AS LEVEL GEOGRAPHY

G  GA2

REVISION GUIDE

Core Concepts in Human Geography

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✓ Past exam questions and markschemes

KEY CASE STUDIES

All pages refer to AS level Geography Bowen and Pallister unless otherwise specified. When text book 'Nagle' is referred to you have been given these as photocopies!

Please note: These are the suggested case studies. You have been given additional information on some topics – these should be used for additional examples / case studies especially if you are aiming for higher grades!

Section of syllabus	Suggested case study
POPULATION DYNAMICS	
Population changes over time and the factors influencing change with specific reference to	UK: p152-3

the UK. Economic, social and political factors are to be considered.	Nagle p242 – 245 Information in this booklet
The Demographic Transition Model to include a consideration of the fifth stage. The usefulness and application of the model in both an MEDW and an LEDW context.	Look at Japan p154 and India p155
A study of the causes (of migration) to consider physical, economic, social, cultural and political processes.	P156- 159
The consequences of migratory flows to analyse the economic, environmental, social and cultural impact.	Refugees: p167 P169 (consequences)
Candidates need to study economic and refugee migration at a national and international scale.	Economic migrants: p168-9 'Turkish Guestworkers in Germany'. Your migration podcasts on the blog here: http://ashumangeography.blogspot.com/2007/11/migration-podcast-1.html The following website may also help if you're stuck! http://www.geographyalltheway.com/ib_geography/ib_population/migration_case_studies.htm
The study of an ageing population with reference to the UK and a youthful population with reference to a contrasting LEDC.	Ageing population: UK: p180-181 Although your syllabus specifies the UK, it is useful to have information from other MEDCs… look at http://geoblogbytes.wordpress.com/2007/04/18/japans-ageing-population/ for information on Japan's ageing population problem Youthful population: You were given a handout on Uganda
SETTLEMENT PATTERNS AND PROCESSES	
The causes, patterns and effects, and	Kibera and Tondo case studies (sheets)

characteristics of urbanisation in one major LEDC where the process is still occurring	Also p192-198 (problems and benefits).
Suburbanisation within MEDCs -causes and consequences in an MEDC	P198-203 (this inc case study). You had a powerpoint on this and also did some work on Linby (Notts)
The consequences of reurbanisation.	P208--210
Gentrification as illustrated by a UK case study.	P211; You also did research on two case studies – London Docklands, Manchester – your powerpoints are on the blog!
The nature of and causes of changes in the land use patterns of suburbanised villages. The model of a suburbanised village and its application to a case study.	Model of suburbanised village p213. Case study Urchfont, Wiltshire p206-7
The issues regarding the use of greenfield and brownfield sites for additional housing.	Some of the other sheets /articles given about building of new housing on green belt land
ECONOMIC ACIVITY	
Secondary Activities (N) Industrial change in the UK – areas of declining manufacturing industry (de-industrialisation) and the areas of expanding manufacturing industry.	Decline of the car industry: P242-245 Consett info and South Wales handout
Industrial growth in NICs in the LEDW with reference to the role of multinationals.	Case study of NIC (you did this independently) P252-3 Malaysia if you haven't got your own
Development of global operations by multinational companies such as Ford or General Motors (G)	Case study of TNC / multinational company (you did this independently)
The economic, social, political and environmental impact of these changes.	Bhopal
The changing patterns of retailing with specific reference to the UK	P258-9 p176-177 from the photocopies I gave you
Regional decentralisation e.g. food, DIY. Retail parks and regional shopping centres	Be able to refer to specific out-of-town shopping centre (see map p258)
Development of business and science parks.	Cambridge science park (you completed this

Planning issues in the location of business and science parks.	in class) and P260-261
The costs and benefits of a city centre location versus out of town location for retailing and business/ science to be considered	p178 – 180 *other* text book (photocopy)

Command Words

Describe …	State simply what is requested. Further comment or explanation is not required.
Name / state …	Identify briefly. One word may be adequate, but it may be better to use a sentence if in any doubt.
Distinguish between …	Define and state the differences between. Linking terms such as 'whereas' or 'on the other hand' are essential.
Outline …	Describe, with a specific focus, the geographical element requested. For example, 'Outline the main features of …' has more of a focus than 'Describe the main features of …'
Outline reasons for …	Give reasons for, with a specific focus, the geographical elements required. The response will be briefer than a full explanation.
Account for / explain / why …?	Give reasons for. Marks will be awarded for these reasons rather than a description.
Give reason(s) for …	Some explanation must be offered.
Describe and explain …	Both elements, description and explanation, must be present for full marks. Ensure that examples of the mentioned theme are used in the response.
Compare …	What are the similarities between? Some elements of contrast may be present.
Contrast …	What differences are there? Two separate accounts will not meet the needs of this question, there must be a specific contrast or distinction between the two elements.

Examine …	Give an overview of the elements which affect the theme i.e. outline *and* explain.
Assess / to what extent …?	This requires an assessment of the importance of the factors involved in the response. This would be in an extended prose answer rather than a short one.

Topic 1:

Population dynamics

Population change

There are 4 elements to population change:

- Births
- Deaths
- Immigration
- Emigration

Natural population change for an area is the birth rate minus the death rate.

- **Birth rate** is the number of live births per 1000 population per year.
- **Death rate** is the number of deaths per 1000 population per year.

Population change can also be measured by fertility rates and infant mortality rates.

- The general **fertility rate** is the number of live births divided by the number of women of childbearing are (15-49). It can also be expressed as the number of children born per woman.
- The **infant mortality rate** is the number of deaths of infants under 1 year old per 1000 live births. This is used as an indicator of the level of economic development of a country, because the infant mortality rate falls with greater levels of economic development.

Key terms

Birth rate A measure of an area's fertility. It is expressed as the number of live births per 1,000 people in 1 year.

Death rate The number of deaths per 1,000 people in 1 year.

Fertility The number of live births per 1,000 women aged 15–49 in 1 year. It is also defined as the average number of children each woman in a population will bear. If this number is 2.1 or higher, a population will replace itself.

Infant mortality The number of deaths of children under the age of 1 year expressed per 1,000 live births per year.

Life expectancy The average number of years from birth that a person can expect to live.

Longevity The increase in life expectancy over a period of time. It is a direct result of improved medical provision and increased levels of economic development. People live longer and this creates an older population.

Natural change The change in size of a population caused by the interrelationship between birth and death rates. If birth rate exceeds death rate, a population will increase. If death rate exceeds birth rate, a population will decline.

