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Revision Guide

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Contents

Introduction: How to use this book

This revision and exam guide provides everything you need to revise and refresh your knowledge of economics so you can maximize your marks in the Cambridge International Examinations IGCSE and O Level in Economics.

It provides comprehensive coverage of the new IGCSE and O Level course syllabuses and gives practical help and guidance on how to answer examination questions.

USING THE REVISION GUIDE

The book is divided into the 8 main sections of the course. Each section contains a number of easy-to-read units on different topics containing the key economic concepts, terms and arguments you will need to recall and apply to questions in your final exams. There are 22 units in total. Each one can be studied and completed in an hour or two each day.

You will find the following useful features in each unit:

REVISION SUMMARY

Key economic concepts and terms covered in the unit

EXAM PREPARATION

A short exercise to help you develop answers to related questions from the Cambridge International Examinations IGCSE and O Level in Economics

›› Links to other sections

These show related units in the book

At the end of each main section there are additional exercises to help you prepare for your exams. These are:

IMPORTANT THINGS TO REMEMBER

A chance to test your knowledge of key economic concepts and terms by completing the missing words

10 MINUTE TEST

A short multiple-choice test covering all the key economic concepts and terms covered in the preceding sections.

EXAM GUIDANCE AND PRACTICE

These sections will help you prepare for your final exams. They contain useful tips and techniques on preparing and answering exam questions, and information on how answers will be assessed by examiners.

There are lots of real exam questions for you to practise in these sections from the Cambridge International Examinations IGCSE and O Level in Economics. Model answers to these questions are provided at the end of the book.

The dates given for real examination questions refer to the IGCSE and O level examinations. Questions were the same in both examinations, unless otherwise stated.

1 The basic economic problem

1.1 Factors of Production

REVISION SUMMARY

Consumers are people or firms who need and want **goods and services**

Resources, or **factors of production**, are used to make goods and services

Productive resources include **land** (natural resources), **labour** (human effort) and **capital** (human-made resources) such as machinery, offices, factories and road networks

Entrepreneurs organize and combine resources in **firms** to produce goods and services

Making goods and services from resources is a process called **production**

Producers use resources to make goods and services to satisfy consumers' needs and wants

Durable consumer goods, such as electrical items and furniture, last a long time. **Non-durable consumer goods**, such as many foods and liquids, are used up quickly

Capital goods and semi-finished goods or components are used up in production

Producers and consumers must **trade** with each other to obtain the goods and services they need and want

SYLLABUS

This section will

- define the factors of production (land, labour, capital, enterprise).

Every person has **needs and wants**. We all have a basic need for food, clean water and shelter. In addition we may want to eat in restaurants, drive a car, watch television, play computer games and use up many other different goods and services.

Resources are used to produce goods and services to satisfy all the different needs and wants we all have. However, resources are just too scarce to satisfy them all. For example, in some areas resources are so scarce that people are starving and have no clean water to drink.

RESOURCES ARE CLASSIFIED AS LAND, LABOUR AND CAPITAL

Productive resources are also known as **factors of production**. These are:

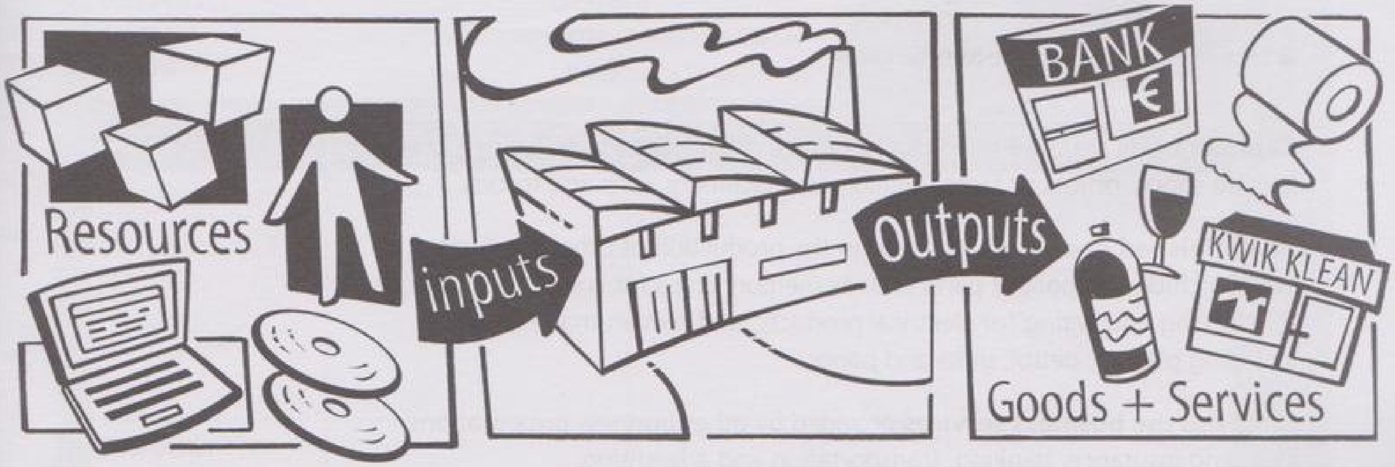
- **Land** refers to all natural resources used in production
- **Labour** is the productive effort provided by people, or human resources
- **Capital** consists of human-made resources used in the production of other goods and services, such as tools, machinery, offices and factory buildings.

PRODUCTION USES UP RESOURCES TO MAKE GOODS AND SERVICES

Production involves combining land, labour and capital to make goods and services to satisfy the needs and wants of consumers. An **entrepreneur** is a person who combines and organizes resources in a **firm** to produce goods and services.

- Entrepreneurs have 'business know-how' or **enterprise**. They are willing to take risks starting and running firms. Enterprise is often described as the fourth factor of production.

Entrepreneurs and people who provide their labour to make goods and services are called **producers.**



▲ Land, labour, capital and enterprise are needed to produce goods and services.

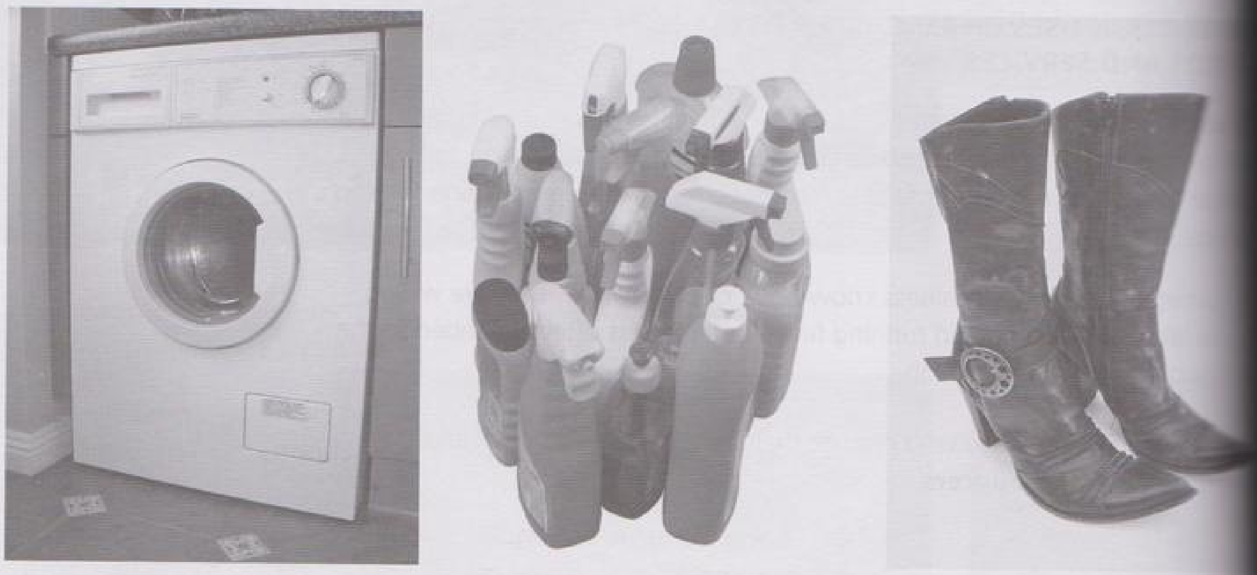
GOODS AND SERVICES SATISFY THE NEEDS AND WANTS OF CONSUMERS

The outputs or **products** of productive activity are goods and services. People and organizations that use up, or consume, goods and services to satisfy their needs or wants are called **consumers**.

Durable consumer goods, such as washing machines, DVD players and cars, can be consumed over a long period of time.

Non-durable consumer goods are used up quickly or are perishable, such as many foods and drinks, cosmetics and soaps.

Consumer services include personal services such as hairdressing and dentistry, and leisure services including those provided by holiday companies and cafes.



▲ Some durable and non-durable consumer goods

Capital goods are used by firms to produce other goods and services. They include shops, offices or factory buildings, machinery, vans and trucks.

Semi-finished goods are also used in the production of other products. These include component parts such as memory chips for computers, buttons for clothing and wiring for electrical products, and human-made materials including plastics, petrol, glass and paper.

Firms also use **business services** provided by other business organizations including insurance, banking, transportation and advertising.

PRODUCERS AND CONSUMERS MUST TRADE TO OBTAIN GOODS AND SERVICES

Production uses up scarce resources to provide goods and services to satisfy the needs and wants of consumers. The using up of goods and services by consumers to satisfy their needs and wants is called **consumption**.

›› *3.2 Occupations and Earnings*

Few people will be able to produce all the goods and services they will need or want. They must therefore **trade** or **exchange** with producers of goods and services. In modern economies most people do this by selling their labour to firms to earn money in the form of wages.

People then use the money they have earned to buy goods and services from other producers. In turn, entrepreneurs use the money they earn from selling goods and services to pay for the scarce resources they need to make them.

EXAM PREPARATION

Below is a list of different factors of production. Which factors would an economist classify as land, labour or capital? Which of the factors listed could be used to produce the two products shown? Use the table below for your answers.

SAND (USED IN GLASS)	OIL (IN PAINTS, PLASTICS)
ELECTRICAL ENGINEERS	OFFICES
COMPUTERS	FINANCIAL ACCOUNTANTS
MOBILE TELEPHONES	SOLDERING EQUIPMENT
PAINT SPRAYING MACHINES	TRUCKS
WATER	WOOD
FACTORY BUILDINGS	MACHINE OPERATORS
DESIGNERS	CLEANERS
COTTON	METAL PRESSES/ROLLERS
RUBBER	LASERS

	LAND	LABOUR	CAPITAL
Car			
DVD player			

Example exam questions

- Explain with the use of examples what is meant by a natural resource.
- What are factors of production? Describe briefly how they might be used in the production of bread.
- What is the difference between a capital-intensive firm and a labour-intensive firm?

1.2 Scarcity and Opportunity Cost

REVISION SUMMARY

There are too few productive resources to make all the goods and services that consumers need and want. **Scarcity** of resources is the basic **economic problem**

Opportunity cost is the cost of choosing between alternative uses of resources. Choosing one use will always mean giving up the opportunity to use resources in another way, and the loss of goods and services they might have produced instead

The problem of **resource allocation** is choosing how best to use limited productive resources to satisfy as many needs and wants as possible and maximise **economic welfare**

The **aim** of economics is to find the most **efficient allocation of resources**. The most efficient allocation of scarce resources will satisfy as many needs and wants as possible

SYLLABUS

This section will

- define the nature of the economic problem (finite resources and unlimited wants)
- define opportunity cost and analyse particular circumstances to illustrate the concept
- demonstrate how production possibility curves can be used to illustrate choice and resource allocation
- evaluate the implications of particular courses of action in terms of opportunity cost.

You have chosen to use two hours of your time today to refresh your knowledge of economics and to prepare for your exam.

You could have used this limited amount of time and your energy to play computer games or go out with friends instead, but you are giving up the benefit from these opportunities. This is the **opportunity cost** of your decision to revise. You have chosen to study because the benefit of revising economics to improve your exam performance is greater than the benefit you could have enjoyed from alternative uses of your time.

In the same way, every society must decide how best to use its resources for maximum benefit. This is because resources are scarce. This is the basic **economic problem**.

CONSUMERS AND PRODUCERS MUST DECIDE HOW TO ALLOCATE SCARCE RESOURCES

Very few consumers can satisfy all their needs and wants. This is because the world's productive resources are scarce relative to their needs and wants for goods and services.

Consumers must therefore choose what goods and services they will consume and producers must choose what goods and services to produce and who to produce them for.

That is, all societies must choose how best to use their limited resources to satisfy as many needs and wants as they can.

Choosing how best to use scarce resources is the problem of **resource allocation**. For example, allocating more productive resources to the production of, say, military equipment will mean fewer resources are available to produce cars and other consumer goods.

RESOURCES ARE SCARCE AND CAN BE USED UP IN DIFFERENT WAYS

Although resources such as raw materials, land, skilled workers, machinery, factories and offices are scarce, they can all be used in different ways to make many different goods and services.

The problem of resource allocation therefore involves making choices and evaluating 'trade-offs' between alternative uses. Choosing one use means going without another.

OPPORTUNITY COST IS THE COST OF CHOICE

The true cost of something is what you have to give up to get it. The **opportunity cost** of a decision to use resources one way is the benefit foregone from their next best or highest valued alternative use.

Recall how your decision to use two hours of your time to study economics meant you chose to go without the benefit of going out with your friends. Similarly, a person who spends a day at the beach may have to forego a day's wages. Everything we do has an opportunity cost.

Similarly, using an area of open land to build houses on means the same area of land is no longer available to grow crops for food. The benefit that could be derived from the food that could have been grown on the land has been given up. The loss of this benefit is the opportunity cost of the decision to use the scarce land for housing.

Similarly the labour and capital equipment that was used to build the houses were not available to make other goods and services during the construction of the houses.

> ***TOP TIP***
> **Look for the opportunity costs**
>
> Many exam questions describe economic decisions or actions. These will all involve trade-offs and opportunity costs. A good answer will explain as many as possible.

▲ An area of land could be used to grow crops to provide food for people

...or for housing to provide homes for people to live in

...or for road space so people can travel to work and firms can transport their goods

There are a great many examples of opportunity cost at the level of the individual consumer, household, employee, firm, government and the economy. Here are just a few:

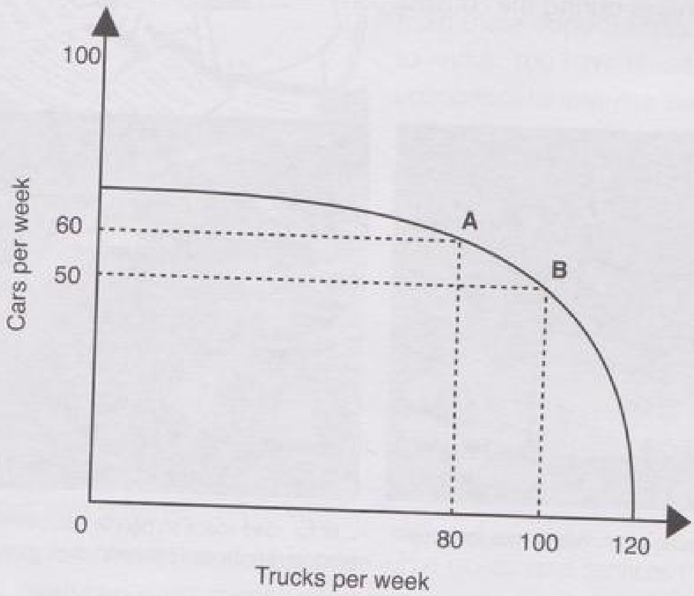
- The opportunity cost to a consumer of deciding to buy a new bicycle is the lost opportunity to buy and benefit from some new clothes or a portable music player instead

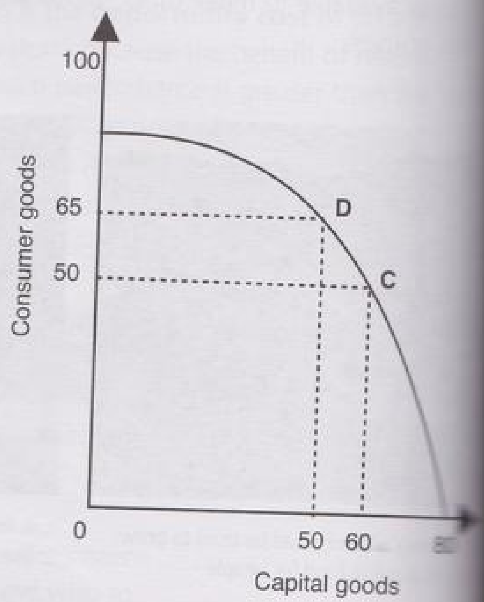
- A household decides to save $200 in a bank account towards a holiday next year. This means they will be unable to spend that money on current consumption
- The opportunity cost of the decision by an employee to give up work will be his or her lost wages
- $10 billion allocated to building new roads by a government could have been used to build more schools instead. Alternatively, income taxes could have been cut. More roads may also result in more car use and pollution

PRODUCTION POSSIBILITY CURVES CAN ILLUSTRATE CHOICE AND RESOURCE ALLOCATION DECISIONS

A **production possibility curve (PPC)** or production possibility frontier is a useful way to show the opportunity cost of different production decisions. A PPC shows the combined maximum possible output of two products (or groups or products) a firm or even an entire economy can produce with its existing resources and technology.

For example, the first diagram below shows the PPC for a firm producing cars and trucks. It can produce a maximum of either 100 cars or 120 trucks each week with its resources if they are used efficiently. The firm is currently producing 60 cars and 80 trucks each week with its resources (at point A). To increase its output of trucks to 100 per week (point B) it must move some of its resources out of car production. Its output of cars will therefore fall to 50 cars per week. The opportunity cost of an extra 20 trucks per week is therefore 10 cars foregone.





The second PPC diagram is for an entire economy. Producers can choose between allocating scarce resources to the production of consumer goods or capital goods. It is currently producing a combination of consumer and capital goods at point C. The PPC shows that in order to produce an additional 15 tonnes of consumer goods each period the economy must give up 10 tonnes of capital goods.

THE 'BEST' USE OF SCARCE RESOURCES WILL MAXIMIZE ECONOMIC WELFARE

Owning and using goods and services can make consumers feel happier, healthier and even wealthier. Consumers are therefore willing to pay for those goods and services that satisfy their needs and wants because they value them.

However, some uses of resources may cause dissatisfaction by harming the natural environment or causing suffering to people or animals. These are **economic bads** because they impose costs on others and lower economic welfare.

>> *2.3 Social Costs and Benefits*

The aim of economics is to find the most efficient allocation of resources. The most efficient allocation of scarce resources will satisfy as many needs and wants as possible. If and when this is achieved the economic welfare of people will be maximized.

EXAM PREPARATION

Imagine you alone have the power to decide how best to use scarce resources in your country. Below is a series of choices you can make. You can choose to reallocate resources from one use to another and in so doing produce less of one good or service and more of the other. What will you choose and why? When making your choices think about how your decisions may affect economic welfare, and how they could affect the consumers and producers of your chosen goods or services

Choice?	Your choice, and why?
More housing or more farmland?	
More cars or more buses and trains?	
More nuclear power stations or more wind turbines to generate electricity?	
More health care or more education?	
More cigarettes or more cakes?	

Example exam questions

- Explain the terms scarcity and opportunity cost, using examples.
- Discuss, with examples, how decisions on government expenditure might illustrate the concept of opportunity cost.
- Explain what is meant by the terms **(i)** opportunity cost and **(ii)** economic welfare. Discuss whether it is possible to apply these concepts to the provision of health care.

IMPORTANT THINGS TO REMEMBER

Fill in the missing key words.

___________ are people or firms who need and want goods and services.

___________ are used to produce goods and services. They are too scarce to satisfy all consumers' needs and wants.

_____ refers to natural resources used in production, such as water, minerals, oils, plants and animals.

________ is productive effort supplied by people to make goods and services.

_________ goods are human-made resources, including machinery, equipment and factory buildings, used to produce other goods and services.

________________ organize and combine resources in firms to produce goods and services.

Productive resources are also known as _________ of _____________.

_____________ involves using resources to make goods and services to satisfy the needs and wants of consumers.

__________ consumer goods, for example many electrical items, tend to last a long time.

__________ involves trade in goods and services between producers and consumers.

_____________ _____ is the cost of choosing between alternative uses of scarce resources. Choosing one use will always mean giving up the opportunity to use resources in another way, and the loss of goods and services they might otherwise have produced.

A ____________ ______________ ______ or frontier shows the combined maximum possible output of two products or groups of products a firm or an entire economy, can produce efficiently with its existing resources and technology.

The problem of __________ _____________ involves choosing how best to use and combine limited productive resources to satisfy as many needs and wants as possible.

__________ _________ is maximized in a society when as many of its needs and wants as possible are satisfied from using and combining scarce resources in the most efficient way.

10 MINUTE TEST

Choose and then mark your answer A, B, C or D to each question.

1 A new dam is built in India to provide hydroelectric power. What is the opportunity cost to the Indian economy of the dam?
- A the construction and running costs of the hydroelectric dam
- B the cost to consumers of using the electricity
- C other goods and services the resources used for the dam could have produced instead
- D the cost of loans used to finance the building of the dam

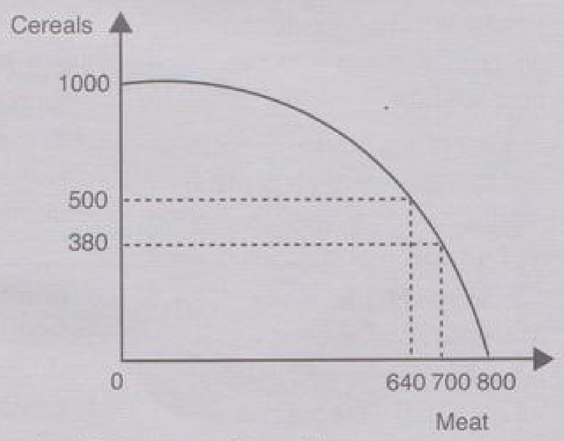
2 Which of the following resources used in the production of timber would an economist refer to as land?
- A a saw for cutting wood
- B a forest used to produce timber
- C a truck used to transport timber
- D a computer used in a timber merchant's office

3 Which of the following statements best describes the process of production?
- A an activity that uses scarce resources to provide any good or service
- B an activity that uses scarce natural resources to make goods and services
- C an activity that uses up scarce resources to make a profit
- D an activity that uses scarce resources to make goods and services to satisfy consumers needs and wants

4 Which of the following is an example of a capital good?
- A a shopping complex
- B a pair of fashionable shoes
- C a DVD player
- D money

5 The total amount of goods and services that can be produced in the world economy will be:
- A determined by the amount of natural resources
- B unlimited
- C just enough to satisfy all consumer wants
- D less than what consumers want

6 In the diagram below what is the opportunity cost of increasing the output of meat from 640 tonnes to 700 tonnes per month?



- A 120 tonnes of cereal crops
- B 380 tonnes of cereal crops
- C 500 tonnes of cereal crops
- D 1000 tonnes of cereal crops

Now check your answers against those given on page 155. How well did you do? Make a note of any you got wrong and make sure you understand the reasons why before you continue to the next section.

2.1 Economic Systems

REVISION SUMMARY

An **economic system** determines how scarce resources are allocated

In a **market economic system** or **market economy** the decisions of consumers and producers will determine what goods and services are produced and who they are produced for

Producers in a market economy aim to maximize their **profit** from producing and selling those goods and services that consumers want

A **market** for a particular good or service consists of all those producers willing and able to supply it and all those consumers willing and able to buy it

The **price mechanism** allocates scarce resources to the most profitable uses in a market economic system.

Producers use market **price signals** to determine what is profitable. Rising consumer demand for a product will tend to increase its price. Producing more could earn producers more profit

A market economy will produce a wide variety of goods and services if it is profitable to do so but only for those consumers with the ability to pay for them

Market failures can cause scarce resources to be allocated to uses that are wasteful, inefficient or even harmful to people and the environment

A mixed economic system has a **private sector** (private individuals and firms) and a **public sector** (government organizations)

A government can try to correct market failures in a **mixed economic system**. It can allocate scarce resources to provide goods and services that people need and introduce laws and regulations to control harmful activities

SYLLABUS

This section will

- describe the alloca[…] of resources in ma[…] and mixed econom[…] systems
- describe the conce[…] of market failure a[…] explain the reaso[…] its occurrence
- evaluate the meri[…] the market system

Scarce resources can be used in different ways to prod[…] many different goods and services, but they will never s[…] all our needs and wants.

Every society must therefore choose how best to allocate their scarce resources to the production of goods and services.

That is, we must decide what goods and services to pro[…] how to produce them, and who will get them.

How these decisions are made is called an **economic system**.

ECONOMIC SYSTEMS DETERMINE HOW SCARCE RESOURCES ARE USED

An **economy** is a system of activities involving the production, consumption and exchange of goods and services. For example, the Spanish economy is the national economic system in Spain. In turn, the Spanish economy is part of the European economy along with other national economies in Europe including France and Germany. Similarly, all national economies together make up the global economy.

An **economic system** determines how scarce resources are used. That is, it addresses the problem of resource allocation. This involves providing answers to three key questions.

What to produce?	How to produce?	For whom to produce?
Should more resources be allocated to the production of consumer goods and services and less to the building of roads or the provision of health care?	What tools and machinery will be needed? How many workers will be required and what skills do they need? Is it cheaper to employ more labour or more machinery?	Should people in the greatest need get the goods and services they require? Or should they be provided to people who can pay the most for them?

0% *< less government involvement* *more government involvement >* *100%*

MARKET ECONOMY **MIXED ECONOMY** **PLANNED ECONOMY**

There are three main types of economic system depending on how much government involvement there is in making decisions about the allocation of resources.

In a totally free **market economy** there is no role for government and therefore no taxes or government spending. However, in reality, all market economies have a government that will also decide how best to allocate some scarce resources.

The ownership and allocation of scarce resources in a **mixed economic system** is split between the **private sector** (private firms and individuals) and a **public sector** (government organizations). The amount of goods and services provided by the public sector can vary greatly between different national economies.

During the 1990s the governments of many countries, including China and Russia, introduced policies that increased the role of the market system in their economies.

China and Russia (then as part of the Soviet Union) were formerly **planned economies** in which their governments owned or controlled the vast majority of scarce resources and determined what, how and for whom goods and services were produced. There were no private firms in these economies many years ago and very little consumer choice.

	Market economy	Mixed economy
Who decides what and how to produce?	Producers and consumers	Producers, consumers and government
Who owns or controls most scarce resources?	The private sector	The private sector and public sector
How are resource allocation decisions made?	Firms use market price signals to identify what goods and services consumers want and will make a profit	Same as market economy but the government also provides some goods and services to those in greatest need
Who are goods and services produced for?	Consumers with the greatest ability to pay for them	Same as market economy but the government may provide some goods and services to people in need
Main advantages	Wide variety of goods and services available As firms compete with each other for profits it encourages them to develop new and more efficient products and processes	Same as market economy plus – government can intervene to correct serious market failures
Main disadvantages	There can be serious market failures including – worthwhile but unprofitable products will not be provided – harmful goods may be available to buy	Same as market economy plus – taxes can be high – public sector provision may be inefficient

CONSUMERS AND PRODUCERS ALLOCATE SCARCE RESOURCES IN A MARKET ECONOMY

In a **market economic system**, or **market economy**, producers and consumers decide what, how and for whom to produce.

The **private sector** of private firms and individuals own all the scarce resources. Every firm aims to make as much profit as it can. **Profit** is the amount of money a firm makes from selling its goods or services at a price greater than the cost of producing them.

Firms will therefore produce goods and services for consumers with the greatest willingness and ability to pay for them.

CHANGES IN MARKET PRICES TELL PRODUCERS WHAT CONSUMERS WANT

The **market** for a good or service includes all those producers willing and able to supply it and all those consumers willing and able to buy it, no matter where they might be located.

Consider the market for cool air conditioners. Consumer demand is increasing as summer temperatures rise around the world. Producers are therefore able to charge higher prices and earn more in profit. The increase in price signals to other producers that demand for air conditioners is rising and producing them may be a more profitable use of resources than making, say, electric heaters.

In contrast, if consumers are buying less of a particular good or service, its market price will tend to fall and profits will be reduced. This will force some firms to reduce their production of the product or even to close down, and move their resources into the production of other more profitable goods and services instead.

This is called the **price mechanism**. In this way, market forces ensure consumers get what they want and are willing to pay for. That is, the profit motive of firms and the preferences of consumers determine how resources are allocated in a market economy.

>> *2.2 How Markets Work*

A market economy has a number of advantages due to the price mechanism:

- it produces a wide variety of goods and services to satisfy consumers wants
- it responds quickly to changes in consumer wants
- it encourages innovations in products and new, more efficient methods of production because firms will compete with each other to lower their costs and increase their sales and profit.

MARKET FAILURES CAN MISALLOCATE SCARCE RESOURCES AND REDUCE ECONOMIC WELFARE

A market economic system can also have major drawbacks, or **market failures**. These occur when markets fail to produce goods and services that are worthwhile and when markets result in wasteful or harmful activities.

In a **mixed economy** a government can intervene in markets to correct market failures. It can organize resources to provide goods and services and can also introduce laws and a legal system to control harmful activities.

>> *5.1 Government Economic Policy*

To finance public sector activities, governments levy taxes on incomes, on wealth and on goods and services.

>> *5.2 Types of Taxation*

How markets can fail	How a government can intervene
Only goods and services that are profitable to make will be provided. For example, a market economy will not provide education or health care for people who cannot afford to pay for these services	It can produce **merit goods** such as education and health care for people, regardless of their ability to pay for them, because all the economy will benefit from having a healthy and educated population
Other services, such as street lighting, sea and flood defences and national parks, will not be provided: firms would be unable to charge consumers a price according to how much they use them or benefit from them	It can provide **public goods**, such as street lighting, sea and flood defences and national parks, that would otherwise be unprofitable for private sector firms to provide
Resources will only be employed if it is profitable to do so. Some people who are willing and able to work may be left unemployed and without an income	The public sector can employ people who may otherwise be unemployed and provide welfare benefits and payments to people out of work or on low incomes
Harmful goods, such as dangerous drugs and weapons, may be produced and be freely available to consumers who want to buy them	Laws can make the production of harmful goods illegal, and high taxes can be imposed on others, such as cigarettes, to reduce their consumption
Some producers may ignore the harmful effects of their production on the environment or people's health	Laws and regulations can protect the natural environment and people's health and safety. Firms may have to pay large fines if their activities break these laws
Some firms may dominate the supply of a particular good or service and will charge consumers very high prices. These firms are described as **monopolies**	Monopolies can be regulated to keep their prices down or be broken up into smaller firms to increase competition and choice

Government decisions can also introduce disadvantages to a mixed economic system:

- High taxes on profits may reduce enterprise and high taxes on wages can reduce people's incentives to work. Consumers will also have less money after tax to spend on the goods and services they want
- Regulations can impose significant costs on firms and as a result they will produce less goods and services, increase their prices or lower the wages of their workers
- Public sector provision may be inefficient and produce poor quality goods and services because public sector organizations are not motivated to make profits
- Government spending may be politically motivated instead of correcting market failures and improving economic welfare.

EXAM PREPARATION

Look at the newspaper headlines below. What problems do they describe about resource allocation in a mixed economic system? Write a brief note on each in the boxes provided.

High corporation tax on profits is forcing multi-national firms out of Indonesia argues a new report

1

A hospital chain in the United States has agreed to pay back more than $800m in what has been described as the largest fraud settlement ever. The company, HCA, was accused of fraudulent billing and overcharging Medicare, a US government health programme that provides for millions of poor and elderly Americans

2

Is Government regulation strangling small businesses?

The Government has introduced new employment legislation to strengthen employee rights in the workplace. But employers are becoming increasingly vocal about the negative impact that these rights are having on the way they interact with staff and run their businesses.

3

THE French oil giant Total was yesterday ordered to pay a 375,000 million euro fine and 192 million euros in compensation after a Paris court found the company responsible for one of Europe's worst-ever oil spills

4

RWE npower Britain's fourth-largest energy supplier, fuelled anger over soaring bills yesterday when it reported a 41.4% increase in annual profits.

5

Congressmen in the Philippines are seeking an investigation into the alleged misuse of more than P50 billion in funds for road maintenance, road safety and pollution control. They said a large part of the money goes to the pockets of corrupt government officials and contractors. The funds whose use or misuse they want the House to look into are collections from the so-called motor vehicle user's charge

6

Example exam questions

- Discuss the advantages and disadvantages of a public sector allocating resources.
- What are the advantages and disadvantages of relying more on the market economy?

2.2 How Markets Work

REVISION SUMMARY

The **market demand** for a good or service is the total **effective demand** of all consumers willing and able to buy that product

Market demand curves are downward sloping. As price rises, demand contracts

Some goods and services are **complements** and in **joint demand**, such as cars and petrol

Substitutes, such as butter and margarine, compete to satisfy the same consumer demand

The **market supply** of a good or service is the total quantity supplied by all producers of that product. **Market supply curves** are upward sloping. As price rises, supply expands

When market demand is equal to market supply a market will be in **equilibrium**

At the equilibrium the **market price** will be stable as consumers are willing and able to buy exactly the same amount that firms are willing and able to supply

If demand does not equal supply a market will be in **disequilibrium**. Price will have to rise to reduce an excess of demand or price will have to fall to sell off an excess of supply

Price elasticity of demand measures the responsiveness of demand to changes in prices

Demand is relatively **price elastic** if a small increase in the price of a product causes a large contraction in the quantity demanded and a fall in sales revenue

Demand is relatively **price inelastic** if quantity demanded contracts only very little and sales revenue rises following a small increase in the price of a product

Price elasticity of supply measures the responsiveness of supply to changes in prices

A government can use **taxes** and **subsidies** to change market prices and quantities traded

SYLLABUS

This section will

- demonstrate the principle of equilibrium price and analyse simple market situations with changes in demand and supply
- describe the causes of changes in demand and supply conditions and analyse such changes to show effects in the market
- define price elasticity of demand and supply and perform simple calculations
- demonstrate the usefulness of price elasticity in particular situations such as revenue changes and consumer expenditure.

Why do the prices of ice creams rise during the summer?

Why are the prices of LCD televisions falling?

Why do the prices of vegetables rise following a poor harvest

Changes in the **market prices** of goods and services in a market economy are the result of changes in the pattern of consumer demand and the amount supplied by producers.

DEMAND IS THE WILLINGNESS OF CONSUMERS TO BUY GOODS AND SERVICES

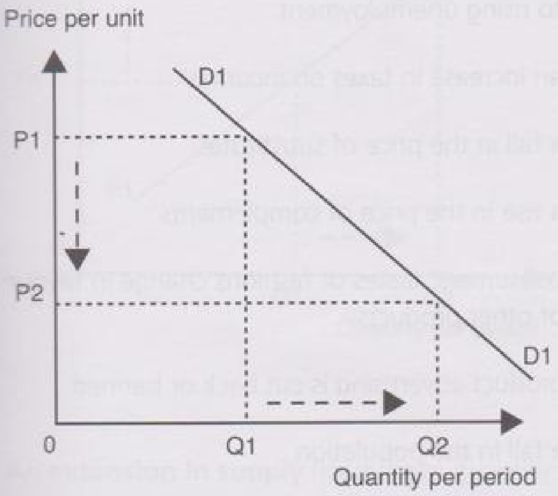
The market demand for a particular good or service is the total **effective demand** of all consumers of that product.

