



## **ECONOMICS**

### **Bridging Study Pack**

**Dundee College**

## **Table of Contents**

Reading list and sources.....	page 3
Guide to illustrations.....	page 4
Introduction to economics.....	page 5
The economic problem.....	page 6
Demand.....	page 7
Supply.....	page 8
Price elasticity of demand.....	page 10
Costs.....	page 12
Economies and diseconomies of scale.....	page 14
Perfect competition.....	page 16
Monopoly.....	page 18
Oligopoly.....	page 20
National income.....	page 22
Aggregate demand.....	page 23
The multiplier effect.....	page 23
Inflation.....	page 24
Unemployment.....	page 27
Taxation.....	page 31
Keynesian demand management.....	page 33
The trade cycle.....	page 34
Fiscal policy.....	page 35
Monetary policy.....	page 37
Answers to activities.....	page 39
Acknowledgements.....	page 40

## **Reading List and Sources**

Economics – Alain Anderton, 4<sup>th</sup> edition

Introductory Economics – G.F. Stanlake



[www.tutor2u.net](http://www.tutor2u.net)

[www.bized.co.uk](http://www.bized.co.uk)

[www.bbc.co.uk/news](http://www.bbc.co.uk/news) (Business/economy section)

## **Guide to Illustrations**

This is a guide to the illustrations that will be used throughout this unit.

	This is an activity to reinforce your learning.
	This is a web link that you may find useful and interesting.

## **Introduction to Economics**

Economics is the study of scarce resources and how these resources are allocated in society.

Stiglitz J.E. and Driffill J. define economics in Economics (2000) as “The social science that studies how individuals, firms, governments and other organisations make choices and how these choices determine the way the resources of society are used.”

Economics is divided into two main categories: Micro Economics and Macro Economics.

Micro economics deals mostly with individual markets and is concerned with determination of prices, demand, supply, costs of firms, market behaviour and output of firms.

Macro economics deals with the economy as a whole and is concerned with inflation, unemployment and government economic policies.

This unit will cover both micro economics and macro economics.

## The Economic Problem

Economics is mostly concerned with the allocation of scarce resources to satisfy human needs and wants. A need is something for survival such as food, water and shelter. All other items are wants. In other words we do not require them for survival, they are luxuries.

Our needs and wants are unlimited but the resources to satisfy them are limited in supply. For example, if everyone in society chose to eat five apples everyday then there would not be enough apples produced to satisfy everyone's wants.

These economics resources are known as the Factors of Production and are:

1. **Land** – This includes land, forest, minerals and raw materials.
2. **Labour** – This is the workforce made up of those who are able to work for firms.
3. **Capital** – This includes equipment and machinery used in production and money invested into firms to carry out production.
4. **Enterprise** – This is the entrepreneur who brings the other three factors together to produce a good or a service.

Because all of these factors are limited in supply, economics choices must be made in order for them to be allocated effectively. For example, is an area of land better used for the benefit of society for building a new school or for building a new supermarket on? The land cannot be used for both.

The effect of choosing to allocate a resource is known as the Opportunity Cost. Opportunity cost is defined as “The sacrifice of the next most desired alternative” in other words, by allocating the piece of land to building the school we have “given up” building the supermarket. Not building the supermarket is the opportunity cost of building the school.

Take, for example, an individual who has a limited weekly income. A new pair of shoes will be the opportunity cost of the weekly food shopping as the limited budget will not stretch to both. Individuals, firms and government must all make economic decisions based on this concept.



You can read more about this topic at [www.tutor2u.net](http://www.tutor2u.net). Click on Economics AS/A2 in the revision notes section.



### Activity 1

Identify some of your needs and wants. Explain for each why they are either a need or a want.

## Demand

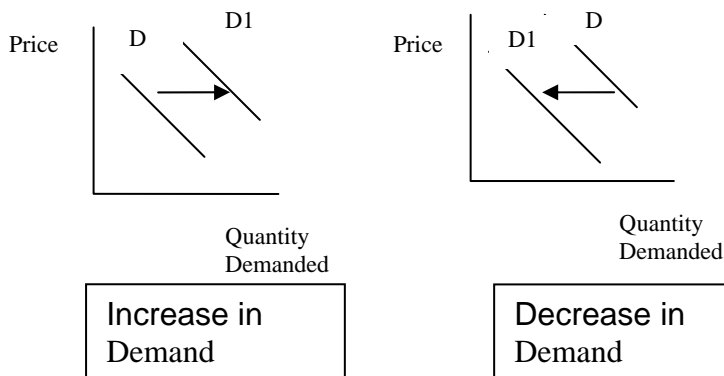
Demand is defined as the desire to possess a good or a service coupled with a willingness and ability to pay a certain price for it.

Individual demand is the demand of just one consumer whereas market demand is the total demand of all consumers for a good or service.

There are many factors which will affect the demand for a good or service:

1. **Income** – higher incomes result in increased demand and lower incomes result in decreased demand.
2. **Fashion and taste** – Increased popularity of a good or service results in increased demand and a change in taste against the good or service results in decreased demand.
3. **Advertising / Publicity** – An increase in awareness of a good or service will increase demand whereas bad publicity may decrease demand.
4. **Size of Population** – A larger population will result in an increase in demand as there are more people available to purchase the good or service.
5. **Price of Substitute Goods** – An increase in the price of a substitute good, for example butter, will cause an increase in the demand for margarine.
6. **Complementary Goods** – These are goods/services that we use together. For example, a decrease in the price of DVD players will result in an increase in demand for DVDs.

The rule of demand states that more will be demanded at a lower price and less demanded at a higher price.



You can read more about demand at [www.tutor2u.net](http://www.tutor2u.net).