Population change in the UK over time

During medieval times, both birth and death rates in the UK were high, at around 35 per 1,000. Generally, the birth rate was a little higher than the death rate, resulting in a slow rate of natural increase.

The birth rate tended to remain at a relatively stable level, but the death rate varied considerably. In 1348–49, the epidemic of bubonic plague, called the Black Death, killed one-third of the population. Other plagues followed in the seventeenth century, including the Great Plague of 1665. There was an increase in mortality between 1720 and 1740, which is attributed to the availability of cheap gin. This was ended by the introduction of a 'gin tax' in 1751.

Falling death rate

The period from the mid-eighteenth century to about 1875 was a time of rapid urbanisation, which alerted public officials and enlightened industrialists to the urgent need for improvements in public health. Factory owners soon recognised that an unhealthy workforce had a huge impact on productivity. The provision of clean, piped water and the installation of sewage systems, together with improved personal and domestic cleanliness, saw the incidence of diarrhoeal diseases and typhoid fall rapidly. Greater disposable income from factory wages led to more food being consumed by the working class and to a wider range of food products being demanded. At the same time improvements in farming practices and transport systems allowed this demand to be met. Better nutrition played a significant role in the decline in infant mortality.

The combination of better nutrition and the general improvements in health brought about by legislation such as the Public Health Acts of 1848 and 1869, caused the incidence of common infectious diseases such as scarlet fever and tuberculosis to diminish markedly. Public perception of cleanliness was also a major factor. Soap was a well-advertised product and the availability of cheaper cotton clothing (which is easier to wash than woollen clothing) was important.

Falling birth rate

After 1875, the continued decrease in the death rate was accompanied by a reduction in the birth rate. Medical science began to play an important role in the control of mortality, with doctors being able to administer more effective drug treatments. Surgery grew more advanced and anaesthesia became available. From the early part of the twentieth century, increasing attention was paid to maternity and child welfare, and to the health of schoolchildren. There were further advances in nutrition – for example cheap American wheat, and refrigerated meat and fruit from Australia and New Zealand began to be imported.

The decline in fertility began with the celebrated trial of two social reformers, Charles Bradlaugh and Annie Besant. They were prosecuted, and later acquitted, for publishing a book that gave contraceptive advice. The desire for smaller families at this time was due to the financial costs of looking after children, especially when education to the age of 13 became compulsory. Between 1890 and 1930, the birth rate fell from 32 per 1,000 to 17 per 1,000.

By 1940, the birth rate had fallen again to 14 per 1,000, partly due to the uncertainties of war. Immediately following the war, birth rates rose for a short while — the postwar baby boom. However by 1980, birth rates had again fallen to 14 per 1,000 and have remained at this level. The introduction of the oral contraceptive pill and the wider use of condoms have meant that the relationship between desired family size and achieved family size has remained strong. The rise in the importance of females in the employment structure of the UK in the last few decades, particularly in service industries, has further impacted on birth rates, particularly in the professional classes.

The Demographic Transition Model

The interaction of crude birth rates and death rates causes changes in a country's population over time.

Stage 1

High fluctuating stage. Birth rates and death rates are over 35 / 1000 and fluctuate. Population growth is small. Reasons for high birth rate include:

- No birth control / family planning
- High infant mortality rates, encouraging more children to be born
- Children are a source of income at an early stage
- Children are a sign of virility and fertility
- Some religions / cultures encourage large families

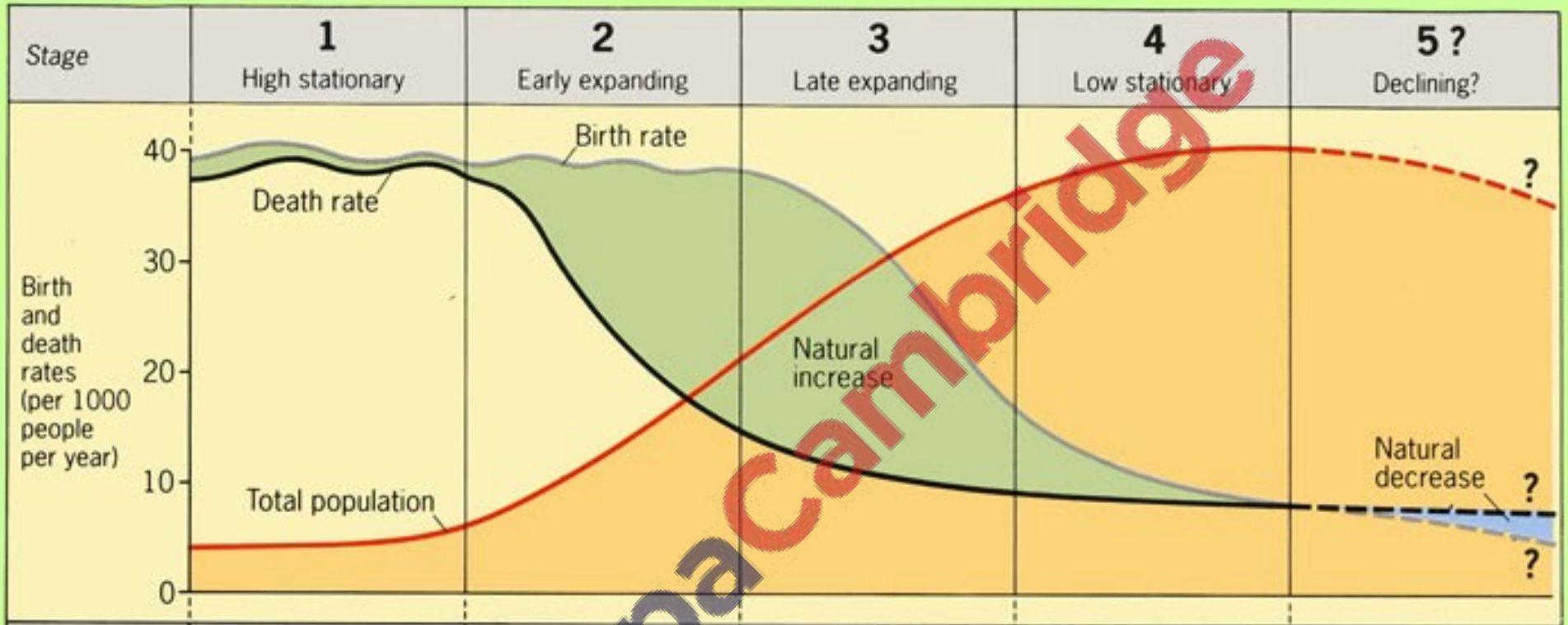
Reasons for high death rates include:

- Disease and plague
- Famine and/or poor nutrition
- Poor hygiene
- Undeveloped medical science