›› 3.4 Spending, Saving and Borrowing

Consumers want many things but for their demand to be an **effective demand** they must have enough money to buy what they want at different prices. That is, a consumer must have a disposable income they can use to pay for goods and services.

Disposable income refers to the amount of income people have left to spend or save after taxes on their incomes have been paid.

The **market demand curve** for any good or service therefore shows the total quantity demanded by consumers in a given period of time at every possible price.



In general, market demand curves are downward sloping. As prices fall, quantity demanded tends to increase.

As the price of a good or service changes, consumers tend to move along the market demand curve.

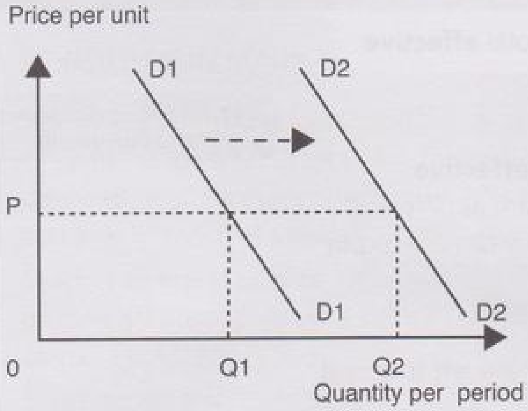
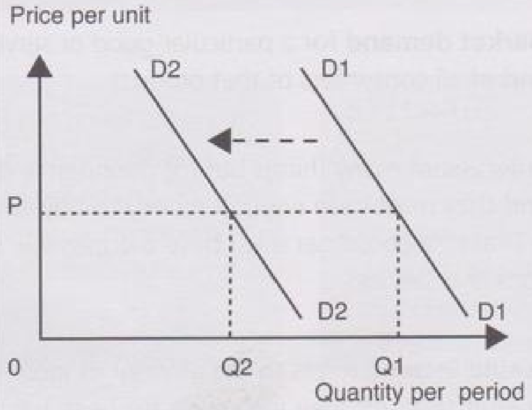
An **extension in demand** (increase in quantity demanded) occurs when price falls.

A **contraction in demand** (decrease in quantity demanded) occurs when price rises.

If the market demand for a good or service changes for any reason other than a change in price it will cause the market demand curve to shift.

A **rise in demand** will shift the market demand curve outwards to the right and shows that consumers now demand more than they did before at every possible price.

A **fall in demand** will shift the market demand curve inwards to the left and shows that consumers now demand less than they did before at every possible price.

A rise in market demand	A fall in market demand
	
A rise in the market demand for a product may be caused by: • an increase in consumers' incomes, for example, due to rising employment • a reduction in taxes on incomes • a rise in the price of substitutes • a fall in the price of complements • consumers' tastes or fashions change in favour of the product • increased advertising of the product • a rise in the population • other factors, for example, a hot summer can boost demand for cold drinks and summer clothes.	A fall in the market demand for a product may be caused by: • a fall in consumers' incomes, for example, due to rising unemployment • an increase in taxes on incomes • a fall in the price of substitutes • a rise in the price of complements • consumers' tastes or fashions change in favour of other products • product advertising is cut back or banned • a fall in the population • other factors, for example, a ban on smoking in public places may reduce demand for cigarettes.

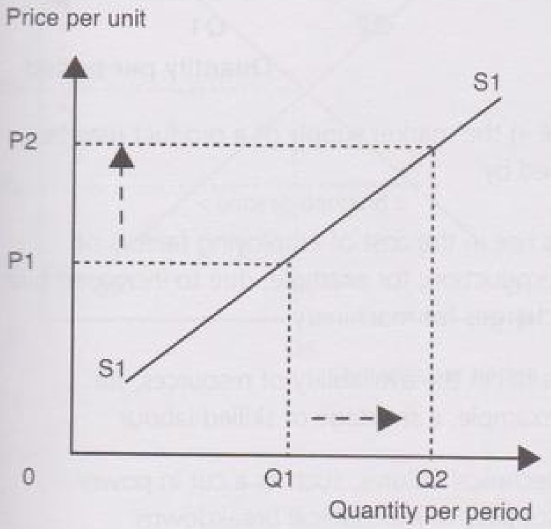
Demand for a **normal good** will tend to rise as incomes rise. However, demand for **inferior goods** will tend to fall as incomes rise. For example, as consumers become better off they might prefer to travel by taxi rather than by bus.

Taxi and bus travel are also substitutes. Goods and services are **substitutes** if they are similar and compete to satisfy the same consumer demand. For example, butter and margarine are close substitutes for many consumers. A rise in the price of one may result in a rise in demand for the substitute.

Complementary goods or services are in **joint demand**. This means they are consumed together such as cars and petrol, bread and butter, mobile phones and phone calls. A rise in the price of one will often lead to a fall in demand for both.

SUPPLY IS THE WILLINGNESS OF PRODUCERS TO PROVIDE GOODS AND SERVICES

Supply is the amount of a good or service a firm is willing and able to make and sell to consumers at different prices. The **market supply** for a particular good or service is therefore the total quantity supplied by all firms producing that product.



The **market supply curve** for any good or service shows the total quantity supplied by firms in a given period of time at every possible price.

In general, market supply curves are upward sloping. As prices rise quantity supplied tends to increase. This is because firms expect to earn more profits at higher prices.

As the price of a good or service changes, its producers tend to move along the market supply curve.

An **extension in supply** (increase in quantity supplied) occurs when price rises.

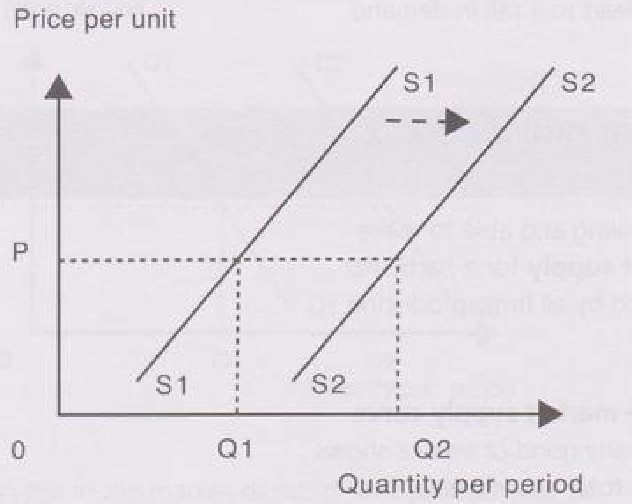
A **contraction in supply** (decrease in quantity supplied) occurs when price falls.

If the market supply for a good or service changes for any reason other than a change in price it will cause the market supply curve to shift.

A **rise in supply** will shift the market supply curve outwards to the right and shows that firms will now supply more than they did before at every possible price.

A **fall in supply** will shift the market supply curve inwards to the left and shows that firms will now supply less than they did before at every possible price.

<table>
<tr><th>A rise in supply</th><th>A fall in supply</th></tr>
<tr><td>



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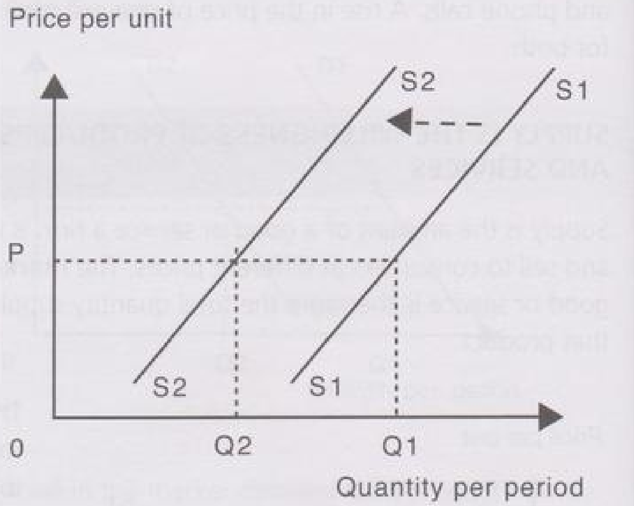

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<tr><td>

A rise in the market supply of a product may be caused by:

- a fall in the cost of employing factors of production, for example, due to falling wage costs or lower prices for materials
- an increase in resources, for example, from new sources of raw materials
- technical progress and improvements in production processes and machinery
- an increase in business optimism and profit expectations
- the government pays subsidies to producers and/or cuts taxes on profits
- other products become less profitable
- other factors, such as a good summer to boost crops of fruit and vegetables.

</td><td>

A fall in the market supply of a product may be caused by:

- a rise in the cost of employing factors of production, for example, due to increased hire charges for machinery
- a fall in the availability of resources, for example, a shortage of skilled labour
- technical failures, such as a cut in power supplies or mechanical breakdowns
- a fall in business optimism and profit expectations become more pessimistic
- the government withdraws subsidies and/or increases taxes on profits
- other products become more profitable
- other factors, such as wars and natural disasters.

</td></tr>
</table>

THE MARKET PRICE OF A PRODUCT IS DETERMINED BY MARKET DEMAND AND SUPPLY

The market price of a good or service will be determined where the market demand equals the market supply. At this price consumers are willing and able to buy exactly the same amount of the product that firms are willing and able to supply.

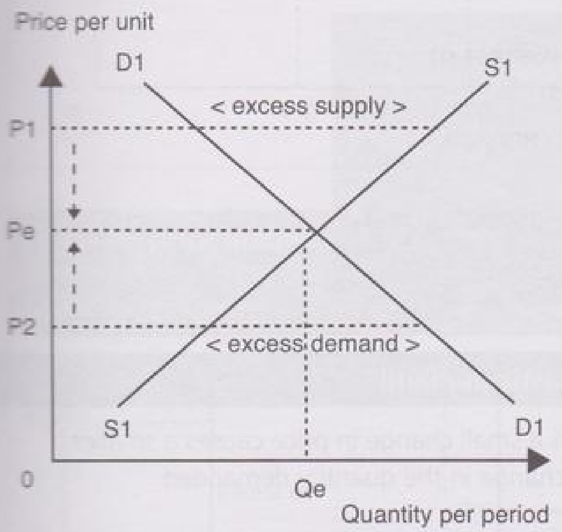
A market is in **equilibrium** when demand equals supply because the market price (Pe) and quantity traded (Qe) between consumers and producers will be stable.

The market will be in a **disequilibrium** at any price above or below the market price because demand will not equal supply and the price will have to change until they do.

TOP TIP

Always label your diagrams

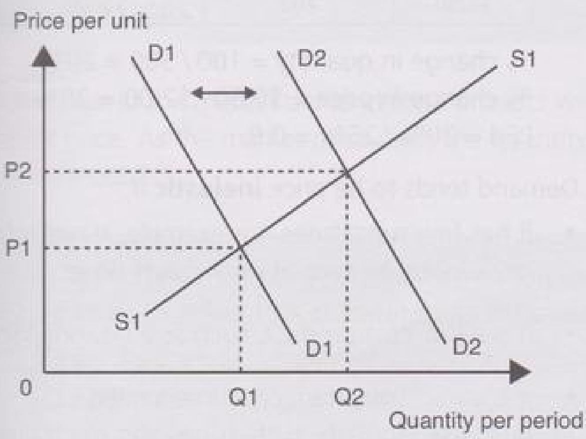
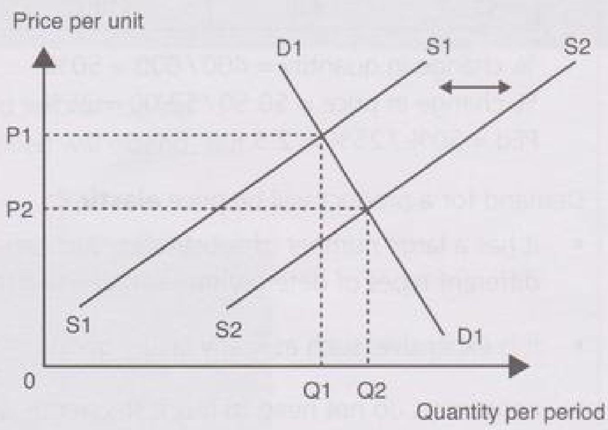
Whenever you draw a graph or diagram you should always label it clearly with a title, labels for axes and the units they use, for example, $ (millions) or Number of Employees (thousands), etc.



At a price (P1) above the market price, there will be an **excess supply** because the quantity supplied by firms will exceed the quantity demanded by consumers. Price will have to fall to encourage consumers to buy up the excess supply.

At a price (P2) below the market price, there will be an **excess demand** because the quantity demanded by consumers will exceed the quantity supplied by firms. As a result the price will have to rise to contract demand and encourage firms to extend their supply.

Market prices will change when changes in market demand or market supply occur.

A shift in demand	A shift in supply
	
As demand rises from D1 to D2, market price rises from P1 to P2 and more is traded at Q2. As demand falls from D2 to D1, market price falls from P2 to P1 but less is traded at Q1.	As supply rises from S1 to S2, market price falls from P1 to P2 and more is traded at Q2. As supply falls from S2 to S1, market price rises from P2 to P1 but less is traded at Q1.

PRICE ELASTICITY OF DEMAND IS THE RESPONSIVENESS OF DEMAND TO PRICE CHANGES

>> 5.2 Types of Taxation

Firms will want to know what will happen to their revenues from sales of their goods and services following a change in their price. A government will also wish to know what will happen to tax revenues if they change indirect taxes such as sales tax and value added tax (VAT) levied on goods and services.

An increase in price may not result in an increase in revenue. This will depend on what happens to consumer demand.

Price elasticity of demand (PEd) measures the responsiveness of demand to a change in price. It is calculated as follows:

PEd = % change in quantity demanded / % change in price

where

% change in quantity demanded = change in quantity/original quantity

% change in price = change in price/original price

Elastic demand

- If a small change in price causes a larger change in the quantity demanded
- If an increase in price causes a decrease in revenue
- If the demand curve is relatively flat
- If PEd greater than 1, e.g.

Price	Demand	Revenue
$2.00	800	$1600
$2.50	400	$1000

% change in quantity = 400 / 800 = 50%
% change in price = $0.50 / $2.00 = 25%
PEd = 50% / 25% = 2.5

Demand for a product will be price **elastic** if:

- it has a large number of substitutes, such as different types of detergents
- it is expensive, such as many luxury goods
- consumers do not need to buy it frequently, so they have the time to search for alternatives if price rises.

Inelastic demand

- If a small change in price causes a smaller change in the quantity demanded
- If an increase in price causes an increase in revenue
- If the demand curve is relatively steep
- If PEd less than 1, e.g.

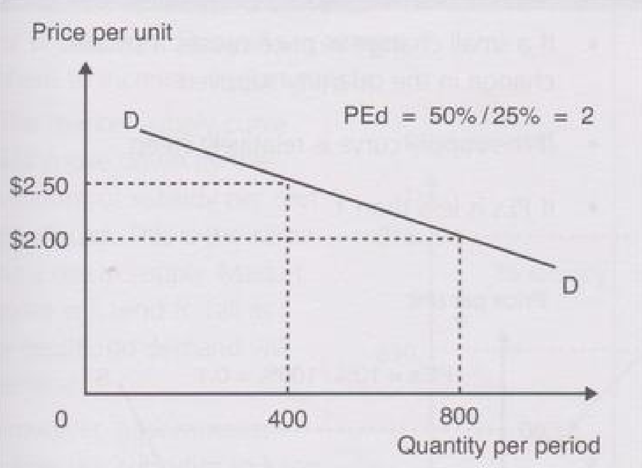
Price	Demand	Revenue
$2.00	500	$4800
$2.50	400	$5000

% change in quantity = 100 / 500 = 20%
% change in price = $0.50 / $2.00 = 25%
PEd = 20% / 25% = 0.8

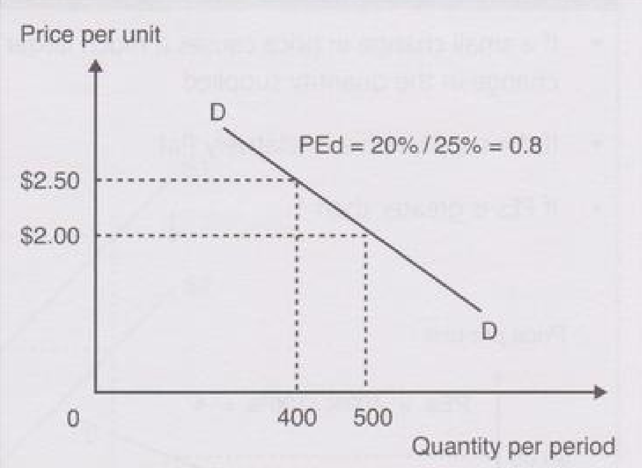
Demand tends to be price **inelastic** if:

- it has few substitutes, for example, travel into city centers by train at peak travel times
- it is a low cost product, such as a newspaper
- it is a necessary item consumers need to purchase regularly, such as gas and electricity supplies and many foods.

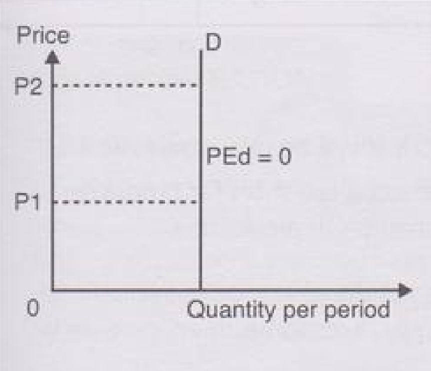
Demand is relatively price elastic



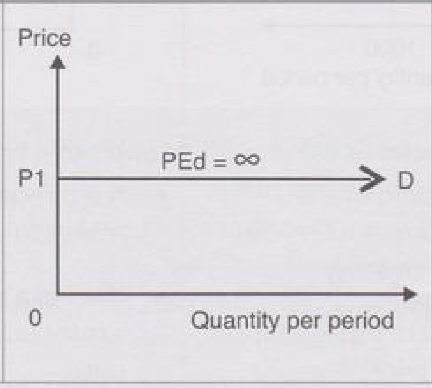
Demand is relatively price inelastic



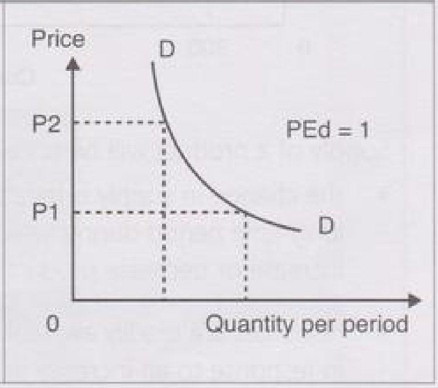
Perfectly price inelastic: demand remains constant whatever the price



Infinitely price inelastic: there is unlimited demand but at only one price



Unitary elasticity: revenue remains constant at every possible price



▲ Some special demand curves

PRICE ELASTICITY OF SUPPLY IS THE RESPONSIVENESS OF SUPPLY TO PRICE CHANGES

An increase in the market demand for a product will tend to push up its market price. As the market price rises, the quantity supplied will extend, but by how much?

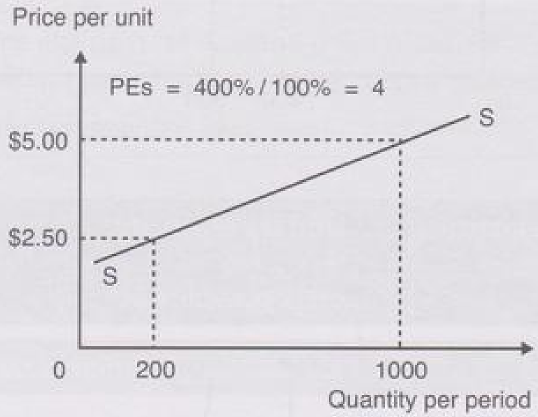
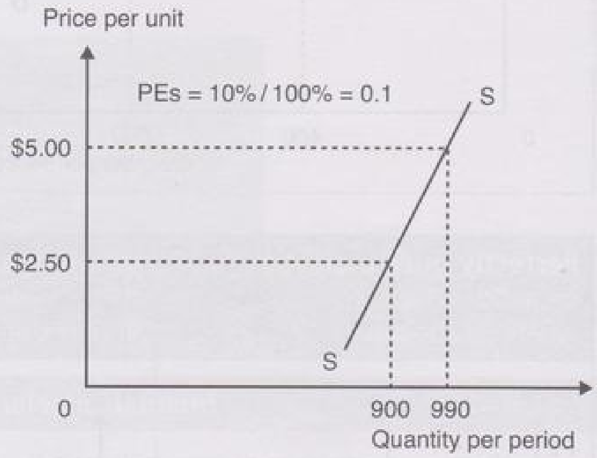
Price elasticity of supply (PEs) measures the responsiveness of supply to a change in price. It is calculated as follows:

PEs = % change in quantity supply / % change in price

where

% change in quantity supply = change in quantity/original quantity

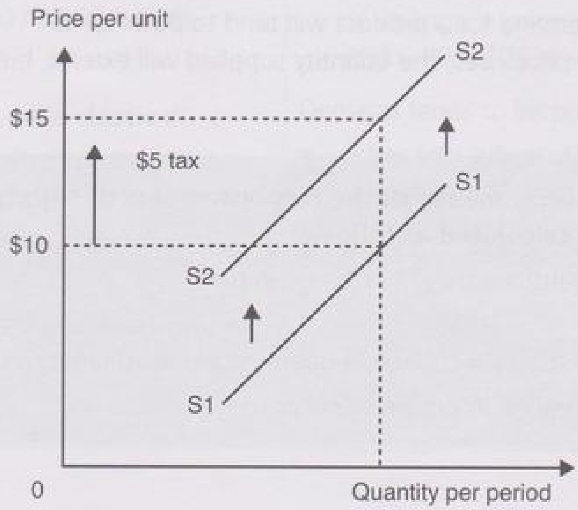
% change in price = change in price/original price

Supply is relatively price elastic	Supply is relatively price inelastic
• If a small change in price causes a much larger change in the quantity supplied • If the supply curve is relatively flat • If PEs is greater than 1  Supply of a product will be price **elastic** if • the change in supply is measured over a long time period during which producers can increase or decrease production easily • resources are readily available to expand supply in response to an increase in price.	• If a small change in price causes a smaller change in the quantity supplied • If the supply curve is relatively steep • If PEs is less than 1  Supply of a product will be price **inelastic** if • the time period is too short for producers to make big changes in production • there is a shortage of resources available to expand supply in response to an increase in price.

A GOVERNMENT CAN USE TAXES AND SUBSIDIES TO CHANGE MARKET PRICES AND QUANTITIES

A government can levy an **indirect tax** on the price of a good or service to reduce its market supply. The tax increases the cost of production and reduces the profits of firms.

The tax is added to price and therefore shifts the market supply curve up by the amount of the tax. This has the same effect as a fall in supply and market price will tend to rise. This will contract demand for the product.

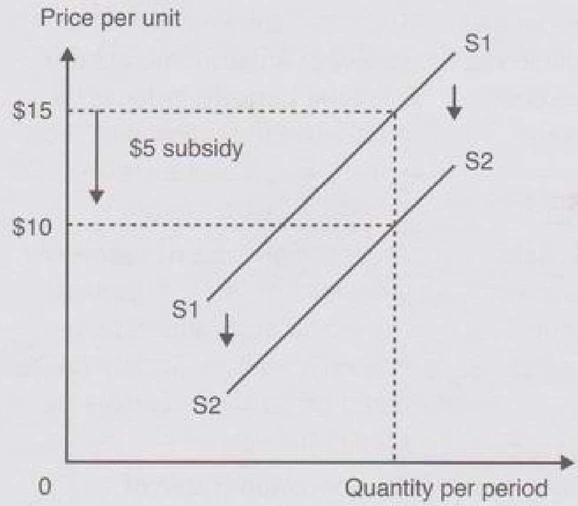


>> 5.2 Types of Taxation

A **subsidy** is a payment to producers to reduce their costs of production. This will encourage them to increase market supply.

The market supply curve will move down by the amount of subsidy per unit produced. This is the same as a rise in supply. Market price will tend to fall as a result and demand will extend.

However, governments often use subsidies to keep costly and inefficient firms running in their countries to protect employment and their balance of trade.



>> 8.1 International Specialization and Trade

EXAM PREPARATION

The following table shows the market demand and supply for air travel between Singapore and Jakarta in Indonesia measured in thousands of aircraft seats per week. There has been a rise in the market demand over time as consumers' incomes have risen and more people want to take overseas holidays. Competition to supply the market has also increased as more budget and low cost airlines have entered the market.

Plot the market demand and supply curves on a diagram and explain what has happened to the market price and quantity traded over time.

Price per seat	Market demand (1)	Market demand (2)	Market supply (1)	Market supply (2)
$20	100	140	20	40
$30	90	130	30	50
$40	80	120	40	60
$60	70	110	50	70
$70	60	100	60	80
$80	50	90	70	90
$90	40	80	80	100
$100	30	70	90	110

Example exam questions

- Explain the difference between an equilibrium price and a disequilibrium price.
- Explain, with the use of a diagram, what will happen in a market system if a good becomes popular and there is a fall in the cost of production.
- Many more people today travel by aeroplane than ten years ago. With the help of a demand and supply diagram, explain what might have happened in the global market for air travel.

2.3 Social Costs and Benefits

REVISION SUMMARY

Private firms aim to maximize their profit, measured as the difference between their **private costs** of production and their **private benefits** or revenues

A private firm may not take account of the **external costs** of its activities from pollution or the destruction of the natural environment. Other firms and people incur these costs

Decisions by **consumers** to use goods and services can also impose **external costs** on others, for example, if they consume loud music or drop litter

Some economic activities may create **external benefits** which other firms and consumers unrelated to the activity are able to enjoy without having to pay for them

The total economic cost to society of an economic activity, or **social cost**, includes the private costs incurred by firms and consumers undertaking the activity and any external costs on others

The total economic benefit to society of an economic activity, or **social benefit**, includes the private benefits enjoyed by those undertaking it and any external benefits it creates for others

An **economic use of resources** will create more social benefits than social costs and increase economic welfare. Society will be better off if more resources are used in this way

An **uneconomic use of resources** will create more social costs than social benefits and lower economic welfare. Society will be better off without the activity

A government can intervene if economic activities create significant external costs and benefits. For example, **regulations** can be used to restrict activities that create external costs, and **subsidies** could be used to encourage activities with external benefits

SYLLABUS

This section will

- define private and socia[l] costs and benefits
- discuss conflicts of interest in relation to these costs and benefits in the short term and long term through studies of the following issues:
  - conserving resources versus using resource[s]
  - public expenditure versus private expenditure.

Do you like to play loud music? If you do, imagine the impact this might have on your neighbours.

Similarly, how would you feel if people threw litter in your garden or a local firm dumped toxic waste into a nearby river?

All these activities have negative impacts, or **external costs** o[n] others.

Producers and consumers often fail to take account of the external costs of their activities and this can result in an uneconomic use of scarce resources in an economy.

ECONOMIC ACTIVITIES INCUR BOTH PRIVATE AND EXTERNAL COSTS AND BENEFITS

Imagine a firm making paints. It pumps the waste chemicals and dyes used in its paints into a nearby river. This kills the fish and the river can no longer be used for swimming.

The total economic costs and benefits of this decision are listed in the tables below.

Paint production	$ million per year
Private costs – wages – purchases of materials – machinery hire charges – factory and office rent – costs of electricity, insurance, transport etc	$10 m
Private benefits – sales revenues – all other revenues	$15m
Profit	**$5m**

External costs and benefits	$ million per year
Lost revenue of fishing industry	$4 m
Detriment to local residents unable to go swimming	$1m
Cost of cleaning up the polluted river	$2m
Total external costs	**$7m**
Value to other firms of trained chemical engineers	$1m
Total external benefits	**$1m**

The firm making and selling the paints aims to maximize its profit. This is the difference between its **private costs** of production and its **private benefits**, or revenues.

The firm does not pay the **external costs** it creates, nor does it compensate the firms or people badly affected by them. They are called external costs because others must pay them.

Similarly, the firm receives no payment for the **external benefits** it creates. Other people and firms enjoy external benefits. The paint maker may have spent money training its workers to become skilled chemical engineers. These workers may then leave and work for other firms which become more productive and profitable as a result.

An **external cost** arises when the economic activities of one group have a negative impact on others and when that impact is not taken into account or paid for by those creating it.

An **external benefit** arises when the economic activities of one group have a positive impact on others and when that impact is not taken into account or paid for by those who benefit.

THE SOCIAL COST OF AN ECONOMIC ACTIVITY IS THE SUM OF ITS PRIVATE AND EXTERNAL COSTS

Notice how the total external costs exceed the profit of the private firm making paints and the external benefits. The owners of the firm are better off producing paints because they make a profit but, overall, society is worse off. That is, economic welfare is reduced by the activity.

A use of resources is **uneconomic** whenever its **social cost** exceeds its **social benefit**, as in the example above. Society will be better off – or economic welfare higher – if the same resources are used to produce something else instead.

Social cost: the total economic cost of an activity to a society, including private costs incurred by firms and consumers undertaking the activity and external costs affecting those not directly involved in the activity.

Social benefit: the total economic benefit of an activity to a society, is the sum of its private benefits and external benefits.

Only when the social benefit of an activity exceeds its social cost will that particular use of resources be an **economic use of resources** and worthwhile for a society. Economic welfare is increased by the activity.

If an economic activity creates significant social benefits, society will be better off having more of it. For example, a society may benefit from having more parks and opens spaces, but private firms may not find it profitable to provide them. Government may provide them instead.

CONSUMERS' DECISIONS ALSO CREATE EXTERNAL COSTS AND BENEFITS

The decisions of consumers to enjoy certain goods or services can also create external costs and external benefits for others. For example, smoking cigarettes can cause health problems for other people, and dropping litter will mean others have to spend money and time cleaning it up.

Every year billions of tonnes of waste bottles, cans, paper and food are discarded by consumers all over the world. Scarce resources will have been used up producing these products, and scarce land then has to be used to bury the waste. Waste therefore involves a big opportunity cost. The same resources could have been used to produce something else instead.

Alternatively, we could create less waste if we consume fewer goods and services. This will conserve scarce resources but will satisfy fewer of our needs and wants, and fewer people may be employed. The opportunity cost of conserving resources is the goods and services given up.

›› 1.2 Scarcity Opportunity

GOVERNMENTS CAN INTERVENE IF AN ACTIVITY CREATES SIGNIFICANT EXTERNAL COSTS OR BENEFITS

>> 2.2 How Markets Work

A government can try to encourage more economic uses of resources in the following ways:

- **Taxes** can increase the private costs of activities that create external costs. For example, some countries have introduced 'green' taxes on waste disposal and energy. Firms and consumers can avoid paying these taxes if they cut their waste and energy use. Cigarettes, cars, petrol and air travel are also taxed in many countries to reduce demand for them
- **Subsidies** can be paid to firms to encourage them to move resources to activities that create more external benefits. For example, subsidies are often paid to firms to train workers and to recycle waste
- **Laws and regulations** can make some economic activities illegal. Firms or consumers found breaking these rules may have a to pay a fine or go to jail. For example, it is illegal in many countries to dump untreated waste, while others have banned smoking in public places.

EXAM PREPARATION

Each day millions of people all over the world travel to and from their place of work by car. Many could have used public transport instead. Continue to list and compare the most likely private and external costs and benefits of these choices. Overall, which mode of travel do you think will use less petrol, cause less congestion and create fewer harmful emissions?

Private costs and benefits	External costs and benefits	
Spending on petrol		
Revenues for bus and train companies		

Example exam questions

- Discuss, using concepts of social costs and social benefits, why a government might wish to subsidize public transport but tax private motorists.
- Explain what is meant by **(i)** an opportunity cost and **(ii)** a social benefit. Discuss whether it is possible to apply these concepts to the provision of health care by a government.

IMPORTANT THINGS TO REMEMBER

Fill in the missing key words.

A _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ is an economic system in which the allocation of resources is determind by the actions of firms and consumers through the exchange of goods and services.

In a market economy, the actions of producers and consumers are guided by market price signals. This is called the _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _.

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ occur when markets fail to provide efficient outcomes.

In a _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ the allocation of resources is determined by the actions of a private sector and a public sector of government organizations.

A market is in _ _ _ _ _ _ _ _ _ _ _ _ _ _ where market demand is exactly equal to market supply.

Products in joint demand are called _.

A product that can replace a consumer want for similar product is a _ _ _ _ _ _ _ _ _ _ _ _ _.

_ _ _ _ _ _ _ _ is the amount of a product firms are willing and able to produce at different prices.

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ of _ _ _ _ _ _ _ _ measures the responsiveness of demand to a change in the price of a product.

If a small change in the price of a product causes a much bigger change in demand for it then demand is relatively price _ _ _ _ _ _ _ _ _.

The profit of a firm is the difference between the _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ of production and its private benefits or revenue from the sale of its goods or services.

An _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ is a negative impact of an economic activity on others that is not paid for by those who created it.

The _ _ _ _ _ _ _ _ _ _ _ _ _ _ of an activity, or total economic cost to society, will include the private costs paid by firms and consumers undertaking it and any external costs on others.

A use of resources is _ _ _ _ _ _ _ _ _ _ _ _ _ _ and will reduce economic welfare if it creates more social costs than social benefits.

10 MINUTE TEST

Choose and then mark your answer A, B, C or D to each question.

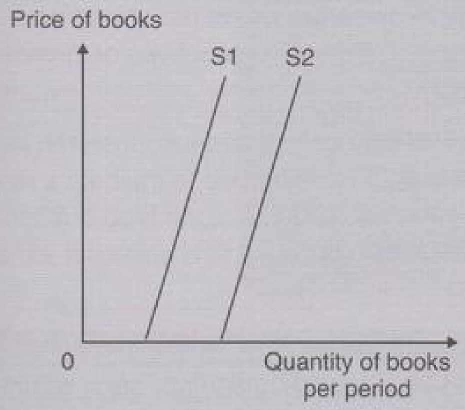
1 A mixed economy has:

A an agricultural and an industrial sector
B consumer goods and capital goods
C a financial sector and an industrial sector
D a private sector and a public sector

2 During the 1990s many countries in Eastern Europe transformed from planned economies to more market oriented economies. Which of the following best describes this change?

A more public sector control of resources
B increased use of the price mechanism to allocate resources
C less private sector ownership of resources
D increased use of price controls

3 A firm publishes and sells books. The diagram shows a shift in the supply curve from S1 to S2.



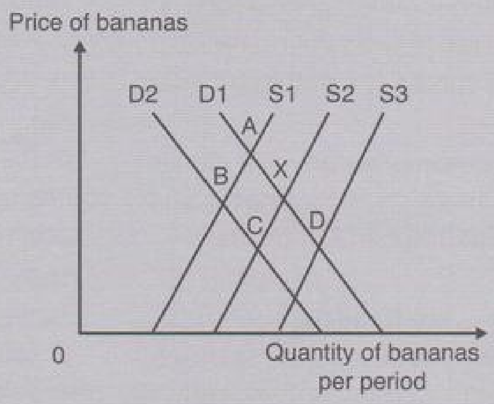
What could have caused the shift in supply?

