

# ECC1000 Semester 2

## Week 1: Markets & Trade

### Topic 1: Markets & Trade

- Introduction to microeconomics, opportunity cost, reasons for trade, absolute & comparative advantage

### Markets & Trade

**Economics:** is the study of how society manages its scarce resources

**Microeconomics:** focuses on the individual parts of the economy

- How households & firms make decisions & how they interact in specific markets

**Macroeconomics:** looks at the economy as a whole

- Economy-wide phenomena, including inflation, unemployment & economic growth

### Why Microeconomics

- Microeconomics analyses trade in markets & other institutions
- **Trade:** is any exchange (for money, for other goods e.g. barter, for satisfaction)
  - Focus of this course is on trade in markets
- **Market:** is any group of arms-length trades that are of interest
  - Markets are everywhere
  - They are the most important social institution in the world
  - They are so important that we take them for granted

### Three Basic Principles of Individual Decision Making

#### Marginal v Total Analysis

- **Total Analysis:** should you do something at all?
- **Marginal Analysis:** should you do a bit more or a bit less?
- E.g. run a charter flight (refer to ppt. 1)
  - It costs 20,000 to hire, fuel & crew a plane with 100 seats to Bali & back
- Both total & marginal analysis are important
- A critical skill in business is knowing when & where to use this analysis
- Market prices & sales are determined by marginal decisions (entry & exit decisions are determined by 'total analysis')

#### Trade Offs

- People face trade-offs
- To get one thing, we usually have to give up another thing

The efficiency versus equity trade-off	
<b>Efficiency:</b> society gets the most that it can from its scarce resources	<b>Equity:</b> the benefits of those resources are distributed fairly among the members of society

## Trade

**Trade:** a voluntary exchange between two or more people for money, other good &/or satisfaction, that makes all participants better off

### Benefits of Trade

- More access to more goods & services
- Minimised opportunity cost
- Maximised trade & productivity

### Why do People Trade?

1. **Different endowments:** if individuals possess different g/s that another individual wants, a trade off can take place
2. **Fixed cost of tasks (specialisation):** the cost of specialising in one trade is more productive than individuals investing in doing all tasks themselves
3. **Comparative advantage:** the ability of a firm or individual to produce g/s with a lower opportunity cost in comparison to other firms or individuals
4. **Absolute advantage:** the ability of a firm or individual to produce g/s more efficiently in comparison to another firm or individual

## Opportunity Cost

**Opportunity Cost:** the next best alternative foregone when a decision is made to allocate resources in a particular way

- The idea of opportunity cost, is to go with making a decision whereby the opportunity cost is minimised
- Lowest opportunity cost means comparative advantage is gained

Q1) If Becky can make 1kg of potatoes in 6 hours and 1kg of tomatoes in 3 hours and Tom can make 1 kg of potatoes in 8 hours and 1kg of tomatoes in 2 hours. Who has the lowest opportunity cost in each good's production and absolute advantage.

OPPORTUNITY COST:

	POTATOES	TOMATOES
TOM	$\frac{1}{2}$	2
BECKY	$\frac{1}{4}$	4

Becky has the lowest opportunity cost of making potatoes at  $\frac{1}{4}$  of a kg of tomatoes, and Tom has the lowest opportunity cost of making tomatoes foregoing 2kg of potatoes.

**Comparative Advantage:** the ability to produce a g/s with the lowest opportunity cost in relation to a g/s

- If two people have different opportunity costs, then specialisation in production & trade can make them both better off
- If Tom has a lower opportunity cost than Becky when producing one kilogram of tomatoes, then we say that Tom has a comparative advantage in tomato production

- There are gain from trade if each person specialises in production according to comparative advantage
- Note that if Tom has a comparative advantage in producing tomatoes then Becky must have a comparative advantage in producing potatoes

**Absolute Advantage:** is producing the maximum quantity of g/s than a competitor

- If Becky requires less inputs to produce one kilogram of tomatoes than Tom, then we say that Becky has an absolute advantage in tomato production
- Tom has absolute advantage in making potatoes and Becky has absolute advantage in producing tomatoes
- Absolute advantage has nothing to do with potential gains from trade

ABSOLUTE ADVANTAGE:

	POTATOES	TOMATOES
TOM	1/6	1/3
BECKY	1/8	1/2

**Specialisation:** division of labour separated into focusing all of their efforts into one task, rather than multiple – according to lower opportunity costs in production, can make both parties better off

Q2) If Tom can produce 6kg of potatoes in 1 hour and 3kg of tomatoes in 1 hour, and Becky can produce 3kg of potatoes in 1 hour and 6kg of tomatoes in 1 hour – However then they decide to specialise. Meaning Tom specialises in using all of his time to make potatoes and Becky uses all of her time to make tomatoes.