Stage 2

Early expanding stage. Birth rates high, death rates falling to 20 / 1000. Population increases rapidly. Reasons for falling death rate include:

- Improved public health
- Better nutrition
- Lower child mortality
- Improved medical facilities



Stage	1 High stationary	2 Early expanding	3 Late expanding	4 Low stationary	5 ? Declining?
Examples	A few remote groups	Egypt, Kenya, India	Brazil	USA, Japan France, UK	Germany
Birth rate	High	High	Falling	Low	Very low
Death rate	High	Falls rapidly	Falls more slowly	Low	Low
Natural increase	Stable or slow increase	Very rapid increase	Increase slows down	Stable or slow increase	Slow decrease
Reasons for changes in birth rate	Many children needed for farming. Many children die at an early age. Religious/social encouragement. No family planning.		Improved medical care and diet. Fewer children needed.	Family planning. Good health. Improving status of women. Later marriages.	
Reasons for changes in death rate	Disease, famine. Poor medical knowledge so many children die.	Improvements in medical care, water supply and sanitation. Fewer children die.		Good health care. Reliable food supply.	

Stage 3

Late expanding stages. Birth rate falls rapidly to 20 / 1000, death rates to 15 / 1000. Population increases slowly. Reasons for falling birth rates include:

- Changing socio-economic role of women
- Smaller families preferred
- Fashion
- Increased wealth
- Compulsory schooling makes children expensive
- Greater access to education for women
- lower infant mortality rate
- availability of family planning and the role of government

Stage 4

Low fluctuating stage. Birth and death rates are low (16 / 1000 and 12 / 1000 respectively). There are increasingly low fertility rates.

Stage 5

The birth rate falls below the death rate, causing a population decline. This stage is not in the original model, but has been observed in some west European countries.

Uses of the DTM

- Universality – all countries can be placed on the model
- It provides starting point for the study of demographic change over time
- The timescales are flexible
- It is easy to understand
- It enables demographic comparisons to be made between countries

Limitations of the DTM

- The lack of the fifth stage in the original model

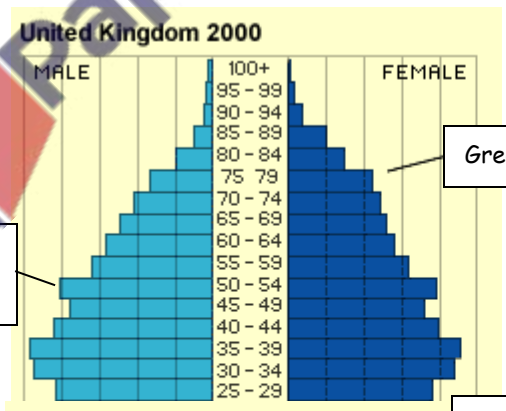
- It is Eurocentric, assuming that all countries will follow the European stages in the same timescale. This is not the case for Newly Industrialising Countries (NICs), which are changing more rapidly.
- It assumes that the same socio-economic changes that took place in Europe will occur in other countries for the same reasons.
- The role of governments is not covered (e.g. population policies)
- The contribution of migration to population change is not covered.

Population structure

Population structure is the division of a population by age and sex. This can be shown on a population pyramid which has the population in five year age bands on the vertical scale and the number or percentage of males and females on the horizontal scale.

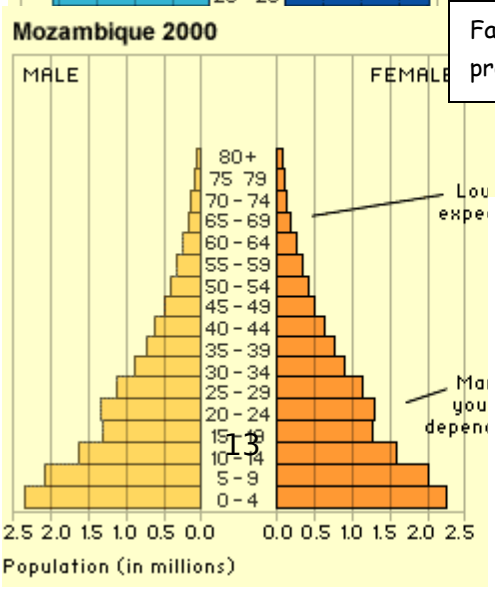
The pyramid also shows the **life expectancy** of the population by its height. Life expectancy is the average lifespan of a person born in a specific year.

The **dependency ratio** is the proportion of the population that is economically non-productive compared with the proportion that is economically productive – that is, the proportion aged 0-14 (non-working) and 65 and over (retired) compared with the proportion aged 15-64 (working). The higher the dependency ratio, the more the non-productive proportion is dependent on the productive.



Greater longevity of females

Impact of war on birth rate – 'baby boom'



Falling birth rate with increasing prosperity and social change

Low life expectancy

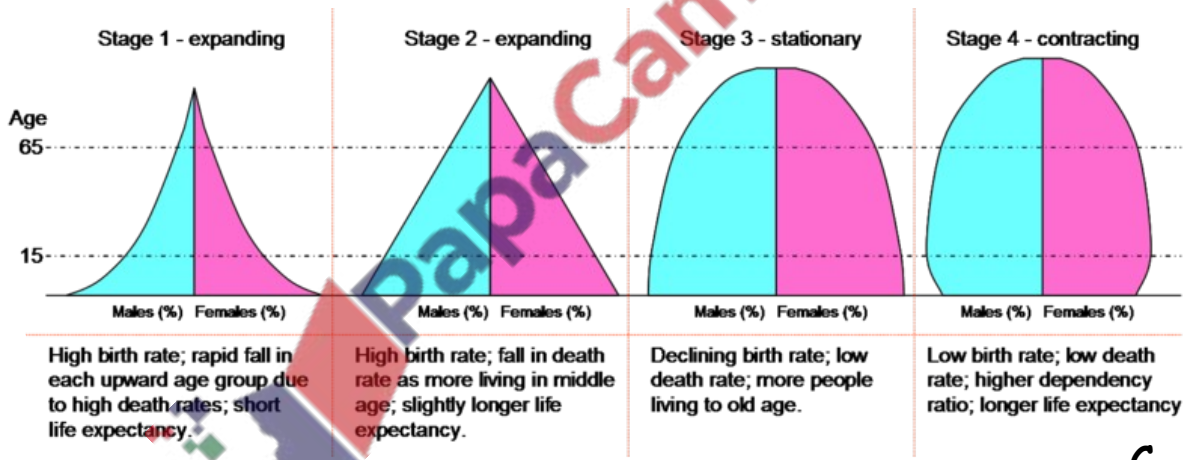
High death rate gives true pyramidal shape

Many young dependents and high birth rate

Pyramids and the DTM

The DTM can be used as a vehicle to demonstrate changes in population structure spatially and over time. This is clearly seen by the characteristics shapes and names of the pyramids at each stage of the DTM.