A a fall in subsidies paid to book publishers
B a fall in the price of paper
C a rise in the income of consumers
D a rise in the wages of the firm's workers

4 What is an external cost of building houses in a city centre?

A the cost of compensating residents for mud on local roads
B the cost of city centre traffic congestion caused by the building works
C the cost of obtaining planning permission
D the cost of building materials

5 The diagram shows the market for bananas. The market equilibrium is X. What will be the new market equilibrium if there is a bad harvest?



6 What information will you need to plot a market demand for a product?

A the equilibrium market price of the product
B the number of suppliers of the product at each price
C the number of consumers who would like to buy the product at each price
D the quantity each consumer would be willing and able to buy at each price

Now check your answers against those given on page 155. How well did you do? Make a note of any you got wrong and make sure you understand the reasons why before you continue to the next section.

3 The individual as producer, consumer and borrower

3.1 Money and Finance

REVISION SUMMARY

Money is a generally accepted **medium of exchange** and a good store of value

Without money people had to **barter** or swap their services or any surplus goods they produced

The **money supply** in a modern economy consists of **notes and coins** and **bank deposits**

Banks are **financial intermediaries** because they bring together customers who want to save money and customers who want to borrow money

The **interest rate** charged by banks on loans or paid on savings is the price of money.

Commercial banks have retail branches in most modern shopping centres. They offer a wide range of financial services including internet banking and credit cards to make payments

The **central bank** in an economy maintains the stability of the national currency and money supply on behalf of the government

The **stock market** is a global market for the buying and selling of new and second-hand stocks and shares. Joint stock companies and governments issue stocks and shares to raise finance

A **stock exchange** enables individuals, companies and governments to buy and sell stocks and shares on the stock market

SYLLABUS

This section will

- describe the functions of money and the need for exchange
- describe the functions of central banks, stock exchanges, commercial banks.

Try to imagine a world without **money**. How would you buy all the different goods and services you needed or wanted? How would you be paid for work?

Many years ago before the widespread use of money, most people had to swap goods and services they produced. This type of exchange is called **barter**.

For example, a person who grew a lot of oranges could swap their surplus oranges with someone who produced a lot of cheese or clothing. But how many oranges should be exchanged for 1 kg of cheese, or a pair of trousers? And what if people with spare cheese or clothes didn't want oranges? No wonder many people either had to go without or be as **self-sufficient** as they could.

Barter therefore has a number of problems:

- **Fixing a rate of exchange** between every different type of good and services is very difficult
- Exchange can only take place when there is a **double coincidence of wants**. That is, two people must each want the good the other person has.

Money therefore enables people to **specialize** in different occupations and use the money they earn to buy the different goods and services they need and want from other producers who accept money in exchange.

MONEY MAKES TRADE OR EXCHANGE POSSIBLE IN MODERN ECONOMIES

Money overcomes the problems of barter and allows people, firms, governments and entire countries to specialize and trade with each other. However, to do this money must be:

- **A widely accepted medium of exchange**
  Exchange is simple if everyone accepts money in payment for things they provide. A person can be paid money for their labour and then use this money to buy goods and services
- **A reliable measure of value**
  Money provides a single measure of value that can be used for all goods and services. Every type of good or service will have an easily recognized market price in terms of money
- **A good store of value**
  Many goods or services are difficult to save because they are too big or perish quickly. Money usually provides a good store of value unless there is very rapid price inflation. A given amount of money will buy less and less over time if prices rise quickly

>> 6.1 Price Inflation

- **A means of deferred payment**
  Because money can be saved and will hold its value, many firms allow their customers to pay for a good or service in instalments over time or at later date.

People in different countries at different times in the past have used various objects as a medium of exchange, including teeth from animals, shells, small flat stones and gold rings. However, to fulfil the functions above a money must possess the following characteristics:

Characteristics of a good money	
Acceptable	A money must be generally acceptable in exchange. This is why we are able to use paper notes and metal coins as money today. They would be worthless unless everyone accepted the face value printed on them, such as a $10 note or €1 coin
Durable	A money must be hard wearing and last a long time. If a money wore out or perished quickly it would not be a good way to store value
Portable	Money must be easy to carry around. Paper notes are lightweight and can be folded into a wallet or purse, while a handful of small metal coins can be carried easily in your pockets
Divisible	It is important to be able to divide money up into different amounts without it losing its value. This is why we have notes and coins with different face values to buy goods and services with different prices and to give change
Scarce	This is by far the most important characteristic of a good money. Not only must it be generally accepted but it must also be limited in supply if people and firms are to value it. For example, small stones or pebbles would not be a good money because anyone could pick up as many as they wanted whenever they liked

THE MODERN MONEY SUPPLY CONSISTS OF NOTES, COINS AND BANK DEPOSITS

Cash or notes and coins with different face values are generally accepted and recognized as money in all economies. However, cash can lose its value over time due to rising prices.

Many **financial assets** can provide a good store of value and so may also be a good form of money especially if they can be converted easily and quickly into cash in order to make payments. If they can they are called **near money**.

Bank deposits held at banks and other financial institutions are the most easily converted into cash, usually for little or no cost. Bank deposits have therefore become the most important form of money in most modern economies.

In contrast, term or **savings accounts** that cannot be withdrawn until, say, 90 days or longer have passed, and **physical assets** such as jewellery and property that may be difficult to sell quickly, will take time to convert to cash and become a medium of exchange. They are not near money.

The **money supply** in an economy = notes and coins in circulation and bank deposits

FINANCIAL INSTITUTIONS SUPPLY MONEY IN MODERN ECONOMIES

Financial institutions provide financial services to consumers, firms and governments to help them save, borrow and invest money and make payments.

The main type of financial institution is a **bank**. A bank is a **financial intermediary** because it brings together customers who want to save money and customers who want to borrow it.

Banks attract savers by offering them interest on their savings or a share of their profits. Banks are then able to use this money for loans to other customers. They earn revenue from:

- interest charges on loans. For example, if a person borrows $1000 for one year at an interest rate of 10% then they will have to repay the bank $1100 in total
- fees for services, such as foreign currency exchange or using automated cash machines
- profits from investments they make in other companies through the stock market.

The **interest rate** charged by banks on loans or paid on savings represents the price of borrowing or saving money.

- **Commercial banks** are well-known banks with retail branches found in most modern shopping centres or easily accessed via internet banking.

Accepting deposits of money and savings
Short-term personal and commercial loans
Long-term loans or mortgages for property purchases
Buying and selling shares
Providing insurance cover
Operating pension funds
Financial and tax planning advice
Storing valuables
Exchanging and transferring foreign currencies
Helping customers make payments, including cheque accounts, debit and credit cards
Sharia'a Law compliant savings accounts and loans

▲ Commercial banks offer their customers a wide range of financial services

- **Credit unions** are co-operative societies, owned by their members and non-profit making, originally set up to help people and small businesses on low incomes borrow money. They now provide a range of financial services similar to commercial banks
- **Mutual societies**, also savings and loan associations and building societies in some countries, are owned by and run on behalf of their customers or members. Traditionally they specialized in long-term loans called **mortgages** to buy property but now offer many commercial banking services
- **Investment banks** specialize in helping large business organizations raise finance from the stock market
- **Islamic banks** specialize in banking services that are compliant with Islamic Sharia'a Law which forbids interest charges and payments. Instead they charge fees and share profits
- Other specialist financial institutions include insurance companies, pension fund managers and unit trust companies.

THE CENTRAL BANK OF AN ECONOMY CONTROLS MONETARY POLICY AND THE BANKING SYSTEM

The **central bank** is the centre of the banking system in an economy. Its main functions are to maintain the stability of the national currency and money supply on behalf of the government. There are many examples including the European Central Bank, the US Federal Reserve, and the Central Banks of Swaziland and the UAE.

A central bank usually performs the following functions:

- **issuing new notes and coins for the nation's currency**
- **managing payments to and from the government's account.**

- **stabilizing the value of the national currency on the foreign exchange market**
- **managing the stock of government borrowing (the national debt)**
- **supervising the banking system, regulating the conduct of banks, holding their deposits and transferring funds between them**
- **'lender of last resort' or lending money to banks to prevent them going bankrupt if they run short of money**
- **operating the government's monetary policy.**

Monetary policy involves using the interest rate to manage inflationary pressures in an economy. Inflation can be caused by people and firms spending too much money on goods and services. Raising the interest rate in the economy will make borrowing money more expensive and reduce demand for loans. It will also make saving more attractive and increase demand for savings.

›› *5.1 Government Economic Policy*

COMPANIES AND GOVERNMENTS CAN ALSO RAISE MONEY FROM THE STOCK MARKET

Stock is money raised by a joint stock company or corporation, or government, through the stock market.

›› *4.1 Types of Business Organization*

Types of stock bought and sold on the stock market

Type of stock	Also known as...	
Preferred stocks	**Preference shares**	These are issued by joint stock companies. Holders of preference shares receive a share of any profits (called a 'dividend') before all other shareholders
Common stocks	**Ordinary shares**	These are issued by joint stock companies. Ordinary shareholders receive their dividends after preference shareholders but are able to vote on company policy and directors at annual general meetings. There is one vote per share
Government stocks	**Government bonds**	These are loan stocks issued by a government to borrow money over a fixed term. They are repaid with a fixed rate of interest at the end of their term ('maturity'). Some government bonds are issued for 25 years or more

The **stock market** is the global market for the buying and selling of new and second-hand stocks and shares.

>> *4.1 Types of Business Organization*

A **shareholder** is a person or organization that buys and holds shares in a joint stock company. The total value of shares or **equity** issued by a company is called its **market capitalization**.

Unlike loans, companies do not repay the money they raise from new issues of their shares. If shareholders want their money back they must sell their shares to other investors. They are able to do this through stock exchanges like the New York Stock Exchange (NYSE).

A **stock exchange**, or bourse, is a business organization that enables individuals, companies and governments to buy and sell stocks on the stock market because

- it brings together buyers and sellers of new and second-hand stocks
- it provides up-to-the-minute information on stock market prices and quantities traded
- it supervises the conduct of firms of brokers that buy and sell stocks on behalf of investors.

Without stock exchanges governments and companies would be unable to raise finance from issues of stocks and shares. This is because investors would be reluctant to buy stocks and shares if they could not then sell them again to get their money back.

Holders of government stocks can also sell these on the stock market before they mature.

Many investors trade stocks in the hope they will make a capital gain from an increase in their value. But investors may not always get all the money back they originally paid for them. The market price of a stock on the stock market may differ from the face value printed on the stock certificate. It can rise or fall over time depending on stock market demand and supply.

EXAM PREPARATION

Which, if any, of the following items would make a good money? Write down the functions of money you think each item will be able or unable to perform and why.

Example exam questions

- List **four** functions that euro notes and coins should perform.
- Explain why some people prefer to keep money in cash and current accounts in banks even though other accounts earn more interest.

3.2 Occupations and Earnings

REVISION SUMMARY

People go to work to earn **wages**. They choose between different jobs or occupations depending on how much they can earn and other **non-wage factors**

Non-wage factors will make some jobs more attractive than others. They include holiday and pension entitlements, promotion prospects, job security and travel to work times

Wage levels and non-wage factors that affect the attractiveness of a job or occupation are called its **net advantages**

People will usually choose to **specialize** in particular skills and occupations. This can make them more productive and earn them higher wages

The market **wage rate** for an occupation is determined by the demand for labour and the supply of labour to that occupation

Differences in wage rates between different jobs are called **wage differentials**. Wage rates can vary by occupation, within the same occupation and between different economic sectors

Some employees receive a higher wage rate because they are more experienced or skilled than others, or because the job they do is dangerous or involves working unsociable hours

SYLLABUS

This section will

- identify the factors affecting an individual's choice of occupation (wage factors and non-wage factors)
- describe likely changes in earnings over time for an individual
- describe the differences in earnings between different occupational groups
- describe the benefits and disadvantages of specialization for the individual.

Why do some football players earn more than nurses?

Although nurses help to save peoples lives, talented football players are in short **supply** compared to nurses.

Top football clubs **demand** talented football players because they will score more goals and attract more football fans. This helps a football club to earn more revenue and profit.

Just like all other employees the **wages** of football players are determined by the demand for their labour and their supply.

PEOPLE ARE ATTRACTED TO WORK IN DIFFERENT OCCUPATIONS DEPENDING ON THEIR NET ADVANTAGES

Most people supply their labour to earn an income. They choose different jobs or occupations depending on the **wage** or **salary** they offer and also depending on **non-wage factors**.

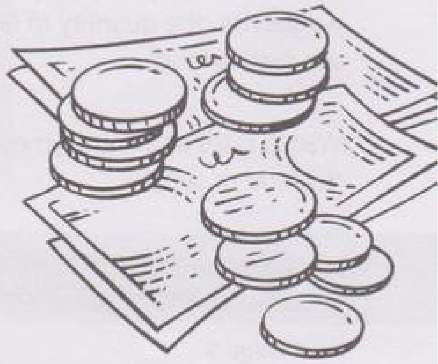
For example, a job that involves working unsociable hours over night and a long journey to work and may be less attractive than a job that doesn't unless it offers a much higher wage.

Some people may nevertheless choose to work in occupations that pay relatively low wages because they offer more non-wage benefits or because they are considered more worthwhile and satisfying, such as nursing or charity work.

Non-wage factors include ...	
• hours of work	• distance or travel time to work
• holiday entitlement	• training provision
• promotion prospects	• how secure the job is
• flexible working arrangements	• pension entitlement
• a good working environment.	• access to a company car.

All the wage and non-wage factors that affect the attractiveness of a job or occupation are called its **net advantages**.

Wages paid to employees are normally calculated from an hourly, daily or weekly **wage rate** multiplied by the amount of time the employee has worked. Wage rates may also be paid by the piece (or per unit of output) so the more an employee produces the more he or she will earn.



A **salary** is a total annual wage rate that is paid in monthly instalments regardless of hours worked each month but subject to a minimum number of hours being worked per week or over the year.

MOST PEOPLE SPECIALIZE IN THE SAME OCCUPATION FOR ALL OR MOST OF THEIR WORKING LIFE

Advantages of specialization	Disadvantages of specialization
• Employees can make best use their particular talents and skills • Employees can increase their skills and experience by repeating tasks • Employees can produce more output and reduce business costs if they concentrate on the same job or tasks • More productive employees can earn higher wages.	• Doing the same job or repetitive tasks can become boring and stressful • Individuals must rely on others to produce goods and services they want but cannot produce themselves • Many repetitive manual tasks can now be undertaken by computer-controlled machinery and robots. This has led to many low skilled workers being made unemployed.

WAGE RATES FOR OCCUPATIONS ARE DETERMINED BY LABOUR DEMAND AND SUPPLY CONDITIONS

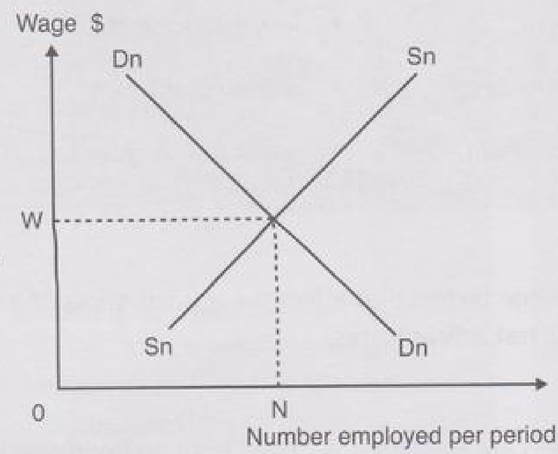
There is a **labour market** for every type of occupation. Employers will **demand** labour with the right skills for a job and people willing and able to do that job will **supply** their labour.

The **demand for labour** is a **derived demand** because employers want labour to produce goods and services consumers want or need.

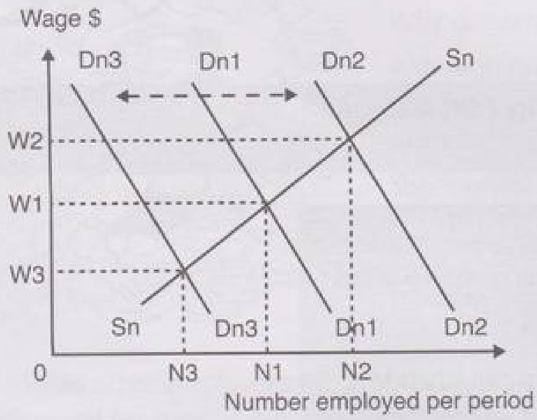
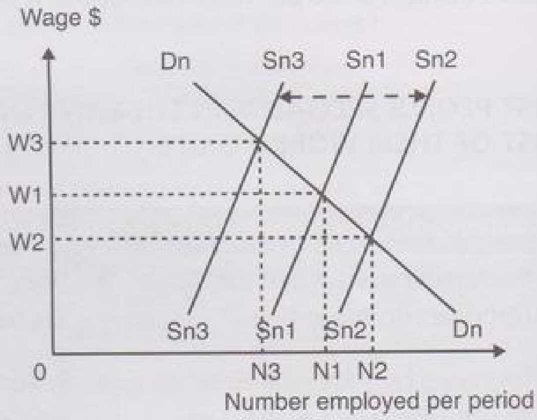
The **market wage rate** (W) for an occupation and number of people employed (N) are determined where the demand for labour is equal to the supply of labour.

The **market demand curve for labour** (Dn) is downward sloping. As wages rise, the quantity of labour demanded contracts.

The **market supply curve for labour** (Sn) is upward sloping. As wages rise, the quantity of labour supplied extends.



Wages rates and employment will change if there are changes in labour demand or supply.

A change in the demand for labour	A change in the supply of labour
	
If the demand for labour rises from Dn1 to Dn2, the wage rate rises from W1 to W2 and employment increases from N1 to N2. If demand falls from Dn1 to Dn3, the wage rate falls from W1 to W3 and employment falls to N3.	If the supply of labour rises from Sn1 to Sn2, the wage rate falls from W1 to W2 and more people are employed at N2. If supply falls from Sn1 to Sn3, the wage rate rises from W1 to W3 and employment falls.

The demand for labour may rise due to...	The demand for labour may fall due to...
• an increase in consumer demand for goods and services • an increase in labour productivity • an increase in the cost of employing capital equipment • a fall in non-wage employment costs paid by employers. For example, falling employment taxes and pension contributions.	• a fall in consumer demand for goods and services • a reduction in labour productivity • a fall in the cost of employing capital equipment • a rise in non-wage employment costs paid by employers. For example, a rise in the cost of health and safety equipment and training.
The supply of labour may rise due to...	**The supply of labour may fall due to...**
• an improvement in the net advantages of an occupation, for example, if holiday entitlement is increased • a rise in the working population, due to more people joining the workforce or inward migration • improved education and training in the skills required for the occupation.	• a decline in the net advantages of an occupation. For example, if non-wage benefits are cut compared to other jobs • a fall in the working population, for example, due to an ageing population or more young people staying longer in education • employees lack a good education or training in skills required for the occupation.

WAGE RATES VARY BY THE TYPE OF JOB UNDERTAKEN, OCCUPATION AND LOCATION

Wage differentials between different occupations and groups of employees can be explained by differences in labour market demand and supply conditions.

For example, workers with occupational skills that are in high demand but in short supply are likely to be paid higher wage rates or salaries than other workers.

Wages will therefore tend to be higher in occupations in which:

- employees are required to have very specific abilities, **skills** or **qualifications** that may take a long time or are expensive to obtain, for example, to become a doctor or a lawyer, or even a talented footballer
- employees are required to work **unsociable hours** or undertake **dangerous tasks**, such as police or armed forces personnel
- job vacancies in particular locations are difficult to fill because workers are not prepared to move, for example, because housing is more expensive. The reluctance or inability of workers to change location is called the **geographic immobility of labour**.

Wage differentials can also exist between employees doing the same job because:

- there are **regional pay differences**
- different employers offer different **non-wage benefits** instead
- older employees may receive higher wages than younger employees as a reward for their **experience and length of service**
- **discrimination** whereby some employers choose to pay some employees differently simply because of their sex, race, age or religion. This is illegal in many countries.

WAGE DIFFERENTIALS ALSO EXIST BETWEEN DIFFERENT SECTORS IN AN ECONOMY

Wage differential	Who earns more?	Why?
Public sector or private sector employees?	Public sector workers are sometimes paid less than private sector workers for doing similar jobs	Public sector workers often enjoy more job security and more holiday entitlement than private sector employees But the public sector is a major employer and needs to offer attractive wages and other benefits to recruit and retain skilled workers
Male or female employees?	On average, male employees tend to earn more than females	Some women may take career breaks to raise children More female employees work part-time compared to men or choose occupations like teaching, nursing and retailing, which tend to offer lower wage rates. There may also be discrimination
Skilled or unskilled workers?	Skilled workers are paid more than unskilled workers	Skilled workers are more productive. Some specialist skills are in short supply Demand for skilled workers is increasing in many countries. Firms are willing pay higher wages to attract and retain skilled workers
Employees in different industries	Agricultural workers tend to be paid less than workers in manufacturing and service industries	Agriculture has become more capital intensive and so the demand for agricultural workers has declined Manufacturing and particularly service industries have expanded significantly There is a shortage of supply of labour with specialist skills for many advanced manufacturing sectors, but an abundant supply of low skilled labour available for agriculture and many service industries

EXAM PREPARATION

Compare the two job advertisements and then complete the table of questions below.

JOB A

Major Multinational Company requires Senior Energy Economist

The company provides a dynamic, challenging and stimulating working environment for economists with an interest in energy markets.

Candidates should have an excellent academic record, together with at least 5 years experience of working in the energy industry, consultancy or government.

The job will be based in modern offices in New York but will involve substantial international travel.

Excellent salary + benefits including pension, health insurance, health club membership, company car and 30 days annual leave.

JOB B

Home help wanted

We are looking for someone who can help look after our 3 young children and with other domestic tasks around the house. Duties will include helping our children to get ready for school in the morning and collecting them in the afternoon, cooking their meals, and cleaning their rooms.

Must be good with children and able to work flexibly including some nights and weekends, up to a maximum of 20 hours per week during school periods. Working during school holidays is not required. Would suit a student or a fit retired person.

We will pay a basic wage rate per hour plus expenses to cover rent, food and travel costs. Free use of car included.

Which job....	Job A?	Job B?
requires a highly skilled employee?		
requires working unsociable hours?		
requires the employee to have studied for qualifications?		
offers long-term job security?		
will provide a good working environment?		
offers better promotion and pay prospects?		
allows flexible working patterns?		
is likely to pay more?		

Example exam questions

- Why do you think a worker would be prepared to work for very low wages?
- State **three** factors that might determine an individual's choice of occupation.

3.3 The Role of Trade Unions

REVISION SUMMARY

A **trade union** is an organized group of workers, formed to promote and protect the wages, benefits and working conditions of its members

Collective bargaining is the process of negotiating wages and other working conditions between trade unions and employers

Industrial disputes arise when unions and employers cannot agree terms and conditions

A trade union will be in a strong bargaining position if it represents many key workers in a workplace, for example, if there is **closed shop** requiring all workers to be in a union

To increase their bargaining strength union members may take **industrial action** to disrupt production. This can involve **strike** action when workers refuse to work

SYLLABUS

This section will

- describe trade unions and analyse their role in an economy.

When you finish your studies and go to work you may be asked to join a trade union.

A **trade union** or labour union is an organization of workers formed to promote and protect the interests of its members concerning wages, benefits and working conditions

.The trade union movement worldwide has also helped bring an end to child labour in many countries, improved safety at work and improved education and other benefits for many poor and working families.

TRADE UNIONS AIM TO PROTECT AND IMPROVE THE WAGES AND WELFARE OF THEIR MEMBERS

Trade union functions

- Negotiating wages and other non-wage benefits with employers
- Defending employee rights and jobs
- Improving working conditions, such as better hours of work and health and safety
- Improving pay and other benefits, including holiday entitlement, sick pay, pensions
- Encouraging firms to increase worker participation in business decision-making
- Supporting members taking industrial action
- Developing the skills of union members, by providing training and education courses
- Providing social and recreational amenities for their members.

TRADE UNIONS REPRESENT WORKERS IN MANY DIFFERENT OCCUPATIONS AND INDUSTRIES

There are four main types of trade union:

- **General unions** represent workers across many different occupations and industries, such as the Australian Workers Union representing all types of employees in metals, aviation, mining, construction, food processing and retailing
- **Industrial unions** represent workers in the same industry, for example, the National Union of Mineworkers in South Africa
- **Craft unions** represent workers with the same skill across different industries, such as the United Brotherhood of Carpenters and Joiners of America
- **Non-manual unions** or **professional unions** represent workers in non-industrial and professional occupations, such as the National Union of Teachers in the UK.

UNIONS AND EMPLOYERS NEGOTIATE WAGES AND OTHER TERMS AND CONDITIONS OF EMPLOYMENT

The process of negotiating wages and other working conditions between trade unions and employers is called **collective bargaining**.

A trade union will be in a strong bargaining position to negotiate higher wages and better conditions if:

- it represents most or all of the workers in a firm or an entire industry
- union members provide goods and services that consumers need and for which there are few alternatives, such as electricity and water supplies, health care and education.

Union representation in the workplace

In a **closed shop** all workers in a place of work must belong to a trade union. This is outlawed in a number of countries.

In an **open shop** a firm can employ both unionized and non-unionized labour.

In a **single union agreement** a firm agrees a single union can represent all its workers. Because this will give considerable bargaining power to a union, a firm will only agree this in return for commitments by the union on pay, productivity improvements and not to strike.

Unions and employers will also negotiate over employment levels and other benefits such as pension rights, holiday entitlement, training and the introduction of new technology and working practices.

Employers can save time by negotiating wages and other conditions with a union for all their members rather than negotiating individually with each worker.

INDUSTRIAL DISPUTES MAY ARISE IF TRADE UNIONS AND EMPLOYERS FAIL TO REACH AGREEMENT

If collective bargaining between a union and employer fails to result in an agreement on wages or other conditions, trade union members may take **industrial action**.

Industrial action	
Overtime ban	Workers refuse to work more than their normal hours
Work to rule	Workers deliberately slow down production by complying with every rule and regulation
Go-slow	Working deliberately slowly to reduce production
Strike	Workers refuse to work and may also protest, or **picket** outside their workplace to stop deliveries or to stop non-unionized workers from entering

Industrial action can help a union increase its bargaining strength to force employers to agree to wage and other demands. However, union action also has major implications:

- **Firms** suffer higher costs and lose output, revenues and profits during industrial action. If the action is prolonged a firm may also lose big and regular customers to rival firms
- **Union members** will lose wages during a strike although some may receive income support from their union. Some may also lose their jobs if employers cut back their demand for labour because industrial action has lost them customers and profits
- **Consumers** may be unable to obtain the goods and services they need and may also have to pay higher prices if firms pass on their increased costs
- The reputation of **an economy** as a good place for business may be damaged by frequent and widespread industrial action. Firms may decide to invest and set up businesses elsewhere. This will increase unemployment and lower incomes.

EXAM PREPARATION

The photographs show trade union activities. Describe what these are in the boxes provided.

In the article below underline those factors you think give the trade union bargaining power.

News flash

Air traffic controllers are taking strike action this weekend in support of their claim for higher pay. The strike has the backing of their union representing over 90 per cent of all air traffic controllers in the country and over 1 million workers in many other key industries, such as the health service, public transport, and many schools. The strike has brought many airports to a standstill leaving many holidaymakers and business passengers stranded on one of the busiest weekends for air travel in the year.

Example exam questions

- Describe the functions of a trade union and explain the function you consider to be the most important.
- What factors will influence the strength of trade unions in negotiating wages and conditions with a firm?

3.4 Spending, Saving and Borrowing

REVISION SUMMARY

Disposable income is the amount of income a person has left to spend or save after direct taxes have been deducted

The more **disposable income** and **wealth** a person has the more they can spend and save

People will choose to spend and save their income in ways that maximize their **utility**

Spending enables a person to buy goods and services to satisfy their needs and wants. People on low incomes spend more of their income meeting their basic needs for food, clothing and housing. Higher incomes enable people to spend more satisfying their wants

Saving involves delaying consumption. People earning higher incomes can afford to save more of their income to buy expensive items or to fund their retirement from work

As **interest rates** rise people may save more and spend less. Older people also tend to save more of their income than younger people

Borrowing allows a person to increase their current level of spending. As interest rates fall people tend to borrow more. The **availability of credit** has increased **debt** in recent years

SYLLABUS

This section will

- analyse the diffferent motives for spending, saving and borrowing
- discuss how and why different income groups have different expenditure patterns (spending, saving and borrowing).

How much do you spend and what do you like to buy? Do you have any savings? If so, why do you save?

Ask the same questions of people of different ages, sex and backgrounds and you will get many different answers.

How much different people spend, save or borrow depends on their **disposable income** and many other factors.

People pay **direct taxes** on the incomes they earn from wages and salaries, interest on savings and from profits.

Disposable income is the amount they have left to spend or save as they wish after direct taxes have been paid.

PEOPLE CHOOSE TO SPEND AND SAVE THEIR INCOME IN WAYS THAT WILL MAXIMIZE THEIR UTILITY

People will divide up their disposable income between spending on different goods and services, and on savings in a way that gives them the most satisfaction or **utility**.

The more disposable income a person has the more their potential **spending**, or **consumer expenditure** on goods and services can be, and the more they can save.

>> 6.1 Price Inflation

Rising prices will reduce the amount people can buy with their disposable incomes. Price inflation reduces the purchasing power of money and any savings. People may increase their spending now if they think inflation will rise in the future.

Saving allows a person to delay spending and consumption, for example, to purchase an expensive product such as a car or to fund their retirement from work. Savings accounts in banks can earn additional income from interest. The **savings ratio** in an economy is the proportion of total disposable income that is saved.

>> 3.1 Money and Finance

Borrowing, from a bank or using a credit card, allows a person to increase their current consumption of goods and services. It enables them to buy expensive items they cannot afford now, like a car or a house, and make loan repayments from their future income. Interest is charged on loans.

Wealthy people are also able to spend and save more. **Wealth** held in savings and shares will earn income from interest and dividends, and property can be rented. Banks will often lend more and at lower interest rates to wealthy people because they will be able to repay their loans easily by selling off some of their **assets**.

INCOME AND AGE ARE KEY DETERMINANTS OF HOW MUCH WE SPEND, SAVE OR BORROW

People with low disposable incomes may spend less in total than people with high incomes but will tend to spend all or most of their income meeting their basic needs.

The amount of income we earn tends to rise as we get older, that is, until we retire and have to live off a pension and any savings. This is because:

- employees earn more in wages as they learn more skills and become more productive
- we tend to save more as we get older and earn interest on our savings
- entrepreneurs may become more experienced in business and can earn more profit.

Our spending and saving patterns also change as we **age** as our **tastes** and **family circumstances** change over time.

Young single people tend to spend more of their income on music and fashionable clothes. People with young families will spend more on their children and homes. Elderly people may spend more on health care and heating.

WEALTH, INTEREST RATES AND OTHER FACTORS ALSO AFFECT OUR SPENDING AND SAVING DECISIONS

An increase in...	Spending	Saving	Borrowing	Why?
Real income	↑	↑	↑	Rising real incomes make people better off
Direct tax	↓	↓	↕	As disposable income falls some people may borrow more to maintain spending
Wealth	↑	↓	↑	If people feel wealthy the more they can spend and borrow with confidence
Interest rates	↓	↑	↓	Rising interest rates makes borrowing more expensive but saving more attractive
Availability of saving schemes	↓	↑	↓	More and better ways of saving and earning interest can encourage saving
Availability of credit	↑	↓	↑	Cheap, widely available credit cards and loans encourages people to increase their **debt**
Consumer confidence	↑	↓	↑	People may increase spending if they believe economic conditions are improving

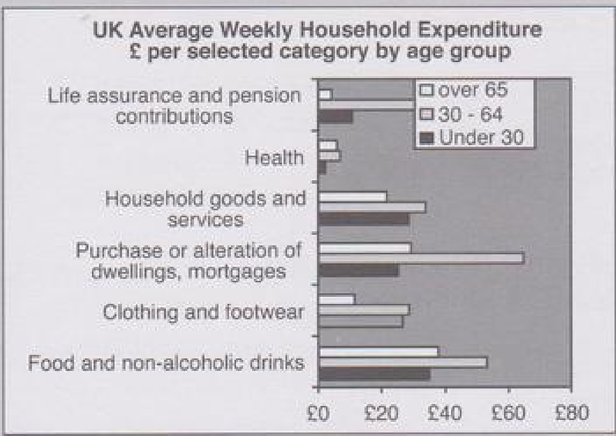
A decrease in...	Spending	Saving	Borrowing	Why?
Real income	↓	↓	↓	Falling real incomes will leave people worse off
Direct tax	↑	↑	↕	A reduction in direct tax will give people more disposable income
Wealth	↓	↑	↓	Falling property and share values will reduce people's wealth and their spending
Interest rates	↑	↓	↑	A cut in interest rates makes borrowing cheaper and saving less attractive
Availability of saving schemes	↑	↓	↑	People may save less if there are fewer ways to do so that offer a good return
Availability of credit	↓	↑	↓	Borrowing will fall if credit cards and other loans become more difficult and expensive to obtain
Consumer confidence	↓	↑	↓	If people fear an economic recession they may save more in case they lose their job later

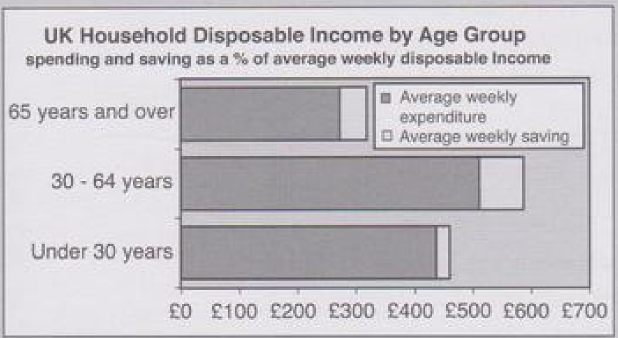
↑ **Most likely to rise** ↓ **Most likely to fall** ↕ **May go up or down**

EXAM PREPARATION

In the news article about the 'credit crunch' find and underline up to five reasons why people save. One reason has already been highlighted for you.

Then, using the charts, write in the boxes below up to four reasons why people's saving and spending patterns may differ with age.





CREDIT CRUNCH BITES DEEPER

Consumer confidence is at its lowest recorded level as food and energy prices rise and house prices fall rapidly.

Many consumers fear there will be a recession as sales of goods and services start to slide. Interest rates are high as the banking crisis continues and borrowing has all but dried up. Those who built up significant debt over the last few years when credit was cheaper and easy to obtain are now facing much bigger repayments.

