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Economics

STUDENT'S BOOK

Also for Cambridge O Level

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5 Economic development

Economic development encompasses not only economic growth but also other factors affecting the wellbeing of a population. These factors include the quality of education, healthcare, the environment and the level of income equality. In this chapter, you will begin by looking at the various ways of comparing living standards between countries, before examining the problem of poverty in developing and developed economies and how it can be alleviated. You will go on to compare populations between countries in terms of growth, size and age, and gender distribution. By the end of this chapter, you should have a clear understanding of the characteristics of developing and developed countries and the key differences between them.

Living standards

Learning objectives
By the end of this unit, you should be able to:
- identify indicators of living standards, including real GDP per head and the human development index (HDI)
- describe the components of real GDP per head and HDI
- explain the advantages and disadvantages of real GDP per head and HDI
- analyse the reasons for differences in living standards and income distribution within and between countries.

Starting point

Answer these questions in pairs:

1. What is real GDP?
2. What does real GDP per head measure?
3. What are the differences between the primary, secondary and tertiary sectors in an economy?

Exploring

Discuss these questions in pairs:

1. What makes you happy?
2. What factors influence an individual's wellbeing and quality of life?
3. Which of these factors could the government help to provide?

Developing

Indicators of living standards

Living standards refer to the general economic wealth, wellbeing and quality of life of a country's population. Two economic indicators that are commonly used to measure living standards within a country are real GDP per head and the **human development index (HDI)**.

Key term

Human development index (HDI) – a measure of human development and wellbeing that takes into account the three dimensions of living standards, health and education

Real GDP per head

As discussed in Unit 4.6, real GDP per head (real GDP per capita) is the real GDP of the country averaged across its population. It can be calculated using the following formula:

$$\text{real GDP per head} = \frac{\text{real GDP}}{\text{population}}$$

In general, the higher the GDP per head, the higher are the living standards within a country. According to the data in the table below, Luxembourg was the richest country in 2015, with a real GDP per head of $107 036, while Burundi was the poorest, with a real GDP per head of only $207.

Real GDP per head by country in 2015

Country	Real GDP per head (US$)	Country	Real GDP per head (US$)	Country	Real GDP per head (US$)
Luxembourg	107 036	Brunei Darussalam	32 226	Sri Lanka	3 638
Norway	89 591	Korea, Rep.	25 023	Nigeria	2 535
Qatar	74 687	Malaysia	10 878	India	1 752
Australia	54 688	Argentina	10 502	Lesotho	1 370
Singapore	51 855	Mexico	9 511	Pakistan	1 143
USA	51 638	Mauritius	9 469	Kenya	1 134
Japan	47 150	South Africa	7 586	Bangladesh	973
UK	41 183	Maldives	7 222	Afghanistan	620
UAE	39 313	China	6 498	Ethiopia	486
New Zealand	36 801	Thailand	5 776	Liberia	367
Hong Kong	36 173	Indonesia	3 834	Burundi	207

Source: World Bank national accounts data, and OECD National Accounts data files

Real GDP per head is useful because it provides an indication of the economic wealth and living standards of a population in a country. Furthermore, the information used to calculate real GDP per head is available for all countries. However, it has a number of drawbacks that limit its accuracy as an indicator of living standards.

Limitations of real GDP per head as a measure of living standards

1. Real GDP per head ignores factors other than income that may contribute to improved living standards, such as access to healthcare, education and clean water, levels of environmental pollution and political freedom.
2. As the value for real GDP is an average, it gives no indication as to how the income of a country is distributed (spread) across the population. A large gap between rich and poor may mean a

significant number of people receive incomes well below the average. In such cases, there would be a large proportion of the population with much lower living standards than the value for real GDP per head indicates.

3. The living standards of a country will depend on the types of goods and services a country is producing. If a country is producing consumer goods such as cars and smartphones, healthcare or education, the living standards of the population are likely to be rising. The production of nuclear weapons and cigarettes, on the other hand, may not contribute to living standards in the same way despite a high figure for real GDP per head.
4. Some countries have large informal economies in which transactions are not officially recorded (see Unit 4.7). As goods and services produced in the informal economy will not be included in GDP, the calculation for real GDP per head in a country with a large informal economy may underestimate the average income of a population.