These changes can be applied over time. More developed countries such as the UK would have passed through each of these stages to reach the current one.



C

onsequences of change in population structure

Changes in population structure have economic, demographic, social and political implications. The most apparent are concerned with ageing populations, which are a consequence of the decline in birth rates that most countries have experienced or are experiencing. The consequences are important in MEDCs such as the UK. The structural type is known as contractive / regressive.

The characteristics of this structural type are:

- An ageing population
- Low birth and death rates

- A narrowing base to the pyramid
- A smaller proportion of younger age groups
- A larger proportion of older age groups
- Longer life expectancy
- More females in older age groups
- More males in younger age groups

Economic implications

- Increasing dependency ratio, despite the lower birth rate, as life expectancy rises and young people are forced to enter the labour market in later life.
- Costs of care for the elderly rise (medical care, hospitals) as more elderly survive and medical inflation is greater – pensions take a higher proportion of government expenditure as life expectancy rises.
- Costs for education (especially higher education) rise as school leaving age effectively rises.
- A decline in services for the young, but an increase in economic opportunity for services for the elderly e.g. sheltered housing.

Demographic implications

- A smaller proportion of younger age groups
- A larger proportion of older age groups
- Longer life expectancy
- More females in older age groups
- More males in younger age groups

Social implications

- More elderly people living together in sheltered housing or in coastal towns
- Social interaction might be restricted and the social mix unbalanced

Political implications

- Greater political power for older voters as their numbers increase
- Higher expectations of the older age groups can only be met if the working population is prepared to meet the costs of supporting them.

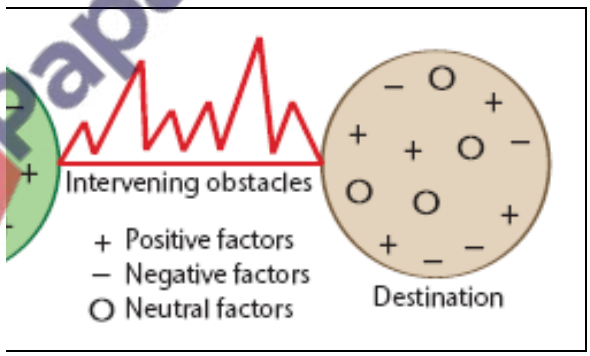
Migration

Migration is a permanent or semi-permanent change of residence. The types of migration can be classified in a number of ways:

Factor	Types
Timescale	Permanent, semi-permanent, seasonal
Motivation	Forced, voluntary, economic, political, social, retirement
Distance	Internal, external
Source / destination	Rural-urban, urban-rural, urban-urban, rural-rural
Settlement processes	Urbanisation, suburbanisation, counterurbanisation, reurbanisation

Lee's model of intervening obstacles

The decision to migrate depends on the number of obstacles (negatives factors) between the origin and the destination. The greater the number of obstacles, such as mountain barriers or international boundaries, the less likely it is that migration will occur.



Key terms

Forced migration The migrant has to migrate, because of the circumstances.

International migration The UN defines international migration as the movement of people across national frontiers, for a minimum of 1 year.

Migration A permanent or semi-permanent change of residence of an individual or group of people.

Net migration The difference between the numbers of in-migrants and out-migrants in an area. When in-migrants exceed out-migrants, there is net migrational gain. When out-migrants exceed in-migrants there is net migrational loss.

Rural–urban and urban–rural migration In LEDCs, the net migrational gain of urban areas at the expense of rural areas results in urbanisation. In MEDCs, movements from urban areas to rural areas have led to counter-urbanisation.

Voluntary migration The migrant makes the decision to migrate.

The Push-Pull Model

The push–pull model

Many factors influence the decision to migrate. They can be categorised into push factors and pull factors:

- **Push factors** are the negative aspects of the current place of residence. They include lack of employment, low wages, poor housing, poor educational opportunities, political persecution, natural hazards, starvation and war.
- **Pull factors** are the attractions of the destination. They are often the inverse of the push factors: better employment and educational opportunities, better housing and social services (health services), higher wages, family integration and political stability.

If the perceived push or pull factors are strong enough to overcome the forces of **inertia** (cost of moving, disruption of social networks), then migration will occur.

One of the most important factors in any migration is the **perception** of the individual concerned. Perception is the subjective view that a person has of the environment, which is derived from personal experience, the experience of others and the media. Through perception, a potential migrant builds up a mental image of the destination. This mental image may be partial and distorted but will be the basis of the decision by the migrant.

The mental images that migrants have, therefore, often fail to accord with reality. This is one reason why for each migration there is often a movement in the opposite direction — disillusioned migrants returning to their place of origin.

The effects of migration

You need to be aware of the consequences of migration, including the economic, environmental, social and cultural impacts as well as the attitudes and values relating to migration.

Impact	Origin	Destination
Social	• Younger age groups migrate (20-34) leaving an older population. • Males more likely to migrate, decrease in population. • Birth rate might fall; death rate will rise. • Marriage rates will fall; family structures break down.	• Younger age groups increase proportion of the population • Males increase in proportion • Birth rate might rise; death rate will fall • Marriage rates will rise
Economic	• Those with skills and education leave, causing labour shortages or the advantage of reduced pressure on resources • Dependence on remittances (money sent home) – gain to economy • Migrants bring back new skills on return	• Those with skills and education arrive, causing labour surplus and the new drive to the economy; take up of menial jobs • Loss of remittances to the economy • Skills exported on leaving

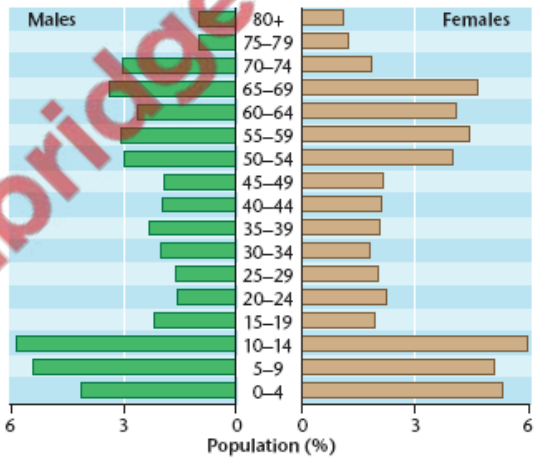
Environmental	• Decline of farming; land abandoned	• Pressure on resources; temporary housing and shanty towns; pollution, poor public health etc
Cultural	• Loss of males and young families causes a loss of cultural leadership and tradition	• Arrival of new groups of people can cause friction, especially if cultural identify is retained • New foods, music etc introduced

The effects of migration on population structure

Impacts on the area of origin include:

- The younger adult age groups (20-34) migrate, leaving behind an older population;
- Males are more likely to migrate, causing an indentation on that side of the population pyramid;
- Birth rates will fall and death rates will rise.