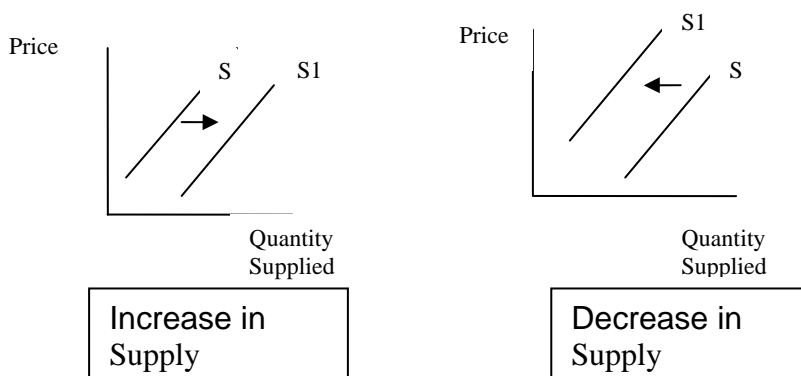
## Supply

Supply is defined as the amount of a good or service that a producer is willing to produce and sell at different prices.

Producers are willing to supply more of a product or service at higher prices as this will enable them to make greater profit. They will supply less at lower prices as this may result in less profit.

As with demand, there are a number of factors that will affect the supply of a good or service:

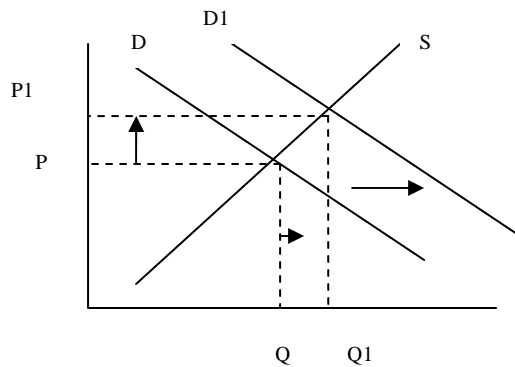
1. **Changes in the costs of production** – Lower costs such as cheaper raw materials will result in increased supply whereas increased costs of production will result in a decrease in supply.
2. **Taxes and subsidies** – An increase in tax such as corporation tax, which is a tax on profits, will result in a decrease in supply and a subsidy, which is financial assistance to a firm, will result in an increase in supply.
3. **Technology** – Improved technology, such as computerisation or better machinery, will result in an increase in supply.
4. **Weather** – Weather conditions can affect the supply of goods such as agricultural goods. Good weather will increase supply whereas bad weather conditions may destroy crops and decrease their supply.
5. **Joint Supply** – These are goods which are produced together in the same proportion. One is usually a by-product of the other. For example if there is an increase in the supply of beef, there will be an equal supply in the production of cow hide to produce leather.
6. **Competitive Supply** – Certain producers have a choice of producing more of one good or another. For example if a farmer chooses to grow more wheat in a field then the amount of barley that the farmer can grow in the same field will decrease.



You can read more about supply at [www.tutor2u.net](http://www.tutor2u.net).

The effects of a change in demand and supply can be shown on a graph to determine the overall position of a product or service.

Consider the market for the Apple ipod as a result of an increase in its popularity.



An increase in popularity of the ipod will cause an increase in demand from  $D$  to  $D1$  as more consumers purchase it. This will cause supply to expand from  $Q$  to  $Q1$  as Apple increase their production of the ipod to keep up with the high consumer demand. Price rises from  $P$  to  $P1$  as Apple capitalise on the high demand to increase profits.

## Price Elasticity of Demand

Price elasticity of demand is defined as the relationship between price and the quantity demanded, in other words, the extent to which demand increases as the price falls or the extent to which quantity demanded decreases as the price rises.

There are three main categories of price elasticity of demand: Inelastic, Elastic and Unitary.

**Inelastic** – This is where the percentage change in quantity demanded is less than the percentage change in price. This shows that demand has changed proportionately less than price. A rise in price will, therefore lead to a rise in revenue and a fall in price will lead to a fall in revenue. Inelastic goods and services are usually necessities.

**Elastic** – This is where the percentage change in the quantity demanded is greater than the change in price. A rise in price will therefore lead to a fall in total revenue and a fall in price will lead to a rise in total revenue. Elastic goods tend to be luxuries or non-essential items.

**Unitary** – This is where a rise or fall in price will have no effect on total revenue.

Factors affecting the price elasticity of demand of a product or service include:

- **Availability of substitutes** – where there are few close substitutes available for a product, demand will tend to be more inelastic. Demand for petrol will be inelastic as it is a necessity for car users and there is no substitute, unless the driver switches to a diesel car.
- **Habit** – Some goods such as cigarettes are habit forming goods and demand for these goods is inelastic as they are a necessity to the user.
- **Luxury versus necessity** – Certain goods such as food and heating are bought regardless of their price as they are necessities and demand for them is inelastic. Foreign holidays and designer clothing are luxuries and therefore demand for them is elastic.

## Users of Elasticity

1. **Producers** – Producers need to know how price increases will affect demand and total revenue.
2. **Government** – Governments tend to tax goods and services that are inelastic in demand as they know that if they increase tax on, for example cigarettes and petrol, they will have increased taxation revenue.

3. **Consumers** – Without perhaps fully realising that they are using the concept, consumers are applying elasticity of demand in making decisions about how they spend their income.



You can read more about price elasticity of demand as well as the concepts of price elasticity of supply and income elasticity of demand at [www.tutor2u.net](http://www.tutor2u.net)

## **Costs**

Economists examine two different types of costs: fixed costs and variable costs.

### **Fixed Costs (FC)**

A fixed cost is a cost that does not change with increased or decreased levels of output. For example, rent on a building or factory owned by a firm would be classed as a fixed cost. If the firm increases its level of production, its rent would not increase or, on the other hand, if the firm decreased its level of production, its rent would not decrease.

### **Variable Costs (VC)**

A variable cost is a cost that does change with increased or decreased levels of output. For example, raw materials used in the production of a product would be classed as a variable cost. If a firm making strawberry jam was to increase its levels of jam production, it would require more strawberries (a raw material) which would cost more money and if it decreased its level of strawberry jam production, it would require fewer strawberries which would cost it less money.

### **Total Costs (TC)**

Total costs are the sum of fixed and variable costs to a firm.

