skilled labour, a plentiful supply of necessary inputs and a major consumer market. The major consumer market reduces transport cost.

*External diseconomies of scale*- are usually the result from the growth of the industry in which the firm is operation, but could also result from rapid growth across the entire economy. They are not the results of the firm changing its own scale of operations.

E.g.

The growth of the industry causes increased pollution, this can lead to government regulations requiring firms to provide more pollution control, and this involves additional costs for all firms.

#### Investment and technological change

New technology offers the opportunity of securing competitive advantage over other companies, but the cost of technological investment also carries risks.

- Production method
  - leads to lower costs
  - increased efficiency
  - decrease in labour requirements
  - the possibility of larger production runs.
- Prices
  - Squeeze profit margins more tightly in the future
  - Force firms to reduce their costs to an absolute minimum in an environment where it will be difficult to increase profits by raising price.
- Employment
  - make many previous jobs redundant
  - reduce their staffing levels substantially as faster production and data processing technologies have reduced their requirement for labour.
  - Increased competitiveness of overseas firms has caused some firms to cut back local manufacturing operations or move them offshore-resulting in job losses within Australia
  - Growth of new technology provides new job opportunities.
  - strong demand for people with specific information technology skills
- Output and profits
  - offer better quality products at a lower price.
  - able to respond to changes in market demand
  - able to customise their output to the specific needs of the marketplace.
  - further increase demand for their products, resulting in higher level of output and increased profitability.
  - Lead to virtuous cycle of investment, output growth, and expanding profits in the longer term.
  - shorter term, businesses must be prepared to make a substantial investment in technology.
- Types of products
  - Expand the range of products that may be produced to satisfy market demand.
  - Creates completely new products and industries.
  - Improvements in technology are a major reason why some people regularly update products.
  - broadening range of products and making it easier to satisfy consumer demand.
- Globalisation
  - major driving forces behind the globalisation markets.
  - low costs of communications allows information to flow more freely from overseas to consumers and business
  - allowing them to make better informed decisions about production and consumption
  - facilitating the emergence of a global market economy.

### **The limits of markets:**

#### **Why governments intervene:**

Under a free market system (laissez-faire), some important community wants may not be satisfied. Some individuals may be unable to earn enough money to live, and at times the market may cause economic instability. Because of these factors, the government intervenes and modifies the operation of the price mechanism in order to achieve a better allocation of resources, a more equitable distribution of income and greater economic stability.

#### **Market failure in the provision of goods and services:**

**Market failure-** This occurs because the operation of market forces creates unfavourable outcomes. This generally occurs because the pre-condition for markets to operation competitively are not always borne out in reality. Governments step in to solve problems caused by market failure.

**Merit goods** – Goods which are not produced in sufficient quantities due to the private sector unwilling to provide it.

**Public good**- are Goods which are *non- excludable* and more desirable to be not provided by individual firms at all.

- They are also non-rival, that is, one person enjoyment of a public good does not diminish the potential for others to also enjoy the good.

Variations in competition:

**Pure competition**- (Price takers) Is a market structure where small buyers are not sufficiently large enough to affect market price, so these small firms sell the same product at the same price, because if they raise the prices they're output would decrease because consumers will be aware that they can purchase the exact same product elsewhere for a lower market price.

**Monopoly**- (price setter) *can be regarded as the opposite to pure competition.*

- There is only one firm selling the product and there is no market competition at all.
- The product sold has no close substitutes.
- There are significant barriers to entry and this effectively prevents any potential competitors from entering the market.

**Monopolistic competition- (imperfect competition)**

- There are a large number of relatively small firms
- The products sold in the market are similar, but not identical. The firms engage in *Product differentiation* ( they package and present their products so that they appear different from those of their competitors.
- The fact that the products differentiate gives firms some degree of price setting power
- There are some small barriers to entry for new firms entering the market, including the fact that existing firms have loyal customers who, through product differentiation, consider that their firm supplies the best products (this is referred to as brand loyalty)

**Oligopoly- (imperfect competition)**

- There are only a few relatively large firms, each of which has a significant share of the market.
- They sell similar, but different products
- There are significant barriers to entry, and are generally accounts for the fact that there are only a few firms in the industry.

**Natural monopoly**- is a market structure in which goods can only be efficiently provided by one supplier, usually because an enormous investment in infrastructure is required.

- occurs where it would be inefficient for competition for competition to operate.
- Governments may maintain ownership of these monopolies because of

concerns that private owners of such enterprise would have monopoly power and consumer would have little choice but to pay whatever price the monopolist set for their good or service.

Market failure in income distribution:

**Relative poverty**- Those whose standards of living is substantially lower than the average for the economy as a whole, and is often defined as a level of income below 30% of average earnings.

- Refers to living stands of the poor in comparison to the rest of the population