The Government admitted people are feeling the pinch. 'They feel less wealthy than they did last year' the Finance Minister said in an interview yesterday. 'They have cut their spending and those who can are saving more not just because interest rates are high but because they think conditions will worsen.'

Khalid Ghani, a middle-aged factory worker, commented as follows: 'In the past I saved for my retirement, and to afford a new TV or a holiday. Now I am saving while I am able to because I fear I may lose my job in the economic recession.'

1	3
2	4

Example exam questions

- Analyse the motives that might cause a person to save rather than spend.
- An older skilled worker's pattern of spending and saving is likely to be different from that of a younger unskilled worker. Discuss why.

IMPORTANT THINGS TO REMEMBER

Fill in the missing key words.

______ is a generally accepted medium of exchange.

The money supply of an economy consists of notes and coins and _____ __________.

A bank is a ____________ _______________ because it accepts savings from customers and loans money to others.

The price of borrowing money in an economy is the __________ _____.

The _________ bank in an economy controls monetary policy and the banking system.

The ______ ________ is the global market for buying and selling new and second-hand stocks or shares issued by joint stock companies and governments.

A _______________ is a person or organization that buys and holds shares in a joint stock company.

A ______ __________ or bourse, is a business organization that enables investors to buy and sell stocks on the stock market.

People supply their labour to different occupations in return for ______ or salaries, and non-wage factors, including holiday and pension entitlements.

The _____ _____ for an occupation is the market price of labour with relevant skills and is determined where the demand for labour equals the supply of labour.

Wage _________________ are differences in wage rates between different occupations, industries and regions. They are explained by different labour market conditions.

A ______ ______ is an organized group of workers formed to promote and protect the wages, benefits and working conditions of members.

Trade unions will negotiate wages and working conditions for their members with employers. This process is called _____________ _____________.

Industrial action by a trade union can involve an overtime ban and a _______ if union members refuse to work and withdraw their labour.

_______________ ________ is the amount of income a person has left to spend or save after direct taxes have been deducted.

The ability of a person to spend, save and borrow money from a bank is highly dependent on their disposable income and the value of their _______.

10 MINUTE TEST

Choose and then mark your answer A, B, C or D to each question.

1 What characteristic is essential for good money?
- A it is lightweight
- B it can be stored easily
- C it is generally accepted in exchange
- D it is unlimited in supply

2 Why is a surgeon likely to have a higher wage rate than a porter in the same hospital?
- A the surgeon works unsociable hours
- B surgeons are highly skilled and in short supply
- C the surgeon is older
- D the surgeon is in a trade union

3 Which factor is most likely to cause an increase in total saving in an economy?
- A an increase in income tax rates
- B a cut in real wages
- C an increase in interest rates
- D a reduction in borrowing

4 National power supplies were severely disrupted in February 2006 following a strike by the trade union over pay. What factor will have increased the bargaining power of the union in negotiations with power companies?
- A industry profits were falling
- B the union represents less than half the workforce in the industry
- C the union lacked financial resources to support the incomes of its members
- D consumer demand for power supplies is highly price inelastic

5 Disposable income will rise following:
- A a cut in indirect taxes
- B a cut in interest rates
- C a cut in public expenditure
- D a cut in direct taxes

6 The wages of car mechanics will tend to rise if:
- A the supply of car mechanics falls
- B consumer demand for cars falls
- C labour productivity falls
- D working conditions in garages improve

Check your answers against those given on page 155. How well did you do? Make a note of any you got wrong and make sure you understand the reasons why before you continue to the next section.

Exam Guidance and Practice 1

WHAT YOU WILL LEARN

There are four **assessment objectives** or key skills for the IGCSE and O Level in Economics. You will be assessed on your:

- knowledge and understanding of economics
- analysis
- judgment and decision-making
- critical evaluation.

You will be required to take two **examination papers** and answer the following types of questions:

- multiple choice questions (paper 1)
- structured questions (paper 2)
- **techniques** to help you answer **multiple choice questions** and **structured questions** to maximize your marks
- what examiners are looking for, how answers are marked and the differences between a **grade A** and a **grade C**.

THE EXAMINATION WILL ASSESS YOUR SKILLS AND KNOWLEDGE OF ECONOMICS

You will be assessed on three key skills during the course of the examination. These are:

KU

KNOWLEDGE WITH UNDERSTANDING

- identify economic facts, definitions, concepts, principles and theories
- use economic vocabulary and terms.

A

ANALYSIS

- select, organize and interpret data
- apply your economic knowledge and understanding in writing, numbers, diagrams, pictoral form and in graphs
- use economic data, recognize patterns in such data, and work out the economic relationships they demonstrate.

CE

CRITICAL EVALUATION AND DECISION MAKING

- distinguish between evidence and opinion, make reasoned judgements and communicate them in an accurate and logical way
- recognize that economic theory has various limits and uncertainties
- evaluate the social and environmental implications of particular courses of economic action
- draw conclusions from economic information and critically evaluate economic data
- communicate conclusions in a logical and concise manner

These skills will be assessed in two examination papers (from 2014). The most important assessment objectives of each paper are shown in bold letters in the table below.

Paper	Duration	Types of questions	Key skills	Contribution to final grade
1 Multiple Choice	45 minutes	30 questions – all must be answered	KU **A**	30%
2 Structured questions	2 hours 15 minutes	1 compulsory question from Section A plus a choice of 3 questions from Section B	KU A **CE**	70%

Answers to the questions will be marked and papers graded A to G. The grade you achieve will depend on how well you demonstrate the required skills in each paper.

Grade A students must demonstrate excellence in the key skills and show mastery of the content of the IGCSE or O Level course in economics. Answers to more difficult questions should be outstanding and show a sound ability to draw conclusions from economic information.

Grade C students must also demonstrate a good understanding of the course content and some ability to answer the more difficult questions.

Grade F students must demonstrate some familiarity with the main economic issues and concepts covered in the course. They should be able to answer basic questions correctly and draw some basic conclusions.

PAPER 1: WHAT IS A MULTIPLE CHOICE QUESTION?

You should already be familiar with multiple choice questions from the ten-minute tests at the end of Sections 1, 2 and 3.

A **multiple choice question** requires you to choose an answer from four possible options. When you *have decided on the correct response*, indicate your choice on the answer sheet. Each right answer to a question is awarded one mark. No marks are deducted for wrong answers.

You have 45 minutes to complete 30 multiple choice questions in Paper 1. You must answer all the questions. This means you have 1.5 minutes on average to read and answer each question. However, *some questions may take more time* to read and answer than others.

ANSWERING MULTIPLE CHOICE QUESTIONS

- Read through each question carefully. Some answers may be clear. Others may appear to have more than one right answer, but only one will be correct.
- If you find some questions are difficult and taking you a long time to think through, then move on to the next question and return to the difficult ones later.
- Carefully monitor time during the examination. Your teacher will start the exam and will tell you when there is 5 or 10 minutes remaining. You should try to leave yourself at least 5 minutes towards the end of the exam to check your answers.
- If you are unsure of the answer to a question use a **process of elimination**. You have a 25% chance of getting an answer right in a multiple choice question. You can improve your chances by using your knowledge to quickly eliminate options that are clearly wrong or only partially right.

> ***TOP TIP***
> **Never leave a question unanswered**
>
> Unanswered questi earn no marks. So, i your time has almo run out, quickly ma an answer to any questions remainin Even if you have to guess you may still get some question right and earn extr marks.

1 An entrepreneur is someone who:

A produces goods and services → Yes, but so do workers ✗

B owns and runs a factory → Yes, but not all firms have factories ✗

C organizes resources in a firm → Yes. This is the best answer ✓

D supervises other workers → This is labour. A supervisor is a senior worker or manager ✗

You now have **15 minutes** to complete 10 multiple choice questions using the techniques you have learned in this section to help you.

When you have finished, check your answers against those provided at the end of this book. How many did you get right? Make a note of any you got wrong and make sure you understand why before you go on to the next section.

15 MINUTE TEST

Choose and then mark your answer A, B, C or D to each question.

1 What is the process of transforming resources into goods and services?
- A resource allocation
- B production
- C consumption
- D trade

2 What is the main aim of firms producing in a market economy?
- A employment
- B economic welfare
- C efficiency
- D profit

3 What is most likely to increase the demand for DVD players?
- A a fall in disposable incomes
- B a fall in the price of cinema tickets
- C a fall in the price of DVD discs
- D a fall in the price of hard drive recorders

4 What is present in a mixed economy but not in a market economy?
- A capital goods
- B taxation
- C consumer spending
- D private firms

5 Which characteristic of money is essential if it is be used as a medium of exchange?
- A it must be legal tender
- B it must be durable
- C it must be limited in supply
- D it must be easy to carry

6 The wages of electrical engineers will tend to rise if:
- A the supply of engineers rises
- B the productivity of engineers rises
- C the demand for engineers falls
- D the demand for electrical products falls

7 The savings ratio in an economy will tend to rise if:
- A taxes on personal incomes rise
- B interest rates are
- C borrowing falls
- D consumer spendi

8 Demand for a produ likely to be relatively inelastic if:
- A it has few substit
- B it has a high mar price
- C it is a luxury goo
- D it has few compl

9 If an increase in the of 1 kg of salt from $1.10 caused its sup extend by 25%, the elasticity of supply w
- A 1.5
- B 0.1
- C 2.5
- D –2.5

10 The stock market is market for
- A new issues of sh
- B government stoc
- C financial product
- D new and second stocks and share

Check your answers against those on page 155. How well did you do? Make a note of any you wrong and make sure you understand the reasons why before you continue to the next sectior

PAPER 2: WHAT IS A STRUCTURED QUESTION?

A **structured question** is a series of related questions, often based on a sentence or short paragraph describing a real economic situation. Some questions may require short, one-word answers or a single sentence. Others will require more detailed explanations.

You are required to answer the structured question in Section A of Paper 2 based on an extract of data or information on a real life economic situation, and any three questions from Section B from a choice of six

The compulsory question in Section A has a maximum of 30 marks and will take around 45 minutes to complete. (We will look at these type of questions in more detail in Exam Guidance and Practice 2 starting on page 116).

Each question in Section B carries a maximum of 20 marks and should take around 30 minutes to complete. Here is an example of the type of question you can expect in Section B of Paper 2.

A combination of excess supply, weak consumer demand and competition from new channels such as the internet has pushed prices down in shops for goods from clothing to electrical products.

a Identify **three** causes of a change in the demand for a good. [3]

b Using demand and supply analysis, explain whether the reasons given in the above extract would lead to the stated effect on prices. [7]

c Define what is meant by price elasticity of demand and explain how it is calculated. [3]

d Discuss whether clothing and electrical products would be likely to have an elastic or an inelastic price elasticity of demand. [7]

CIE 0455 November '02 Paper 4 Q2

The marks for each question will vary according to how much explanation is required in the answers. For example, short answers requiring a very brief definition or statement could earn you 1 or 2 marks. Questions that require longer answers to demonstrate all the key skills in economics will be awarded more marks, in some cases up to 8 or even 10 marks per answer.

IDENTIFYING WHAT EACH QUESTION REQUIRES

In the structured question example above, notice how different words are used at the start of each question to tell you what to do, such as 'identify', 'explain' and 'define'.

The following words are commands or instructions common to all structured questions. Each one requires you to answer a question in a different way to test your core skills against the different assessment objectives. Examples of questions are provided.

Commands	What is required?	Assessment
Analyse	Scrutinize the information provided to identify and describe economic reasons why an outcome may or may not occur. *'Analyse the motives that might cause a person to save.'* *'Analyse what might have happened to profits in US airlines as a result of the problems stated.'*	KU A CE
Calculate	Work out a number(s) or percentage(s) from the information provided. *'Calculate the reduction in profit between 2011 and 2012. Show your calculations.'* *'Calculate the change in total employment. Show your workings.'*	A
Consider	Look at the information provided and explain why the proposal or economic situation described in the question may or may not occur. Similar to 'evaluate' and 'analyse'. *'Consider how cheap imports might affect US companies.'* *'Consider whether the price elasticity of demand for soap is likely to be high or low.'*	KU JD
Contrast	Compare, distinguish between and describe different situations, outcomes or features. *'Contrast the population structure of a developed country with that of a developing country.'* *'Contrast the likely spending patterns of younger and older people.'*	KU JD
Define	Write a short description of the economic term or concept. 'What is meant by…' is another way of asking for a short description. *'Define what is meant by economic growth.'* *'What is meant by labour-intensive production?'*	KU
Describe	Provide a series of short descriptions or explain a series of economic concepts or situations. *'Describe the balance of payments of a country.'* *'Describe briefly the main types of business organization.'*	KU
Discuss	Describe economic reasons or arguments for and against a particular proposal or theory. Where possible, state what arguments or reasons you accept and why. *'Discuss why a small food shop might survive when there are very large supermarkets.'* *'Discuss how firms might achieve a rise in profits.'*	KU CE

Commands	What is required?	Assessment
Distinguish	Draw out and classify the differences between two or more economic features, terms or situations. *'Distinguish between the private sector and public sector of an economy.'* *'Distinguish between a quota and a subsidy'*	KU CE JD
Evaluate	Weigh up different possible answers or outcomes and judge which ones are more accurate or suitable. These questions usually require analysing a statement about an economic situation or a set of data. *'Evaluate the potential impact on a developing country of removing all barriers to trade.'* *'Evaluate the potential impact of government subsidies to wheat farmers in Japan on local food prices.'*	KU A JD CE
Explain	Clearly define and describe why and how an economic situation or outcome can occur. *'Explain, using examples, what is meant by an external cost.'* *'Explain why a reduction in unemployment might increase inflation.'*	KU A JD
Identify	Find, state and explain the relevant economic terms, concepts or measures. *'Identify three ways of measuring whether an industry in a country is large or small.'* *'Identify the factors of production.'*	KU
Summarize	Provide a brief statement describing key economic concepts or arguments. *'Summarize the main arguments for and against having a market economic system.'* *'Summarize the key drivers of an individual's choice of occupation.'*	KU CE
State	Clearly express economic facts or account for an economic concept or situation. *'State four ways in which multinational companies can help developing countries.'* *'State the functions of a central bank.'*	KU
Why...	Give reasons for an economic situation or outcome. *'Why might a government increase employment opportunities?'* *'Why do exchange rates fluctuate?'*	KU A

HOW TO ANSWER A STRUCTURED QUESTION

- Read the short paragraph or extract and each question slowly and in full. Re-read them if necessary. Make sure you understand as much as you can about each question and what it is about before you start writing your answer.
- Underline all the key economic terms and concepts you can identify in the short extract and each question.
- Note the command word in each question to identify what is expected from your answer.
- Look at the marks for each question to consider how long or detailed your answer should be. The more marks there are, the more is expected.
- Before you start writing make any quick notes that you think will help you write your answers in full. If you run out of time and cannot complete your answers, you may pick up some marks on your notes if they show you have understood the question and what the answer requires. For example:

TOP TIP
Learn and use examples

Questions will often ask you to provide examples, such as '*Explain, using examples, what is meant by an external cost.*' Even if a question does not ask you for examples it may still be worthwhile providing some to illustrate your answer. Reading newspapers and listening to business news is a good way to pick up new examples and ideas.

Suggest how a firm could try to increase its profit.

profit = revenues – costs

increase revenues? increase consumer demand (from advertising, better product, cut price if demand price elastic)

decrease costs? more efficient, increase in scale

We will now apply these techniques to the structured question on page 60.

A combination of excess supply, weak consumer demand and competition from new channels such as the internet has pushed prices down in shops for goods from clothing to electrical products.

a Identify **three** causes of a change in the demand for a good. [3]

First identify the key economic concepts. These are demand and supply analysis, competition, and price elasticity of demand.

Only three short statements of cause will be needed to earn 3 marks. These may include changes in prices, disposable incomes, tastes and/or the availability of substitutes. Changes in the price of the good will cause a movement along a demand curve while the other explanations will result in shifts in the market demand curve for the product.

b Using demand and supply analysis, explain whether the reasons given in the above extract would lead to the stated effect on prices. [7]

7 marks requires detailed explanation and analysis. Excess supply and weak demand will both tend to push prices down. Increasing competition between firms for consumer demand will also tend to reduce prices, so all the reasons given will lead to a fall in prices. To gain maximum marks it is useful to show these effects on a demand and supply diagram. Increased competition will shift the market supply curve to the right.

c Define what is meant by price elasticity of demand and explain how it is calculated. [3]

A correct definition will receive only 1 mark so keep it short. For example, 'The responsiveness of demand for a good to changes in its price.' The other 2 marks are for an explanation or an equation showing how price elasticity of demand is calculated.

d Discuss whether clothing and electrical products would be likely to have an elastic or an inelastic price elasticity of demand. [7]

For 7 marks a full discussion will be required. Start by explaining what is meant by elastic and inelastic price elasticity of demand. Then think about the factors that make demand price elastic or inelastic and relate them to the two products. Some clothing will be a necessity, such as basic shoes, shirts or dresses, and some low cost items may be purchased regularly. Demand for such clothing will tend to be relatively price inelastic. In contrast, many electrical goods such as high definition TVs, are expensive but durable. Demand for them is likely to be relatively price elastic.

However, for maximum marks you need to explain why this may not be the case. For example, designer clothes and shoes, like Gucci and Armani, are luxury items and demand for them is likely to be price elastic. In contrast, radio and satellite navigation equipment may be necessities for people who operate ships and drive trucks so they can listen to weather reports or find their position. Low cost electrical items may also be relatively price inelastic because they are affordable.

TOP TIP

Put a twist in your tale

Some questions may look straightforward but economics rarely is. There will always be arguments for and against a particular proposal in a question or why an economic situation may or may not arise. A good answer will therefore challenge a statement or proposal made in a question, and consider both sides of an argument. This will demonstrate your judgment and critical evaluation skills.

30 MINUTE TEST

*You now have **30 minutes** to answer the following structured question using all the techniques you have learned in this section.*

a Explain what is meant by a trade union. [3]

b State **four** non-wage influences on an individual's choice of occupation. [4]

c Discuss the extent to which the relative strengths of trade unions can influence the level of earnings in different occupations. [6]

d An older skilled worker's pattern of spending and saving is likely to be different from that of a younger unskilled worker. Discuss why. [8]

Parts a–c from CIE 0455 November '06 Paper 4 Q3

When you have finished writing your answers, compare them with the student answers and examiner's comments provided on the following pages.

a Explain what is meant by a trade union. [2]

Student answer

A trade union is an organized group of workers with a number of aims including defending employee rights and jobs, securing improvements in working conditions, improving pay and other benefits, developing and protecting the skills of members and encouraging firms to increase worker participation in decision-making.

There are a variety of different types of union including general unions representing workers from different occupations, industrial unions representing workers in the same industry, craft unions representing workers with the same skills across different industries, and non-manual or professional associations.

Examiner's comments

The candidate has correctly explained trade union organizations and their main aims. The answer given is however far too long for 2 marks. It also describes different types of trade unions. This is not required and will earn no additional marks.

Some candidates however thought a trade union was a group of countries entering into trade agreements. Another common mistake was candidates suggesting employers organized trade unions, rather than workers.

b State four non-wage influences on an individual's choice of occupation. [4]

Student answer

There are many wage and non-wage influences on an individual's choice of occupation. Non-wage influences include job satisfaction, security, promotion prospects and working conditions, including the number of hours an employee is required to work each week and whether these include unsociable hours.

Individuals will respond to different wage and non-wage influences according to their particular circumstances and preferences. For example, a significant improvement in working conditions may attract a bigger supply of labour to an occupation.

Examiner's comments

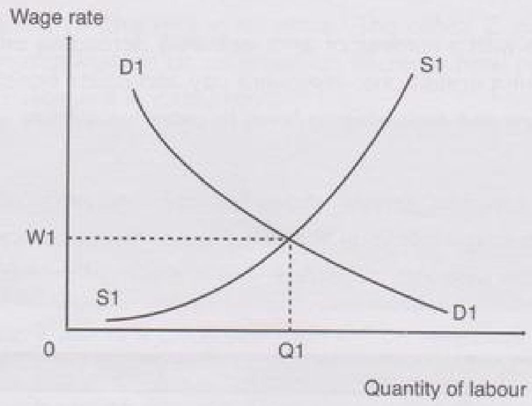
The candidate above has correctly identified four non-wage influences for maximum marks. The statement on the degree to which the individual responds to the different influences according to their circumstance demonstrates knowledge and understanding.

In the exam, some candidates included wage influences in their answer, arguing that higher wages attracted more people to an occupation. Although this statement is correct the question does not ask for wage factors and it is awarded no marks. It is extremely important to always read the question carefully.

c Discuss the extent to which the <u>relative strengths</u> of trade unions influence the level of earnings in <u>different occupations</u>. [6]

Student answer

The earnings of workers in a particular occupation will be determined by the demand for and supply of their labour. The market wage rate for an occupation is shown as WI in the diagram where the demand for labour (DI) equals the supply of labour (SI).



A trade union can increase the wage rate if it is able to increase the demand for the workers it represents or reduce their supply.

Trade unions can influence the demand for labour positively through actions such as training their members to increase their skills and productivity. However, unions can also reduce demand for the labour they represent if they continually disrupt production through strikes or other industrial actions. Employers may be forced to close down or employ non-union labour or more machinery instead of unionized workers.

In a closed shop all workers in a workplace or industry must belong to a trade union. This can restrict the supply of labour to an occupation. Bans on overtime and go-slows can also restrict labour supply. This may force employers to raise wages to stop these industrial actions.

A trade union must also represent a significant number of workers in a workplace or an entire industry to have strong bargaining power over wages. This will especially be the case where unions control the supply of critical services to people such as education, health and power supply. The financial resources available to the union (primarily from membership fees) are also important and will enable them to actively communicate with all their members, call ballots for industrial actions and support their incomes during a strike. Trade unions with few members and financial resources are less likely to have significant bargaining power over employers and wages compared to other unions.

The supply of labour to an occupation can be influenced by trade unions through promoting the particular occupation, having a good reputation for supporting and protecting its members and negotiating good pay increases.

Examiner's comments

The answer is excellent and gains top marks. The candidate correctly identifies all the factors which will make one union relatively strong compared to another, including whether the union represents all the workers in a firm or industry, the importance of the product they produce and the financial resources of the union. The candidate makes a very good start by arguing how a trade union must influence labour demand and supply conditions to influence the market wage for an occupation and uses a diagram to show this.

In the exam, many candidates struggled with this question. Some wrote about the different methods used by trade unions to achieve their aims, such as calling a strike or a go slow, but did not explain the circumstances in which these industrial actions will be a powerful influence on employers and the wages they pay. Many students also overlooked how trade unions can raise the skills and productivity of their members to increase the attractiveness of their labour to their employers.

d An older skilled worker's <u>pattern of spending and saving</u> is likely to be different from that of a younger unskilled worker. <u>Discuss</u> why. [8]

Student answer

An individual's pattern of spending and saving is likely to be determined by a number of different factors including age, income and tastes.

Spending patterns change with age. Older people tend to spend more on household goods, e.g. furnishings, while younger people may spend more on items such as entertainment and fashion.

Unskilled workers are likely to earn lower wages than skilled workers and therefore will tend to spend most of their disposable income to meet basic needs for food, clothing, housing and heating.

Skilled workers will earn higher wages and have the ability to spend far more on luxury items, leisure activities and other goods and services to satisfy their wants. However, skilled workers will be able to save more than an unskilled worker on lower wages.

Older workers with higher incomes, more secure jobs and who are also home-owners may also be able to borrow more money from banks than younger people on lower incomes. This will enable them to buy luxury items like overseas holidays, a new car and furniture. Older people may therefore spend more on loan repayments. In contrast, loan repayments may be at greater risk from younger people who have only recently started in work, earn relatively low incomes and have no property to offer as collateral or security against loans. Consequently, banks may be less inclined to offer younger people loans.

Older skilled workers are also more likely to understand the need to save money to fund their retirement. However, younger unskilled workers may be less willing to save money.

Age and skill levels will not be the only determinants of patterns of saving and spending. There other important considerations including lifestyle and family status.

For example, people may become more health conscious as they get older, and may increase th spending on health care products and exercise. An older worker may also be more likely to hav family than a younger person and will spend money on goods and services their children will ne and want, such as clothes, toys and education.

Examiner's comments

The question requires students to analyse relationships between skill levels, age, incomes and t and examine their influence on patterns of spending and saving. These are well covered by the candidate. The answer earns top marks. The answer also includes references to older workers w higher incomes and property being able to borrow more to fund their lifestyle choices and bein more aware of the need to save to fund their retirement.

In the exam, some candidates focused solely on the influence of income or age on patterns of spending and saving and failed to earn maximum marks.

So, how good do you think your answers were compared to those of the student and the examiner's comments? For each question, make a note of where you may need to improve your answers. Revisit notes if you encounter similar questions during practice exams.

a
b
c
d

90 MINUTE TEST

*You now have **90 minutes** to complete answers to the following questions.*

1 In Japan persistent worries about job security, high unemployment and a steady fall in income have meant that consumers are buying less. This has caused the prices of some products to fall.

- **a** Explain how the price of a good is determined by market forces. [4]
- **b** Use demand and supply analysis and diagrams to explain how the reasons given in the above extract could cause a fall in the price of a product. [6]
- **c** How might a fall in prices affect consumer saving? [4]
- **d** Discuss the motives that might cause a person to spend or save. [6]

CIE 0455 June '02 Paper 4 Q2

2 In the last ten years many countries have introduced policies that increased the role of the market system.

- **a** Explain the most important features of 'the market system'. [4]
- **b** Explain, with the use of a diagram, what will happen in a market system if a good becomes more popular and there is a fall in the cost of its production. [6]
- **c** What are the advantages and disadvantages of relying more on the market economic system? [10]

CIE 0455 November '01 Paper 4 Q2

3 The euro replaced the national currencies of many European countries in the European Union in 2002 to become the sole legal tender in the eurozone.

- **a** List **four** functions euro notes and coins should perform. [4]
- **b** Explain how consumer price inflation in Europe may affect these functions. [6]
- **c** Discuss the actions that European governments might take to control inflation. [10]

When you have finished, compare your answers to the model answers provided at the back of this book on pages 155–8. Make some notes on any differences between the model answers and your own in case you encounter similar questions in your final examinations.

TOP TIP

Don't forget to include examples

Illustrating your answers with real economic or business examples will help to clarify your answer and show the examiner your breadth of knowledge.

4.1 Types of Business Organization

REVISION SUMMARY

Business organizations vary according to how they are owned, controlled and financed

A **sole trader** is a business owned and controlled by one person

A **partnership** is an agreement between a group of people to run a business and share profits

Sole traders and general partners in a partnership have an **unlimited liability** to repay any business debts should their businesses fail

Joint stock companies or **limited companies** sell shares to raise finance and are owned by their shareholders

A **private limited company** can only sell shares to people recommended by existing owners

A **public limited company** can sell shares publicly on the stock market

Shareholders in a limited company will elect a **board of directors** to manage their business

Shareholders in a limited company have **limited liability** and will only lose the money they invested in their business if it fails

Co-operatives are owned and run by their members for their mutual benefit

Worker co-operatives are owned by their workers. **Consumer co-operatives** are owned by customers

A **multinational** is a global corporation with business operations in more than one country

A **public corporation** is responsible for running a business organization owned by and accountable to government

SYLLABUS

This section will

- describe the type of business organization in the public and private sectors: sole traders, partnerships, private companies, public companies, multi-nationals, co-operatives, public corporations
- describe and evaluate the effects of changes in structure of business organizations.

Entrepreneurs organize and manage resources in **firms** to make goods and services.

Firms are business organizations. In a modern economy there are many different types of **business organization**.

Each type of business organization allows an entrepreneur to organize and control resources, and to raise finance or **capital** for the business, in a different way.

BUSINESSES ARE ORGANIZED ACCORDING TO HOW THEY ARE OWNED, CONTROLLED AND FINANCED

Public corporations are public sector organizations owned and controlled by government.

Private sector firms are owned and controlled by individuals and can range in size from small businesses called **sole traders** because they are owned by one person, to large **joint stock companies** owned by many thousands of people.

Co-operatives are owned and run by their members for their mutual benefit.

Owning and running a business organization can be risky. An entrepreneur will be responsible for ensuring a business has enough money to pay any debts should the business fail. This financial responsibility is known as the **owner's liability**.

Some business owners have **unlimited liability**. This means they must repay any business debts even if it means using their savings or selling their own property to do so.

The owners and the business have the **same legal identity**. Employees or customers with grievances against the business can take business owners to court. The owners will be liable for any damages awarded.

Owners with **limited liability** are not responsible for business debts. They can only lose the money they invested in a business if it fails.

They also have a **separate legal identity** from the business. They cannot be held responsible for any harm or injury suffered by an employee, customer or any one else as a result of the activities of the business.

THERE ARE MORE SOLE TRADERS IN THE WORLD THAN ANY OTHER TYPE OF BUSINESS

A **sole trader** is a business owned and controlled by one person.

It is the oldest and most popular form of business organization. Many of today's largest companies started as sole traders many years ago.

A sole trader may employ other people but will only ever have one owner.

Advantages	Disadvantages
• A sole trader is his or her own boss • Can choose hours of work • Receives all profits • Is easy to set up.	• Owner has full responsibility for business • May lose revenue if off sick or on holiday • Has unlimited liability to pay any debts • Lacks capital to finance business growth.

KEY FEATURES

- One owner
- Unlimited liability for any business debts
- Owner and business have same legal identity
- Financed from savings and personal loans
- Usually small, local businesses

A PARTNERSHIP IS AN AGREEMENT BETWEEN TWO OR MORE PEOPLE TO RUN A BUSINESS

A sole trader can raise additional finance and expand by forming a **partnership**.

A partnership is a legal agreement between two or more people to own, finance and run a business, and to share any profits.

Partnerships are popular among professions including solicitors, doctors, accountants and veterinary surgeons.

Most partners are **general partners** who share unlimited liability. However, it is also possible to have some **limited partners** with limited liability. A **silent partner** or **sleeping partner** will provide money to the partnership in return for a share of the profits, but will not be involved in the management of the organization.

Advantages	Disadvantages
• Easy to set up • More partners means more capital • Partners bring new skills and ideas • Partners share responsibility for decisions.	• Partners can disagree • Partners share any profits • General partners have unlimited liability • Can lack capital to finance growth.

KEY FEATURES

- Two or more owners (usually no more than 20)
- General partners have unlimited liability
- Limited partners have limited liability
- Financed from partners' savings and loans
- Many are local businesses offering professional services

JOINT STOCK COMPANIES SELL SHARES TO RAISE MONEY TO FINANCE THEIR ORGANIZATIONS

Joint stock companies are also known as **limited companies**. They raise money to finance the business by selling shares to investors.

›› *3.1 Money and Finance*

What is a dividend?	Shareholders are the owners of limited companies. Each share purchased in a company receives a share of its profit after corporation taxes have been paid. This payment is a **dividend**. The more shares a shareholder has the more of the company they own and the more dividends they will receive
What is a board of directors?	Some large limited companies have many thousands of shareholders. They cannot all manage the business so they elect a **board of directors** to do so. Many shareholders have voting rights and can vote on how best to run the company
What is a controlling interest?	Selling shares to other investors means the original owners lose control of their business. Any shareholder with more than 50% of shares in a company holds the **controlling interest** because they can out-vote all other shareholders

Limited companies are also known as **corporations** in many countries. There are two main types:

- A **private limited company** only sells shares to people known to existing shareholders
- A **public limited company** sells shares on the stock market through a stock exchange.

The main advantage of a public limited company is the ability to raise far more money for business expansion than a private limited company because it can sell shares to many more investors on the stock market. However, doing so can be expensive. Many legal documents and scrutiny are required before a limited company can 'go public' and issue shares for sale.

Advantages	Disadvantages
• Shareholders have limited liability • Shareholders receive dividends from profits • Companies have a separate legal identity • Share sales can raise significant capital	• Public companies must publish annual accounts • Original business owners can lose control • Large shareholders can out-vote others • Directors may run the business in their own interests rather than for shareholders

▲ Walmart and Petrochina are two of the world's largest companies

Private Limited Company: KEY FEATURES

- 1 or more shareholders
- Shareholders receive dividends from profits
- Shareholders have limited liability
- Shares are sold privately
- Company has a separate legal identity
- A board of directors manage the company

Public Limited Company: KEY FEATURES

- 2 or more shareholders
- Shareholders receive dividends from profits
- Shareholders have limited liability
- Shares are advertised and sold publicly
- Company has a separate legal identity
- A board of directors manage the company

CO-OPERATIVES ARE OWNED AND CONTROLLED BY THEIR MEMBERS FOR THEIR MUTUAL BENEFIT

A **co-operative** is owned and controlled by its members who run the business for their mutual benefit.

Each member of a co-operative has an equal share in the ownership and control of the organization.

Worker co-operatives are owned and controlled by their workers. **Consumer co-operatives** are retail businesses owned by their customers. Examples of retail co-operatives include supermarkets, banks and travel agencies.

KEY FEATURES

- Owned by their members
- Members share any profits
- Members have limited liability
- Members have equal voting rights
- Directors appointed by members

Co-operatives may aim to make a profit or be non-profit-making organizations. Co-operatives that aim to make a profit usually return any profit to their members in the form of a dividend on their shareholdings, or as bonuses for worker members, or as lower prices.

Advantages	Disadvantages
• Owned and controlled by members • Members have limited liability • Workers in worker co-operatives take business decisions and share profits • Members of consumer co-operatives enjoy profit dividends or lower prices.	• Many consumer co-operatives have been forced out of business by larger companies • Worker co-operatives may be badly run if their workers do not have business skills • May find it difficult to attract new members and raise additional capital for the business.

MULTINATIONALS HAVE BUSINESS OPERATIONS IN MANY COUNTRIES

A **multinational** is a firm that operates in more than one country but will usually have its headquarters based in its country of origin.

Multinationals are some of the largest companies in the world, often selling many billions of dollars worth of goods and services, and employing many thousands of people globally.

Advantages of the multinational organization
• It can reach many more consumers globally and sell far more than other types of business • It can minimize transport costs by locating plants in different countries to be near to sources of raw materials or big consumer markets • It can minimize wage costs by locating operations in countries with low wages • It is able to enjoy low average production costs from large-scale production • It can raise significant amounts of capital for business expansion, research and development, and to employ workers and managers with the highest skills.

Governments often compete to attract multinationals to their countries because:

- they provide jobs and incomes
- they bring business knowledge, skills and technologies which can help other firms
- they pay taxes on their profits which help boost government revenues.

However, a multinational may also cause problems in a host country:

- they can switch their profits to other countries to avoid paying taxes on their profits
- they can force smaller firms out of business
- they may exploit workers in low wage economies
- they may use their power to get generous subsidies and tax advantages from government.

PUBLIC CORPORATIONS ARE OWNED AND CONTROLLED BY GOVERNMENT

>> 3.1 Money and Finance

Most **public corporations** are responsible for the day-to-day running of businesses owned and controlled by either a central government or local government authority. For example, the US government owns Amtrak, a train operator, and the United States Postal Service. Many central banks are also run by public corporations.

Some aim to make a profit while others will deliver public services at cost or will receive grants from government to provide services for free that are in the public and economic interest.