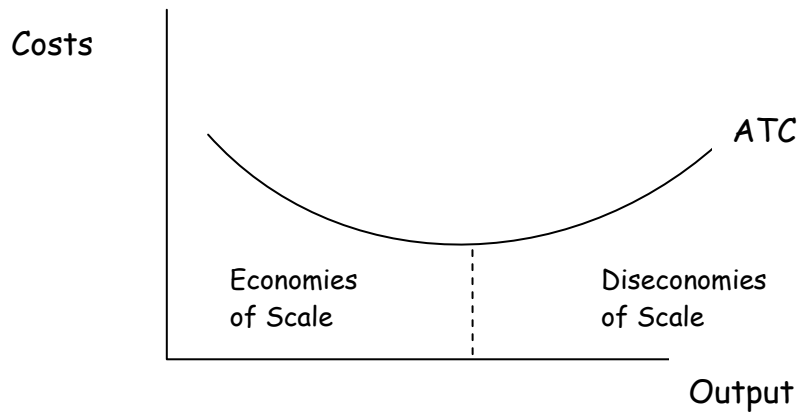
## **Average Costs**

It is difficult to compare the Total Costs of two or more firms due to a number of factors which make these comparisons unfair, for example, the size of each firm, the total number of employees, the number of machines, etc. In order to fairly compare, costs are averaged in order to compare like with like.

### **Average Total Cost (ATC)**

These are Total Costs averaged by the output of the firm.

When output is low, Average Total Costs are high as fixed costs are being spread over a small number of goods being produced. However, as output increases, ATC will decrease as the Fixed Costs are being spread over an increased number of goods being produced.



## **Revenues**

### **Total Revenue (TR)**

The Total Revenue is the money received by the firm for the sales of its product.

### **Profit**

Profit is calculated by subtracting Total Costs of production from the Total Revenue of selling the product.

### **Optimum Output**

Optimum output occurs where ATC is at its lowest.

### **Profit Maximisation**

This occurs where marginal costs = marginal revenues



Additional information is available on this topic at [www.tutor2u.net](http://www.tutor2u.net)

## **Economies and Diseconomies of Scale**

### **Economies of Scale**

Economies of scale are the advantages of large scale production that lead to lower average costs.

The total costs of a large firm are greater than those of a small firm, for example a larger workforce, higher rent, more raw materials and supplies, more expensive equipment, etc. However, a large firm's average costs per unit are much lower than a smaller firm.

Some examples of economies of scale are as follows:

1. A large firm can make more effective use of equipment such as machinery, by operating, for example, 24 hours per day. By using equipment to its full capacity, average costs will be lower.
2. A larger firm can buy raw materials and stock in bulk and can therefore obtain these materials at a lower price.
3. Because these large firms are buying in bulk, they can have these materials delivered in bulk, therefore reducing transportation costs.
4. Large firms are in a position to employ specialist staff, therefore utilising the principle of the division of labour. A specialist may then contribute to lowering average costs. For example, a specialist member of the production team may reduce production wastage and therefore lower the cost of materials or a specialist in the purchasing department may negotiate better deals for raw materials, therefore reducing costs of production.

### **Diseconomies of Scale**

Diseconomies of scale are the disadvantages of larger scale production. There is an optimum size for any organisation after which diseconomies of scale will start to emerge.

1. In a larger firm with many levels of staff, communication between departments can become more difficult. This may result in information passed down from the top not reaching the bottom levels of the firm, or becoming distorted.
2. In a large firm that employs specialised staff, workers who are doing the same job day in day out, may become bored with their job and leave. This leads to a high turnover of staff and an increase in costs as jobs will have to be advertised and filled and the new employees will have to be trained.

3. A supplier of materials to a large firm may not be able to meet increased demand for supplies. As a result, the firm may have to look elsewhere for a new supplier, and, as a result, may have to pay increased prices and increased transportation costs.
4. Machinery and equipment in a larger firm which is being used 24 hours per day may not be serviced properly and may be more prone to breaking down. This will increase costs as production will be slowed down and the firm will have to meet the cost of repairs.



You can read more on this topic at [www.tutor2u.net](http://www.tutor2u.net)

## **Perfect Competition**

A perfectly competitive market, in practice, could not exist. It is only theoretical as a market in real life could never fulfil all of the following conditions.

### **Conditions of Perfect Competition**

#### **1. Large Number of Sellers and Buyers**

Within perfect competition, there are a large number of firms which exist. As each firm only has a very small, almost insignificant share of the market, it does not have any control over the market or over the price. It is a **price taker**.

In addition, there are also a large number of buyers in the market.

#### **2. Homogeneous Products**

Each firm produces goods which are perfect substitutes for that of another firm (homogeneous). As a result, customers are unconcerned about which firm that they buy from as each firm sells an identical product. Firms do not need to use persuasive advertising or gimmicks to generate sales.

#### **3. Each Buyer and Seller has Perfect Knowledge and Information**

Firms in perfect competition will be aware of any changes in the market place such as a competitor changing price, and would be able to react on this immediately. In real life, however, it would be difficult for a firm to follow exactly what the competition is doing. Consumers also have perfect knowledge regarding products and prices.

#### **4. No Barriers to Entering or Exiting the Market**

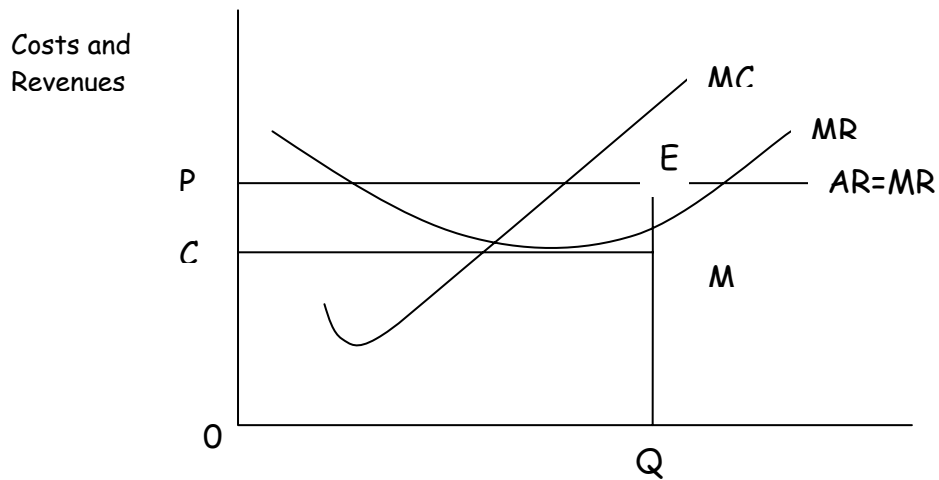
There is perfect mobility which means that firms are free to enter or leave the industry as they wish.

