HL Economics

(to note: 12/3 test UP TO DEMAND, not including circular flow of income; 3.)

1.1 Factors of Production

-Capital (physical capital; man-made factor of production used to product goods and services, eg. buildings (factories), machinery, semi-finished goods) (human capital; education and training) (natural capital; everything included in land + other naturally occurring resources like air, soil quality, ozone layer, climate) (financial capital; investments in financial instruments like stocks and bonds)
-Entrepreneurship (organises the other 3 factors of production, risk-taking and decision-making)
-Land (natural resources)
-Labour (physical and mental human effort)
(CELL)
*money is **not** a factor of production

Why are resources also called factors of production?
-they are necessary for production to take place.

1.12 Scarcity, Choice and Opportunity cost

> Opportunity cost is the highest valued alternative forgone
Eg. If a piece of state land was used to build a hospital, the opportunity cost might be a school.

Free and Economic Goods

>free goods are goods that are not scarce (can be consumed in as much quantity as needed without reducing its availability to others) & has zero opportunity cost.
>economic goods are goods that are scarce, because they are naturally occurring resources or because they are produced by scarce resources, and have an opportunity cost.

1.2 The three basic economic questions: resource allocation & output / income distribution

Basic economic questions:

>WHAT to produce (decision on the type of goods to produce)
>HOW to produce (concern with the method of production, aim to choose the most efficient method of production to make fullest use of scarce resources)
>FOR WHOM to produce (concern with the distribution* of output)

*distribution: ability to pay VS needs/equity

Market VS Government Intervention

>Free Market Economy
>Command Economy
>Mixed Economy

2. Production Possibilities Curve Model

PPC -> shows all combinations of 2 goods that can be produced by an economy using

-available resources
-available technology
(fully utilised)

Assumption?

-full employment of all resources
-all resources are efficiently used (used to full potential)
(productive efficiency)