Population pyramid for Barra, Scotland



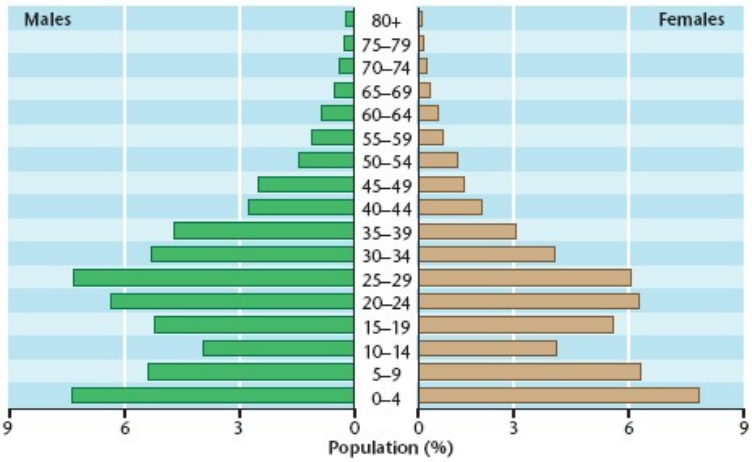
Barra, an island in the Outer Hebrides (Scotland) has long experienced depopulation as a result of the poor economic prospects in this remote and isolated location.

Impacts on the area of destination:

- The proportion of younger adult age groups (20-34) increase;
- Males are more likely to migrate causing an expansion on that side of the pyramid;
- Birth rate rise and death rates fall.

Dar-es-Salaam, the capital city of Tanzania, is a thriving international port and has long been a magnet for those seeking employment in that area of east Africa.

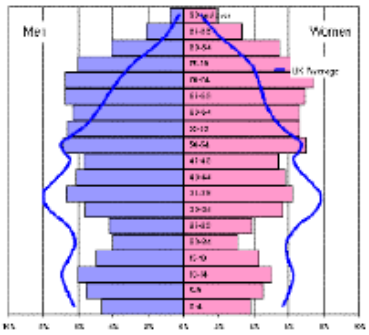
Figure 4.6 Population pyramid for Dar-es-Salaam, Tanzania



Retirement migrations

Bournemouth is a town on the south coast of England. With its milder climate and large numbers of hotels / rest homes it has traditionally been attractive for retirement.

- **Retirement towns**
  e.g. Bournemouth will have a regressive and top-heavy structure because of the in-migration of elderly people



Topic 2:

Settlement Patterns and Processes

Urbanisation and suburbanisation

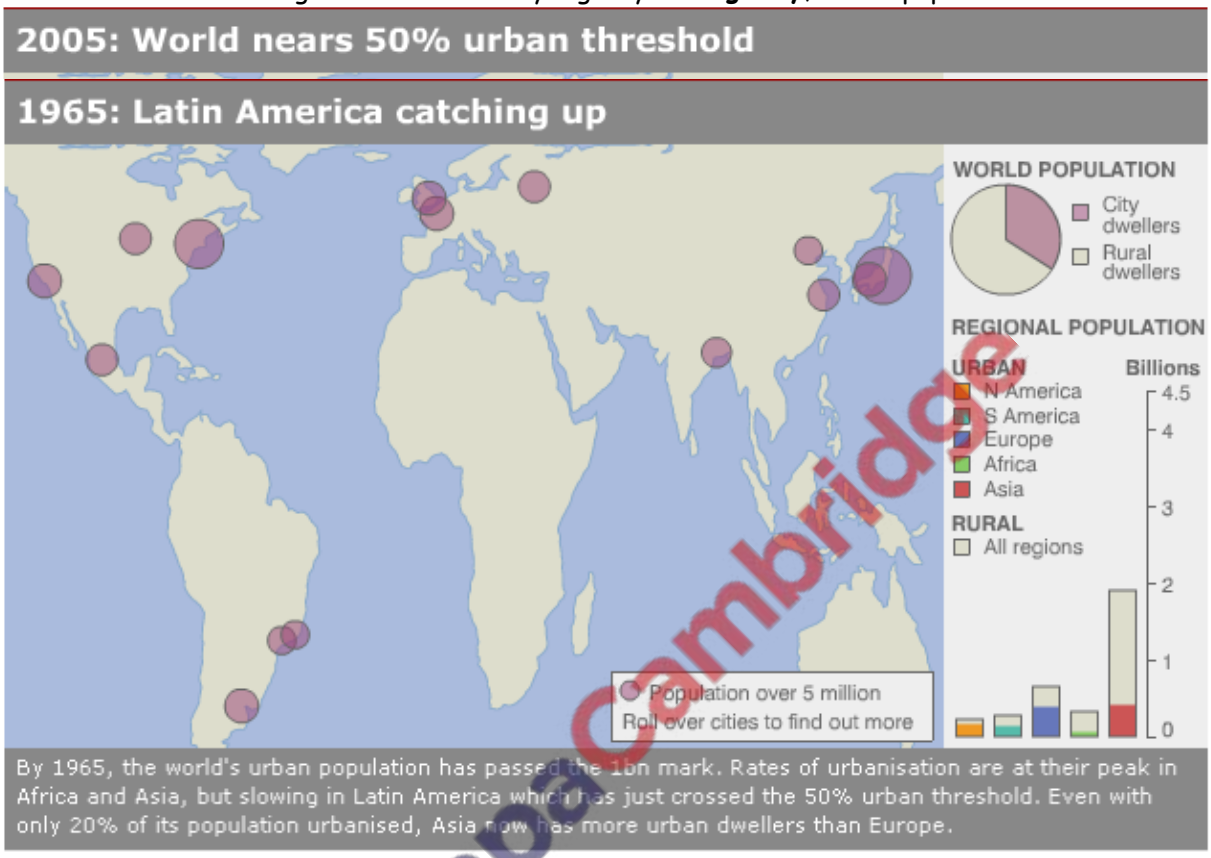
Urbanisation is defined as an increasing proportion of a country's population living in urban areas. There have been two main waves of urbanisation:

- In MEDCs during and following the Industrial Revolution - as a result of economic development.
- In LEDCs since 1950 - as a result of migration from rural areas and high rates of population growth in urban areas.