There are no barriers from entering or exiting the market and as a result, firms are able to react to market signals.

#### **5. Firms aim to Maximise Profits**

Firms in perfect competition will aim for profit maximisation.

## The Perfectly Competitive Firm in the Short Run



Total Cost = OCMQ  
Total Revenue = OPEQ  
Profit = CPEM

In perfect competition, firms aim for profit maximisation. This occurs where MC (Marginal Cost) = MR (Marginal Revenue).

If MR is greater than MC, this adds more to revenue and profits increase.

If MR is less than MC this adds more to costs and profits fall.

Under perfect competition, price will remain constant over the output range.

## **Monopoly**

Monopoly is a market structure where there is one firm who has control over the market for a product or service by being the sole supplier.

Think of the board game Monopoly. The aim of the game is to buy (or take over) as much of the property on the board as possible and therefore to end up as the sole “supplier”.

### **Conditions of Monopoly**

#### **1. Sole Producer (Supplier) of the Good or Service**

A monopoly will be the sole supplier of a good or service and as a result will produce 100% of the industry’s output. As a result, a monopoly has considerable power over the price set for the good.

#### **It is a price maker.**

A monopoly will also control the level of output of a good.

#### **2. The Good has no Close Substitutes**

A monopoly will produce a good which has no close substitutes. This gives the firm power over its customers because if they wish to purchase the good, they have no alternative but to purchase from the monopoly or do without.

#### **3. Barriers to Entry**

In order to protect its monopoly position, there are barriers to entering the market which a monopoly will use to prevent competition:

##### **a. Statutory Monopolies**

There are monopolies which are protected by law. The Post Office in the UK is a statutory monopoly protected by Government legislation.

##### **b. Patent Rights / High Set up Costs**

Firms which have high set up costs or high research and development costs will want to remain the sole producer of a good.

For example, a drug company may have spent large amounts of capital on researching and developing a new drug. The firm will want to patent the drug in order to prevent other companies from copying it and making profit from selling it.

##### **c. Agreements Between Producers (Cartels)**

Producers can form a cartel, which is a group of producers who have grouped together in order to restrict competition in the market.

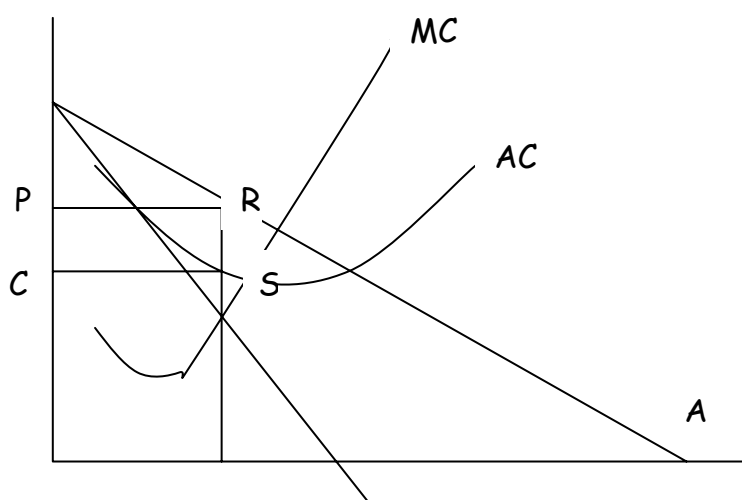
The Organisation of Petroleum Exporting Countries (OPEC) and the DeBeers diamond cartel are two of the most famous cartels in the world.

#### d. Tariffs and Quotas

A tariff is a tax placed on a foreign good by the government of the country that the good is destined for export to. The exporting firm will pay the tariff (usually a “per unit” charge) to the government of the destination country in order for the good to be allowed entry to that country. As a result of this charge, the producer will have to increase the price of the good in order to remain profitable. This will increase the price of the foreign good in the destination country and consumers in the destination country will purchase the “cheaper” home produced good.

This practice allows the home monopoly to keep foreign competition at bay.

A quota, unlike a tariff, is a restrictive amount of foreign goods being permitted entry into a country. This restriction will make the foreign good scarce with consumers in the home market purchasing the home produced good as an alternative.



The monopolist is a short run profit maximiser, operating at a profit maximising level of output where  $MC=MR$ .

The high price charged by the monopolist will result in supernormal profit being earned. This is shown on the diagram as the area PRSC.

A monopoly will be regulated by the Government or by Government agencies to ensure that monopoly power does not lead to anti-competitive practices or to consumer exploitation, such as high prices.

The Competition Commission was set up by the Competition Act 1998. It is a public body and was previously known as The Monopolies and Mergers Commission.

## **Oligopoly**

Oligopoly is a market structure where there are a few firms that dominate the market.

### **Features of Oligopoly**

#### **1. A Few Large Firms Dominate the Market**

Each of these large firms has significant market power and a significant share of the market.

These firms watch the market behaviour of each other very closely in terms of variables such as price, advertising, product design, etc., and will anticipate or react to the next movement of a rival firm.

This behaviour can be modelled through the use of Games Theory, where each firm recognises its interdependence to others and where each firm must take into account how other firms in the market will react when making price and output decisions.

#### **2. Product Differentiation**

Products (and services) produced by oligopolistic firms do have substitutes. However, a firm will use non-price competition methods in order to make their product or service stand out from the others.