3. Circular flow of income **NOT TESTED IN UPCOMING 12/3 WA1**

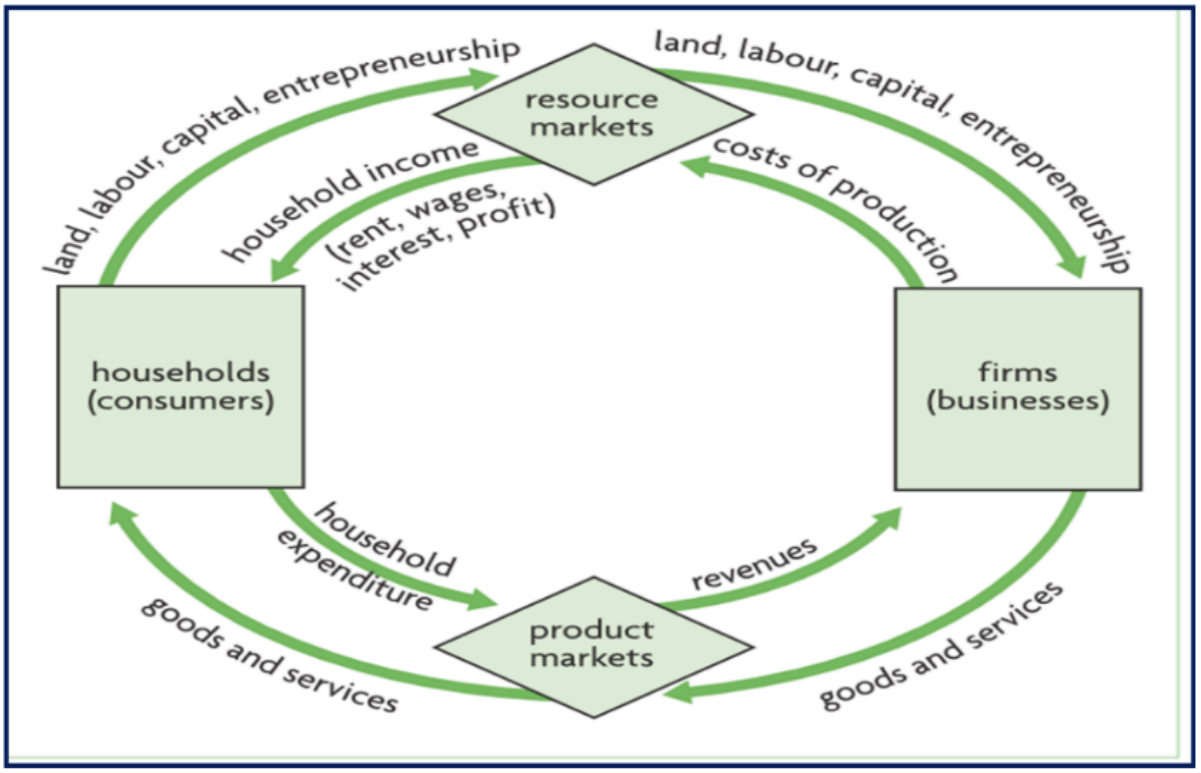
Sectors

1. Households
2. Firms
3. Government
4. Foreign/Trade Sector

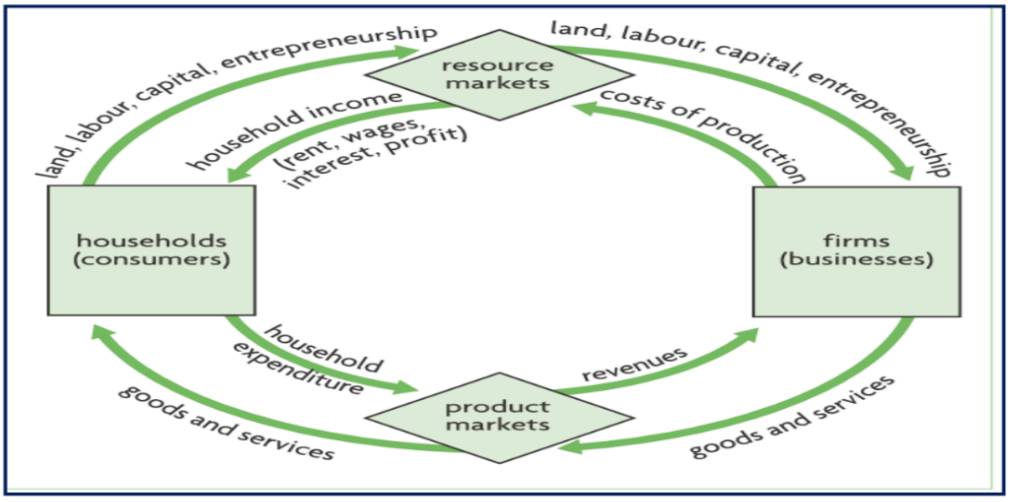
CFY (circular flow of income)
-real flow; flow of goods and services
-money flow

1. Households: owners of factors of production
2. Firms: buy the factors of production in resource markets and use them to produce goods and services. They then sell the goods and services to consumers in product markets.

> 2-sector circular flow of income model (closed economy and without government)



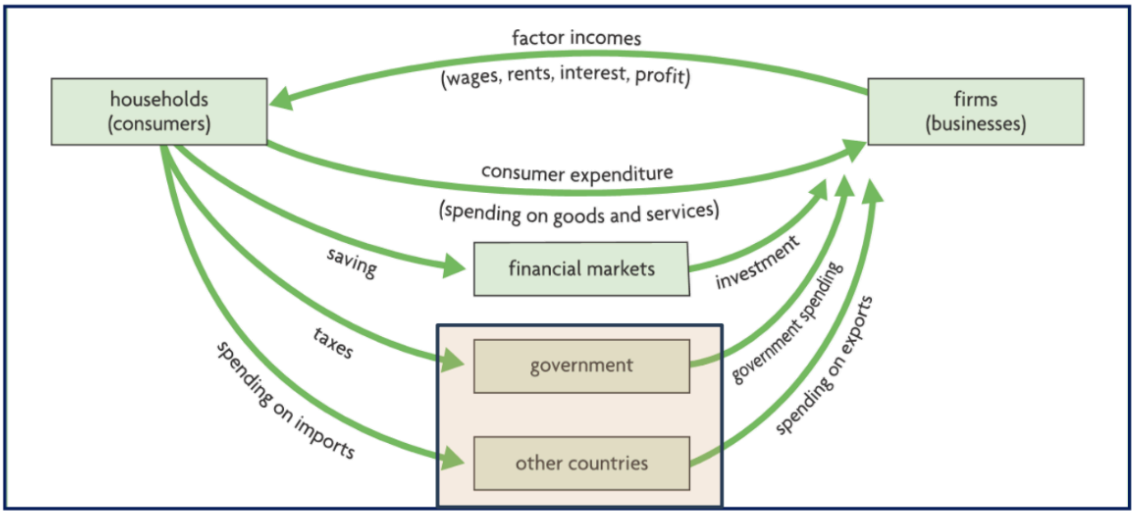
Two-sector circular flow of income model