ORIGINAL PRODUCTION

	POTATOES	TOMATOES
TOM	6	6
BECKY	3	3
TOTAL	9	9

SPECIALISATION:

	POTATOES	TOMATOES
TOM	12kg	0
BECKY	0	12kg
TOTAL	12	12

By specialising according to opportunity cost, people can produce more. Then by trading they can all be better off.

# ECC1000 Semester 2

## Week 2: Markets & Trade

### Topic 1: Markets & Trade

- Reasons for trade – comparative advantage, production possibility frontier & role of prices in coordinating trade

## Markets & Trade

### Relative Prices

**Relative Prices:** the price of one g/s in comparison to the price of another g/s, expressed in dollar value & is an indicator of one unit of a g/s in relation to another unit of an alternative g/s

- Trade is determined by relative prices

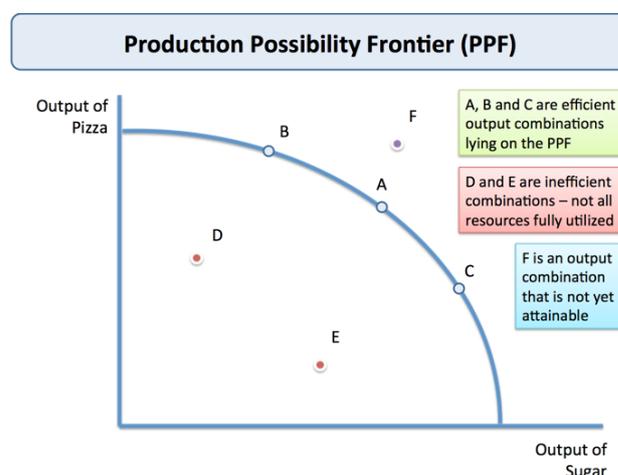
**Price Mechanism:** how the forces of demand & supply interact to determine prices & quantities of goods & services offered for sale in a perfectly competitive market

By specialising & trading according to comparative advantage individuals - & countries as a whole – can be better off

### Production Possibility Frontier

**Production Possibility Frontier:** given the level of inputs, the frontier shows the level of potential outputs for a person/group/country

- Shows the maximum amount of goods & services we can produce
- Production is technically efficient if we are operating on the PPF
- **Autarky:** what a person or country chooses to do in the absence of trade



# ECC1000 Semester 2

## Week 3: Perfectly Competitive Markets – Supply & Demand

### Topic 2: Competitive Market Model

- Demand, supply & equilibrium
- Introduction to competitive market model – demand, supply & equilibrium
- Applications of competitive market model

### Perfectly Competitive Model

**Perfectly Competitive Model:** a simplified model of the real world to capture insight into how the world works

- Made on strong assumptions about how people interact
- Assumptions made include many people buying & selling and all the people taking prices as given
- Has two key elements: demand & supply

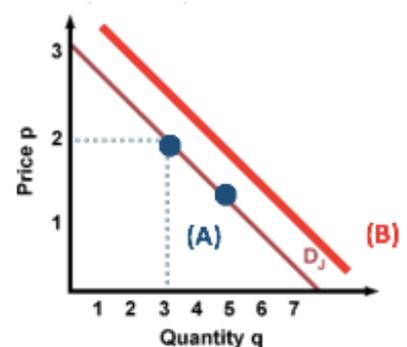
### Demand

**Demand:** a person's demand curve for a product shows, given the price of the product, how much of the product that person would like to buy, holding all other relevant factors fixed

- Usually slopes down
- Can be represented as a table, graph or mathematically

**Shifting the Demand Curve (A):** occurs when something other than price changes

- Fashion
- Price of substitutes
- Price of compliments
- Interest rates
- Disposable income



**Moving the Demand Curve (B):** occurs when price changes

**Substitutes:** two goods are substitutes if a rise in the price of one good leads to a rise in the quantity demanded of the other good (elasticity  $< 0$ )

**Complements:** two goods are complements if a rise in the price of one good leads to a fall in the quantity demanded of the other good (elasticity  $> 0$ )

**Normal:** a good is 'normal' if the quantity a person demands increases as income increases (e.g. luxury cars) (elasticity  $> 0$ )

**Inferior:** a good is 'inferior' if the quantity a person demands falls as income increases (e.g. cheap transport) (elasticity  $< 0$ )

**Market Demand:** the market demand curve is given by the horizontal sum of the individual demand curves

- For a given price, it tells us the total amount of the product all people would like to buy holding everything else fixed