#### ***Non – price competition methods include:***

- Mass media advertising and marketing
- Loyalty cards
- Home delivery
- Extended opening times (e.g. 24 hours per day)
- Internet shopping
- Special offers
- Superior customer service

#### **3. Collusion**

Oligopolistic firms will often enter into agreements amongst themselves to restrict competition and maximise their own benefits. This is known as collusion. These anti-competitive practices were made illegal in the UK by the Restrictive Trade Practices Act 1956.

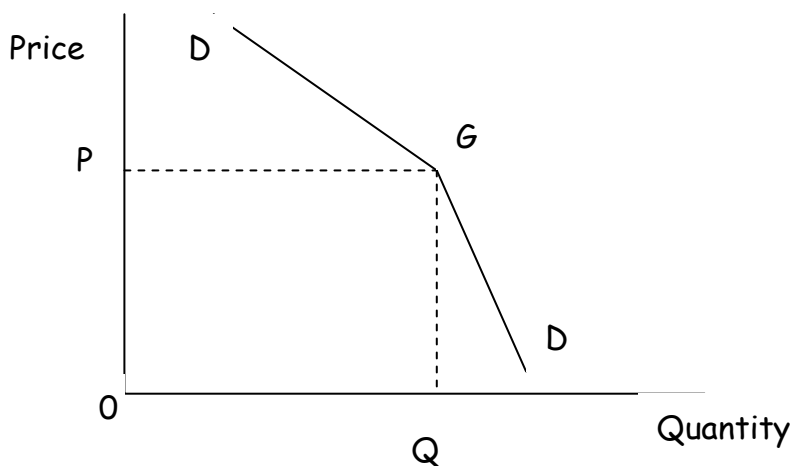
## Price and Output Behaviour in an Oligopolistic Market

Unlike the monopolist or a firm in perfect competition, the oligopolist approach to the market will differ. If, for example, the oligopolist changes their prices, they can expect some reaction from their competitors. What that reaction will be is uncertain.

If the oligopolist cuts their price, they may end up with increased sales or they may find that they are selling less. It all depends on how their rivals react. They may well hold their prices intact or they may lower them further than the first oligopolist, therefore undercutting them and gaining some of their market share.

The uncertainty of what will happen to the oligopolist if they change their price means that a normal demand curve cannot be used when analysing the determination of output. Economists do, however, use a kinked demand curve in order to explain why price in an oligopolistic market is much more stable than in other markets.

### The Kinked Demand Curve



From the diagram, the price is  $0P$  and the output is  $0Q$ . The demand curve is kinked at  $G$ .

At prices higher than  $0P$ , demand is very **elastic**. This is because the oligopolist fears that if they raise their prices, their competitors will **not** follow and they will lose share of the market.

At prices lower than  $0P$ , demand is very **inelastic**. The oligopolist will not lower their prices because they believe that if they do, their competitors **will** follow and, therefore, they will gain very little from this movement.



You can read more about perfect competition, monopoly and oligopoly at [www.tutor2u.net](http://www.tutor2u.net)

## **National Income**

National income is a measurement of all goods and services produced in an economy over a year. It calculates what has been produced, how much the workforce involved in the production of those goods and services get paid and what they spend their earning on.

Every economy has a national income, although the size of it depends on the size of the economy and the economic activity that takes place there. For example, USA will have a much higher national income than Luxembourg.

National income calculations are based on measurements of three key areas in the economy:

1. **National Expenditure** – this is the total amount spent by consumers in an economy on goods and services, by firms and by the government.
2. **National Income** – this is the total amount of money earned in an economy from the use of the factors of production – land, labour, capital and enterprise.
3. **National Output** – this is a calculation of the total amount of goods and services produced in an economy.



You can read more about national income at [www.tutor2u.net](http://www.tutor2u.net)

## **Aggregate Demand**

Aggregate demand is the total demand of all goods and services in an economy at a given price and is made up of the following components:

1. Consumption expenditure.
2. Investment expenditure
3. Government expenditure
4. Expenditure on exports by consumers in other economies
5. All import expenditure

Import expenditure must be subtracted as national expenditure only measures expenditure on goods and services produced in whole or in part in the domestic economy.

## **The Multiplier Effect**

The multiplier effect looks at the effect on national income if there is an increase in expenditure.

To understand why there might be a multiplier effect, consider what would happen if a firm increased their spending on new factories by £50m.

- Firms would pay for contractors to build their factories.
- The contractor would use this money, in part, to pay its staff to build the factories.
- The workforce would then spend the money that they had earned on purchases such as food, clothing, cars and holidays.
- This spending would be an addition to national income.
- The £50m would therefore cause an increase in aggregate demand.
- If £100,000 of the money paid to the workforce was spend on holidays, for example, the holiday companies would see an increase in their revenues which would mean they would spend that income on a variety of goods and services therefore increasing national income further.

The multiplier effect would therefore not only increase national income but would also increase jobs in the economy. Each job directly created by firms through extra spending would indirectly create other jobs in the economy.



You can read more about aggregate demand and the multiplier effect at [www.tutor2u.net](http://www.tutor2u.net)

## **Inflation**

**Definition:** The loss in purchasing power of money. This is perhaps only a symptom as we are inclined to measure inflation by the increase in the cost of living as measured by the Retail Price Index (R.P.I.)

### **Retail Price Index**

This is the statistical device used in order to measure the average expenditure of the average family on the average weekly costs. Apart from obvious areas, such as food and energy costs, there is a weighting towards, for example, leisure costs. As this is an average, there are losses and gains, e.g. in the summer the price of fresh fruit and vegetables is inclined to fall, therefore everyone will gain, but what about the effect of, for example, cheaper petrol – will this affect everyone? This is a crude measurement which does not account for seasonal differences.

### **Types of Inflation**

#### **1. Demand Pull Inflation**

This is where the shortage of supply of a good (or service) causes the price for that good or service to be increased to restrict demand. For example, the price of housing.

#### **2. Cost Push Inflation**

This is where the cost of production of a good pushes up the price, and therefore the new price level pushes up the level of wages, as wages are a cost of production, a wage increase will push up the final price and so on. This is known as the Wage Cost Spiral. The question is what causes the push – wages or prices?