Clockwise direction (Real Flows)

- flow of factors of production – capital, entrepreneurship, land and labour from households to firms, and
- flow of goods and services from firms to households.

Four-sector circular flow with leakages and injections



- Real world: There are 2 additional sectors i.e. Government and trade (foreign sector)

- Some of the income earned by households must be paid to the government in the form of taxes. Taxes are a form of leakage.
- Government will spend money on a wide range of things - schools, roads, hospitals etc. Government spending is a form of injection.

1.4 The method of economics

Positive vs Normative Statements

-positive statements - true/false based on facts
-normative statements- based on judgements

Role of positive economics

Use of logic - method of reasoning
Use of hypotheses - cause and effect relationship
Ceteris Paribus Assumption - all **other** things are assumed to be constant/no change
Use of empirical evidence - real world evidence, observations and data
Theories in relation to hypotheses - general explanation of a set of interrelated events, usually based on several hypotheses that have been tested successfully
Use of laws - based on theories and are known to be valid given that they have been successfully tested many times
Use of models - used to illustrate theories (or laws)
Importance of refutation - to be able to refute or disprove a hypothesis or theory must be present

Role of normative economics

Value judgement in policy-making - opinions/subjective judgements; important for economic policy-making
Equity and equality -
Equity: being fair or just
Equality: being equal with respect to something

1.5 Brief History of Economic Thought

The Origin of Economic Ideas

18th century: Adam Smith

Adam Smith believes that self-interested behaviour of decision makers without government intervention results in competitive market:

- This will give rise to a more efficient allocation of resources and greater output, thus benefiting the society
- Invisible hand of the market
- Wealth of Nations

19th century: Classical Economics

Utility Theory in Classical Economics

Jeremy Bentham - founder of utilitarianism; *"it is the greatest happiness of the greatest number that is the measure of right and wrong."*

John Stuart Mill - furthered Bentham's ideas by blending them with human rights

The Concept of the Margin

Concept of Utility - satisfaction derived from consuming a good or service

Marginal utility - extra satisfaction derived from consuming an extra unit of the good or service; used as a basis for determining the prices of goods & services *(eg. the extra satisfaction derived from drinking the first can of 100 Plus after playing sports is considered as marginal utility)*

This concept of utility forms from the basis of rational consumer behaviour that is used till today in microeconomics

Alfred Marshall - used these ideas to come up with the law of demand & demand curve that is used till today

Say's Law in Classical Economics

Jean-Baptiste Say (Say's Law) - supply creates its own demand, a theory that claims that the economy will more towards full employment in the absence of government intervention

Marxist Critique of Classical Economics

Karl Marx - capitalism would eventually be replaced by communism because the free market economic system's internal contradictions would lead to its collapse

20th century: Keynesian Revolution

John Maynard Keynes - government intervention is necessary in order to ensure full employment as an economy left on its own will not necessarily lead to full employment.