Suburbanisation is defined as the movement of people from the central and inner areas to the surrounding residential areas. It has taken place in MEDCs as transport has developed, enabling people to commute to their place of work and is characterised by lower building densities.

Global patterns of urbanisation

Accelerated world urban growth since 1950 has been the result of urbanisation spreading the LEDCs. Before 1950, a millionaire city was considered to be something special. There were about 70 of them in 1950. By 2000 there were about 350 of them. The increasing urbanisation in LEDCs has reduced the average latitude of millionaire cities from 40° to 30°. More remarkable now is the growth of the really big city or **megacity**, with a population of more than



10 million people.

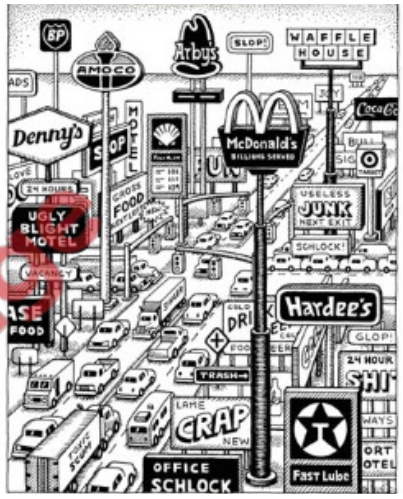
The growth of settlements: MEDCs

Accelerated growth took place in MEDCs as a result of industrialisation, which encouraged migration of potential workers from rural areas to meet the demand for labour in factories and mines. Housing was built near to factories and mines, as transport was poorly developed and wages low. Building was at a high density and conditions were poor. Over time, because of legislation and the increasing wealth of workers, housing conditions improved. In the UK, the typical late-nineteenth century terraced housing was the result of these developments. This housing spread away from the centre of the urban areas to form what is now recognised as the inner city.

The growth of settlements: LEDCs

Accelerated urban growth in LEDCs has been spectacular in recent years, resulting in megacities. The fastest growing are in Latin America, south-east Asia, Japan and Korea, with Mexico City, Sao Paulo, Tokyo, Calcutta and Bombay all with over 16 million inhabitants in 2000.

The reasons for this growth include rural-urban migration (push-pull) and natural increase, without the same degree of industrialisation that took place in MEDCs. The wealthy tend to live close to the city centre and the poor tend to live further away. Consequently, the quality of housing declines away from the centre, the reverse of the situation in MEDCs.



Consequences of accelerated urban growth

The building of shanty towns is a direct consequence of rapid urban growth, as there is not enough housing to accommodate all of the population. On average, 30% of an LEDC city's population live in such settlements. The houses are constructed from any available material.

The following factors are associated with shanty settlements:

- Services are poor, with little running water, mains drainage or rubbish collection
- The streets are frequently open sewers and carry flood water when rain occurs
- They have limited electrical power and a lack of schools, teachers, hospitals, doctors and nurses
- There is frequent pollution of drinking water, leading to the spread of infection and disease (typhoid, cholera and dysentery)
- The air, land, and water are often polluted by industry, resulting in high infant mortality rates and low life expectancy
- Most people are unemployed or underemployed and find work in the informal sector of the economy
- Transport is poorly developed and roads are unable to cope with the volume of traffic

Suburbanisation in MEDCs

Suburbanisation is a term used to describe the process of population movement from within towns and cities to the rural-urban fringe.

Suburbanisation in MEDCs occurred for the most part in the mid to late twentieth century. This was a consequence of a number of factors including;

- improvements in transport (the bus, electric train and motor car);
- increased wealth;
- availability of housing, employment and other facilities in the suburbs;
- the availability of lower-cost land assisted the construction of cheaper, yet better quality housing at a lower building density;
- the wealthier, middle-class inhabitants were able to travel to their place of work by car, bus or train.

The construction of very large housing estates in the suburbs of major cities in the UK showed the decentralisation forces at work. Suburbanisation has been limited in the UK by the establishment of 'green belts' around urban areas. These have prevented further spread of residential areas and other developments.

Counter-urbanisation

Counter-urbanisation is the movement of people from an urban area into the surrounding rural area. This is frequently characterised by the development of commuter villages. It is different from suburbanisation because the final location is outside the existing urban area.

Causes	Consequences
Accessibility – railways and motorways allow access to places of employment	Middle class immigrants; social structure changes
Mobility – increasing levels of car ownership	Increased traffic/congestion; dependence on car
Increasing wealth – house prices and cost of travel becomes affordable	House prices rise beyond the reach of locals
Decline of farming – less labour needed and land might be run down	New estates of detached and semi-detached houses built; renovation of farm buildings
Out-migration of agricultural workforce – allows new migrants to move in	Young to middle-aged professional people move in, plus some of retirement age
Planning – existing urban margins are clear, causing green belt areas in which the process can occur	Light industry might develop in the area
Fashion – people wish to live in such areas	Shops might decline as a result of competition from supermarkets in suburban areas (other areas might have more retail services); more restaurants; primary schools might flourish or in some cases close; village society/organisations taken over by middle classes

Re-urbanisation

Re-urbanisation is the movement of people into the centre of inner city as part of a process of urban regeneration. The migrants are frequently middle class and the process is known as gentrification. In some cases, the investment by central and local governments as part of a strategy for urban regeneration might result in a more varied social structure.

London Docklands Case Study

The regeneration of London's Docklands has taken place since 1980. The establishment of London Docklands Development Corporation (LDDC) was the catalyst for major change. The Docklands area had been abandoned as shipping tended to use facilities donw-river at Tilbury. The oldest and smallest docks were by Tower Bridge and the largest on the Isle of Dogs (the Royal group of Docks).

The LDDC reclaimed over 600 hectares of derelict land and helped to improve the transport infrastructure. The Docklands Light Railway, extensions to the Jubilee Line, London City Airport and the Limehouse Link all improved access to the area. The public investment of over £1 billion was more than matched by over £8 billion of private investment. The flagship development at Canary Wharf helped to establish more than 40 000 jobs, though many local people were unable to gain employment.

The social regeneration of the area mostly involved private ownership, though some 'affordable' housing was built further away from the centre. The old warehouses along the river near the City were converted into expensive apartments and this encourages restaurants, businesses and retailers into the area. In particular, the accessibility of the location for the City and Canary Wharf caused the area to become very fashionable. The apartments are frequently used as mid-week residences, with the owners returning to their homes in suburbanised villages at the weekend. The proportion of private housing increased from 5% to 44% and the resident population from 39 000 to 61 000.