#### **3. Latent Inflation**

As the name suggest, this is hidden inflation, i.e. the decrease in the weight, quantity or quality of products. How do you measure this?

#### **4. Hyper Inflation**

This is also known as Super or Runaway inflation. In Argentina, before and during the Falklands Conflict, inflation was 500% +. In Germany in the early 1930's, it was even greater than this.

The figure itself is unimportant, but its significance is the fact that there is an absolute loss of confidence in the economy resulting in people preferring goods to savings and money.

For example, in Germany, before the second world war, people would carry around their money in a basket as they needed so much in order to buy even

the most simplest of goods because of severely high prices. If they were robbed, the thief would steal the basket, not the money, as the basket was worth more than the money.

## **5. Stagflation**

This is a situation where an economy faces both rising inflation and rising unemployment. Stagflation was a particular problem during the 1970's and early 1980's as a result of the combined effect of Cost Push inflationary pressures coming from the oil price increases of 1973 and 1979 and the deflationary consequences of reduced real purchasing power in the oil consuming countries which accompanied these increases.

### **Effects**

1. Loss of value of money – does it pay to save?
2. Re-allocation of wealth and resources – high inflation could damage the standard of living of low wage earners and certain pensioners.
3. Danger to international competitiveness – Britain's costs of production could be rising much higher than that of its foreign rivals; therefore the price of British goods would be higher.



## Activity 2

Match the correct types of inflation to their definitions.

Definition		Type of Inflation
1. This is hidden inflation where there is a decrease in the weight, quality or quantity of a product.		<b>A. Demand Pull Inflation</b>
2. This is where a shortage of the good causes the price to be increased to restrict demand.		<b>B. Cost Push Inflation</b>
3. This is where an economy faces both rising inflation and rising unemployment		<b>C. Latent Inflation</b>
4. This is where inflation is so high that people prefer goods to savings and there is a loss of confidence in the economy		<b>D. Hyper Inflation</b>
5. This type of inflation is where the cost of a good pushes up the price, and the new price pushes up wages and wages push up the final price.		<b>E. Stagflation</b>

## **Unemployment**

Unemployment is a waste of economic resources, e.g. land, labour, capital and enterprise.

### **Types of Unemployment**

#### **Frictional**

- This occurs when workers change jobs and spend a short time unemployed.
- For example, those who are employed on short term renewable contracts.

#### **Structural**

- This occurs when the industrial structure of an economy changes.
- For example, old “heavy” industries such as coal mining have seen large scale unemployment as the skills of the employees of these industries are no longer in demand as their products/services are no longer in demand.

#### **Regional**

- Unemployment will occur in a particular region of the country that may be dependant on a particular industry, rather than the whole economy.
- For example, Dundee (jute), Fife (mining).
- Regional unemployment is a form of structural unemployment.

#### **Cyclical (Demand Deficient)**

- This occurs in an economy when there is not enough demand for goods and services.
- If people are not buying goods and services, both sales and profits fall and workers are no longer required to produce these goods and services.

#### **Seasonal**

- A number of jobs in an economy are dependent upon the weather and/or the time of the year.

- Workers such as agricultural workers, Christmas retail staff, holiday reps, Santa Claus, etc., will only work in these positions at certain times of the year.

### **Technological**

- In certain industries, employees have been, or are being replaced by machinery.
- A number of industries are changing from being labour intensive to capital intensive

### **Residual**

1. Some people would like to work but are unable to do so, for example, as the result of a disability.
2. Some people do not want to work.

## **Effects of Unemployment to the Unemployed**

### **1. Poverty**

- Benefits given by the Government provide the minimum income required.
- The unemployed have less disposable income and therefore their spending decreases.
- Poor housing

### **2. Psychological Problems**

- Unemployment resulting in a lack of self esteem.
- Social problems such as higher divorce rates, higher crime rates and health issues.

## **Effects of Unemployment on the Employed**

1. A feeling of “When will I lose my job” as other around lose their jobs.
2. Higher taxes imposed by the Government to pay for benefits being paid to the unemployed.
3. Less prospect of the employed changing jobs or achieving a wage increase.

## Effects on the Economy

1. The cost of benefits using up Government revenues.
2. Decreased Government revenue.
3. The opportunity cost of the unemployed if they were working.  
(Increased national output and greater gross domestic output)

## Cures of Unemployment

1. Reduce the working population by decreasing the retirement age and increasing the school leaving age.
2. Cut the working week.
3. Allow increased spending to stimulate demand.
4. Protectionist policies imposed by the Government to protect their home markets (tariffs and quotas).
5. Retraining of the unemployed in new skills.
6. New Deal
7. Enterprise Allowance – encourage people to start their own business.
8. Decrease taxation to increase consumer disposable income and therefore increase consumer spending.
9. Increase Government spending to create a multiplier effect.
10. Decrease interest rates to stimulate the level of borrowing/spending, therefore increasing demand.



You can read more about unemployment and its effects at [www.tutor2u.net](http://www.tutor2u.net)



### **Activity 3**

**a. Identify what type of unemployment the following situations result in:**

1. People dressing as Santa's elf helpers at Christmas are forced to look for alternative employment throughout the rest of the year.
2. Builders on a large construction site finish the construction of a new building and are unemployed after these contracts come to an end.
3. The jute industry suffers falling demand and a large amount of workers in Dundee are made redundant.
4. A bank replaces a member of staff with a cash machine to give out cash.
5. The Easter Bunny throughout the rest of the year.
6. A fall in demand throughout the whole economy for coal, therefore causing the closure of a number of pits.
7. A nanny with severe arthritis no longer being physically able to perform their job.
8. A lack of demand for British beef causing mass unemployment of those in the beef industry.
9. An unemployed person refusing to find a job because they "can't be bothered".
10. A car factory replacing production line workers with robots to speed up the car manufacturing process.

## **Taxation**

There are a number of reasons why a Government will tax the population of an economy

### **Purpose of Taxation**

#### **1. To raise revenue to pay for the services of the Government.**

If the Government did not tax the population, people within the economy would have to pay for services such as health care, education and defence themselves.