Ownership and control	• A board of directors runs a public corporation • They are accountable to government ministers • Committees may be set up to monitor and investigate any irregularities or complaints.
Legal status	• Has a legal identity separate from its directors and from government.
Finance	• From taxes and other government revenues • From any profits re-invested in the organization • Alternatively, any profits may be used by government to finance other public services or reduce taxes.

EXAM PREPARATION

Complete the following table of features of different types of business organization.

	Sole trader	Partnership	Private limited company	Public limited company	Worker co-op	Consumer co-op
Ownership						Owned by members
Control	Run by the owner					
Sources of finance				Sell shares on stock market		
Distribution of profits						

Example exam question

- Describe the main types of business organization and consider which of them is likely to be the most significant in a developed economy.

4.2 Organizing Production

REVISION SUMMARY

A **primary industry**, such as farming or mining, produces **natural resources**

Using natural resources to make other goods is a process called **manufacturing**

Secondary industries include all **manufacturing industries** and **construction**

Tertiary industries produce and supply **services**

Most private sector firms aim to maximize **profit**, but if **total revenue** fails to cover **total costs** a firm will make a **loss** and may be forced to close

A firm will **break even** if total revenue equals total cost

Productivity measures the amount of output or revenue produced by a given amount of labour, capital and materials

Increasing productivity will lower costs and increase profit

A firm may substitute capital equipment for labour if it is cheaper and more productive to do so. This is called **factor substitution**

Fixed costs, such as factory and office rents, do not vary with the level of output produced

Variable costs, such as the cost of component parts, vary directly with the level of output

The **total cost** of producing a given level of output is the sum of **total fixed costs** and **total variable costs**

The **average cost** per unit of output will tend to fall as output rises because total fixed costs are spread over a larger volume of output

SYLLABUS

This section will

- describe what determines the demand for factors of production
- define total and average cost, fixed and variable cost and perform simple calculations
- analyse particular situations to show changes in total and average cost as output changes
- define total and average revenue and perform simple calculations
- describe the principle of profit maximization as a goal.

Production is a chain of economic activity linking firms in different industries at different **stages of production**.

An **industry** consists of firms producing similar goods and services, or using similar production processes.

Primary industries, such as farming, forestry and mining, produce natural resources.

Using natural resources to make other goods is a process called manufacturing. **Secondary industries** include all **manufacturing industries** and **construction**.

Tertiary industries provide services such as banking, insurance, transport and retailing, which are used by firms in every other industry and individual consumers.

MOST FIRMS AIM TO MAXIMIZE PROFIT FROM THEIR PRODUCTIVE ACTIVITIES

The aim of production for most private sector firms is to make as much profit as possible. **Profit** is a surplus of revenue remaining after all costs have been deducted.

However, some productive organizations in a mixed economy may have other motives:

Public service	Charity	Not for profit
Many public sector organizations aim to provide services people need but may be unable to pay for in full, such as health care and education Costs are funded from government revenues	Charitable organizations usually provide valuable services to people or animals in need, or to help protect the environment Charities aim to cover their costs from donations and other gifts of money	Non profit-making business organizations aim to make enough revenue to cover their costs. Any surplus revenue is re-invested into making their organizations and services better. Examples include many local clubs, co-operatives and mutual organizations

THE DEMAND FOR FACTORS OF PRODUCTION WILL DEPEND ON HOW PRODUCTIVE THEY ARE

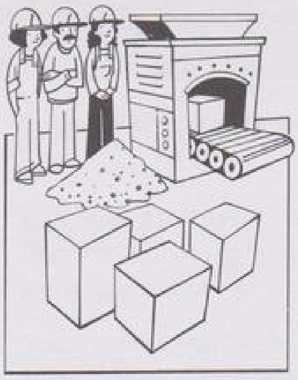
All productive organizations will need **factors of production**. They will try to combine land, labour and capital in the most efficient and productive way to minimize their costs of production.

›› *1.1 Factors of Production*

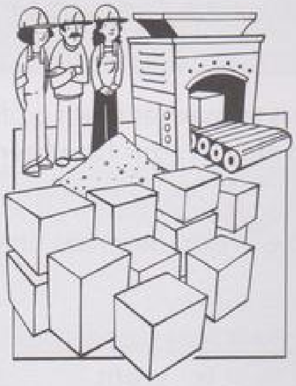
A **labour-intensive** organization will employ more labour than capital equipment and machinery	A **capital-intensive** organization will employ more capital equipment and machinery and relatively few workers

The amount of labour or capital demanded by a firm will depend on the:

- **demand for goods and services by consumers**. The more consumers are willing and able to buy, the more labour and capital firms will need
- **price of labour and capital**. Just like most other goods and services, the higher the wages of labour and the higher the cost of buying or hiring equipment, machinery and other capital goods, the less labour and capital firms will demand
- **productivity of labour and capital**. The more output or revenue labour and capital help to produce the more profit they will generate over and above the cost of employing them.



▲ Productive



▲ More productive

Productivity measures the amount of output or revenue produced by a given amount of labour, capital and/or materials.

Productivity will have increased if:

- more output or revenue is produced from the same amount of resources
- the same output or revenue can be produced using fewer resources.

A firm that fails to increase productivity at the same pace or a faster rate than rival firms have higher production costs and therefore lower profits than their competitors.

Firms may be able to increase **factor productivity** in the following ways:

- **Training employees to improve their skills**
- **Rewarding employees who increase productivity with performance-related payments**
- **Improving the working environment to increase employee job satisfaction**
- **Introducing new production processes and working practices to reduce waste**
- **Replacing old equipment and machinery with new technologies**
- **Replacing labour with modern computer-operated machinery.**

Factor substitution refers to the substitution of capital for labour in firms. This has occurred in many modern industries as new technologies have reduced the running costs of equipment and machinery, and increased their productive capability relative to employing workers

However, some firms may find it difficult to replace labour with modern machinery:

- It cannot replace the work of a doctor, solicitor, hairdresser or other workers providing personalized services
- The fixed cost of buying and installing new and more productive machinery can be expensive
- Workers may need to be retrained to operate new equipment
- Workers may strike because they fear losing their jobs.

›› 3.3 The Role of Trade Unions

TO CONTROL THEIR COSTS OF PRODUCTION FIRMS MUST BE ABLE TO IDENTIFY AND MEASURE THEM

All business organizations need to manage and cover their costs, whether they aim to make a profit or not. Costs are incurred employing factors of production. They include wages for labour, the cost of buying materials and component parts, rent for work premises, the costs of capital equipment and machinery, and charges for services such as insurance, electricity and water supplies.

Fixed costs	Variable costs
Costs that do not vary with the level of output Examples include: • rents for business premises • loan repayments and interest charges • the hire or purchase of equipment • insurance premiums • cleaning costs.	Costs that vary directly with the level of output Examples include: • purchases of materials • purchases of component parts • electric power to run production machinery • wages, especially overtime pay and other payments related to higher productivity.

Total fixed cost = the sum of all fixed costs

Total variable cost = variable costs × output

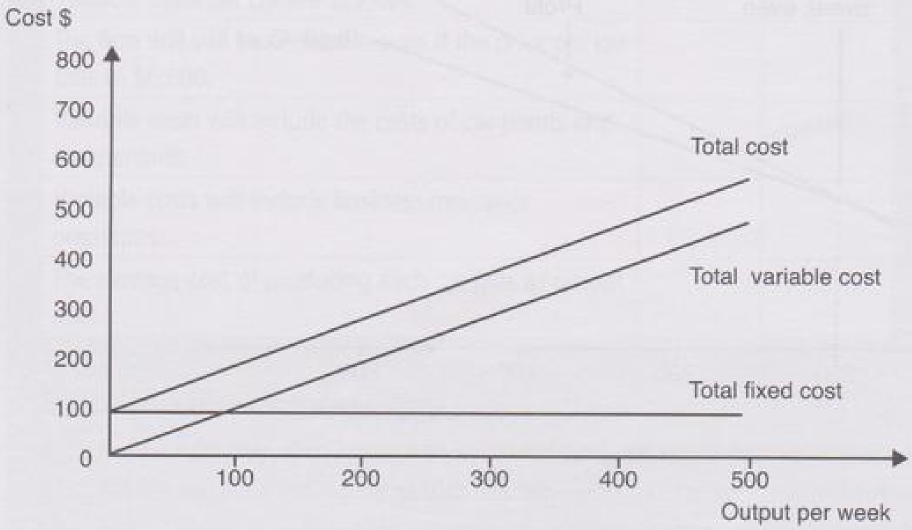
Total cost = total fixed cost + total variable cost

Average cost per unit of output = total cost/total output

Average costs tend to fall as output rises because fixed costs are spread over a larger output.

Example: A firm producing toy dolls. Total fixed costs are $100. Variable costs per doll are $1.

Output per week	Total fixed cost $	Total variable cost $	Total cost $	Average cost $
0	100	0	100	--
100	100	100	200	2.00
200	100	200	300	1.50
300	100	300	400	1.33
400	100	400	500	1.25
500	100	500	600	1.20



A FIRM WILL BREAK EVEN WHEN TOTAL REVENUE EQUALS TOTAL COST

Firms earn revenue or **turnover** from the sale of their goods and services to consumers.

Total revenue = price per unit × quantity sold

Average revenue per unit sold = total revenue/quantity sold

If total revenue exceeds total cost a firm will be in **profit**. A firm that is unable to earn enough revenue to cover costs will make a **loss** and will be forced to close down if it continues to do so.

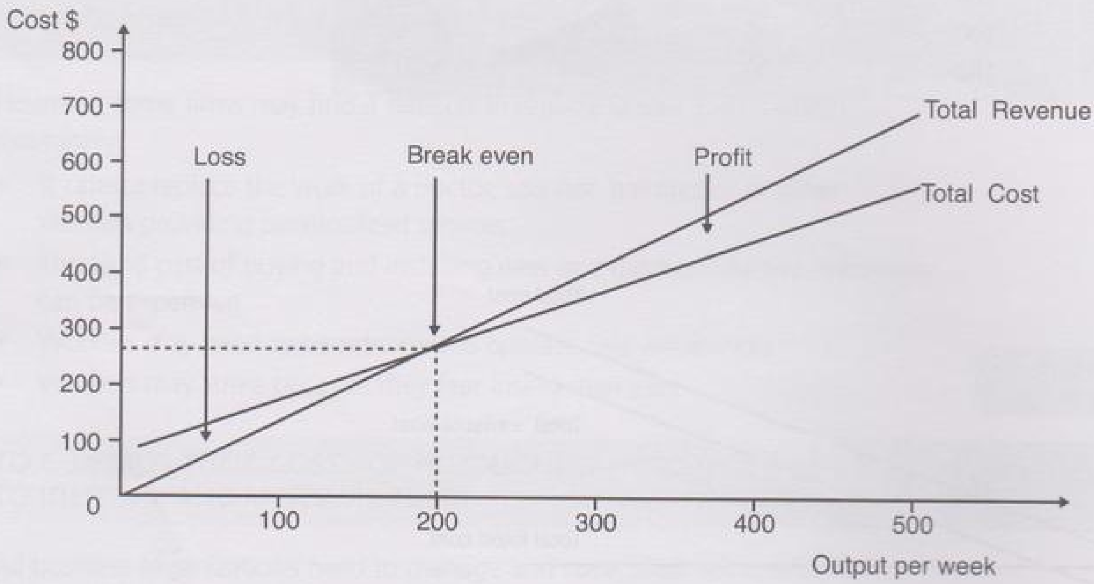
Profit (or loss) = total revenue – total cost

A firm will break even when the level of output it produces and sells costs as much to produce as it earns in revenue so that profit or loss is zero, i.e.

Total revenue – total cost = 0 = breakeven level of output

Example: Same firm producing toy dolls. The price per doll is $1.50.

Output per week	Total cost $	Total revenue $	Profit / loss $
0	100	0	-100
100	200	150	-50
200	300	300	0
300	400	450	50
400	500	600	100
500	600	750	150



EXAM PREPARATION

Complete the table for profit or loss, and average costs, for a car manufacturing plant.

Then answer each question true or false.

Output of cars per week	Total costs $m	Average cost per car $	Revenue $m	Profit/loss $m
0	40	-	0	?
2000	44	22 000	24	?
4000	48	?	48	?
6000	52	?	72	?
8000	56	?	96	40
10000	60	?	120	?

	True?	False?
Car manufacturing is a tertiary industry.		
Car manufacturing is a secondary industry.		
Wages are likely to be the car plant's most significant fixed cost.		
Factory rents and hire charges for machinery are significant fixed costs.		
Profit is maximized at 8,000 cars per week.		
The firm makes a loss if it produces less than 4,000 cars per week.		
The firm breaks even at 6,000 cars per week.		
The firm breaks even at 4,000 cars per week.		
Total fixed costs are $60 million.		
Total fixed costs are $40 million.		
Variable costs per car are $2,000.		
Variable costs per car are $22,000.		
The firm will still be profitable even if the price per car falls to $6,000.		
Variable costs will include the costs of car paints and components.		
Variable costs will include business insurance premiums.		
The average cost of producing each car falls as output rises.		

Example exam questions

- Using examples, explain the terms fixed cost, variable cost and average cost.
- Explain what might cause profits to fall.

4.3 The Growth of Firms

REVISION SUMMARY

The amount of **capital employed** *in a firm refers to how much* has been invested in **fixed assets** including machinery and equipment

The amount of total market supply or revenue accounted for by a firm is its **market share**

A **takeover** occurs when one company acquires ownership and control of another company through the purchase of its shares

A **merger** occurs when two or more firms agree to form a new company together

Increasing capital employed in a firm to increase output will increase the **scale of production**

Economies of scale are cost *savings associated with increasing* the scale of production in a firm

Diversification involves producing a range of different products for different markets to increase sales revenues and reduce the risk of a fall in consumer demand for any one product

A firm that has grown too large may suffer rising average costs due to **diseconomies of scale**

SYLLABUS

This section will

- describe the main *reasons for the different* sizes of firms (size of market, capital, organization)
- describe and evaluate integration, economies and diseconomies of scale.

In every industry there will be firms of different sizes.

Many of today's largest firms started as small firms many years ago but have since grown to employ many thousands of employees and a significant amount of capital.

The size and market power of a firm can also be measured by its **market share**.

Some large firms enjoy significant cost advantages over smaller firms. These are called **economies of scale** but despite these many smaller firms still do well.

TOTAL EMPLOYEES, CAPITAL EMPLOYED AND MARKET SHARE ARE MEASURES OF FIRM SIZE

Firm size can be measured in a number of ways:

- **Number of employees:** firms with less than 50 employees are often classed as small. However, some large firms are very capital intensive and may employ relatively few workers.

- **Amount of capital employed:** large firms will often invest many millions of dollars in **fixed assets** such as premises, fixtures and fittings, machinery and equipment needed for large-scale production and running business operations, often at many different locations
- **Market share:** the bigger the market demand for a good or service the more potential there is for firms to grow large. The relative size of firms can be compared according to their percentage share of the total market supply or total market revenue
- **Organization:** large firms may be divided up into many different departments, for example, finance, sales and marketing, purchasing and production, and have offices, shops and/or factories spread over many locations with many different levels of management.

›› 4.4 Competition

A FIRM CAN GROW THROUGH INTEGRATION WITH OTHER BUSINESS ORGANIZATIONS

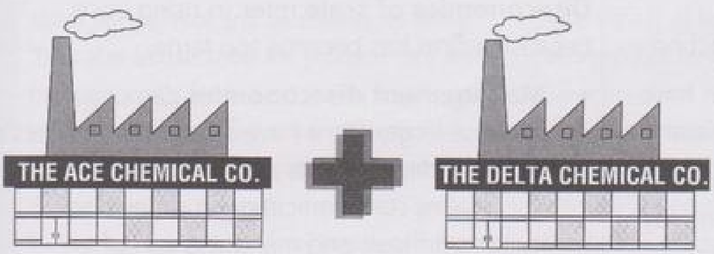
Internal growth involves financing business expansion from reinvested profits, loans or share sales.

›› 3.1 Money and Finance

Growth by **takeover** or **merger** involves **integration** with other firms.

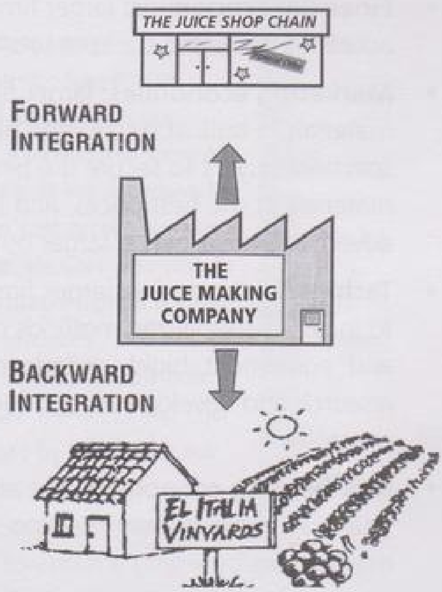
A **takeover** occurs when one company acquires ownership and control of another company through the purchase of its shares.

A **merger** occurs when two or more firms agree to form a new company and issues new shares in the combined company replacing those shares held by existing shareholders.



▲ **Horizontal integration** occurs between firms at the same stage of production producing similar products

▲ **Lateral integration**, or **conglomerate merger**, occurs between firms at the same stage of production but producing very different products



▲ **Vertical integration** occurs between firms at different stages of production

LARGE FIRMS CAN ENJOY SIGNIFICANT ECONOMIES OF SCALE

If a firm is supplying a large or expanding market it may be profitable to increase output.

A firm can increase output in the short run by increasing productivity or hiring some more labour, but it will only be able to increase output significantly by expanding its **scale of production**. This means increasing the amount of capital it employs in larger premises, new equipment and machinery.

Increasing returns to scale – example

	Before	After
Labour	\$200	\$400
Capital	\$250	*\$500*
Materials	\$150	\$300
Total cost	\$600	\$1200
Total output	200	500
Average cost	\$3.00	\$2.40

If total output rises faster than factor inputs then a firm will enjoy **increasing returns to scale** and its average cost per unit of output will fall.

If the % increase in total output is less than the % increase in factor inputs a firm will have **diminishing returns to scale** and the average cost per unit of output will rise.

As firms increase output, market supply will rise and market price will tend to fall. This means average revenue per unit sold will fall. Increasing the scale of production will increase total profit as long as **average revenue** from each unit sold continues to exceed the **average cost** per unit.

Advantages of large-scale production	Disadvantages of large-scale production
Economies of scale refer to cost savings due to increasing the scale of production • **Financial economies:** larger firms often have access to more and cheaper sources of finance • **Marketing economies:** larger firms can buy materials in bulk at discounted prices, employ specialist buyers to secure the best quality materials at the best prices, and spread their advertising costs over a larger output • **Technical economies:** larger firms can afford to invest in specialized methods of production and equipment, highly skilled workers, and research and develop new products and processes • **Risk-bearing economies:** the ability to spread financial risks over many investors, and reduce market risks by selling a range of different products in different locations. This is called **diversification**.	**Diseconomies of scale** refer to rising costs because a firm has become too large • **Management diseconomies** can occur because larger firms have so many managers of different departments and in different locations. This makes communication and decision-making difficult and managers can often disagree • **Labour diseconomies** occur when workers become demotivated and their productivity falls. This may occur in large firms because many production processes may be automated and workers become bored with repetitive tasks • **Agglomeration diseconomies** occur if a company takes over or merges with too many other firms producing different products. The business owners and managers may find it difficult to co-ordinate all the different activities of the merged firms.

DESPITE THE ADVANTAGES OF LARGE-SCALE PRODUCTION, MANY SMALL FIRMS ENJOY SUCCESS

There are still many small businesses and new start-ups all over the world because:

- **the size of their market is small or local**
- **consumers want to choose between a wide variety of products and suppliers**
- **consumers like personalized services and products**
- **the owners choose to keep their businesses small**
- **they cannot raise enough capital to expand their business**
- **governments often provide financial help to new entrepreneurs to start businesses.**

EXAM PREPARATION

Read the extracts from interviews with the managers of a big supermarket and a small local shop. In each interview underline what you think are the advantages of the size of their firms.

Natalia Giralda owns a small grocery shop.
'It's a long way to drive to the supermarket,' she explained, 'and many of my customers are local and like to buy their fruit and vegetables regularly, sometimes every day.
'I know my customers by name and we often talk about our families and all manner of things. They also like to know the produce they are buying is really fresh. I stock only locally grown produce and also offer some more exotic varieties they cannot buy in the supermarkets. However, on the downside, if my local growers have a bad harvest, or if my customers change their tastes, I cannot sell very much.
'I did think about expanding my shop and selling some non-food items to spread these risks but I decided against it. I didn't have enough capital and in any case it would be pointless trying to compete with larger supermarkets. Not only would it mean far more work for me but I would also have less time to offer my customers such a personalised service.'

Asad Rama manages a large supermarket, part of global chain owned by the Sellit Corporation. 'The Sellit Corporation has recently taken over the Quick Buy Retail chain and now has some of the most modern shopping facilities for consumers all over the world. We offer a wide variety of locations, customer services and product ranges, and we are very proud to advertise these facts.
'Our computerised inventory system was a major investment. It provides up-to-the-minute information on sales and stocks at all our stores and ensures they are restocked from our warehouses within 12 hours. It was expensive but we are able to spread the cost across our many stores and huge turnover. We were also able to source the finance very cheaply from a number of different lenders and investors.
'We are also able to buy in considerable bulk from our suppliers all over the world and offer our customers lower prices by passing on our bulk cost savings.'

Example exam questions

- Discuss why a small shop might survive when there are very large supermarkets.
- Discuss how a large firm may benefit from economies of scale.
- How might a firm become large?

4.4 Competition

REVISION SUMMARY

Firms engage in **price competition** using different **pricing strategies** to expand their sales and **market share** at the expense of their rival producers

Firms also engage in **non-price competition** by changing the quality of their goods or services, and using advertising and other promotions to expand their sales

In a **perfectly competitive market** there will be a large number of different firms competing to supply an identical or very similar product and an equally large number of consumers wanting to buy it. Therefore all firms are **price takers** because no individual producer can influence the market price: they must all accept the equilibrium market price

A **monopoly** is a single firm or small group of firms acting together that has sufficient market power to restrict competition and determine market price. A **pure monopoly** controls 100% of the supply of a product to a market

An **oligopoly** occurs when a small number of firms dominate the market supply of a product. To avoid **price wars** firms in an oligopoly may act together to agree prices. This is called **price collusion**

By restricting market supply and raising the market price, a monopoly can earn **excess profit** or **abnormal profit** over and above what it would earn in a more **competitive market**

A monopoly may use **artificial barriers to entry** to restrict competition from new firms. For example, it may use aggressive price cuts below the costs of smaller competing firms to force them out of business. This is called **predatory pricing**

Some firms become monopolies because of their advantages, including cost savings from large-scale production, their capital size and ability to invest in new products and processes. These **natural barriers to entry** may discourage other firms from trying to compete with them

SYLLABUS

This section will

- describe the characteristics of perfect competition and monopoly
- describe pricing and output policies in perfect competition and monopoly
- discuss the advantages and disadvantages of monopoly.

Competition between firms is, in most cases, good for the consumer. Profit-seeking firms will compete with each other to attract consumers to buy their products.

Price competition involves firms using price strategies to attract customers from rival producers.

Non-price competition includes offering better quality products than rival firms, improving customer services, free gifts with purchases or by using **persuasive advertising**.

Competition therefore forces firms to make best use of their resources so they can keep their costs down, develop new and better products and lower prices.

IN COMPETITIVE MARKETS FIRMS COMPETE FOR MARKET SHARE, REVENUES AND PROFITS

Price and non-price competition between rival firms are features of **competitive markets**.

Firms will compete with each other for consumer demand to:

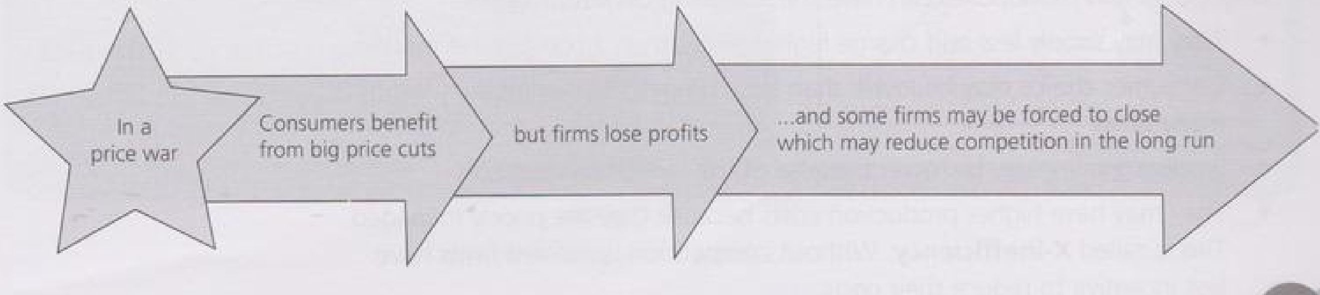
- **increase the number of customers buying their products**
- **achieve product superiority over rival products, in terms of quality and sales**
- **expand their share of total market sales**
- **increase their sales revenues**
- **maximize their profits.**

FIRMS WILL USE DIFFERENT PRICING STRATEGIES TO COMPETE WITH RIVAL FIRMS

Firms can use a range of different **pricing strategies** for their products in an attempt to expand their sales and market share at the expense of rival firms.

Pricing strategy	Description
Penetration pricing	Setting price low to encourage sales. This may be important for a new firm or an existing firm trying to attract demand for a new product
Expansion pricing	Setting price low to expand demand for an existing product. As demand rises, firms can increase their scale of production and reduce average costs
Market skimming	Initially charging a high price for a new product to maximize profit from those consumers willing to pay more to be among the first to buy the product. This strategy is often observed in the market for new consumer electronic goods
Price leadership	When smaller firms set their prices at a similar level to a larger, more dominant firm. This can help to avoid aggressive price competition and price wars with the larger firm
Predatory pricing	Aggressive price cutting by a large dominant firm intended to drive smaller competing firms out of business because they have higher costs and will be unable to match the price cuts. Once the competition has been removed the large firm is able to raise prices again

Price wars can sometimes develop in very competitive markets as firms continually try to reduce their prices below those of their rival producers.



MONOPOLIES ARE ABLE TO DOMINATE MARKETS AND RESTRICT COMPETITION TO THEIR ADVANTAGE

The amount of competition in a market for a particular good or service can be measured by:

- How much control a firm or group of firms has over the market supply. *This is measured by their* ***market share*** *of total quantity traded or total* sales revenues
- *How much influence a firm or group of firms has over the determination of market price.* Firms that are able to influence market price are known as **price makers**.

In a **perfectly competitive market** there will be a large number of firms competing to supply an identical or very similar product and an equally large number of consumers wanting to buy it. Because there are so many producers competing with each other for sales no single firm will have any power over the market price. That is, they are all **price takers** and must simply try to sell as much as they can at the equilibrium market price. If a firm did try to raise its price above the market price it would lose custom to rival producers and soon go out of business.

>> 2.2 How Markets Work

However, in reality there are very few perfectly competitive markets. The markets for most goods and services are dominated by a small number of large firms. Competition between these firms may be fierce or restricted.

Oligopoly	Pure monopoly
When a small number of firms dominate the market supply of a good or service.	A firm that controls the entire market supply of a good or service.
To avoid price wars firms may act together to maximize their profits, setting market price high by restricting their combined market supply. This is called **price collusion.** A **cartel** is a formal agreement between firms to control market supply and price. They may create **barriers to market entry** together to deter competition from new firms.	A monopoly may use predatory pricing and other **artificial barriers to entry** to force competing firms out of their market. Other firms may also be deterred from competing with a monopoly because they will be unable to match its size in terms of its **capital employed** and/ or **market share.**

Large, dominant firms may abuse their **market power** by restricting market supply to force up the market price and earn more profit. These are often called **excess profits** or **abnormal profits** because they will be much higher than they would be if the market was competitive.

Oligopolies and monopolies can have the following **disadvantages**:

- They may supply less and charge higher prices than a competitive market
- Consumer choice may be lower than in a competitive market supplied by many firms
- Product quality may be lower because of the lack of competition
- They may have higher production costs because they are poorly managed. This is called **X-inefficiency**. Without competition dominant firms have less incentive to reduce their costs.

BARRIERS TO MARKET ENTRY CAN DETER COMPETITION FROM OTHER FIRMS

Some firms become oligopolies or monopolies simply because of their **advantages**. These create **natural barriers to entry** for smaller firms trying to compete with them. Other oligopolies and monopolies may try to protect their market power by creating **artificial barriers to entry** to restrict competition from other firms.

Natural barriers to entry	Artificial barriers to entry
• If a firm enjoys significant cost savings from large scale of production • If it employs a lot of capital equipment that other firms cannot afford • If it has a large customer base built up over many years • If it has developed advanced products or processes that are protected by patents, i.e. it has a **legal monopoly**.	• Using predatory pricing strategies to force smaller firms out of their market • Preventing their major suppliers from selling materials and components to other firms by threatening to switch their custom to rival suppliers • Forcing retailers to stock and sell only their products ('**exclusive dealing**').

Governments may introduce laws and regulations to control large firms that are found to be using **restrictive practices** to deter competition and earn excess profits. This is known as **competition policy**. It can involve:

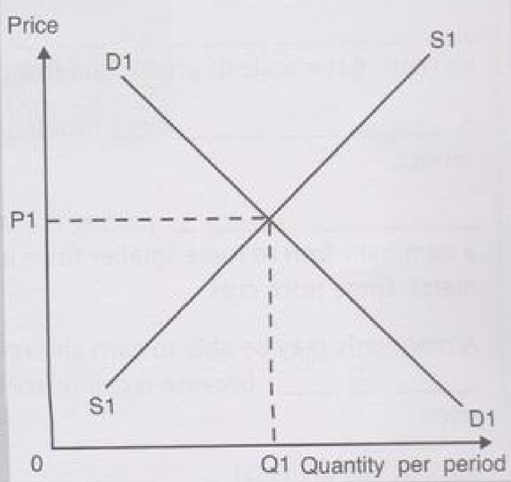
- imposing fines on large firms found to be abusing their market power
- forcing oligopolies and monopolies to break up into smaller competing firms
- setting maximum price levels that firms are allowed to charge their customers
- taking monopolies into public ownership to be run by a public corporation.

EXAM PREPARATION

The demand and supply diagram shows a competitive market equilibrium. Imagine now the market becomes dominated by a monopoly.

In order to earn more profit the monopoly restricts supply to force up the market price. Show this change in the diagram by drawing the new market supply curve, and marking in the new market price and quantity traded.

What might happen to product quality?



Example exam question

- What problems may occur because a firm is a monopoly?

IMPORTANT THINGS TO REMEMBER

Fill in the missing key words.

A ____ ______ is a business organization owned and managed by one person.

A ________ _________ issues shares to raise finance and is owned by its shareholders.

A __-__________ is owned and run by its members for their mutual benefit.

A _____________ owns business operations in more than one country.

A ______ _____________ is a public sector organization accountable to government.

Most private firms aim to maximize their _______.

A firm that fails to earn sufficient revenue to cover its total costs will make a ____.

________ costs, such as the cost of materials, vary directly with the level of output.

_____ costs, such as rents and loan repayments, do not vary with the level of output.

Mining is an example of a _______ industry producing natural resources.

A _________ industry involves firms engaged in manufacturing or construction.

Firms producing services are part of the ________ industry.

____________ measures the amount of output or revenue produced from a given input of labour, capital and land.

Horizontal ___________ involves takeovers or mergers between firms at the same stage of production and producing similar products.

_________ of _____ are cost savings arising from increasing the scale of production in a firm.

A ________ is a firm that dominates the market supply of a good or service.

_________ pricing is a strategy involving big price reductions by a dominant firm to force smaller firms out of business because they are unable to match these price cuts.

A monopoly may be able to earn an excess profit or _________ ______ because it can restrict market supply to force up the market price.

Natural and artificial ________ to _____ may deter competition from new and smaller firms in markets dominated by large, powerful monopolies and oligopolies.

10 MINUTE TEST

Choose and then mark your answer A, B, C or D to each question.

1 Which of the following can be defined as a secondary industry?
- A banking
- B tin mining
- C glass making
- D retailing

2 Which of the following mergers between two firms is an example of vertical integration?
- A a dairy farm and an arable farm
- B a restaurant chain and hotel chain
- C a bank and a supermarket
- D a clothes manufacturer and clothes retailer

3 Which of the following types of business organization is a public sector organization?
- A public corporation
- B public limited company
- C partnership
- D worker co-operative

4 A firm may substitute more capital for labour in production if
- A the cost of borrowing rises
- B wages rise
- C profits fall
- D labour productivity rises

Questions 5–7 are based on the following table:

	Output per month	Total Cost $	Total Revenue $
A	100	1000	1200
B	200	1600	2800
C	300	2100	3600
D	400	3200	4000

5 At what level of output is average cost at a minimum?

6 At what level of output is average revenue at a maximum?

7 At what level of output is profit maximized?

Now check your answers against those given on page 155. How well did you do? Make a note of any you got wrong and make sure you understand the reasons why before you continue to the next section.

5 The role of government in an economy

5.1 Government Economic Policy

REVISION SUMMARY

Most national governments share similar **macro-economic** objectives:

- **low and stable price inflation**
- **a high and stable level of employment**
- **economic growth and prosperity**
- **a favourable balance of international payments.**

Governments use **policy instruments**, including taxes and regulations, to help achieve their objectives through the impact they have on the actions of producers and consumers

Fiscal policy involves changing the total level of taxation or government spending in an economy to influence the level of demand for goods and services

Monetary policy uses the interest rate of the central bank to influence demand

Supply-side policy instruments are used to encourage higher levels of output and employment. They include **tax incentives, subsidies** and **regulations**

Policy aims and actions can sometimes conflict. For example, raising taxes or interest rates to reduce price inflation may reduce employment and economic growth in output and incomes

SYLLABUS

This section will

- describe the government as a producer of goods and services and as an employer
- describe the aims of government policies, such as full employment, price stability, economic growth, redistribution of income, balance of payments stability
- discuss the possible conflicts between government aims
- discuss the government's influence (regulation, subsidies, taxes) on private producers.

Macro-economics is the study of how a national economy works and the interaction between economic growth in output and national income, employment and the general level of prices.

A macro-economy consists of all the different markets for goods and services, labour, finance, foreign exchange and other traded items.

Changes in the behaviour of producers and consumers in individual markets will therefore have an effect on the macro-economy and the rate of economic growth, inflation, employment and trade.

Most national governments share similar **macro-economic** objectives. These are:

- low and stable price inflation
- a high and stable level of employment
- economic growth and prosperity
- a favourable balance of international payments.

Governments can use different **policy instruments**, including taxes and regulations, to help achieve their objectives through their impact on the actions of producers and consumers.