## Supply

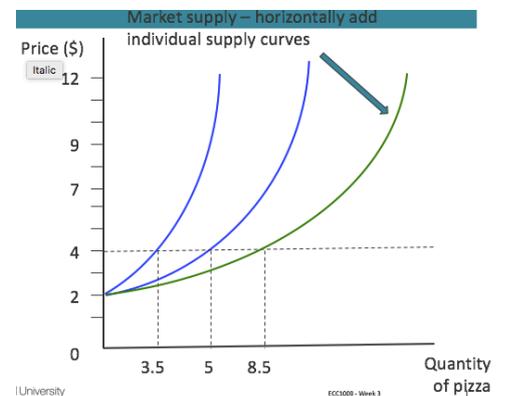
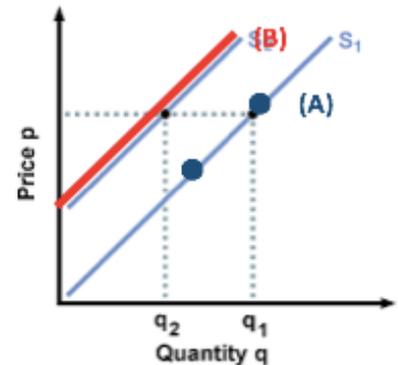
**Individual Supply:** an individual's supply curve tells us, given the price, how much of the product the person would like to sell, holding everything else constant (e.g. input prices, technology & expectations)

**Shifting the Supply Curve (B):** occurs when something other than price changes

- Cost of production
- Supply shocks
- Price of other g/s
- Taxes
- Interest rates

**Moving the Supply Curve (A):** occurs when price changes

**Market Supply:** horizontally add individual supply curves



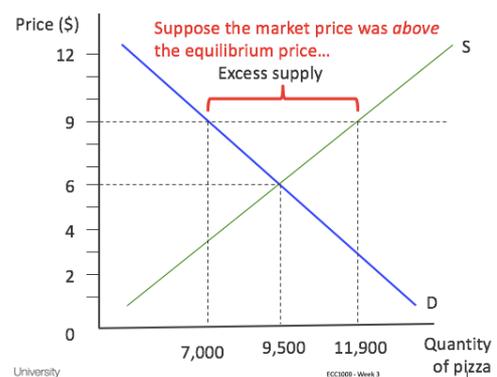
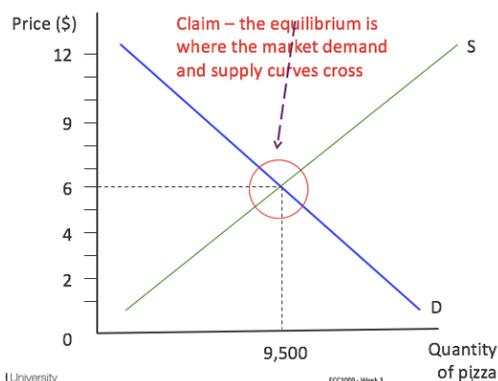
## Equilibrium

**Equilibrium:** an economic system is in equilibrium when, given their individual choices & options, each person can achieve his or her planned outcomes & no-one wants to change his or her plans

- Equilibrium is where the market demand & supply curves cross

If price is above the equilibrium price, then the quantity that producers would like to sell exceeds the quantity that consumers would like to buy

- There is excess supply of pizza, & expect the price to fall

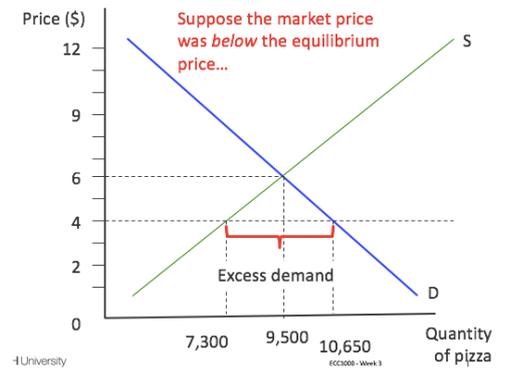


If price is below the equilibrium price, then the quantity that producers would like to sell is less than the quantity that consumers would like to buy

- There is excess demand of pizza, & expect the price to rise

**Consumer Surplus:** when demand is greater than supply

**Consumer Shortage:** when supply is greater than demand



### Equilibrium Price

- Where market demand intersects market supply ( $P^*$ )
- At a higher price we have excess supply (& expect price to fall)
- At a lower price we have excess demand (& expect price to rise)
- So we think that equilibrium price is a good predictor of the actual market price WHEN our assumptions are reasonable