-> resulted in the emergence of macroeconomic policy

Monetarist/New Classical Counter Revolution - government intervention prevents the economy from reaching a state of full employment on its own; instead a free market economy without the government intervention will tend towards full employment

Milton Friedman - emphasis the role of money in economy; changes in the money supply have major effects on output in the short run & on the price level in the long run

21st century: Behavioural Economics (psychology)

Growing awareness of interdependence between the economic society & the environment & the need to move towards a circular economy

Considerations of psychology into the study of economics:

Alternative ways of understanding how consumers make decisions & based on it, influence their choices towards socially desirable outcomes.

Development of new models regarding sustainability that focus on the close interdependencies between the economy, society & the environment, and the concept of circular economy.

Microeconomics

The Nature of Markets

> buyers and sellers of goods, services or resources are linked to carry out an exchange

> it can be local or international

> the meaning of a competitive market

- Large number of buyers and sellers acting independently
- No one seller has the ability to influence price of the goods and services

- Price of products is determined by interactions between many sellers and buyers, through the forces of demand and supply

Demand

Definition: it is the various quantities of goods and services the consumer is willing and able to buy at different possible prices during a particular time, ceteris paribus. (memorise)

Willing - wants to buy
Able - can afford to buy

*As **prices decrease**, the quantity of the goods demanded **increases.**

The Law of Demand

> Negative (or inverse) relationship between price of a good and its quantity demanded over a particular time period, ceteris paribus.

Individual and Market Demand

Market demand curve

- **Horizontal summation** of the quantities that **each** (all) consumer is willing to buy at each price

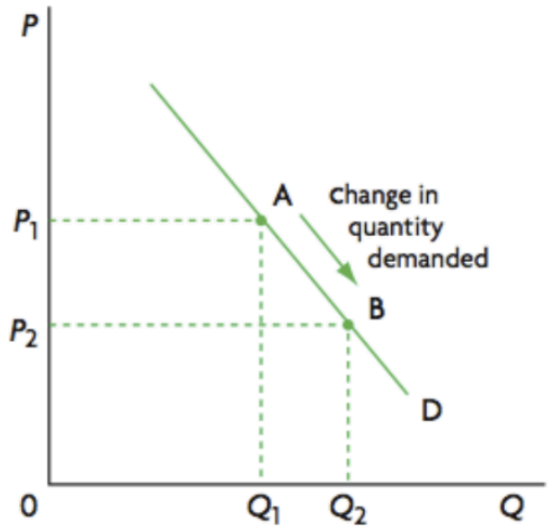
An individual demand curve is a demand curve or schedule of an **individual buyer**

Price changes and Movement along the demand curve

Movements along the demand curve are caused by changes in price of the goods.

A fall in the price of a good from P1 to P2 in the

- Movement along the demand curve from point A to point B
- Increase in quantity demanded from Q1 to Q2



Non-Price Determinants of Demand

Non-price factors - changes in:

- Income (normal vs inferior goods)
- Prices of related goods (substitutes and complements)
- Tastes and preferences
- Number of consumers
- Others
-

-> Shifts in demand curves

Changes in non-price determinants cause a shift of the demand curve.

- Increase in demand
  -> Rightward shift of demand curve from D1 to D2
- Decrease in demand
  -> Leftward shift of the demand curve from D1 to D3

Theory of Demand

Non-Price Determinants of Demand

1. Income

Normal goods VS Inferior goods

(normal goods)

Income increase = higher purchasing power

=> for a given price, P, increase in demand

=> demand curve shifts to the right (D0 to D1)

(inferior goods)

Income increase = higher purchasing power

=> for a given price, P, fall in demand
=> demand curve shifts to the left (D1 to D0)

2. Tastes and preferences
-more fashionable -> influence consumers to buy the product
=> for a given price, P, increase demand of the good, ceteris paribus

3. Price of related goods

A. Substitutes VS B. Complements

Reasons for the downward sloping demand curve (HL only)

Law of diminishing marginal utility

2.3 Supply

Supply
> The supply of an individual firm indicates the various qualities of a good (or a service) a firm is willing and able to produce and supply to the market for sale at different possible prices, during a particular time period, ceteris paribus.

Law of Supply
> There is a positive relationship between the quantity supplied and its price, ceteris paribus.

Individual and Market supply
>an individual supply curve is a supply curve or schedule of an individual seller
>a market supply curve is the sum of the amount supplied at each possible price by all the individual suppliers.