›› 6.1 Price Inflation

›› 6.2 Employment and Unemployment

›› 6.3 Output and Growth

›› 8.2 Balancing International Payments

GOVERNMENTS USE POLICY INSTRUMENTS TO HELP ACHIEVE MACRO-ECONOMIC OBJECTIVES

Fiscal policy involves varying total public sector expenditure and/or the overall level of taxation to influence the level of demand in an economy.

Expansionary fiscal policy may be used during an economic recession to boost demand for goods and services through tax cuts or increased public sector spending. Firms may respond by hiring more labour and increasing output. However, increasing demand can force up market prices and involve spending more on imported goods and services from overseas. Increasing imports will have a negative impact on the balance of payments.

Contractionary fiscal policy may be used to reduce price inflation. It involves reducing demand in an economy through tax increases or cuts in public sector spending. However, firms may respond to falling demand by cutting their output and reducing employment. Increased taxes may also reduce work incentives and therefore productivity.

Fiscal policy instruments	Impacts on consumers	Impacts on producers
Increase income taxes	Disposable income is reduced and consumer spending falls	Market prices and profits fall as consumer demand falls. Firms cut output and employment
Reduce income taxes	Disposable incomes and consumer spending rise	Market prices and profits start to rise so firms expand output and employ more labour
Increase taxes on profits	Consumers are not directly affected but may pay higher prices if firms cut output	After-tax profits fall. Firms may increase their prices and/or cut output in response
Cut taxes on profits	Consumers may benefit from reduced prices as output rises	After-tax profits rise so firms may expand their output and employment
Increase indirect taxes on goods and services	Consumers on low incomes may be hit hardest by price rises because they spend all or most of their incomes	Consumer demand may contract and profits fall. Firms may cut output and reduce their demand for labour
Cut indirect taxes on goods and services	Consumers may expand their demand for goods and services as after-tax prices fall	Expanding demand will boost profits which are an incentive to firms to raise their output and demand more labour
Raise public expenditure	Public sector workers could be paid more. Low income families may receive more benefits. More public services could be provided for free	Firms supplying goods and services to government will enjoy increased revenues and profits, and may expand their output and employment
Cut public expenditure	Public sector workers could suffer pay cuts or be made unemployed. Welfare benefits may be reduced	A cut in public spending on capital projects, such as road and school building, will cause cutbacks in the construction industry. Subsidies paid to other firms may be cut

>> 3.1 Money and Finance

Monetary policy involves varying the interest rate charged by the central bank for lending money to the banking system in an economy.

Contractionary monetary policy may be used to reduce price inflation by increasing the interest rate.

Because banks have to pay more to borrow from the central bank they will increase the interest rates they charge their own customers for loans to recover the increased cost. Banks will also raise interest rates to encourage people to save more in bank deposit accounts so they can reduce their own borrowing from the central bank.

As interest rates rise, consumers may save more and borrow less to spend on goods and services. Firms may also reduce the amount of money they borrow to invest in new equipment. A reduction in capital investment by firms will reduce their ability to increase output in the future. Higher interest rates may therefore reduce economic growth and increase unemployment.

Expansionary monetary policy may be used during an economic recession to boost demand and employment by cutting interest rates. However, increasing demand can push up prices and may increase consumer spending on imported goods and services.

Monetary policy instruments	Impacts on consumers	Impacts on producers
Raise interest rates	Spending falls as consumers save more and borrow less The foreign exchange rate of the national currency may rise. This will reduce the prices of imports Consumers may buy more imports instead of home-produced goods and services	Firms cut output and employment in response to falling demand Firms borrow less to invest in new capital equipment, which may harm economic growth Prices of exports sold overseas will rise if the exchange rate increases. Exporting firms may suffer falling demand and profits
Cut interest rates	Spending rises as saving becomes less attractive and borrowing less expensive The exchange rate may fall causing imported inflation	Firms incease output and demand more labour as demand rises Firms may increase investment Prices of exports sold overseas may fall if the exchange rate rises. Demand for exports may rise

>> 8.2 Balancing International Payments

Supply-side policies aim to increase economic growth by raising the productive potential of the economy. An increase in the total supply of goods and services will require more labour and other resources to be employed, will reduce market prices, and provide more goods and services for export.

Supply-side policy instruments aim to encourage firms and employees to become more productive, and to remove any barriers that may prevent this.

Supply-side policy instruments	
Tax incentives	Reducing taxes on profits and small firms can encourage enterprise. Tax allowances can also be used to encourage investments in new capital equipment and R&D
Subsidies or grants	These reduce production costs and also help firms to fund the research and development (R&D) of new technologies
Education and training	Teaching new and existing workers new skills to make them more productive at work
Labour market regulations	Include minimum wage laws to encourage more people into work, and legislation to restrict the power of trade unions
Competition policy	Regulations that outlaw unfair and anti-competitive trading practices by monopolies and other large powerful firms
Free trade agreements	Removing barriers to international trade to allow countries to trade their goods and services more freely and cheaply
Deregulation	Removing old, unnecessary and costly rules and regulations on business activities
Privatization	The transfer of public sector activities, such as refuse collection, to private firms to provide them more efficiently

EXAM PREPARATION

Look at the news headlines and articles below and in each case identify the relevant government objectives and policy instruments they describe.

1

2

3

4

India's central bank raises interest rates to 6.5% over inflation fears

World recession fears as US unemployment hits 5.5%

A trio of crises in the housing, credit and financial markets, have rocked the US economy causing economic growth to slow to a crawl. But the US government is hoping successive interest rate cuts and a $80 billion spending package will start to pull the economy out of recession next year.

Government ministers announce extra funding for training the long-term unemployed

Business leaders urge the government to cut taxes on incomes and profits to stimulate demand and economic growth as unemployment rises to 2m

Example exam questions

- How might a reduction in taxation help any **two** macro-economic aims of a government?
- What actions could a government take to help reduce unemployment?
- Discuss the actions that a government might take to control inflation.

5.2 Types of Taxation

REVISION SUMMARY

The **public sector** is a major employer, producer and consumer in many modern economies

Taxes are used to finance **public expenditure** on **current** consumption and **capital** projects

A **progressive tax** can help **reduce inequalities in incomes and wealth** by taxing people with high incomes or significant wealth more heavily than others

The **tax burden** of a **regressive tax** is higher on people with low incomes while a **proportional tax** makes everyone pay the same tax rate regardless of their income

Direct taxes are taken directly from incomes, profits and wealth

Indirect taxes are paid by consumers when they buy goods and services. They raise the cost of production and can be used to discourage the consumption of harmful products

Many **indirect taxes** are **regressive** because their **tax burden** is highest on poorer people who spend most or all of their low incomes

SYLLABUS

This section will

- describe the types of taxation (direct, indirect, progressive, regressive, proportional) and the impact of taxation.

The **public sector** is a major employer, producer and consumer in many modern economies. For example, the public sector in France employs 22% of the workforce.

Public sector organizations include:

- National, regional and local government authorities and their administrative departments and offices
- Government agencies that run services such as the Child Support Agency and Prisons Service in the UK
- Public corporations.

To pay the running costs of government organizations and for the goods and services they consume or provide the public sector must raise revenue. **Tax revenue** is the main source of public sector finance in most countries.

›› *4.1 Types of Business Organization*

PUBLIC SPENDING INVOLVES CURRENT EXPENDITURE AND CAPITAL EXPENDITURE

Current expenditure is recurring spending on goods and services consumed in the current financial year. These include wages of public sector workers, pensions and welfare payments, consumables such as pens and paper, and the running costs of government offices.

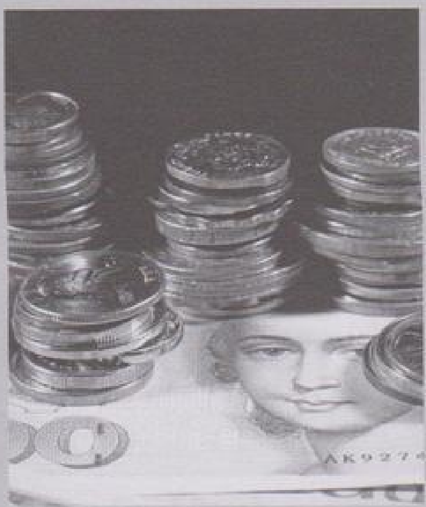
Capital expenditures are investments in long-lived assets such as computer equipment, roads, dams, schools and hospitals. Capital expenditure has a *lasting impact on an economy and can help increase its productive potential.*

Governments use **public expendture** to help achieve a number of objectives:

- **To provide goods and services that are in the public interest**. These are **public goods**, such as street lighting and national parks, and **merit goods** including education, health care and social housing
- **To reduce inequalities in incomes and help vulnerable people,** by providing income support and other welfare benefits for people and families in need or on low incomes
- **To invest in national infrastructure** such as roads, universities and other public buildings
- **To support agriculture and industry** including grants and subsidies to reduce the costs of production, training workers and making investments in new machinery and research
- **To achieve macro-economic objectives**. Cutting taxes and increasing public spending during an economic recession can boost demand and reduce unemployment. In contrast, a government may raise taxes and cut expenditure to control rapid and unstable inflation.

>> *2.1 Economic Systems*

>> *5.1 Government Economic Policy*



A **budget deficit** occurs if a government spends more in a financial year than it receives in tax revenue. If a government budgets for a surplus it plans to raise more from tax revenue than it will spend.

The **public sector borrowing requirement** is the amount a government will need to borrow if public expenditure exceeds its total revenue.

The **national debt** is the total stock of borrowing held by a government. Interest charges on the debt are paid from future public expenditures.

If the national debt and debt interest payments rise at a faster rate than growth in GDP, the burden of debt interest payments will increase. Taxes will have to rise in future to pay them.

PUBLIC EXPENDITURES ARE FINANCED BY TAXES AND OTHER REVENUES

Most revenue is raised from **taxation**. Taxes are used by governments to help them achieve a number of objectives:

- **To finance public expenditure**
- **To reduce inequalities in income and wealth** through a progressive tax system
- **To discourage the consumption of harmful products**, such as cigarettes, by raising their prices
- **To protect the environment** by discouraging damaging and polluting activities, for example, by taxing gasoline, carbon emissions and landfill waste
- **To achieve macro-economic objectives** using fiscal policy.

Borrowing

Interest from government loans

Rents and entrance fees for public buildings

Charges for public services

Proceeds from sales of public assets

Tax revenue

▲ Sources of revenue

THE IMPACT OF A TAX ON INCOME CAN BE PROGRESSIVE, REGRESSIVE OR PROPORTIONAL

Taxes are paid either directly or indirectly from incomes. The **effective tax rate** is the proportion of income paid in tax.

Annual Income $	Progressive % tax rate	Regressive % tax rate	Proportional % tax rate
$5,000	0%	30%	20%
$20,000	10%	25%	20%
$50,000	20%	20%	20%
$100,000	40%	15%	20%

If a tax is a **progressive tax** the effective tax rate rises with income. A person with a high income will pay proportionally more of their income in tax than a person on a low income.

If a tax is a **regressive tax** the effective rate of tax falls with income. The tax will impose a higher relative tax burden on people with low incomes.

If a tax is a **proportional tax** everyone, rich or poor, pays the same effective tax rate.

The total **tax burden** of a tax system is the proportion of the national income taken in tax. For example, in 2007 the tax burden in Denmark was just under 50% of its national income.

DIRECT TAXES ARE LEVIED ON INCOMES AND WEALTH

Direct taxes are levied on the income or wealth of an individual or company, including:

- **Personal income tax** is levied on income including on interest payments on savings
- **Payroll taxes** include personal income taxes collected by employers from the wages of their employees, and the taxes an employer pays from their own funds related to employing workers, including social security contributions
- **Corporation tax** is levied on company profits. Small companies with low profits can often be made exempt, or pay a zero rate of tax, to encourage enterprise
- **Capital gains tax** is a tax on any gain in value from the sale of assets held by individuals and companies such as shares and bonds, precious metals and property
- **Transfer taxes** are applied to the transfer of assets from one person to another. They include gift taxes, estate taxes and inheritance taxes paid on inherited wealth.

Advantages of direct taxes	Disadvantages of direct taxes
• They are a major source of tax revenue • Many are progressive and help to reduce inequalties in incomes after tax • They take account of people's ability to pay.	• Income taxes can reduce work incentives • Taxes on profits reduce profit available to entrepreneurs to re-invest in their businesses • High tax rates can cause tax evasion.

INDIRECT TAXES ARE INCURRED WHEN CONSUMERS SPEND THEIR INCOMES

>> 2.2 How Markets Work

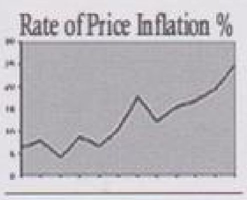
Indirect taxes include tariffs and excise duties added to the prices of goods and services. They are normally imposed on producers who will then pass on as much of the tax as they can to consumers through higher prices.

- **Ad valorem taxes** include value added tax (VAT) and other sales taxes. They are levied as a percentage of the selling price of goods and services or on sales revenues. Some necessities, such as many foods and medicines, may be exempt or zero-rated
- **Tariffs** are customs duties applied to the prices of imported goods as they enter a country. Tariffs are often used to protect domestic firms from overseas competition
- **Excise duties** are applied to specific goods, such as alcohol, cigarettes, vehicles and petrol. They are normally fixed charges based on quantity sold rather than price
- **User charges**, such as tolls for using publicly owned bridges and motorways.

Advantages of indirect taxes	Disadvantages of indirect taxes
• They are cheap for a government to collect • A wide tax base. Anyone who buys goods and services will pay some indirect taxes • They can be used to discourage consumption and production of harmful products.	• The cost of collecting taxes falls to businesses • They are regressive • Tax revenues are less certain because they depend on spending patterns • They add to price inflation.

EXAM PREPARATION

For each of the pictures below suggest reasons why a government might impose a tax and what types of tax instruments (direct or indirect; progressive or regressive) they might use.

Example exam questions

- Discuss why governments impose taxes.
- Distinguish with the use of examples between **(i)** direct and indirect taxes, **(ii)** progressive and regressive taxes.

IMPORTANT THINGS TO REMEMBER

Fill in the missing key words.

_ _ _ _ _ – _ _ _ _ _ _ _ _ _ _ _ involves the study of how a national economy works.

Expansionary _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ involves reducing the general level of taxation and/or increasing public expenditure to boost the level of demand in an economy.

A contractionary _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ involves raising the interest rate to reduce the level of demand in an economy.

_ _ _ _ _ _ _ _ _ _ _ _ policy instruments are used to encourage higher levels of output and employment. They include tax incentives, subsidies and regulations.

_ _ _ _ _ _ _ _ _ _ _ _ involves removing old, unnecessary and costly rules and regulations on business activities.

_ _ _ _ _ _ _ _ _ _ _ _ _ _ involves the transfer of public sector activities, such as refuse collection and running prisons, to private firms to provide them more efficiently.

_ is total spending by the public sector on current or recurring expenditues such as wages for public workers, and capital expenditures, such as road building.

A _ _ _ _ _ _ _ _ deficit will occur if public expenditure exceeds tax revenue.

The public sector _ is the amount a government will need to borrow if public expenditure exceeds its total revenue.

A _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ tax is designed so the effective tax rate rises with income. People with higher incomes will pay a greater proportion of their income in tax than people on low incomes.

A _ _ _ _ _ _ _ _ _ _ _ _ _ _ tax is designed so the effective tax rate falls with income. People with lower incomes will pay a greater proportion of their income in tax then people on higher incomes.

A _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ tax imposes the same effective tax rate on all levels of income.

A _ _ _ _ _ _ _ _ tax is levied directly on income or wealth.

An _ _ _ _ _ _ _ _ _ _ _ tax is levied on goods and services or revenues and passed on to consumers through higher prices.

10 MINUTE TEST

Choose and then mark your answer A, B, C or D to each question.

1 A government decides to expand demand in the economy to boost output and employment. Which of the following policy measures should it use?

A increase taxes and interest rates
B cut public spending and raise taxes
C reduce taxes and interest rates
D reduce the national debt

2 Which of the following taxes is an example of a direct tax?

A a $10 tax on imported televisions
B a 20% tax on the price of clothes
C a £5 tax on a gallon of petrol
D a 30% tax on the earnings of a taxi driver

3 Which of the following policy instruments would you advise a government to use to help lower and stabilise price inflation?

A lower interest rates
B increase taxes on goods and services
C increase income taxes
D increase public spending on welfare benefits

4 The table below compares income tax rates levied on different levels of income in 4 different countries. Which country has the most progressive income tax?

Weekly income	Tax rate %			
	A	B	C	D
$100	0%	35%	20%	25%
$500	15%	30%	22%	25%
$1000	25%	25%	25%	25%

5 Which of the following is an indirect tax?

A a tax on interest earned on savings
B a tax on company profits
C a tax on flight ticket sales
D a tax on gains from the sale of property

6 Which of the following macro-economic policies involves the use of interest rates to control the level of demand in an economy?

A fiscal policy
B monetary policy
C competition policy
D trade policy

Now check your answers against those given on page 155. How well did you do? Make a note of any you got wrong and make sure you understand the reasons why before you continue to the next section.

6 Economic indicators

6.1 Price Inflation

REVISION SUMMARY

Inflation is a sustained rise in the general level of prices in an economy

A **consumer price index** is a measure of price inflation affecting consumers

Inflation reduces the **real value** of money and therefore reduces the purchasing power of people's incomes and savings

Demand-pull inflation is the result of increasing total demand for goods and services

Cost-push inflation is the result of rising production costs

Increases in the prices of imported goods and services, for example, following a depreciation in the exchange rate can result in **imported inflation**

In a **hyperinflation** prices rise so fast that money becomes almost worthless

Disinflation refers to a slow down in the rate of price inflation

A **malign deflation** involves a sustained decline in the general level of prices in an economy usually associated with a slump in aggregate demand

SYLLABUS

This section will

- describe how a consumer or retail price index is calculated
- discuss the causes and consequences of inflation.
- discuss the causes and consequences of deflation.

Imagine you have been saving up to buy a new bicycle or a computer. You think you have enough saved and go to the shops but discover the price has gone up and you will need to save up even more.

Everyone moans when the prices of the goods and services they buy rise. Consumers will either have to cut back their purchases or spend more of their incomes.

Not all prices rise at the same rate over time and some may even fall over time. However, if on average the general level of prices in an economy is rising there is **inflation**.

PRICE INDICES ARE USED TO MEASURE AND MONITOR INFLATION

Inflation is a continuous or sustained rise in the general level of prices of goods and services in an economy.

The rate of price inflation is measured by calculating the average percentage change in prices per period of time, usually per month or each year.

A **consumer price index (CPI)** is a measure of price inflation affecting consumers. It is calculated from the movement in the average price of a 'basket' of goods and services purchased by the 'typical' household in a country from a sample of different retail outlets.

The proportion of total household expenditure spent on each good or service is used to weight their individual prices. For example, if the price of a loaf of bread is $2 and the typical household spends 5% of their weekly or annual spending on bread, then the **weighted average price** will be $2 x 0.05 = $0.10. Prices are weighted in this way because the more a household spends on a particular good or service the more an increase in the price of that product will matter.

In the first year of measurement – the **base year** – the weighted average price of all goods and services in the CPI basket is calculated and set equal to 100. Monthly or annual changes in the weighted average price of the basket are then compared to the base year.

Calculating a CPI – a simple example

Imagine the 'basket' used to calculate a CPI consists of three main products: food, travel and clothing.

Year 1 (base year)

Products	Average price ($)	Proportion of household expenditure spent on each product (%)	Weighted average price ($)	Price index
Food Travel Clothing	$60 $20 $40	60% 10% 30%	0.60 x $60 = $36 0.10 x $20 = $2 0.30 x $40 = $12	
		Total = 100%	**Average price of basket = $50**	= 100

Year 2

Products	Average price ($)	Proportion of household expenditure spent on each product (%)	Weighted average price ($)	Price index
Food Travel Clothing	$70 $40 $48	60% 15% 25%	0.60 x $70 = $42 0.15 x $40 = $6 0.25 x $48 = $12	
		Total = 100%	**Average price of basket = $60**	= 120

$$\text{CPI year 2} = \frac{\text{weighted average price year 2}}{\text{weighted average price base year}} = \frac{\$60}{\$50} \times 100 = 120$$ i.e. the annual inflation rate is 20%

There are three main uses of a consumer price index:

- **As an macro-economic indicator** of the rate of price inflation in an economy and change in the **cost of living** affecting consumers
- **As a price deflator** to 'deflate' the value of wages and incomes by the impact of price inflation to calculate the change in their purchasing power. For example, if wages rise by 5% but prices rise by 8%, the **real value** of wages will have fallen by 3%
- **To index-link income payments** so their purchasing power increases at the same rate as inflation. This is called **indexation**. For example, some savings rates are index-linked. Some governments also increase pensions and welfare payments in line with inflation.

COST AND DEMAND PRESSURES CAUSE INFLATION

There are three main causes of price inflation:

- **Demand-pull inflation** is caused by total demand rising faster than the total output of goods and services, causing market prices to rise

>> 2.2 How Markets Work

- **Cost-push inflation** is caused by an increase in the cost of producing goods and services, for example, from higher wages or raw material prices. Firms will try to pass these costs onto consumers through higher prices

>> 4.2 Organizing Production

- **Imported inflation** results from rising prices of goods and services imported from overseas. This can be due to an increase in the costs of overseas producers and/or a fall in the exchange rate of the currency of the importing country.

>> 8.2 Balancing International Payments

INFLATION HAS PERSONAL AND ECONOMIC CONSEQUENCES

- **Inflation reduces the purchasing power or 'real value' of money**. This can be especially difficult for people on low and fixed incomes such as many old age pensioners and people who are unemployed or disabled
- **Inflation reduces the real value of savings**. For example, if the annual rate of interest on savings is 4% but the rate of inflation is 5%, the real value of people's savings will fall by 1%. People may save less as a result
- **Inflation reduces the real value of loans**. To compensate, banks and other lenders will increase their interest rates on their loans. People and firms with loans will have to pay more.
- **Inflation may help boost tax revenues**. As prices rise so does the tax take from value-added taxes and sales taxes
- **Inflation increases government spending** because a government will also have to pay more for the goods and services it buys, if wages rise for public sector employees and also if welfare payments are index-linked
- **Inflation can reduce company profits**, especially if it is caused by rising costs or if consumers reduce their demand for goods and services
- **Inflation may cause unemployment**. As prices rise, consumers will reduce their demand for many goods and services. The sales and profits of many firms will fall. As a result they will cut production and the size of their workforces to reduce their costs.

Hyperinflation describes extremely high rates of inflation that result in money failing to be a good store of value and becoming virtually worthless.

For example, in October 2008 the official annual inflation rate in Zimbabwe was 231 million per cent with some analysts suggesting the true figure was over 13 billion per cent per month. This meant prices were doubling every 15 hours.

The cost of a loaf of bread in Zimbabwe at this time was around Z$100 billion!

DEFLATION INVOLVES A CONTINUOUS DECLINE IN THE GENERAL LEVEL OF PRICES IN AN ECONOMY

Product prices can fall for a number of reasons including increasing competition between firms and technological advances that reduce production costs. However, when falling product prices become widespread and prolonged due to a slump in consumer demand the result is **deflation**.

Deflation involves a continuous decline in the general level of prices in an economy. Many economies have suffered relatively short-lived deflations from time to time during economic recessions. However, longer periods of deflation do occur and can have very serious consequences. During a sustained or **malign deflation**;

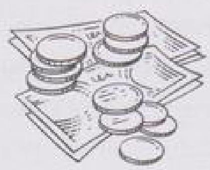
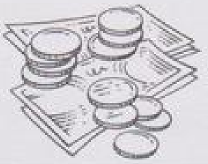
- consumers delay spending as they wait for prices to fall further
- unsold goods accumulate so firms cut their prices and this reduces their profits
- firms cut their production and reduce the size of their workforces
- household incomes fall as unemployment rises. This reduces consumer demand further
- the real value of debts held by people and firms rises as prices fall
- firms stop investing in new plant and machinery and this reduces economic growth
- governments must borrow more money as tax revenues fall

Eventually an economy will go into a deep recession as demand, output, the demand for labour and incomes continue to fall. Many firms may go out of business because they are unable to increase sales and profits no matter how much they cut their prices because consumers simply delay their purchases further.

>> *6.3 Output and Growth*

EXAM PREPARATION

Look at the average prices of the products and how they have changed over time. Use this information to calculate the consumer price index, and therefore the rate of inflation, in year 2.

Products selected for the CPI 'basket'	% household expenditure spent on product each year	Average price in Year 1 (base year)	Average price in Year 2
Food items 	 50%	\$2.00	\$2.20
Travel costs 	 10%	\$10	\$12
Household items 	 40%	\$5.00	\$5.25
CPI		100	?

Why does the increase in the price of food in year 2 matter so much more in this measure of consumer price inflation than travel and household items?

Example exam questions

- Define inflation and briefly describe how it is measured.
- Inflation is usually measured and monitored using a weighted consumer price index. Explain how it is calculated.

6.2 Employment and Unemployment

REVISION SUMMARY

Labour force participation has been rising in most countries, especially among females and participation in **part-time employment**

Employment in primary and secondary industries has been in decline in many countries, while employment in service industries has been growing

Structural unemployment results from the decline of old industries in an economy, and a fall in demand for the skills and technologies they used

Cyclical unemployment occurs during an economic recession as total demand falls

Welfare payments may cause **voluntary unemployment** because they reduce work incentives

Some employers argue that **minimum wages** and employment taxes imposed by the governments of some countries are too high and have reduced their demand for labour

Unemployment can cause significant hardship for people without work and their families. Rising unemployment also imposes costs on the rest of the economy because total output and income will fall. Tax revenue will also be lower but public spending on welfare payments will tend to rise

SYLLABUS

This section will

- describe the changing patterns and levels of employment
- discuss the causes and consequences of unemployment.

Most governments have an objective to maintain a high and stable level of **employment** in their economies, and a low level of **unemployment**. Employment provides incomes. In contrast, unemployment is a waste of productive resources.

It is not surprising, therefore, that government officials and people planning their future careers will be very interested in monitoring **employment trends**.

EMPLOYMENT TRENDS ARE MONITORED CLOSELY BY GOVERNMENTS AND ECONOMISTS

An increase in the **labour force** or **working population** in a country means more goods and services can be produced. However, not everyone of working age will be willing or able to work. They may have the wrong skills or there may not be enough full-time jobs for them all.

Rising employment is a sign that an economy is healthy and growing. Rising unemployment, however, is a sign that economic conditions are deteriorating.

Key indicator	Recent trends
Labour force Total number of people of working age in work or seeking employment	• The global labour force or **working population** has risen over time as the world population has grown • Between 1995 and 2010 the global labour force grew by 550 million workers to over 3 billion.
Participation rate The labour force as a proportion of the total population of working age	• Participation in the labour force has risen in many countries and especially among females • Poverty has forced many women in less developed countries into paid employment. Female employment has also become more socially acceptable • The rising cost of living in many developed countries has persuaded many mothers to return to work after raising chilidren. Younger women are delaying marriage and child birth in order to work • The global labour force participation rate fell slightly from 67% in 1995 to just under 65% in 2010. This was due to an increase in the number of young people in education and an increase in the number of old and retired people worldwide.
Employment by industry Number of people employed in different industrial sectors	• Over 70% of the labour force in developed countries work in service industries. In contrast, over 61% of employees in less developed countries work in agriculture • All countries are experiencing the same general trend: employment in services has been growing while employment in agricultue, mining and manufacturing industries has fallen.
Employment status Number of people employed on full-time, part-time or temporary employment contracts	• Most employees work full-time. This means working 5 or more days each week for 7 or more hours each day • Part-time employment has grown rapidly in many countries, especially among female employees • Hiring part-time and temporary employees is often cheaper than employing full-time workers and allows firms greater flexibility in matching staffing levels to changes in demand.
Unemployment Number of people registered as being without work	• In 2010 over 205 million were officially registered as unemployed worldwide – just over 6% of the global labour force • Almost half the unemployed are young unskilled workers • Unemployment tends to rise during economic recessions.
Unemployment rate Unemployment as a proportion of the labour force	• Unemployment increased by almost 28 million worldwide between 2008 and 2010 as demand fell in many economies following a global financial crisis • In 2010 around 10% of the labour force in the Middle East and North Africa was unemployed. In contrast, only 3.9% of the workforce of South Asia was unemployed.

FALLING DEMAND FOR GOODS AND SERVICES IS A MAJOR CAUSE OF UNEMPLOYMENT

Cyclical unemployment occurs during an economic recession due to falling consumer demand for goods and services and falling incomes. Firms will reduce their output and lay off workers.

Unemployed workers may only find new jobs as demand recovers. A government may try to boost demand using fiscal and monetary policies.

›› *5.1 Government Economic Policy*

Structural unemployment is caused by changes in the industrial structure of an economy. Entire industries may decline and close due to a permanent fall in demand for their goods or services. This can cause prolonged **regional unemployment** if most firms in the industry were located in one particular area, for example, to be close to a supply of raw materials.

Many countries have experienced structural change as old primary and secondary industries such as mining, shipbuilding and textiles have declined. Workers made redundant from these industries will have skills that are no longer needed. They may be unemployed for a long period of time unless they retrain in skills required by new and growing industries.

Technological progress has also caused structural change and unemployment in some industries. Labour has been made redundant as production lines have been mechanized and as consumer demand for new, technologically advanced products has risen.

Other types of unemployment

Frictional unemployment refers to short-lived unemployment that occurs when people leave jobs they dislike, move to higher paid jobs, move home or are made redundant.

Seasonal unemployment occurs because consumer demand for some goods and services changes with the seasons. For example, unemployment among workers in tourist and construction industries tends to rise in winter, but fall during summer months.

SOME UNEMPLOYMENT MAY BE THE RESULT OF LABOUR MARKET FAILURES

- People may choose not to work because they would rather receive welfare payments from government. This results in **voluntary unemployment**
- Taxes and other non-wage costs employers must pay to hire and employ workers are too high. This will reduce their demand for labour
- Some unemployed workers may find it difficult or costly to obtain information on job vacancies and the skills they require
- Minimum wage laws have increased the wage costs of employing low-skilled workers. Some employers have argued minimum wages have been set too high in some countries
- Powerful trade unions may demand high wages that reduce the demand for labour.

›› *3.3 The Role of Trade Unions*

UNEMPLOYMENT HAS PERSONAL AND ECONOMIC CONSEQUENCES

The **personal costs of unemployment** include:

- Loss of income and reduced ability to buy goods and services
- Unemployed people can de-skill if they spend too long out of work
- Unemployed people may become depressed and ill. This can put a strain on their family relationships and local health services.

The **costs to the economy** include:

- Unemployment is a waste of human resources : fewer goods and services will be produced
- Total output and income in the economy will be lower
- Government tax revenues will also be lower. People in work may have to pay more tax
- Government spending on welfare payments to the unemployed may have to rise.

EXAM PREPARATION

Look at the newspaper headlines below. For each one try to identify the cause and type of unemployment they refer to, and the likely impact it will have on the economy.

Type? Cause? Impact?	Firms cut output and employment as economic recession deepens
Type? Cause? Impact?	**Unemployment benefits destroy work incentives argues a new report: a family man earning below average wages will be better off not working**
Type? Cause? Impact?	**POOR SUMMER WEATHER LEAVES TOURIST INDUSTRY OUT IN THE COLD** Hotel and tour operators have reported a low level of demand and warn of job losses if the poor weather continues
Type? Cause? Impact?	**TRADE UNIONS COMPLAIN CHEAP IMPORTED GOODS FROM OVERSEAS ARE DESTROYING JOBS IN MANUFACTURING**

Example exam questions

- Identify **three** types of unemployment and explain how they are caused.
- Identify **two** possible advantages for an economy if unemployment falls.
- Why might a government wish to increase employment opportunities?

6.3 Output and Growth

SYLLABUS

This section will
- define Gross Domestic Product (GDP)
- describe and have a general understanding of the causes and consequences of economic growth
- define the term recession
- describe and evaluate measures and indicators of comparative living standards, such as GDP per head, Human Development Index (HDI).

REVISION SUMMARY

Gross Domestic Product (GDP) is a measure of **national income** or output. It is the final value of all goods and services produced in an economy each year

Economic growth involves an increase in **real GDP**, or the total output of goods and services

During an **economic recession** real GDP may grow more slowly than usual or may even fall

GDP per capita measures average income per person but some may be rich while most others live on low incomes and may lack access to food, health care and education

The **Human Development Index** combines GDP per capita with other measures of economic welfare

The total value of all goods and services produced in an economy is known as the **national output**.

Factors of production are paid by firms to produce the national output, and owners of firms earn profits if they are successful. The total income earned in an economy is the **national income**.

People use their incomes to buy goods and services. The total amount spent on the national output of an economy is the **national expenditure.** Therefore:

National output = National income = National expenditure

GROSS DOMESTIC PRODUCT (GDP) IS A MEASURE OF NATIONAL INCOME AND OUTPUT

Gross Domestic Product (GDP) is the main measure of the national income or output of an economy used by governments and economists. It measures the final value of all goods and services produced within an economy over a given period of time, usually per year.

An increase in prices will increase **nominal GDP** but people will be no better off because increasing prices reduce the purchasing power of their incomes.

>> 6.1 Price Inflation

People will only be better off if there is an increase in **real GDP** because the total output of goods and services will have increased.

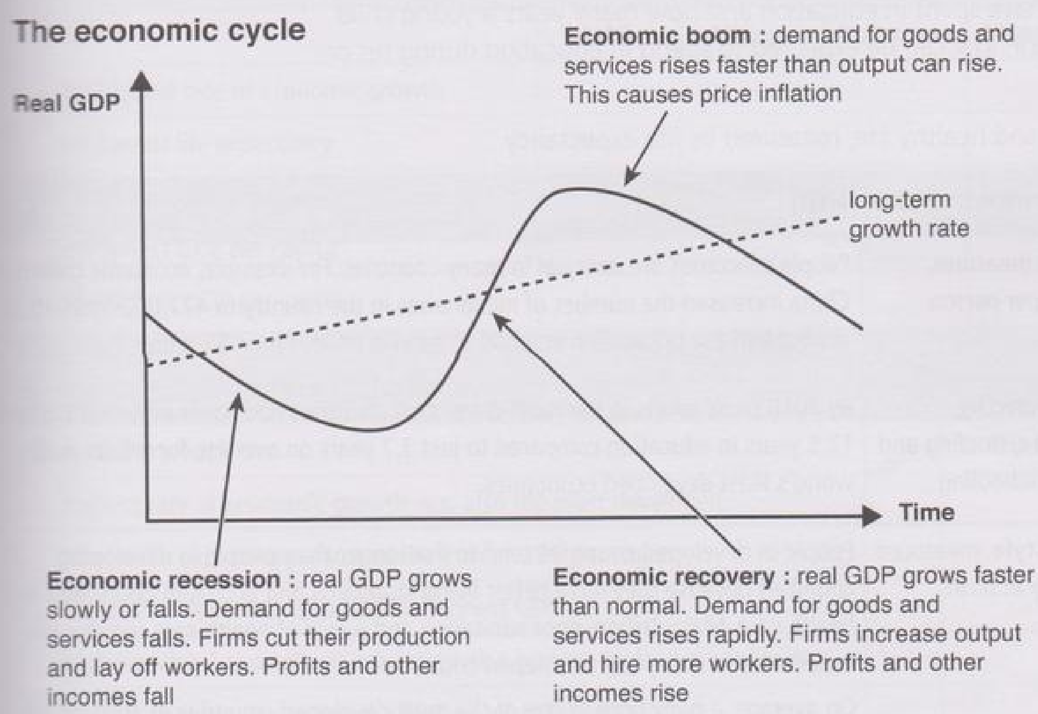
ECONOMIC GROWTH OCCURS AS REAL NATIONAL INCOME AND OUTPUT EXPANDS

Economic growth occurs if there is a rise in real GDP. This may be achieved by:

- the discovery of more natural resources
- investment in new capital goods and infrastructure, such as new ports, roads and research facilities
- technical progress including new products and production processes that can increase the productivity of existing resources
- an increase in the size and skills of the workforce, for example, through better education and training
- reallocating scarce resources to their most efficient uses

Most governments want to achieve stable long-term growth in the real GDP of their economies. Plotted against time this would look like a steadily rising line. However, the rate of growth in real GDP may not be very stable over time.