#### **2. To regulate the amount of total spending in the economy.**

If aggregate demand is too high, this can lead to inflation. The Government can increase taxation to reduce spending and bring demand down.

If aggregate demand is too low, this can lead to recession. The Government can decrease taxation to increase spending and push demand up.

#### **3. To reduce inequalities in the distribution of wealth and income.**

This would mean that those who are earning higher wages pay more tax and those who are on lower incomes pay less tax. This is known as a progressive tax system.

#### **4. To protect certain industries from foreign competition.**

The Government can impose a tariff, which is a tax placed on a good imported into the country. This tariff will make the foreign good more expensive in the country which it is exported to, therefore a consumer will purchase the cheaper home produced good.

#### **5. To discourage the purchase or use of a particular good or service.**

For example, higher taxes are placed on tobacco products to discourage smoking and higher taxes are placed on fuel to discourage too many cars on the road.

It has been suggested that with the levels of obesity growing in the UK that a tax on junk food may discourage its consumption.

### **Types of Taxation in the UK**

There are a number of taxes that the Government in the UK will use.

## **Income Tax**

This is the most important source of government revenue.

The amount of taxation that an individual will pay is based on their tax allowance.

Income earned above this allowance is taxed at the appropriate rate.

## **National Insurance Contributions**

National Insurance contributions are specifically used for state benefits, such as the state pension and unemployment benefit.

Employees pay a percentage of their earnings and in addition the employer will also pay a percentage on the employee's behalf.

## **Corporation Tax**

Corporation tax is a tax which a company pays based on its yearly profits.

At present, larger companies pay 30% of their profits in corporation tax.

## **Inheritance Tax**

This is a tax which is placed on the value of assets left on death by an individual.

Assets above the threshold are taxed at 40%

## **Excise Duties**

This is a tax which is placed on fuel, alcohol, tobacco and betting. This is calculated on volume not on value (e.g. per litre of wine).

## **Value Added Tax**

This is a tax on expenditure. There are 2 rates:

- a. Essential items such as food and children's clothing are exempt.
- b. All other goods and services are taxed at 17.5%

## **Council Tax**

This is a tax on property imposed by local Government. Council tax charged is related to the value of a property and the area in which it is situated.

## **Web Links**



[www.hmrc.gov.uk](http://www.hmrc.gov.uk) – (HM Revenue and Customs – Government site which gives tax rates and additional taxation information)

[www.tutor2u.net](http://www.tutor2u.net) – (Under the “Revision Notes” heading, click on “Economics AS/A2” – under the heading of “Fiscal Policy” access the revision notes about taxation)

## **Keynesian Demand Management Policies**

We can identify 4 main policy objectives of governments with regard to economic policy:

1. To create and maintain full employment
2. To achieve a low and stable rate of inflation
3. To achieve economic growth and improve living standards
4. To attain a satisfactory balance of payments position (i.e. the avoidance of a balance of payments deficit on the current account where imports are greater than exports).

(We might add in a fifth objective namely to achieve a fair or acceptable distribution of income in society).

To try to achieve these objectives, governments have used both Fiscal and Monetary policies.

## **Fiscal Policy**

Fiscal policy refers to government decisions concerning the level of government expenditure and taxation (both direct taxation, e.g. income tax and indirect taxation, e.g. VAT).

A government may run a budget deficit where government spending exceeds revenue from taxation (this would have the effect of increasing aggregate demand) or a budget surplus where government spending is less than revenue from taxation, causing aggregate demand to fall. If government spending is equal to revenue from taxation, the government is running a balanced budget.

## **Monetary Policy**

Monetary policy refers to attempts to achieve economic objectives by the use of monetary instruments such as changes in interest rates, the money supply and control over bank lending.

## **Trade Cycles**

The trade or business cycle refers to the regular fluctuations in production and prices which have characterised the behaviour of the economy since records began.

Prior to the Second World War, these took the form of booms, where output and prices grew rapidly, followed by slumps, characterised by falling output and prices and high unemployment.

Keynesian demand management policies, which were introduced after the Second World War, were designed to avoid the periods of high unemployment (and the resulting social unrest) by manipulation aggregate demand to “iron” out the booms and slumps. Therefore during a slump, aggregate demand would be increased to stimulate growth and reduce unemployment, whilst during a boom, aggregate demand would be decreased to reduce inflation and improve the balance of payments deficit.

During the period 1945 to 1970, policies typically correspond to the following pattern:

### **Characteristics of a Boom**

Relatively high inflation  
High growth of output  
Full employment (nearly)

#### **Fiscal Policy**

Increase taxation  
Decrease government spending

#### **Monetary Policy**

High interest rates  
Control on bank lending  
Increase on higher purchase restrictions (to discourage borrowing and spending)

The purpose of both Fiscal and Monetary policy during a boom was to decrease aggregate demand.

### **Characteristics of a Recession**

Low growth of output  
Unemployment  
Low inflation

#### **Fiscal Policy**

Increase government spending  
Reduce taxation

### **Monetary Policy**

Decrease interest rates  
Ease controls on bank lending  
Ease higher purchase restrictions to encourage borrowing and spending

The purpose of both Fiscal and Monetary policy during a slump was to increase aggregate demand.

### **Fiscal Policy**

Fiscal policy is the government manipulation of taxation and expenditure levels to manage the economy.

Every year (usually around March), the Chancellor of the Exchequer announces the main changes in the taxation and expenditure levels for the UK for the coming financial year (5<sup>th</sup> April – 4<sup>th</sup> April of the following year).

How the government will use fiscal policy is very dependent on the state of the economy at that particular time.

If aggregate demand is low, it may mean that households in the economy are not spending as much money in the economy as they could be. In order to increase the disposable income of consumers in the economy and so therefore increase aggregate demand, the government can decrease the level of taxation in the economy.

By decreasing taxation, for example the levels of income tax or VAT, consumers will have a rise in their disposable income levels and will spend more money in the economy which will then increase the levels of aggregate demand.

The government can also increase aggregate demand using fiscal policy by increasing its levels of government spending in the economy.

