

Economics Notes

(Week 1)

Economics is the study of how society manages and distributes its scarce resources. It dates back to the 18th C when Adam Smith published *The Wealth of Nations* in 1776. It is necessary because mismanagement of scarcity = wasted value.

Microeconomics: Looks at individuals within the economy (people or businesses) and how alternative uses and allocations of resources (e.g. pricing and markets)

Macroeconomics: Looks at the economy of a whole (e.g. inflation, unemployment, economic growth etc.)

Ten lessons from economics		
1. People face trade-offs	How people make decisions	MICRO
2. The cost of something is what you give up to get it		
3. Rational people think at the margin		
4. People respond to incentives		
5. Trade can make every one better off	How people interact	1. time, money etc. 2. i.e. opportunity cost 3. marginal change (incremental changes rather than all or nothing e.g. study an extra half an hour or watch tv vs not study at all and just watch tv). Produces a marginal cost (MC) and marginal benefit (MB). If MB>MC than its a better option 4. Can be a reward or a punishment
6. Markets are a usually a good way to organise economic activity		
7. Governments can sometimes improve market outcomes		
8. A country's standard of living depends on its ability to produce goods and services	How the economy as a whole works	
9. Prices rise when governments print too much money		
10. Society faces a short-run trade off between inflation and unemployment		

The analysis in change in equilibrium is called comparative statistics and is done as follows:

1. Decide whether the exogenous event shifts the S or D curve (or perhaps both).
2. Decide in which direction the curve shifts.
3. Use the curves to see how the shift changes the equilibrium (endogenous change).

Rationing function of prices: Prices are a mechanism for allocating scarce resources:

- Any buyer/seller who is willing and able to buy/produce and sell the good at the equilibrium price, will do so.

Elasticity: A measure of how much a variable will respond to a change in another variable. It is a measure of sensitivity to changes in price. It is calculated as the absolute values of percentage change in quantity supplied/demanded divided by the percentage change in price.

- It is related to the gradient of the curves (lower gradient = more elastic and vice versa)

$$\text{Price elasticity of demand} = \frac{\text{Percentage change in quantity demanded}}{\text{Percentage change in price}}$$

e.g. Suppose the price elasticity of demand for wine is equal to 3. If price of wine increases by 5%, quantity demanded of wine will decrease by 15%.

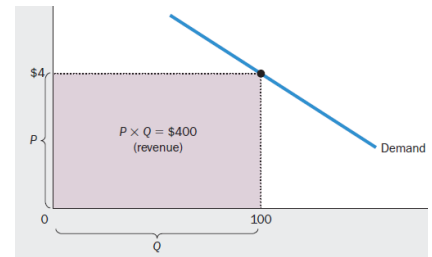
If elasticity > 1, it is said to be elastic (responsive to change in price)

If elasticity = 1, it is said to have unitary elasticity (proportional change compared to price)

If elasticity < 1, it is said to be inelastic (unresponsive to change in price)

Total Revenue (= Price (P) * Quantity (Q))

- If D is inelastic and price increases, TR increases
- If D is elastic and price increases, TR decreases
- If D has unit elasticity and price changes, TR is unaffected
- *Income* elasticity of demand measures how much the quantity demanded of a good responds to a change in consumers' income.



$$\text{Income elasticity of demand} = \frac{\text{Percentage change in quantity demanded}}{\text{Percentage change in Income}}$$

NB: The denominator of the two 'changes' is the midpoint of the two points so that the final elasticity is the same regardless of if you move up or down the curve (i.e. from A to B or B to A)

$$\text{Midpoint method for elasticity} = \frac{\frac{Q_2 - Q_1}{\left(\frac{Q_2 + Q_1}{2}\right)}}{\frac{P_2 - P_1}{\left(\frac{P_2 + P_1}{2}\right)}}$$