Greenfield vs Brownfield residential development

Demand for housing in the UK is rising rapidly;

- The government project that by 2012 there will be an extra 3.4 million people living in the UK.
- Ageing population means greater demand for housing as adult population increases.
- More divorcees and single people creates higher demand for housing.

To meet this demand, both brownfield and greenfield sites will need to be used, but the values and attitudes of decision-makers are not necessarily those of the people who already live in those areas.

Brownfield sites	Greenfield sites
Derelict sites in urban areas	New sites, usually on agricultural land in greenbelts around urban areas
The land is available, but can be costly to reclaim if it has been polluted by industrial use; this information may not be readily available	Land is not available unless planning permission has been obtained; there will usually be a public enquiry and a delay of several years, adding costs
Housing is likely to be built at a high density to reflect the cost of the land; there is less demand for such housing as it is in less fashionable areas	Housing will be at a relatively low density compared with brownfield sites; there is great demand for such housing as it is in fashionable areas
Infrastructure is normally present, though existing facilities can become overloaded	Infrastructure costs are high as new sewerage, gas, water and electricity supplies have to be considered; similarly, new schools and medical facilities might be needed
Sites tend to be small patches of land	Sites tend to be large
The environment is improved	The environment is harmed (biodiversity loss, increased risk of flooding, deforestation etc)
Existing services, e.g. schools, doctors surgeries, are close by	New service provision is required

Values and attitudes

The UK government's preferred option is to develop brownfield sites and only to use greenfield sites where necessary. However, you need to consider whether people should be forced to live in brownfield sites if they do not wish to. In some cities, recently built local authority housing has been demolished as there is no demand for it.

In the other hand, should greenbelt land be used so that people can live where they want to? Is the damage to the environment necessary? Remember, not all housing can be built on brownfield sites if demand is to be met. You need to be able to appreciate the values and attitudes involved in this debate.

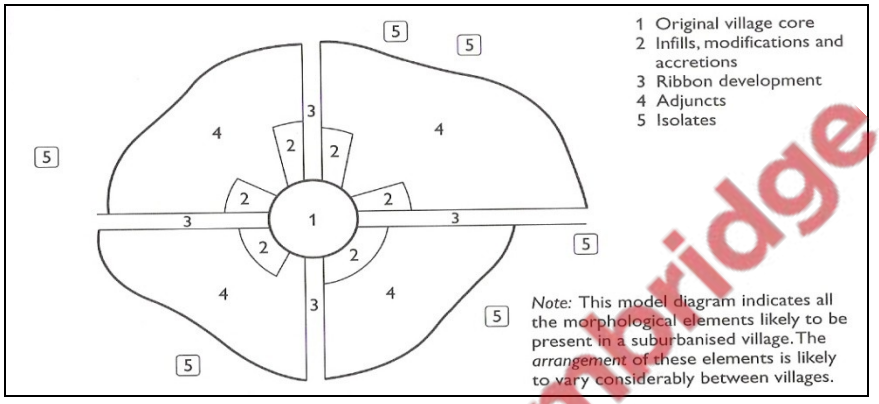
Settlement structure

Land use patterns in suburbanised villages

Suburbanised villages have experiences many changes in recent years. The influx of new population has been reflected in changes to the land-use structure of the village. These changes have taken a number of forms, including;

- New detached and semi-detached houses and bungalows
- Development of individual plots and estates of varying sizes
- The conversion / renovation of old farm buildings

This model summaries the types of change that have occurred in suburbanised villages:



Size and spacing of settlements

Threshold and range

The **threshold** is the minimum number of people required to support the provision of a good or service. The more specialised the service, the greater the threshold. For example, it has been estimated that a village shop requires a threshold population of 500-1000 people, whereas a department store requires over 100 000.

The **range** is the maximum distance that people are willing to travel for a good or service. The range will depend on the value of the good or service, the time taken for the journey and the frequency of the need. For example, people will not travel long distance for a newspaper but will for a piece of furniture.

Therefore, low-order services will have a small range and threshold and will be located close together, whereas high-order services will have a larger range and threshold and will need to be located further apart.

Sphere of influence

The **sphere of influence** of a settlement is the area served by the functions provided. In simple terms, it is a summary of all the ranges of the goods and services provided by that settlement. There sphere of influence tends to diminish with distance away from the settlement as fewer services are provided. The sphere of influence varies according to;

- the order of the service provided;
- the proximity of competing settlements;
- the density of the population;
- the physical nature of the terrain and;
- administrative boundaries.

Reilly's Law of Retail Gravitation

This model is used to predict the theoretical margin (breakpoint) of the sphere of influence of competing settlements. The calculations are performed using this formula:

$$D_{bk} = \frac{D_{ab}}{1+\sqrt{(P_a / P_b)}}$$

D_{bk} = distance breakpoint from smaller settlement

D_{ab} = distance from settlement a to settlement b

P_a = population of the larger town

P_b = population of the smaller town

Topic 3:

Economic activity

Industrial change: de-industrialisation and growth

Industrial change has occurred in many parts of the MEDW. Some of the greatest changes have occurred in old coalfield area such as south Wales, northeast England and the Ruhr in Germany. The heavy traditional industries that were established on these coalfields to use energy and raw materials, such as steel, shipbuilding and textiles have been in decline for many years.

New manufacturing industries, producing consumer goods and being more market-oriented were later established near to and in the main centres of population. These included the motor vehicle, electrical goods and food-processing industries. They were able to use road transport and electricity, so were no dependent on the coalfields.

Since 1960, **de-industrialisation** has been recognised in the MEDW. This is a rapid decline in the primary and/or secondary sectors of a country's or regions economy. There are several reasons for this decline:

- list from other book

Write your mnemonic here:

New industries have been established in the UK in recent years, including electronics and computer industries. These have tended to cluster in certain parts of the country, such as southeast England (particularly along the M4 corridor), Scotland (Silicon Glen) and South Wales. The attractions include:

- a well qualified labour force;
- proximity to universities for research and skilled labour;
- good national and international communications;
- a perceived pleasant environment;
- government incentives to assisted areas.

Industrial growth in the LEDW

Industrial growth has occurred in many countries in the LEDW. It is estimated that about 40% of the working population is in the formal sector, employed by the state or multinational corporations. The remainder is in the informal sector. Large-scale, capital intensive manufacturing industry is seen as important by governments, and incentives are provided to attract it.