An increase in government spending may lead (depending on where the government targets the money) to an increase in jobs, pensions or benefits, for example. Each of these areas would lead to higher consumer disposable income and increased aggregate demand.

By taxing less and spending more, the government would be running a budget deficit and using a reflationary fiscal policy.

On the other hand, if aggregate demand is too high and the economy is in danger of overheating (this can lead to inflation), the government can use fiscal policy to generate the opposite effects.

High aggregate demand is usually as a result of increased consumer spending in the economy which may have happened as a result of consumer disposable income being too high.

By increasing the levels of taxation, for example an increase on tax on fuel or an increase in income tax, the government will cause consumer disposable income to fall by ensuring that many consumers pay more tax and, therefore, have less money to spend in the economy. This would result in the levels of aggregate demand falling.

In addition, the government can also decrease their levels of spending in the economy. This would cause aggregate demand to fall.

By taxing more and spending less, the government would be running a budget surplus and using a deflationary fiscal policy.

Controlling the economy using fiscal policy is a very fine balancing act for the government. Altering the levels of aggregate demand may bring improvements to some areas of the economy, but may cause problems for others.

Previously we mentioned the 4 key macroeconomic variables that the government aim to control:

- a. Inflation
- b. Unemployment
- c. Economic Growth
- d. The Balance of Payments

For example, if the government use a reflationary fiscal policy to decrease unemployment levels and to create economic growth, the result would be an increase in the levels of aggregate demand. Increasing aggregate demand, however, may lead to an increase in inflation levels.

On the other hand, by using a deflationary fiscal policy to decrease aggregate demand and subsequently decrease inflation, the government would be taking disposable income away from consumers, which would lead to lower levels of spending (lower aggregate demand) which could then lead to slower economic growth and increased unemployment.

As a result, there is a trade off made by the government as to which areas of the economy are to be improved. Generally speaking, a government is said to be doing well if they can improve at least some of these areas.



### **Activity 4**

Now go to [www.bized.co.uk/virtual/economy/index.htm](http://www.bized.co.uk/virtual/economy/index.htm) and carry out the Virtual Economy activity. Your task is to run the economy successfully.

## **Monetary Policy**

Monetary Policy is a tool used by the Government to manipulate the levels of aggregate demand, the money supply and inflation within the economy.

The government uses Monetary Policy by changing the rate of interest. The rate of interest is the cost of borrowing to an individual / organisation.

Governments have used other aspects of Monetary Policy in the past, such as restrictions on the amount of money that can be borrowed (mortgages and hire purchase) and the amount of money supplied in the economy for borrowing and spending.

In recent times, however, interest rates have become the most favoured policy instrument of Monetary Policy for the UK economy.

The level of aggregate demand in an economy is influenced by the levels of interest. If interest rates are increased, aggregate demand will fall and if interest rates are decreased, aggregate demand will rise. This, in a very simplistic way, is how the Bank of England can manipulate the economy.

There are a number of aspects of the economy that are influenced in particular by interest rates:

### **1. The Housing Market**

The majority of houses in the UK economy are purchased by the buyer taking out a mortgage (this is a long term loan).

If interest rates are higher, it means that borrowers are making higher repayments on their mortgage, resulting in housing being less affordable for some.

A decrease in interest rates will result in an increase in those able to afford housing as mortgage repayments will be cheaper. This increase in mortgage borrowing will lead to an increase in demand for housing and subsequently an increase in demand for consumer durables such as carpets, curtains, washing machines and furniture.

### **2. Consumer Products**

As the rate of interest rises, consumer spending falls. This is as a result of higher monthly repayments on credit cards / loans.

Goods such as cars, furniture, etc., are particularly sensitive to high interest rates. As a result, sales of consumer goods (and services) will fall.

### 3. Savings

High interest rates attract saving as savers will receive a higher reward for money in an account which pays them interest. As this money is being saved, it is not being spent in the economy which will lead to a decrease in aggregate demand.

### 4. Inflation

Inflation may be influenced by the level of interest in an economy.

High inflation (caused by an increase in aggregate demand) can be lowered by increasing interest rates, resulting in a decrease in borrowing and spending.

A decrease in interest rates can cause an increase in borrowing and spending which can cause an increase in aggregate demand, leading to increased inflation.

### 5. Unemployment

According to some schools of economic thought, lower interest rates will lead to an increase in consumer spending, which will lead to an increase in demand for goods and services. This increase in demand may then lead to job creation in industries which experience increased levels of demand.

## **The Monetary Policy Committee (MPC)**

The day to day control of UK Monetary Policy lies with the Bank of England's Monetary Policy Committee (MPC).

The MPC consists of 9 people; The Chairperson of the Bank of England, 4 additional members of the Bank of England and 4 independent experts, who are mainly professional economists. The membership of the MPC ensures that decisions made are balanced and non-political.

The MPC meet on a monthly basis to determine the state of the economy and then to take the appropriate decision to increase or decrease interest rates or to leave them unchanged.



You can read more about fiscal and monetary policy at [www.tutor2u.net](http://www.tutor2u.net)

The Bank of England's website has additional information about monetary policy.

[www.bankofengland.co.uk](http://www.bankofengland.co.uk)

Additional information about fiscal policy can be found on the government's Treasury website.

[www.hm-treasury.gov.uk](http://www.hm-treasury.gov.uk)

## **Answers to Activities**

### **Activity 1**

Needs are required for human survival. For example air, water, clothing, shelter and food.

A want is anything not required for human survival. For example, cars, mobile phones, DVDs, televisions.

### **Activity 2**

- 1 - C
- 2 - A
- 3 - E
- 4 - D
- 5 - B

### **Activity 3**

- 1. Seasonal
- 2. Frictional
- 3. Regional
- 4. Technological
- 5. Seasonal
- 6. Cyclical (can also be structural)
- 7. Residual
- 8. Cyclical
- 9. Residual
- 10. Technological

### **Activity 4**

The Virtual Economy online model will generate how successful you have been at running the economy.

## Acknowledgements

Fife and Tayside Wider Access Forum would like to acknowledge the support of Angus College, Dundee College, Adam Smith College, University of Dundee and University of Abertay Dundee.