Changes in Price and Movement along the supply curve

>a movement along the supply curve for a good can be caused only by a change in the price of the good
>according to the law of supply, if price increases from P1 to P2, quantity supplied will increase resulting in upward movement from B to A
>however, if price decreases from P2 to P1, quantity supplied will decrease from ()

Non-price determinants of supply

>changes in non-price determinants will cause a SHIFT of the entire supply curve to the left or the right
>an increase in supply will cause the supply curve to shift to the right ()

1. Costs of factors of production
   > increase in prices of factors of production -> increase in cost of production -> production becomes less profitable -> firms produce less -> fall in supply

2. Technology
   > improvement in technology -> fall in cost of production -> production becomes more profitable -> firms produce more -> increase in supply

3. Price of related goods
   > competitive supply - the firm produces one or the other of 2 goods as they compete for the same resources, eg. corn and wheat which use the same resources - if the price of corn increases (due to higher demand) -> more profitable to produce corn -> fall in the supply of wheat
   > joint supply - production of one good is derived from the production of the other, eg. butter and whole milk - increase in the price of whole milk (due to higher demand) -> more whole milk produced as more profitable -> increase in the supply of butter which is derived from whole milk.

Assumptions underlying the law of supply [HL only]

Short run vs Long run

>Short run is the period of time when at least one input cannot be varied.
>In the long run, all inputs can be varied.

Total Product

()

Marginal Product (MP)

Marginal product is the extra output that is produced by using an extra unit of the variable factor : (insert formula)

Law of diminishing marginal returns [HL only]

according to the law of diminishing marginal returns,
>as more and more units of a variable input (eg. labour) are added to at least one fixed input (eg. land),
>the MP of the variable input at first increases, but there comes a point when it begins to decrease.
> the relationship assumes that the fixed input(s) and technology of production are fixed.

There are two types of costs in the short run [HL only]

Fixed cost: Costs of a firm that do not vary with output (eg. rental payments, property taxes, insurance premiums and insurance on loans)
Variable costs: costs of a firm that change with output (eg. wages, material costs). In the SR, output can only be increased by increasing variable factors.

Marginal cost [HL only]

Marginal cost (MC) is the extra or additional cost of producing one more unit of output.
It tells us by how much total costs increase if there is an increase in output by one unit. :
(insert formula)

(class; 4/3/25) 2.4

equilibrium price is the point on the PPC in which the lines representing supply and demand intersect.

equilibrium price

-the quantity that the consumer is willing and able to buy is equal to the quantity that the firms are willing and able to sell.

When the quantity demanded is less than the quantity that is available to be sold, there is a shortage.

shortage-> upward pressure on price
Increasing price - decrease in quantity & increase in supply UNTIL the shortage is eliminated at the higher price of price of equilibrium.

Surplus -> downward pressure on price
Decreasing price - quantity demanded will increase & quantity supplied will decrease UNTIL the surplus is eliminated at the lower price of equilibrium.

A decrease in supply will also lead to a shortage and therefore, an upward pressure on price.

Effect of changes in Supply in Market Equilibrium

The role of Price Mechanism and Market Efficiency

- The price mechanism uses prices to allocate resources. Prices provide signals and incentives. As signals, prices communicate information to the decision makers (both consumers and producers). As incentives, prices motivate decision makers to respond to the information.
- What to produce - firms produce only those goods consumers are willing and able to buy; consumers buy only those goods producers are willing and able to supply
- How to produce (resource allocation) - firms use resources and technologies in their production process that they are willing and able to pay for

Economic Efficiency (or Pareto Optimality)

Definition: Allocative efficiency is achieved when no one can become better off in terms of increasing their benefit from consumption without someone else becoming worse off.

- It answers the *What to produce question* in the best possible way by producing the optimal combination of goods

Productive Efficiency

Definition: Productive efficiency refers to producing goods by using the fewest possible resources (producing at the lowest possible cost)

- It answers the *How to produce question* in the best possible way

Consumer Surplus and Producer Surplus