The business cycle or **economic cycle** refers to the pattern of ups and downs (or 'cyclical fluctuations') observed in real GDP growth over time in many economies.



GDP PER CAPITA MEASURES AVERAGE INCOME PER PERSON BUT NOT THEIR ECONOMIC WELFARE

Sustained economic growth can bring widespread benefits by increasing the availability of goods and services, creating new employment and business opportunities, increasing tax revenues that can be invested by governments in better roads, schools and health care, and more generally improving living standards and economic welfare.

However, economic growth may not make everyone better off. Some people may become very rich while others remain poor and *continue to suffer a* low standard of living. The distribution of income between people is very unequal in many countries. In addition, economic growth may increase the rate at which scarce natural resources are used up in production, create more pollution and congestion and cause irreversible damage to the environment.

GDP per capita, or average income per person, is a narrow measure of economic development and welfare in a country. For example, it does not take account of what people can buy with their incomes, access to health and education, or other non-ecomonic aspects such as the amount of political and cultural freedom people have, the quality of their environment, or level of security against crime and violence.

>> 7.1 Developed and Developing Economies

The **Human Development Index (HDI)** is used by the United Nations to make broader comparisons of human and economic development in different countries. It combines three different measures for each country into a single index with a value between 0 and 1. These are:

- having a decent standard of living, measured by average incomes adjusted for differences in exchanges rates and prices in different countries
- level of education, measured by how many years on average a person aged 25 will have spent in education and how many years a young child entering school now can be expected to spend in education during his or her life.
- living a long and healthy life, measured by life expectancy.

Human Development Index (HDI)

GDP per capita measures average income per person	People's incomes are unequal in many countries. For example, economic growth in China increased the number of millionaires in the country to 477,000 by 2010, but almost half the population still had to survive on less than $2 a day
Education measured by expected years of schooling and average years in schooling	By 2010 most adults in the most developed countries had spent between 7.5 and 12.5 years in education compared to just 3.7 years on average for adults in the world's least developed economies.
Health and lifestyle, measured by life expectancy at birth	People in developed countries tend to live longer than people in developing countries because they have better living standards and access to good food and health care. Malnutrition, poor sanitation and a lack of health care reduces life expectancy in many less developed countries On average, a baby born in one of the most developed countries in 2005 could expect to live to 79 years of age, while a baby born in a least developed country could expect to live around 54 years.

Countries can be ranked by their HDI. In 2010, Norway had the highest HDI of 0.938 and Zimbabwe the lowest at just 0.140. Countries with an HDI equal to or greater than 0.800 are generally thought to have high human development, while those with an index value less than 0.500 are considered to have low human development.

EXAM PREPARATION

The table below provides data from the United Nations on the Human Development Index (HDI) and its underlying indicators for selected countries in 2006.

Country	HDI Value	Life expectancy from birth (years)	Adult literacy (% ages 15 and above)	Combined school and college enrolment (%)	GDP per capita ($US)	% Annual average growth in GDP per capita since 1990
UAE	0.903	78.5	89.8	65.8	49,116	–0.9
Albania	0.807	76.3	99.0	67.8	5,884	5.2
Botswana	0.664	48.9	82.1	70.6	12,774	4.8
Myanmar	0.585	61.2	89.9	56.3	881	6.6
Togo	0.479	58.0	53.2	56.6	792	0.0

From http://hdrstats.undp.org/2008/countries

Use the table below to indicate which country had…

	UAE	Albania	Botswana	Myanmar	Togo
…the highest rate of economic growth					
…the lowest life expectancy					
…the highest adult literacy					
…the lowest GDP per capita					
…the highest GDP per capita					

Now answer true or false to the following questions.

The country with the…	True?	False?
…highest rate of economic growth was also the most developed		
…lowest life expectancy also had the lowest GDP per capita		
…highest adult literacy also had the highest GDP per capita		
…highest school and college enrolment also had the highest adult literacy		
…highest GDP per capita had the highest adult literacy		

Example exam questions

- Why might an increase in economic growth improve the standard of living in a country?
- In addition to GDP, suggest three other indicators you might use to measure the level of economic development or economic welfare in a country.
- A country with a high GDP per capita may nevertheless have low human and economic development. Suggest and explain three reasons why this may be the case.

IMPORTANT THINGS TO REMEMBER

Fill in the missing key words.

_ _ _ _ _ _ _ _ _ involves a sustained rise in the general level of prices in an economy.

A _ (CPI) is a measure of inflation affecting consumers.

_ _ _ _ _ _ – _ _ _ _ _ inflation is the result of increasing total demand for goods and services.

_ _ _ _ – _ _ _ _ _ inflation is the result of rising production costs.

Increases in the price of imported goods and services causes _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _.

During a _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ prices rise so rapidly money becomes almost worthless.

The total number of people of working age in an country who are willing and able to work is known as its _ _ _ _ _ _ _ _ _ _ _ _ _ or _ _ _ _ _ _ _ _ population.

The labour force _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ measures the proportion of people of working age who are in or seeking paid employment.

The number of people recorded as without paid employment as a proportion of the total labour force in a country measures the _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _.

_ _ _ _ _ _ _ _ _ _ _ unemployment is caused by a change in the industrial structure of an economy as old industries decline and workers in these industries are made unemployed.

_ _ _ _ _ _ _ _ unemployment occurs during an economic recession.

_ (GDP) is a measure of national income or output. It is the final value of all goods and services produced in an economy each year.

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ involves an increase in the real output of an economy.

During an _ growth in real GDP slows down or turns negative.

The cyclical fluctuations, or ups and downs, in economic growth over time are known as the _ _ _ _ _ _ _ _ _ _ _ _ _ _.

_ _ _ _ _ _ _ _ _ _ _ _ _ is a measure of average income per person and therefore fails to show how income is distributed between people in a country.

10 MINUTE TEST

Choose and then mark your answer A, B, C or D to each question.

1 What type of unemployment is associated with the economic cycle in an economy?

A structural unemployment
B frictional unemployment
C seasonal unemployment
D cyclical unemployment

2 What is most likely to cause demand-pull inflation?

A an increase in saving
B an increase in consumer spending
C an increase in interest rates
D an increase in taxes

3 The table shows annual percentage changes in the consumer price index in a country.

Year	% change in CPI
2004	16.9%
2005	13.4%
2006	8.7%
2007	4.3%
2008	5.6%

Which of the statements below about the price level is correct?

A it increased over the period
B it was stable over the period
C it was at its highest at the start of the period
D it was at its lowest at the end of the period

4 Look at the labour market data below.

	Millions
Working population	10
People employed	6
People unemployed	2

What is the unemployment rate and the participation rate?

	Unemployment rate %	Participation rate %
A	60%	40%
B	80%	20%
C	20%	60%
D	40%	60%

5 What measure would best indicate if a country has experienced economic growth?

A an increase in nominal GDP
B an increase in price inflation
C an increase in employment
D an increase in real GDP

6 Labour force participation has risen in many countries. What is the most likely reason for this trend?

A unemployment has fallen
B more females have entered employment
C the working population has increased
D more people are retiring earlier

Now check your answers against those given on page 155. How well did you do? Make a note of any you got wrong and make sure you understand the reasons why before you continue to the next section.

Exam Guidance and Practice 2

WHAT YOU WILL LEARN

Section A of Paper 2 of the examination requires you to **analyse and interpret data** on **real economic situations**

All key skills will be tested in the paper, with particular emphasis on **critical evaluation** of economic data and drawing conclusions from economic information

In this section you will learn:

- **techniques** to help you prepare and complete the questions in the final paper to maximize your marks
- how answers are assessed and what examiners expect in order to award top marks.

WHAT IS DATA ANALYSIS AND INTERPRETATION?

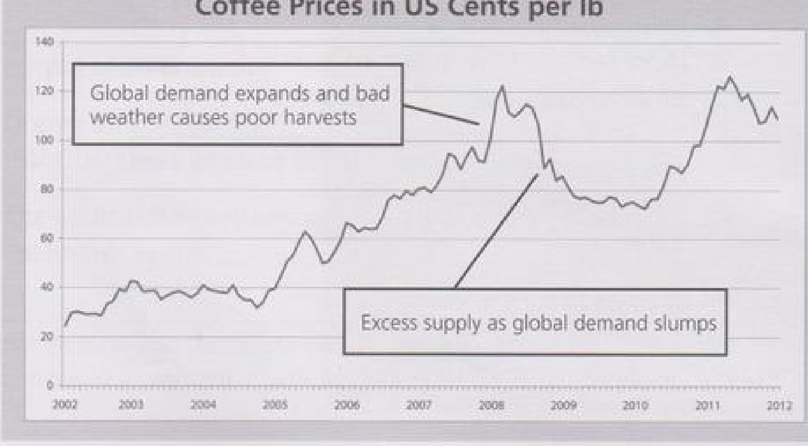
Section A of Paper 2 presents novel **data** on a **real economic situation**. This might be in the form of an article, charts and/or statistical tables. A set of questions will follow relating to the data. You will have 45 minutes on average to complete them.

The questions require you to interpret the economic situation, present your analysis and justify your conclusions. This can include recognizing and describing patterns or trends in data, explaining economic relationships such as the relationship between savings and interest rates, and presenting arguments for and against an economic statement.

You will be provided with a question booklet in the exam, in which to write your answers. Space is provided below each question for your answer. The more space given, the longer and more detailed your answer must be to earn full marks.

Each set of questions in Section A has a maximum of 30 marks.

Here is a short example of the type of question you could encounter in Section A.



Using information in the chart, and demand and supply diagrams, discuss what happened in the market for coffee in:

(i) 2007 and **(ii)** 2009

Adapted from CIE 0455 June '02 Paper 6 Q1

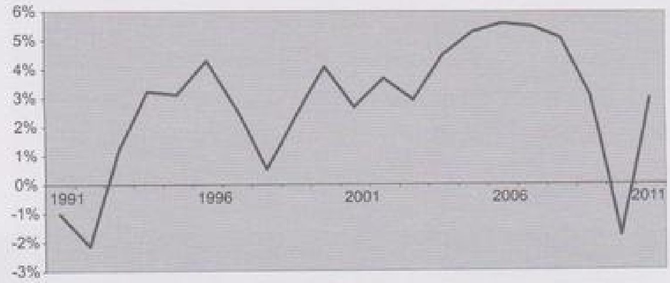
HOW TO ANALYSE AND EVALUATE ECONOMIC DATA

Economic data will sometimes be presented in charts and tables. For example, the chart on the opposite page shows global coffee prices over time. It shows how **volatile** or variable prices have been. There have been a number of **peaks** and **troughs** in prices.

The related question asks what may have caused prices to peak towards the end of 2007 following a fall to a low level in 2009, i.e. what factors might explain why prices are so volatile. Describing the patterns in the data will form an important part of the answer and will demonstrate your ability to analyse and critically evaluate economic information.

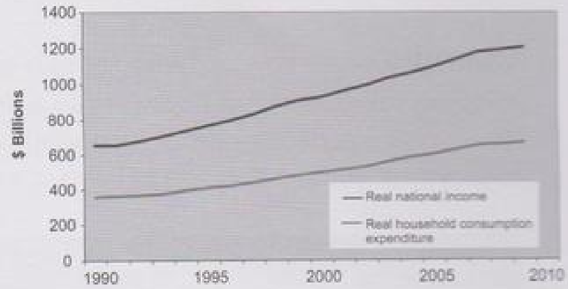
Other common patterns in data are illustrated in the diagrams and statements below. You should try to remember these and use similar descriptions in your answers to questions.

Annual % Growth in Real GDP



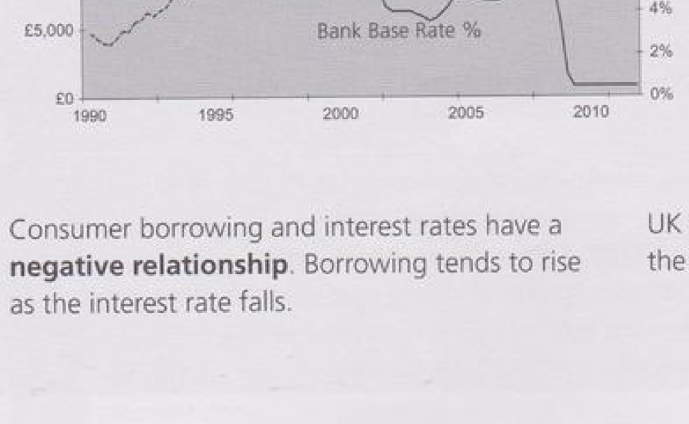
Real GDP growth is **cyclical**. Growth was at a **peak** in 2006. This was followed by falling growth reaching a **trough** between2008 and 2010.

Real Income and Expenditure in constant 1990 prices



Real income and consumption expenditure share a **positive relationship**. As income rises, expenditure also rises.

Consumer Borrowing and Interest Rates



Consumer borrowing and interest rates have a **negative relationship**. Borrowing tends to rise as the interest rate falls.

UK Average House Prices, adjusted for inflat

UK house prices have been **volatile** over time, but the **long-term trend** is upwards.

HOW TO PREPARE ANSWERS DURING THE EXAM

- Read the articles and study any graphs and tables carefully. Look for any trends or patterns in the economic data
- Underline or make notes on all the key economic terms and concepts you can identify
- Read all the questions carefully and note the number of marks for each question. Remember, the more marks there are, the more detailed your answer should be
- Look at the amount of space provided for your answer to each question in the question booklet provided. This is a guide to how much you should write in your answer. If you have large handwriting or your answer is rather longer, don't worry, simply ask the examiner for additional answer sheets
- Structure and plan your answers for major questions on a spare page in your answer booklet, i.e. any question with more than 4 or 5 marks.

Answers to most major questions should follow a similar structure as follows:

Example

Reducing subsidies to farmers will leave a government with more revenue. How would you decide if reducing agricultural subsidies is beneficial to employment and the standard of living in a country?

Structure	Notes
Identify the issue in the question	• Will employment and living standards be higher or lower in a country if a government stops subsidizing agricultural production of food?
Describe the economic situation using the information available	• Reducing subsidies will raise farm production costs, reduce profits and reduce the market supply of agricultural products. • Prices of domestic agricultural produce likely to rise.
Give reasons supporting the statement or action given in the question	• Other jobs and incomes could be created if government subsidizes other industries, invests in new infrastructure projects or cuts taxes. • It may be cheaper to import food from overseas rather than subsidize domestic farms.
Suggest reasons why the statement or action may not be suitable	• The rise in prices of domestic agricultural products will affect all households, but especially those on low incomes. • Employment and income may fall significantly if the agricultural sector is major employer as in many less developed countries.
Suggest and justify any alternative actions you can think of	Government could instead: • invest in retraining agricultural workers for other occupations • help farms become more productive to reduce their costs and increase the supply of food.
Summarize and conclude your arguments	Cutting agricultural subsidies may be beneficial if: • agricultural sector is not a major employer • farms can become more productive without subsidy • other industries grow to provide more jobs and incomes • imported food is cheaper • taxes can be lowered.

We will now analyse and evaluate the economic situation described in the article below to answer a sub-set of questions with total marks of 17. In the real examination you will be required to answer further questions on the article and/or additional information provided to secure up to 30 marks in total. (Key concepts and terms in the article have already been underlined for you).

Toyota Cars

In 2003, Toyota Corporation sold 6.8 million vehicles, overtaking Ford to become the world's second largest car manufacturer. Its <u>profit</u> rose to almost double the combined profits of its three principal competitors – General Motors, Ford and Daimler-Chrysler. Toyota plans to increase its research efforts to develop new materials and car designs that meet current demand and to <u>expand into new markets</u>, building new factories in other countries. Currently it <u>operates 46 factories in 26 countries</u> outside Japan. It plans to <u>increase production</u> in Britain, Poland, Turkey and the Czech Republic.

Toyota makes cars in response to customer orders rather than attempting to sell cars it has already built. The idea is to eliminate waste and increase efficiency by making only what is needed, when it is needed. <u>Workers specialize</u> in assembling particular parts of the car. As a result of a suggestion by one of the employees, recent improvements on the production line have included the placing of the small components needed for each car inside the shell of the car itself rather than in trays alongside on trolleys which can get knocked over and caused wasted time.

The company's luxury car brand, 'Lexus', which was launched in 1989, now sells more than its competitors Mercedes and BMW.

a Discuss the extent to which it is an advantage for the worker when a company uses <u>specialization</u> in production. [4]

b What factors are likely to <u>influence a consumer's demand</u> for a Lexus? [4]

c How would you investigate whether Toyota should <u>expand production into other countries</u> as planned? [9]

CIE 0455 November '06 Paper 6 Q2

a Discuss the extent to which it is an advantage for the worker when a company uses <u>specialization</u> in production. [4]

Notice the question asks about the extent to which specialization is an advantage for a worker. It does not refer to the possible benefits for the company they work for. It also suggests there may be disadvantages. For 4 marks you need to discuss both.

Specialization allows individual workers to make best use of their skills, increasing their productivity and therefore their wages relative to less skilled and less productive workers. However, specialization can also mean workers varry out boring and repetitive tasks. This can reduce their motivation and reduce their productivity. They are also at risk of being made unemployed if, for example, there is a fall in the demand for the product they make or if the task they undertake can be carried out more efficiently by new computerized equipment and robots. This is because the worker will lack a broad range of skills required by other occupations.

b What factors are likely to influence a consumer's demand for a Lexus? [4]

4 marks requires you to list at least four key factors that influence consumer demand, both in general terms and specifically for the Toyota Lexus compared to other cars.

In general, demand for a product by consumers will depend on their ability to pay, i.e. their disposable incomes, and their willingness to pay. This will depend on their tastes and the price of the Lexus relative to other cars. Consumers' willingness to buy the Lexus will also be influenced by the design of the car and the safety and other features it offers, for example if it has air conditioning or how much pertrol it uses per km. Persuasive advertising of these features could also boost consumer demand for the Lexus relative to other cars.

c How would you investigate whether Toyota should expand production into other countries as planned? [9]

This is a big question. For 9 marks a full discussion demonstrating all key skills will be necessary.

The clue, as ever, is in the question. It asks about expanding production into other countries. The question therefore requires knowledge of multinational companies, the benefits enjoyed by this form of business organization and what they depend on. For example, what are tax rates and labour costs in other countries? Is the system of government stable in another country and are government subsidies available to help the company buy equipment, train workers and to lower its production costs.

You will also need to discuss demand and supply conditions Toyota could encounter in other countries, in terms of likely car sales or access to skilled workers. Similarly, are materials and components available from local suppliers and what will they cost? How much competition will Toyota face from other car manufacturers located in the same country? Your answer should describe how you would investigate all these factors.

TOP TIP

Stick to what the question asks

When students answer a question they will often try to write down everything they know about an economic concept, term or situation. Although this shows good knowledge of economics it is a common mistake in exams.
To achieve good marks you should always relate your answer to the question asked. For example, in question b above it requires you to apply demand and supply analysis to the market for cars.

45 MINUTE TEST

You now have ***45 minutes*** *to answer the following set of questions using all the techniques you have learned in this section.*

Savings

Between 2003 and 2006 savers in a country were able to benefit from higher interest rates and reduced inflation. Moreover, they did not have to pay income tax on some of their income from savings. However, between 2000 and 2006 the amount of income from savings that was exempt from income tax (the 'tax allowance') remained unchanged.

The level of personal savings in 2006 was thought to be low and meant that less than 10% of the people were able to retire financially independent.

Government economists suggested that an increase in the level that was exempt from tax would encourage people to save. In 2008 this level was raised from $4,000 to $6,000.

Changes in taxes can, however, have other effects. There is no guarantee that an increase in the amount of income exempt from tax will result in increased savings. Lower taxes do increase disposable income but this might result in extra spending rather than extra saving.

a Explain how savers can benefit from:

i high interest rates [2]

ii reduced inflation [4]

b Using information in the article, comment on the effect that changes in tax allowances might have on total savings in an economy. [6]

c The article says that not many people will be financially independent when they retire. Why might this be a concern for the government? [6]

d **i** What is 'disposable income'? [2]

ii You are asked to investigate the difference in the spending and savings patterns of people with low disposable income and those with high disposable income. What do you think you would discover? [10]

Total marks [30]

Adapted from CIE 0455 November '03 Paper 6 Q1

After you have finished writing your own answers, compare them with the answers and examiner's comments provided on the following pages.

a Explain how savers can benefit from:

(i) high interest rates [2]

(ii) reduced inflation [4]

Student answer

(i) Banks pay monthly or annual interest as a percentage of money held in savings accounts. Higher interest rates provide savers with a higher return, or income on their savings.

(ii) Inflation measures the rate of increase in the general level of prices in an economy. Inflation will reduce the purchasing power or real value of incomes and savings. If inflation is reduced it means prices are still rising but at a lower rate. The real value of savings will still be falling but at a slower rate. If interest rates on savings are unchanged and above the rate of inflation then the interest payable on savings will be worth more in terms of what it can buy.

Examiner's comments

(i) This question is straightforward and requires the student to very briefly explain the relationship between savings and interest rates, noting that interest is the reward or return on savings.

(ii) Many students struggle with this question. Most are able to define inflation and that a reduction in inflation means prices are still rising but at a slower rate than before. Some students, however, mistakenly suggest prices are falling.

Students will earn additional marks for explaining how inflation reduces the 'real' value or purchasing power of income, and therefore how much people could buy with their savings if they were to withdraw them in future. Many students fail to do this, but it is the relationship between inflation and interest rates that causes the most problems.

For full marks students need to analyse how falling inflation will increase the real value of interest payments on savings, assuming interest rates remain unchanged. If, however, the interest rate is below the rate of inflation, interest payments on savings will not be sufficient to overcome the negative effect of inflation on the real value of savings. This will make saving unattractive and people may spend more instead. The student has explained this well and has earned full marks.

b Using information in the articles, comment on the effect that changes in tax allowances might have on total savings in an economy. [6]

Student answer

People pay direct taxes from their incomes. An increase in tax allowances means more income is exempt from tax. People will pay less tax in total from their incomes. This will increase their disposable income and the amount they can spend or save.

Examiner's comments

The question specifically asks the student to use information from the article, and also offers up to 6 marks. However, the answer is too short and earns only 2 marks.

The student has correctly explained how changes in tax allowances will affect the overall or effective tax rate on incomes and therefore the level of disposable income, but does not go on to explain why the article suggests this may have no effect on savings. For 6 marks the student should explain how decisions to spend and save will depend on other factors such as consumer preferences, interest rates and economic conditions. For example, people may prefer to spend any increase in their disposable income, especially people on low incomes. People may also decide to spend the increase in their disposable income if inflation is high or if interest rates are falling.

c The article says that not many people will be financially independent when they retire. Why might this be a concern for the government? [6]

Student answer

Many countries have an official retirement age at which people can retire from paid employment and receive a pension. In addition to elderly people others may have to retire from work due to ill health. Income in retirement is usually far less than income from wages or salaries in work. Tax revenue will be less and will continue to fall as the retired population rises and the working population falls in country.

People must save during their working lives to fund their pensions. If people do not have enough savings to draw on when they retire they may not be able to afford to pay for many things they need, such as food, clothing and heating. Retired people on low incomes may therefore need financial help or welfare benefits from the government, such as free dental and health care. This means people in work will either have to pay higher taxes to pay for the additional welfare payments and benefits, or government spending on other public services or investments, such as on new schools or roads, will have to be cut.

Examiner's comments

The student gives a very good answer. For 2 marks the answer describes how incomes in retirement tend to be much lower than wages from paid employment. Most people need to save during their working lives to pay for a pension in their retirement. If they have not saved enough their pensions will be low.

Understanding both the public expenditure and tax implications of an increase in the retired or dependent population will earn the other 4 marks. The student also demonstrates a clear understanding of the opportunity costs of public spending decisions. This may help the student gain extra marks at the end of the paper to obtain a higher grade if his or her total mark is borderline between grades.

d i What is 'disposable income'? [2]

ii You are asked to investigate the difference in the spending and savings patterns of people with low disposable income and those with high disposable income. What do you think you would discover? [10]

Student answer

i Disposable income is income left to spend or save after direct taxes have been deducted from a person's income.

ii People with lower levels of disposable income will have less money to spend than people with higher levels of disposable income. People with lower incomes are more likely to spend a higher proportion of their income on satisfying their needs (e.g. for food, shelter). This may leave very little to save. Richer people will not only be able to spend more income satisfying their needs and wants, for example, for expensive cars and holidays, but they will also be able to save and borrow more money.

Examiner's comments

i The answer is very good. Many students refer to income after tax rather than direct taxes. The student here also notes disposable income will be divided between spending and saving.

ii The student starts well and explains how people on low incomes tend to spend a far greater proportion of their income on meeting their needs than people on high incomes. People on high incomes can afford to buy expensive items to satisfy their wants. They can also afford to save a greater proportion of their income. Overall this earns 4 marks.

However, for 10 marks the answer should also analyse other influences on spending and saving. Not everyone with the same income will buy the same products or save. Preferences and tastes will vary. Age and family circumstances will also vary and affect these decisions. For example, older employees may be more productive and earn more. They may have young families and may save for a retirement pension. Levels of saving and spending will also be influenced by interest rates and economic conditions.

So, how good do you think your answers were compared to those of the student and the examiner's comments? For each question, make a note of where you may need to improve your answers. Revisit your notes if you encounter similar questions during practice exams.

a
b
c
d

45 MINUTE TEST

*You now have **45 minutes** to complete answers to the following set of questions based on the information below from Section A of Paper 2.*

1. Africa's growing mobile (cell) phone market

The use and ownership of mobile phones in Africa are increasing at a dramatic rate. The population coverage of mobile networks increased from 10% in 1999 to 60% in 2007 and is forecasted to grow to 90% by 2012. The rise in the supply of mobile phones is most rapid in rural areas. It is interesting to note that advances in technology are being brought to Africa more by means of mobile phones than by means of computers (see table below).

Ownership of mobile phones and computers in selected countries 2007

	Per 100 population	
Country	Mobile phones	Computers
African countries:		
Kenya	20.9	1.4
Nigeria	24.1	0.8
South Africa	83.3	8.5
Western countries:		
Germany	103.6	60.6
United Kingdom	116.6	75.8
United States	77.4	76.2

There are a number of reasons why the demand for mobile phones is increasing so rapidly in Africa. One is the fall in their price. The mobile phone companies are bringing out low priced models for the African markets. Another reason is increasing awareness of the benefits mobile phones can bring. These benefits include not only being able to keep in touch with family and friends but also helping buyers and sellers contact each other. TradeNet, a software company based in Accra, Ghana, provides a service which lets buyers and sellers of agricultural products exchange contact information and indicate what they would like to trade. Services offered by mobile phone companies increase the efficiency of trade and help reduce market failure.

Mobile phone companies clearly benefit from the growth in sales. For instance, Globacom, a Nigerian private limited company, and Safaricom Kenya, a joint venture between Telkom Kenya and the multi-national Vodaphone Group, are both experiencing increasing revenues and profits. African governments are also finding that they can increase their revenue by selling mobile phone licences and imposing corporate taxes on the profits of mobile phone companies.

a Give **two** possible causes of an increase in the supply of mobile phones. [2]

b Using the information in the table, compare the ownership of mobile phones and computers in the three
African countries with that in the three Western countries. [4]

c Using a demand diagram in **each** case, illustrate the effect on the demand for mobile phones of:

(i) a fall in the price of mobile phones [2]

(ii) an increase in the awareness of the benefits of mobile phones [2]

d Explain how the use of mobile phones may reduce market failure in agricultural markets. [3]

e (i) Describe **two** characteristics of a private limited company such as Globacom. [4]

(ii) How does a private limited company differ from a public limited company? [4]

f (i) Are corporate taxes direct or indirect taxes? Explain your answer. [2]

(ii) Discuss whether imposing corporate taxes on the profits of mobile phone companies will discourage multi-national phone companies from setting up in a country [7]

Adapted from CIE 0455/32 October/November 2010

When you have finished, compare your answers to the model answers provided at the back of this book on pages 159–61. Make some notes on any differences between the model answers and your own in case you encounter similar questions in your final examinations.

7.1 Developed and Less Developed Economies

REVISION SUMMARY

Developed economies have a well-developed industrial base and service sector, a modern infrastructure and high average income per person

Less developed economies or **developing economies** have an underdeveloped or developing industrial base, a low level of economic development and poor living standards

Some countries have **rapidly developing economies**, expanding their industrial base and infrastructure, and raising living standards

Gross Domestic Product (GDP) per capita, or average income per person, is a commonly used measure of the level of economic development and living standards in a country

Other economic **development indicators** include measures of poverty, malnutrition, adult literacy, ownership of consumer goods, healthcare, and access to clean water and sanitation

Overseas governments and organizations may help developing countries by providing them with food supplies, financial help, technological aid and **debt relief**

SYLLABUS

This section will

- describe why some countries are classified as developed and others are not
- recognize and discuss policies to alleviate poverty
- discuss differences in living standards within countries and between countries, both developed and developing.

Different countries and regions are at very different stages of economic development.

Some countries and areas have very low levels of economic development. These are **less developed economies**.

Incomes and wealth, health care and life expectancy, education and literacy, employment and industry, and living standards, all vary greatly between less developed and developed economies.

DIFFERENT COUNTRIES ARE AT VERY DIFFERENT STAGES OF ECONOMIC DEVELOPMENT

A **developed economy**, advanced economy or industrialized economy, has a relatively high average income per person, a well developed road and rail network, modern communications systems, produces a wide variety of goods and services, has a stable government and legal system and a healthy and educated population.

A **less developed economy** or **developing economy** has a low level of economic development, low average income per person, under-developed transport and communications systems, relies on agriculture for many jobs and incomes, and has low levels of health care and education provision.

Many less developed economies are in Africa, Central America and the Caribbean.

Countries that are quickly developing their industries, workforce skills and living standards, but are not yet developed, are **rapidly developing economies** or **emerging economies**. Examples include Brazil, China and India.

Less developed economy	Developed economy
Too much reliance on agriculture, and poor farming methods, to provide jobs and incomes	Most jobs and incomes are provided by manufacturing and especially service industries
Lacks capital to invest in new industries and machinery to develop an industrial base. This means few jobs and products are available	Attracts capital to invest in new industries due to a skilled workforce, a large consumer base with high incomes and modern infrastructure
A lack of investment in education, skills and health care. Many people may be unable to work if they are unskilled or in poor health	High levels of investment in education, skills training and health care provision, to create a skilled, innovative and productive workforce
Low levels of investment in infrastructure, including road, rail and communications networks. This makes travel and the movement of goods very difficult	High levels of investment in modern infrastructure, which enables trade and travel to take place efficiently
High population growth due to a high birth rate, exceeds growth in national income and output	A stable but ageing population due to low birth and death rates
Other factors, such as wars, corruption, economic mismanagement and unstable governments	A stable system of government, good economic management, a strong legal system and lower levels of corruption

▲ Reasons for differences in living standards and economic development

DEVELOPMENT INDICATORS ARE USED TO COMPARE LIVING STANDARDS

›› *6.3 Output and Growth*

A large number of indicators are used to measure and compare living standards and economic welfare in different countries and regions of the world.

The main indicator used is **Gross Domestic Product (GDP) per capita**.

GDP per capita, or per head, measures average income per person but therefore takes no account of what people can buy with their income, or the distribution of income within a country.

People in a country with a relatively high average income may be no better off than people in another country with lower average income if prices in the first country are so much higher.

The distribution of income is very unequal. Some people may be very rich while most of the population are poor and lack access to good quality health care, education, water and housing.

Some other measures of living standards and economic development	
Population living on less than $1 per day Life expectancy at birth Adult literacy rate Population without access to clean water Ownership of consumers goods Interest payments on national debt	Prevalence of underweight children School and college enrolment rates Population with HIV/AIDS Share of women in paid employment Share of employment in non-agricultural sector Land protected to maintain biological diversity

GOVERNMENTS AND AID ORGANIZATIONS INTERVENE TO ALLEVIATE POVERTY IN POOR REGIONS

Less developed countries often need help from other countries to improve their living standards and economic welfare. This assistance can take many forms.

Policy	Why is it needed?	What are the problems?
Food aid	Poor farming methods produce insufficient food supplies to feed their populations	Free supplies of food to developing countries can force their own farmers out of business
Financial aid	Developing countries lack sufficient capital to invest in an industrial base, modern machinery and infrastructure	Loans have to be repaid Grants are often on condition they are spent on projects requiring contracts with firms from developed nations
Technological aid	Developing countries lack access to modern machinery, equipment and knowledge of modern production methods	Many people in developing countries lack skills to use modern technology Instead of using more machinery, more jobs are needed to employ people
Debt relief	Loan and interest repayments are a huge burden. In some developing countries debt interest grows at a faster rate than their national income. This money could be used for economic development instead	It may encourage developing countries to borrow more money in the belief the repayments may be cancelled again Some governments are corrupt and the money saved will simply be misused
Removing barriers to overseas trade	Developing countries have many natural commodities, including many metal and mineral ores, which they can export to earn income	Developed countries dominate global market demand for natural commodities, and will force down the price they pay for them
Economic advice	Governments in many developing countries lack the knowledge and understanding they need to manage their economies and encourage economic growth	Advice is not enough. Many developing countries need more capital for investment, a trained and healthy workforce, and more stability

EXAM PREPARATION

Look at the two photographs. One shows a family in a developed economy. The other shows a family in a less developed economy.

Using the photographs and your knowledge indicate against each of the development indicators below whether it is likely to be high or low in these different economies.

Development indicator	Developed economy	Less developed economy
	high or low?	high or low?
GDP per capita ($)		
Population living on less than $1 per day		
Life expectancy at birth (years)		
Adult literacy rate (%)		
Population without access to safe water supplies (%)		
Patients successfully treated for tuberculosis (%)		
Prevalence of underweight children under 5 (%)		
Share of paid employment in the non-agricultural sector (%)		
Population owning a personal computer (%)		

Example exam questions

- Describe some of main characteristics of a developing country.
- GDP per capita in China is twice that of India. Is this beneficial to the Chinese people?
- Less developed countries are described as having **(i)** a lack of good human resources and **(ii)** a low level of economic diversification. Explain what is meant by these statements.