The importance of multinational corporations (MNCs) to LEDCs and MEDCs

MNCs make two locational choices: which country and which area within that country. The former involves the assessment of the operating environment, which depends on political factors.

In MEDCs, the attraction might be the aid package, involving cash grants, subsidies and tax concessions.

In LEDCs, the attraction might be a lack of operating restrictions. The benefits to the government and the country form the exploitation of resources, the use of capital and technology and the creation of employment outweigh any disadvantages of this.

In an MEDC, competition between regions results in the best overall financial package attracting the investment, though other factors including the cost of land, communications and a skilled workforce are important. For example, south Wales has attracted MNCs such as Sony, Panasonic and Ford. In an LEDC, the location is likely to be the primate city, especially if it is the capital or a major port. The attraction of cheap labour, low-cost land and good communications are key factors in the decision.

The importance of MNCs to the economies of some LEDCs is demonstrated by newly industrialising countries (NICs) such as Hong Kong, Singapore, Taiwan and South Korea. MNCs investing in these countries include those from MEDCs – e.g. in Hong Kong there are over 900n American MNCs – and those from the NICs themselves with companies such as Daewoo, Proton and LG.

The impact of these changes

There have been important economic, social, political and environmental impacts resulting from industrial growth involving MNCs in MEDCs,

Impact	Consequences
Economic	Employment is created for local labour; education, training and skills are gained; income is received by workers and governments; investment occurs; new technology is introduced; the multiplier effect stimulates local industry and services. Only a small number of people are employed relative to the size of the possible labour force; industry is capital-intensive (mainly uses machines) so few jobs are created; wages are low; profits are exported; raw materials are exported instead of being processed locally; manufactured goods are exported rather than consumed locally; neo-colonialism (dependence on MEDCs)
Social	More employment opportunities; increased levels of education; better nutrition; healthier population; local provision of services improved, such as schools and healthcare Long hours are worked; skills are kept at a low level; unemployment develops as mechanisation increases; health and safety of workers given low priority; conflicts arise between Western and local values
Political	Governments develop policies to attract MNCs; acceptance of Western ideas; priority given to incomers at the expense of locals, causing resentment; governments gain prestige; lack of control over decision-making within the country; political and economic corruption can occur; benefits gained only by political elite; tendency towards dictatorship or strong government under limited democracy
Environmental	Exploitation of resources causes environmental damage to landscape; deforestation occurs; pollution to rivers as industrial effluent is released; disease and malformed babies become more common

Tertiary activities

Changing patterns of higher-order retailing in the UK

There has been increasing specialisation and concentration, both in the location of services and in terms of ownership. Three waves of decentralisation have been identified:

(i) Food - The growth of superstores and hypermarkets dates from the 1970s, shown by the expansion of major supermarket chains. They were constructed in existing shopping areas, both in towns and in suburban shopping areas. More recently, they have been built in out-of-town sites.

(ii) DIY and furniture – The second phase came in the 1980s, usually in the form of non-food retail parks which included large warehouses selling furniture, DIY goods, carpets, furnishings and gardening materials. These were usually purpose-built, with a number of similar-sized outlets on each development. More recently, the retailing of clothing and electrical and computing goods has increasingly been located on these sites. Car access is important; these sites are often on main roads, e.g. The Wyvern at Pride Park (Derby) – A52.

(iii) Retail shopping centres – The third wave came in the 1980s and 1990s. The establishment of very large, regional retail centres was frequently the result of urban regeneration projects. These centres were built on very large sites, usually derelict land, for which there was no other obvious use e.g. Lakeside (Essex) and Bluewater (Kent) shopping centres were both contrsucted on the sites of former chalk quarries. These centres rely on car access (Bluewater has 13 000 free car parking spaces as well as over 60 buses per hour and 130 trains per day).

Changing patterns of lower-order retailing in the UK

There has been a rapid decline in small neighbourhood stores. These conveniences shops, often family-run, have found it impossible to compete on price with the superstores. However, in recent years, there has been a revolution in convenience stores owned by supermarket chains e.g. Tesco metro. This type of store is now frequently found in lower-order shopping centres and increasingly in petrol stations and town centres.

Factors causing retail changes in the UK

1. **Mobility allowed by the private car -** Car parking is expensive and restricted in city centres; access in and out is often on congested roads. Out of town retailing allows

large, free car parks. Locations next to the motorway speed up access. At a local level, it is easier to pull off the road into a garage shop rather than stop at a suburban shopping centre on a busy main road.

2. **Shopping habits of people** – shopping for food or essential has become a weekly or fortnightly habit. A lot of food can be packed into a car boot and freezers allow food to be stored at home.

3. **Expectations from the shopping environment** – a more pleasant shopping experience is desired, which has encouraged the growth of covered and indoor shopping centres often including food outlets and cinemas.

4. **Organisation of retail industry** – only a few large supermarket companies remain and they are very competitive. Land is cheaper out of town and business rates are lower. Large units benefit from economies of scale.

5. **Attitude of planners and politicians** – government policy is now to focus new retail development in city centres. Most of the 8 major regional shopping centres want to expand, but have only been allowed small growth – it is now very difficult to get planning permission to build on greenfield sites.

The development of business and science parks

Business and science parks are purpose-built estates on the outskirts of cities or in regeneration areas with offices and factories for high-tech businesses. The most common are associated with IT, computing, biotechnology and electronics.

One of the best known is at **Cambridge**, where research links with the university are of great importance. The Cambridge site is on the outskirts of the city, close to main road access. The land is owned by Trinity college (part of the university) and planning permission was given (in 1970) as part of a policy to keep the city and the university at the forefront of technological advances.

Attractions of the site:

- communications – Stansted airport nearby; M11 (1hr 30) and rail (1hr) link with London
- house prices lower than in London
- university – research and skilled workforce (and prestige)
- perceived lifestyle opportunities
- multiplier effect – collaboration between companies

Out-of-town vs city centre

There are a number of issues that arise when out-of-town development (for retailing and business / science parks) are compared with those in the city centre. You will need to be aware of these as well as attitudes towards such issues.

City centre disadvantages	Out-of-town disadvantages
Congestion Cost of car parking Decline in some services from competition Land for redevelopment is more expensive Less space for development	Required use of cars for most people Excludes the poor and non-car owners Large amounts of land required Attracts custom away from the city centre

City centre advantages	Out-of-town advantages
Good public transport access New shopping malls constructed Newly refurbished areas Pedestrianised More varied outlets	One-stop shopping Free parking Cheap land available Serves the wealthy Good accessibility Economies of scale Planned shopping environments Purpose-built modern buildings