7.2 Population

REVISION SUMMARY

The world population is expected to grow to over 9 billion by 2050 due to high **birth rates** and falling **death rates**. Around 90% of the world population will live in less developed countries

The **natural rate of increase in population** is the difference between birth and death rates

Low birth and death rates are reducing the populations of many developed countries but increasing the number of older and retired people

The **working population** in an economy supports the **dependent population**. This includes people who are in education, unemployed or too young, old or ill to work

The **dependency ratio** shows how many people each person in work has to support. Dependency ratios are rising in many countries as the result of increasing numbers of either young people or older people

Net migration is the difference between inward and outward migration to and from a country. Many people are migrating from less developed economies to more developed economies in search of higher living standards and incomes

The changing size and structure of the world population is increasing pressure on scarce resources, such as water supplies and land for housing, farming and industry

SYLLABUS

This section will

- describe the factors that affect population growth (birth rate, death rate, fertility rate, net migration)
- discuss reasons for the different rates of growth in different countries
- analyse the problems and consequences of these population changes for countries at different stages of development
- describe the effects of changing size and structure of population on an economy.

There has been a **world population** explosion since the eighteenth century following improvements in housing, sanitation, agricultural technology and medicine.

The world population in 2008 was estimated at 6.6 billion people and is expected to reach over 9 billion by 2050 due to high **birth rates** and falling **death rates**. Around 90% of the world population will live in less developed countries.

The growing population is placing ever-increasing pressure on all scarce resources, but especially on water supplies and land for housing, farming and industry. This can lead to tensions between people resulting in civil unrest and wars.

THE NATURAL RATE OF INCREASE IN POPULATION IS THE DIFFERENCE BETWEEN BIRTHS AND DEATHS

In many countries **birth rates** are high and exceed **death rates**, so populations are rising except in some developed countries.

Both birth and death rates are low in many European countries but birth rates are so low that they expect their populations to shrink by 2050. As death rates are also low this means the average age of their populations is rising.

	Less developed countries	Developed countries
Birth rate = number of babies born for every 1000 people	High	Low
Death rate = number of people for every 1000 people	High but falling	Low
Natural rate of increase = birth rate – death rate	High and rising	Low or negative

Birth rates vary between countries and change over time because of changes in...	
Living standards	In many less developed countries, people living in poor conditions want large families to help them produce food and work for money. They have many children because some will die young due to poor living standards Improvements in food quality, housing, sanitation and medical care have reduced the number of children dying and reduced birth rates
Contraception	Increased use of contraception to prevent pregnancies has led to fewer births in many developed countries
Custom and religion	Many people in less developed and developing countries are unaware of birth control or hold beliefs that will not allow them to use contraception
Female employment	Many women in developed countries go to work to earn an income, and some may not want to take time off to raise children
Marriage	Many people have children when they are married. In developed countries people are marrying later in life and so birth rates have fallen

Death rates vary between countries and have tended to fall over time due to changes in...	
Living standards	Better quality food, housing and sanitation can improve life expectancy but eating fatty foods, smoking and lack of exercise has increased rates of diabetes, cancer and heart disease in many developed countries
Medical advance and health care	Improved medicine and health care has prevented or cured many diseases and increased life expectancy In some countries, especially in the less developed world, diseases such as HIV/AIDS are prevalent and have reduced life expectancy
Other factors	Natural disasters such as earthquakes and tsunamis, famines, wars and escalating violence have also had a big impact on death rates especially in many less developed countries

THE DEPENDENT POPULATION IS GROWING IN MANY ECONOMIES

The **working population** in an economy supports the dependent population. People in work not only produce goods and services for themselves but also for people who do not or cannot work.

The **dependent population** includes people who are too young, too old or too ill to work, school and college students in education, and the unemployed.

The dependent population is growing relative to the working population in many countries. As economies develop, many young people are encouraged to stay in education longer and more people take early retirement from work and tend to live longer. People in work therefore have increasingly more people to support and living standards can fall.

To address this problem, some governments have raised the official retirement age and are actively encouraging women into employment and inward migration.

Net migration is the difference between inward and outward migration to and from a country.

Many people from less developed and developing countries have been migrating to more developed countries to enjoy better living standards and jobs with higher incomes.

The **dependency ratio** measures the number of economically dependent people relative to the economically active population in an economy:

$$\text{Dependency ratio} = \frac{\text{Total population}}{\text{Working population}}$$

Less developed countries	Developed countries
Dependency ratios are high and rising	Dependency ratios are low but rising
High birth rates have increased the number of children and young people	Low birth and death rates are increasing the number of older and retired people
Relatively low life expectancy, poor skills and education, and lack of an industrial base constrains growth in working populations	Life expectancy is high and rising. One in three people in developed countries in 2050 is expected to be over 60 years of age
Outward migration to developed countries is reducing working populations. Many less developed countries have lost skilled workers including doctors, engineers and entrepreneurs	Net inward migration has boosted working populations but has also increased pressure on housing, education, health care and the welfare system

CHANGES IN POPULATION SIZE AND STRUCTURE CAN HAVE A BIG IMPACT ON AN ECONOMY

As economies develop the size and structure of their populations can change.

Demographic changes will have an impact on the size of their working and dependent populations, the supply of labour to different industries and occupations, the pattern of demand for different goods and services and pressure on natural and other resources including on government to provide education and welfare services.

Structural feature	Less developed economies	Developed economies
Age distribution Percentage of population in different age groups	Due to high birth and death rates children under 15 years of age account for 40–50% of many of their populations, while people over 60 years account for less than 5%	The average age of many populations is increasing due to low birth and death rates. Up to 25% of their populations are over 60 years of age. This is increasing the demand for health care, leisure facilities and pensions
Geographic distribution Where people live and the population density (number of people per km^2)	Many people live in rural areas but increasing numbers are moving to cities to find work Cities are expanding rapidly in many developing countries. Shanghai and Macau in China are the most densely populated urban areas in the world	Around 60% of the global population live in cities Congestion and pollution are big problems in many major cities
Occupational distribution Types of Industries people work in and what they do	Most employees work in agriculture, up to 90% of the workforce in some countries In developing economies like China and India, employment in manufacturing and service industries is growing rapidly	Most employees work in service industries. Only a small percentage work in agriculture Female participation in the workforce and self-employment are high

EXAM PREPARATION

Look at the information provided on two different countries. Which country do you think has a developed economy and which country has a less developed or developing economy?

	Country A	Country B
Dependency ratio	2.0	3.1
Life expectancy from birth in years	75	66
Birth rate per 1000	8.7	45.3
Death rate per 1000	9.8	23.5
Average number of children per adult female	2	5
Percentage of workforce in agriculture	4%	79%
Percentage of workforce in services	80%	7%
Percentage of women in employment	52.1%	41.4%
Average age of population in years	42.5	27.3
Percentage of population under 15 years of age	16.7%	46.3%
Percentage of population 60 years of age	21%	4.9%
Developed or less developed?	?	?

Example exam questions

- Identify the factors that determine population growth in a country.
- How may the age and occupational structure of the population of a developing country differ from that of a developed country?

IMPORTANT THINGS TO REMEMBER

Fill in the missing key words.

A ___________ economy has a well-developed industrial base and service sector, a modern infrastructure and high average income per person.

A ____ ___________ economy has an underdeveloped or developing industrial base, a low level of economic development and poor living standards.

Gross Domestic Product (GDP) ___ _______ , or average income per person, is a commonly used measure of the level of economic development in a country.

Other indicators of _________ _____________ and living standards include levels of malnutrition, adult literacy, life expectancy and access to clean water.

The ______ _____ of a country measures the number of babies born per 1000 people.

The ______ _____ of a country measures the number of deaths per 1000 people.

The ________ _____ of _________ in the population of a country is determined by the difference between its birth and death rates.

Net ___________ is the difference between inward and outward migration to and from a country.

The ____________ ______ measures the number of economically dependent people in an economy relative to the economically active population.

The ___________ population is growing relative to the dependent population in many countries. As economies develop, more young people are encouraged to stay in education and older, retired people tend to live longer.

The ___ _______________ of a population measures the number of males and females of each age as a percentage of the total population. The average age of the populations of many developed countries is increasing due to low birth and death rates.

10 MINUTE TEST

Choose and then mark your answer A, B, C or D to each question.

1 Which one of the following is a common characteristic of many less developed economies?

A low levels of capital investment
B low levels of taxation
C low price inflation
D low levels of debt

2 Which one of the following statements about the population of a country will be true if the birth rate and death rate are falling over time?

A life expectancy is falling
B the average age of the population is rising
C the dependency ratio is falling
B the economically active population is rising

3 Which one of the following indicators of economic development is most likely to be observed in a developed economy?

A low prevalence of obese children
B low level of ownership of consumer goods
C low level of adult literacy
D low level of employment in agriculture

4 Which one of the following groups of people is in the working population of a country?

A school children
B old age pensioners
C the economically inactive
D the self-employed

5 The birth rate is likely to be relatively high if

A female employment is high
B average age at marriage is relatively low
C contraception is freely available
D living standards are high

Questions 6 and 7 use the following data:

Country	Total population (millions)	Working Population (millions)	GDP $ million
A	10	8	1,000
B	30	20	15,000
C	6	2	1,800
D	100	50	4,000

6 Which country has the lowest GDP per capita?

7 Which country has the highest dependency ratio?

Now check your answers against those given on page 155. How well did you do? Make a note of any you got wrong and make sure you understand the reasons why before you continue to the next section.

8 International aspects

8.1 International Specialization and Trade

REVISION SUMMARY

Countries specialize in the production of goods and services in which they have an **absolute** or **comparative advantage**. This means they can produce them more efficiently than others

Worldwide **specialization** enables countries to produce more output and engage in **international trade** with each other to obtain different goods and services

Countries should avoid over-specialization. A country that specializes in the production of a very limited number of products is at significant economic risk from a fall in global demand for them

Some governments may protect industries and jobs in their countries from overseas competition by using **trade barriers** to restrict imports

Trade barriers include **tariffs** on the price of imported goods, **quotas** to limit the volume of imports, and giving **subsidies** to domestic producers to reduce their costs below overseas rivals

Trade barriers can reduce the benefits of trade by protecting some inefficient domestic firms at the expense of more efficient overseas producers

Trade liberalization involves removing barriers to free trade between different countries

SYLLABUS

This section will

- describe the benefits and disadvantages of specialization at regional and national levels
- describe methods of protection
- discuss the merits of free trade and protection.

Some countries are famous for the goods and services they produce, even if other countries make the same or very similar products.

This is because they often have a long established reputation among consumers for making these products cheaper or better than anywhere else.

There are many examples: Italian shoes and clothes, Belgian chocolates, German beers, Swiss watches, Scottish whiskey, Cuban cigars, Spanish olive oil, Japanese electronics, and many more.

COUNTRIES SPECIALIZE IN THE PRODUCTION AND TRADE OF DIFFERENT GOODS AND SERVICES

Entire regions or countries specialize in the production of those goods and services they are best able to produce because they have the natural, human or man-made resources to do so.

For example, many Middle Eastern countries specialize in the production of oil because they are located over vast natural oil reserves. Similarly, Japan became a world leader in the design and manufacture of many electronic products and cars because its workers became highly skilled in these activities.


US and European Aerospace


Japanese cars


Spanish olive oil

▲ Some examples of international specialization

Countries specialize in the production of those goods or services in which they have an **absolute advantage** or **comparative advantage** over other regions or countries.

A country has an **absolute advantage** if it can produce a given amount of a good or service with far less resources and therefore at an absolute cost advantage over any other country.

A country has a **comparative advantage** in the production of a good or service if it can produce it at a lower opportunity cost relative to other countries.

This means it has to give up less output of other goods and services to produce this product compared to other countries. If other countries tried to produce the same product and amount they would have to forego so much more in terms of other goods and services their resources could make instead.

›› 1.2 Scarcity and Opportunity Cost

International trade enables countries to specialize in the poduction of different products in which they have an advantage, produce more output with their resources, and sell their surplus output to each other. It involves the sale and transport of goods, the provision of services and the movement of employees, consumers and capital, across national borders.

International specialization and trade

Advantages	Disadvantages
• Specialization allows countries to produce far more total output than if they tried to produce a much wider range of products • International trade allows countries to enjoy goods and services they do not have or can only produce at a much higher cost • International trade allows firms to benefit from economies of large-scale production because they can sell their goods and services to consumers all over the world • Free trade enables firms to benefit from the best workforces, natural resources and technologies anywhere in the world.	• Increased trade across international borders increases greenhouse gas emissions and causes pollution • The free movement of capital internationally has made it easy for multinational companies to shift production to less developed countries where labour is cheaper. This can increase unemployment in developed countries and exploit workers in less developed countries • Developed countries dominate the global demand for natural resources and have forced down global prices. This has reduced incomes for producers in less developed economies and increased the gap between rich and poor countries.

SOME COUNTRIES USE TRADE BARRIERS TO PROTECT THEIR INDUSTRIES FROM GLOBAL COMPETITION

Protectionism involves the use of **trade barriers** by governments to restrict overseas trade.

Some countries use trade barriers to protect their industries and employment from overseas competition. Domestic firms may not be able to compete with overseas firms on costs and prices. They will lose sales and may even be forced to close. Jobs will be lost. Alternatively, domestic firms may move their production overseas to countries where wages and other costs are lower.

Trade barriers include:

- **Tariffs** are taxes on the prices of imported goods to make them more expensive so domestic consumers buy less of them
- **Subsidies** are grants paid to domestic prodcuers to help reduce their production costs and therefore their prices to below those of overseas firms
- **A quota** is a limit on the volume of an imported good allowed into a country
- An **embargo** is a ban on a certain imported good, or on all imports from a particular country.

>> 2.2 How Markets Work

Arguments for protection	Arguments against protection
• **It helps protect small firms and infant industries** that will be unable to compete with large firms based overseas • **It protects jobs.** More efficient overseas producers could force domestic firms to close down • **It prevents dumping.** This occurs when one country floods the market in another with cheap, subsidized products to force domestic producers out of business • **To prevent over-specialization** by protecting a range of different industries. A country that specializes in the production of a small number of products will suffer a significant fall in income if there is a fall in global demand for one or more of these products.	• **Other countries will retaliate** by introducing their own trade barriers. Prices will rise and fewer goods and services will be traded. This will reduce employment and the rate of economic growth in many countries • **Any loss of jobs from global competition will only be temporary.** As people are made unemployed, wages will fall and other firms will increase their demand for labour • **Trade barriers protect inefficient domestic firms.** Consumers in that country will suffer higher prices and/or lower quality • **It penalizes developing countries.** Subsidies paid to less efficient farmers and other firms in developed countries have forced down the global prices of many natural and other products. Producers in developing countries have suffered falling incomes.

Trade liberalization involves removing barriers to trade between different countries.

The World Trade Organization (WTO) helps to negotiate reductions in trade barriers and to resolve trade disputes between member countries.

EXAM PREPARATION

EU and Japan retaliate over US tariffs on steel imports

Japan and Europe put pressure on Washington over its curbs on steel imports yesterday, threatening a full-scale trade war. The Japanese government announced that it plans to hit back with punitive tariffs while Brussels has threatened to slap quotas on $300m worth of US goods unless Washington offers concessions.

The EU President said 'We believe tariffs are not only against the interests of countries in Europe but also against the interests of US consumers themselves, because they will have to pay higher prices for steel imports.'

Adapted from *The Guardian*, 12.05.02

Identify two types of trade barrier and possible problems.

Zambia's wealth is founded mainly on copper, its largest export. Development of its infrastructure and public services is tied to earnings from this commodity.

The economic and social effects of the devastating slump in the world price of copper since 1975 persist to this day.

Zambia's mineral production accounts for around 20% of GDP, and 80% of all export earnings. Since the early 1980s, world copper prices and demand have remained weak mainly because of depressed economic conditions in industrialized countries. This factor, plus drought, has led to falling GDP per capita and increasing debt.

from *www.unsystem.org*

What evidence is there of over-specialization in Zambia?

Fresh vegetable exports from Africa to the European Union have increased rapidly. In the UK, trade in exotic vegetables such as chillies and okra is now high volume and dominated by the biggest supermarkets. Their requirements have transformed horticultural export trade in Africa. Production, processing and transportation are now far more sophisticated. Skills and employment in Africa have improved. Supermarket trade has provided African growers and exporters with a new and growing market and the nature of the business has changed considerably. 20 years ago, the export trade in Kenya consisted of many small exporters who bought produce from many different smallholders. Today, the trade is dominated by large firms growing produce on large-scale farms.

from *www.id21.org*

Identify ways international trade has benefited Africa and the EU.

Example exam questions

- Some countries use protective measures in international trade. Describe **two** types of protection a government can use in international trade.
- Discuss whether it is better for a country to produce many products and protect its markets from international trade or whether it is better to specialize in some products only.

8.2 Balancing International Payments

REVISION SUMMARY

The **balance of payments** of a country records all international financial transactions between the country and all others

The **balance of payments on current account** records payments made for imported goods and services and payments received from the sale of exports

Physical products sold overseas are **visible exports**. Sales of services overseas are **invisible exports**. Exports involve payments flowing into an economy from overseas customers

Visible and invisible imports involve making payments overseas.

There will be a balance of trade **deficit** if the value of visible imports exceeds visible exports

Making payments to other countries requires the exchange of national currencies through the **foreign exchange market**

The **exchange rate** or market price of one currency in terms of another currency will rise or **appreciate** if demand for the currency rises or the supply of the currency falls

A **depreciation** in the exchange rate means the value of the currency has fallen against others. Imports will be more expensive but exports will become cheaper for overseas consumers

SYLLABUS

This section will

- describe the structure of the current account of the balance of payments
- define exchange rates
- discuss the causes and consequences of exchange rate fluctuations.

How many of the things you buy are made in other countries? Do you go on holidays overseas?

Every time you buy a product imported from another country, go on a foreign holiday and exchange different national currencies you are participating in **international trade**.

The money you spend on your holidays or on overseas products is an international payment that will be recorded alongside many billions of others in the **balance of payments** of your country.

INTERNATIONAL PAYMENTS ARE RECORDED IN THE BALANCE OF PAYMENTS

Goods and services traded internationally require international payments to be made. These and other financial transactions between one country and all others are recorded in the **balance of payments** of that country.

The balance of payments of a country records all flows of money into and out of an economy in a given period, usually every month and year. It consists of three main accounts.

Current account	Capital account	Financial account
Payments for visible and invisible imports and exports, plus net income flows and transfers	Payments involving the sale for capital goods or fixed assets such as buildings and machinery	Investments flows including loans and loan repayments, and the sale of shares

Goods and materials sold overseas are **visible exports**. Services bought by residents of other countries are **invisible exports**.

Goods and materials bought from producers overseas are **visible imports**. Services bought from overseas providers are **invisible imports**.

Visible and invisible exports involve an inflow of money into an economy from overseas. Visible and invisible Imports involve an outflow of money from an economy.

Income flows include any wages earned by residents working overseas or paid out to foreign workers, and any international payments of interest, profits and dividends.

Current transfers include payments of taxes and excise duties by visiting residents of other countries, or similar payments made overseas.

A **trade deficit** will occur if visible imports exceed visible exports. A deficit has a number of problems:

- It means people are buying more imports and may be spending less on products made by domestic firms
- The deficit may be the sympton of a declining industrial base in the country
- The foreign exchange rate for the national currency is likely to fall. This will increase the prices of imports and cause **imported inflation**.

Balance of Payments on Current Account - example	\$ bn
Visible exports	+100
Visible imports	−160
Balance of trade (A)	**−60**
Invisible exports	+40
Invisible imports	−15
Balance on invisibles (B)	**+25**
Income credits from overseas	+5
Income debits paid overseas	−3
Income balance (C)	**+2**
Current transfers balance (D)	**+3**
Current Account (A+B+C+D)	**−30**

The balance on invisibles, income and transfers can sometimes offset a trade deficit so the current account will be in **surplus**.

However, if more international payments are made overseas than an economy receives from other countries there will be a **current account deficit**, i.e. there is net loss of income from the economy.

A government can try to reduce a trade deficit in the following ways:

- **Contractionary fiscal policy**, by raising taxes and cutting public expenditure, can reduce total demand for imports
- **Raising interest rates** can attract an inflow of savings from overseas, and reduce borrowing by consumers which they might otherwise spend on imports
- **Trade barriers** can be used to restrict imported goods
- **Allow the exchange rate to depreciate**. A large trade deficit will cause the foreign exchange rate of the national currency to fall. Imports will become more expensive but exports will be cheaper for overseas consumers to buy. As consumer demand for imports falls and overseas demand for exports rises, the trade deficit will disappear.

INTERNATIONAL PAYMENTS ARE MADE IN MANY DIFFERENT CURRENCIES

International trade and payments not only involve the exchange of goods, services, incomes and investments, but also the exchange of national currencies.

For example, when consumers, producers or the government in the USA buy goods and services drectly from suppliers in Japan they must pay them in their national currency, the Japanese yen. This means they must supply US dollars ($) and buy Japanese yen (¥).

>> 2.2 How Markets Work

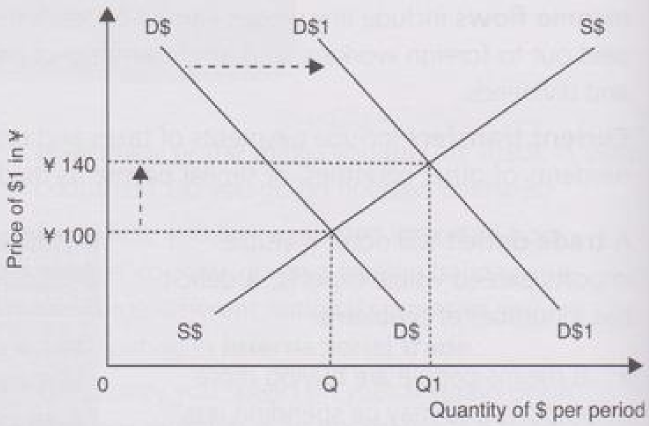
The national curency of one country can be exchanged for any other national currency through the global **foreign exchange market**.

The **exchange rate**, or market price in terms of another currency, is determined where demand for the currency equals its supply.

Changes in demand and supply cause fluctuations in exchange rates.

An **appreciation** in the value of a currency means its exchange rate or price against other currencies has risen.

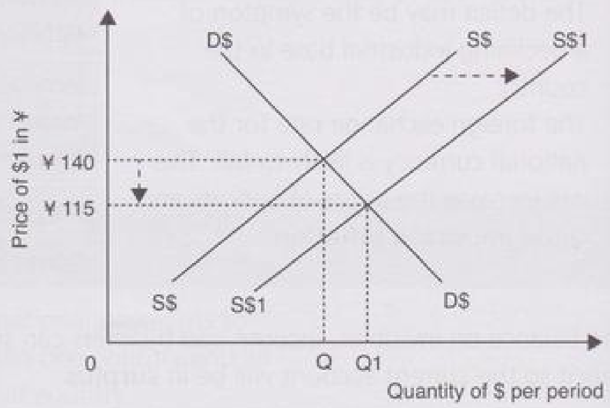
The exchange rate of a currency will appreciate if demand for the currency rises or the supply of the currency falls.



▲ The $ appreciates in value on the foreign exchange market

A **depreciation** in the value of a currency means its exchange rate or price against other currencies has fallen.

The exchange rate of a currency will fall if demand for the currency falls or the supply of the currency rises.



▲ The $ depreciates in value on the foreign exchange market

A currency might depreciate because...	A currenct might appreciate because...
• There is a balance of payments deficit.	• There is a balance of payments surplus
• Demand for other currencies rises as domestic consumers buy more imports	• Demand for the currency rises as overseas consumers buy more exports
• Interest rates fall relative to other countries. People move their savings to bank accounts overseas	• Interest rates rise relative to other countries. This attracts savings from overseas residents
• Inflation rises relative to other countries. This makes exports more expensive and demand for them, and the currency needed to buy them, falls	• Inflation is lower than in other countries so exports will be cheaper and overseas demand for them, and the currency required to pay for them, will rise
• People speculate that the currency will fall in value and they sell their holdings of the currency.	• People speculate that the currency will rise in value and they buy more of the currency.

As the value of a currency depreciates exports become cheaper for overseas economies and imports into an economy more expensive.

This causes imported inflation but it can also help to correct a trade deficit.

An increase in overseas demand for exports from a country can also boost employment and national income in its economy.

e.g. A Japanese motorcycle is priced at ¥ 140,000 and is imported to the US.

If $1 = ¥140, the motorcycle will sell for $1,000 in the US.

If the US $ depreciates to $1 = ¥100, the $ price of the motorcycle will rise to $1,400.

EXAM PREPARATION

Identify the following international transactions between Italy and other countries and suggest what impact they will have on a current account deficit in Italy.

Transaction to/from Italy	Visible export?	Visible import?	Invisible export?	Invisible import?	Increase deficit?	Reduce deficit?
An Italian tourist on holiday stays in a hotel in India				√	√	
An Italian supermarket buys vegetables from Kenya						
A store in Pakistan buys 1,000 suits from an Italian clothing company						
Italian car hire company insures its cars with a British insurer						
A Japanese car producer in the UK sells cars to Italian dealer						
Italian soldiers in Africa go to a local bar and nightclub						

Example exam questions

- Using examples, define and distinguish between an invisible export and a visible export.
- Discuss whether it matters if a country has a visible trade deficit.

IMPORTANT THINGS TO REMEMBER

Fill in the missing key words.

A country will have a ____________ ___________ in the production of a particular good or service if it is able to produce it at a lower opportunity cost than other countries.

Countries that specialize in production can engage in ________________ ______ with other countries to obtain goods and services they do not produce themselves.

A government may try to protect its industries from overseas competition by using ______ ___ ________ to restrict imports.

A ________ is a tax imposed on imported goods. A ______ places a limit on the volume of a particular good that can be imported.

Trade barriers can prevent _________ , when one country floods the market in another with cheap, subsidized products to force domestic producers out of business.

International payments and financial transactions with other countries are recorded in the _________ of __________ of a country.

Physical products sold overseas are _________ _________ . Payments received by a country from the sale of its services to overseas residents are ___________ ________

There will be a balance of trade _________ if the value of visible imports exceeds the value of visible exports.

The balance of payments on _________ _________ records visible and invisible exports and imports, income flows and current transfers.

International payments requires the exchange of national currencies on the foreign __________ ________.

The price of one currency in terms of another is called its __________ _____.

An ______________ in the value of a currency means its exchange rate or price against other currencies has risen.

In contrast, the exchange rate of a currency will fall, or ____________ , if demand for the currency falls or the supply of the currency rises.

10 MINUTE TEST

Choose and then mark or write down your answer A, B, C or D to each question.

1 The table refers to a particular country.

Year	Visible exports	Visible imports
2000	$140 m	$170 m
2008	$230 m	$ 290 m

Which statement about the period 2000 to 2008 is correct?

A the balance of trade improved
B the exchange rate appreciated
C the balance of payments improved
D the trade deficit increased

2 The exchange rate of the Australian dollar appreciates against the Swiss Franc. What is the most likely reason for this?

A speculative buying of the Swiss Franc
B higher interest rates in Australia
C a rise in Australia's trade deficit
D a fall in demand for Australian exports

3 Which of the following is an invisible import to the UK?

A a UK resident buys tickets to fly with Air France to the USA
B a bottle of wine from Italy
C a US resident buys shares in a limited company in the UK
D a car manufactured in Germany

4 What may explain a decrease in the volume of imports into a country?

A an appreciation in the exchange rate
B a cut in tariffs on imported goods
C an increase in the country's income tax rates
D interest rates are cut in the country

5 The table refers to a country's balance of payments current account.

Current account	$ bn
visible exports	50
visible imports	75
invisible exports	20
invisible imports	15
income balance	7
current transfers balance	3

What is the balance on the current account?

A a surplus of $10 bn
B a deficit of $25 bn
C a surplus of $40 bn
D a deficit of $10 bn

6 What would reduce an economy's protection against imports of cars?

A a higher tariff on imported cars
B a higher quota of imported cars
C a higher subsidy for domestic car producers
D a depreciation of the exchange rate

Now check your answers against those given on page 155. How well did you do? Make a note of any you got wrong and make sure you understand the reasons why before you continue to the next section.

Exam Guidance and Practice 3

WHAT YOU WILL LEARN

Before taking your final exam it is important to **take stock of your knowledge** and **check your understanding** of the IGCSE and O Level course content in economics

In this section there are **two exams to practise**. Each exam consists of two real papers: multiple choice and structured questions. The papers follow the same format of papers you will take in your final exam but are slightly shorter

Use the **techniques** you have learned in this book to answer the questions and **identify any gaps** in your understanding

Ask your parents, guardians or teachers to time each paper and then to help you mark your answers and suggest how to improve them if necessary

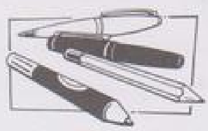
HOW TO PREPARE FOR YOUR FINAL EXAMINATIONS IN ECONOMICS

Pre-exam nerves are normal but good preparation can be a great help. Here are some top reminders to help with your final revision and calm your nerves.

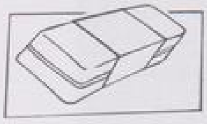
FINAL CHECKLIST

- Read through all the **Revision Summaries** at the start of each unit to check your understanding of key economic concepts and terms
- Read the **Important Things to Remember** page at the end of each part of the course
- Quickly study the **top tips and techniques** covered in the Exam Guidance and Practice sections 1 and 2
- If time has run out for further revision, don't worry and don't try to hurriedly learn any new topics. Just concentrate on what you already know
- Do not stay up all night revising before an exam paper. You will perform better if you sleep well.

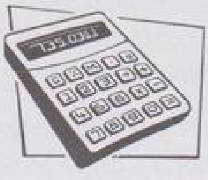
THINGS YOU WILL NEED IN THE EXAM



▲ Pens and pencils



▲ Eraser



▲ A calculator

▲ A watch or clock

TOP TIP

Read the instructions on each paper. Identify which questions are compulsory and which are optional. You must answer all compulsory questions and the correct number of optional questions.

Continually **demonstrate the three key skills** examiners are looking for – knowledge and understanding (KU), (JD), analysis (A) and critical evaluation and decision making (CE).

Make notes and **plan your answers** to questions with high marks to make sure you cover the important points and arrive at a good overall conclusion.

WORKING THROUGH THE EXAM PAPERS

You now have the chance to practise two sets of examination papers. Each exam consists of two shortened versions of actual papers (see page 57).

- Plan a time to take each of the practice exam papers
- Find a quiet room and ask a parent, guardian or teacher to time you on each paper and enforce exam conditions (i.e. talking and looking at your notes are not permitted)
- Just like your final exam, you do not have to complete all three papers on the same day. But if you do, make sure you take a break between each paper

Answers are supplied at the end of the book. Check your own answers against these or ask your teacher to help you mark your papers.

EXAMINATION A

PAPER 1: Multiple choice 30 minutes

There are **twenty** questions on this paper. Answer all questions. For each question there are four possible answers **A, B, C** or **D**.

Record your answer in soft pencil. Each correct answer will score one mark. A mark will not be deducted for a wrong answer.

1 An organization decides to spend more on training employees than increasing their production capacity. What economic idea is illustrated by this decision?

A Specialization
B Opportunity cost
C Market failure
D Price elasticity

2 If a planned economy became a mixed economy, which industry is most likely to remain under government control?

A Banking
B Education
C Fishing
D Tourism

3 What makes an industry labour-intensive?

A It employs many workers and a limited amount of equipment
B It uses state-of-the-art technology and few, skilled workers
C It produces high quality products and services
D It uses poor quality land to site its operations

4 An emergency doctor cannot treat all the patients that need treatment straight away. What is this is an example of?

A Scarcity
B Profit maximization
C Unlimited resource
D Excess supply

5 What is a function of a central bank?

A Providing savings facilities
B Making personal loans
C Supervising the banking system
D Giving independent financial advice

6 A trade union is negotiating a wage rise for its members. What will increase the chance of the wage rise being granted?

A The company's product has many substitutes
B The economy is entering a recession
C The government has made strike action illegal
D Wages are a small part of the company's costs

7 The demand for and supply of a good both change. As a result the price of the good stays the same but the quantity traded rises. What must have happened to demand and supply?

	Demand	Supply
A	fallen	risen
B	risen	risen
C	risen	fallen
D	fallen	fallen

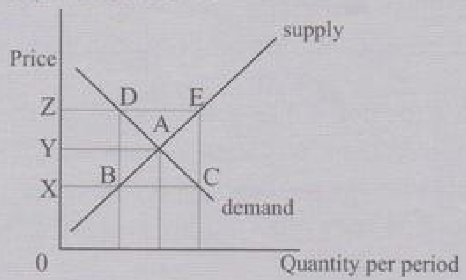
8 A firm's fixed costs are \$2,000. Its total costs are \$10,000. It sells 500 units of output. What is the average fixed cost and variable cost per unit of output?

	Average fixed cost	Average variable cost
A	4	16
B	5	15
C	20	0
D	10	10

9 Give an example of a fixed cost for a firm.
A Cost of air fares for managers
B Cost of raw materials
C Cost of temporary staff
D Rent payments for office buildings

10 Cola and lemonade are substitutes. What will happen if the price of lemonade rises?
A The demand for lemonade will increase
B The price of cola will increase
C The demand for cola will increase
D The supply of chicken nuggets will rise

11 The diagram below shows the demand and supply curves for apples. The market is in equilibrium at A.



What is the excess demand at price X?
A BC
B BD
C EC
D AC

12 When is a firm most likely to undertake capital investment?
A When demand for its product increases
B When it has increasing variable cost
C When it has decreasing rate of profit
D When it has decreasing availability of finance

13 What action by a train company will directly reduce external costs?
A Increasing the frequency of trains
B Building new rail tracks
C Abolishing overnight train services
D Increasing the price of train tickets

14 In the market there is excess supply of a good in the market. What change is required to bring the market back to equilibrium?
A An increase in supply
B An increase in price
C A reduction in demand
D A decrease in price

15 Which factor is likely to cause a reduction in people's borrowing?
A An increase in the real interest rate
B A reduction in unemployment
C A reduction in income tax
D An increase in house prices

16 What may a government change when it uses fiscal policy?
A The interest rate
B The rate of income tax
C The supply of money in the economy
D The exchange rate of the domestic currency

17 What is most likely to cause the government to have a budget deficit?
A A decrease in unemployment
B An increase the in rate of income tax
C A reduction in inflation
D An increase in government spending

18 What situation arises when the birth rate and death rate fall in a country?
A A budget surplus
B An increase in employment
C An ageing population
D An increase in the savings rate

19 What is likely to be higher in a developing country than in a developed country?
A Savings rates
B Birth rate
C Life expectancy
D Inflation

20 A person receives annual interest of 8% on their savings. Inflation is 10% per annum. What is the change in the real value of their savings over the same year?
A It rises 8%
B It falls 10%
C It changes by 18%
D It falls by 2%

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