Key term

Gross national income (GNI) – total income earned by the residents of a country (individuals and businesses) at home and abroad

Gross national income per head – gross national income averaged across the population of a country (GNI per head = GNI/population)

Summary of the advantages and disadvantages of using real GDP per head as an indicator of living standards

Advantages	Disadvantages
It provides a useful indication of the living standards of people within a country.	It only measures average income and ignores other factors that may affect living standards.
It is calculated using income, which is a good indicator of living standards.	It gives no indication as to how income is distributed within a country.
It is calculated using data that is available and relatively easy to access.	It does not take into account the types of goods and services that are produced.
It can be used to compare living standards between countries as all countries record real GDP and population.	A large informal economy may affect the accuracy of the figure for a country's GDP.

Human development index (HDI)

An alternative measure of the living standards of the population of a country is provided by the human development index (HDI). Developed by the United Nations (UN), the HDI is a broader measure of human development than real GDP per head. It measures a country's performance in three key dimensions. These are shown in the following table.

HDI dimensions

Dimension	Economic indicator	Explanation	Example
Living standards	**Gross national income per head**	Measured by the average income per person	China's gross national income per head was estimated to be \$13 345 in 2017 by the UNDP (based on 2011 data).
Health	Life expectancy	Measured by **life expectancy** at birth	According to UNDP data, China's life expectancy at birth was 76 years in 2017.

Dimension	Economic indicator	Explanation	Example
Education	Years in schooling	Measured by the average number of years an adult (aged 25 or over) has spent in schools and the number of years a child is expected to spend in schools from the age of 5 years	In China, the average number of years in schooling for individuals aged 25 years and over in 2015 was 7.6. According to UNDP data, the number of years of schooling a child could expect to receive at the age of 5 in 2017 was 13.5.

(Source: United Nations Development Programme (UNDP) Human Development Reports)

Each of the three dimensions are weighted according to their overall contribution to human development and combined into a single HDI value of between 0 and 1, with 0 being the lowest level of human development and 1 being the highest. According to the data provided in the table below, China had a HDI value of 0.738, giving it an overall ranking of 90th in the world in 2015. Norway topped the HDI rankings in 2015 with a value of 0.949, while the Central African Republic had the lowest HDI with a value of 0.352, placing it 188th in the world.

Key term

Life expectancy – the number of years a person in a country is expected to live

HDI rankings and values for selected countries in 2015

HDI rank	Country	HDI value
Very high human development		
1	Norway	0.949
5	Singapore	0.925
13	New Zealand	0.915
18	Korea (Republic of)	0.901
30	Brunei Darussalam	0.865
High human development		
59	Malaysia	0.789
73	Sri Lanka	0.766
79	Brazil	0.754
87	Thailand	0.740
90	China	0.738

HDI rank	Country	HDI value
Medium human development		
115	Vietnam	0.683
119	South Africa	0.666
131	India	0.624
139	Bangladesh	0.579
146	Kenya	0.555
Low human development		
152	Nigeria	0.527
160	Lesotho	0.497
176	Congo (Democratic Republic of the)	0.435
184	Burundi	0.404
188	Central African Republic	0.352

Source: UNDP

1 Research current HDI rankings on the internet. Which countries in the above table have improved their ranking?

It is important to remember that the HDI only measures a small part of what makes up human development and wellbeing. There are other important factors that contribute to people's overall living standards and quality of life, including the level of inequality, poverty, safety and political freedom within a country.

Summary of the advantages and disadvantages of using the HDI as an indicator of living standards

Advantages	Disadvantages
The HDI provides a wider measure of human development than real GDP per head, covering three dimensions: living standards, health and education.	The HDI does not take into account all factors affecting living standards. Factors such as the distribution of income, levels of pollution, water quality, security and internet access are ignored by the HDI.
As the HDI is produced by the UN, data is collected objectively and can be trusted to be accurate.	The weightings (importance) placed on each of the three dimensions may not accurately reflect their actual contribution to overall living standards in a country.

Extension topic

An alternative measure of living standards – the multidimensional poverty index (MPI)

The MPI measures the wellbeing of an individual across the three dimensions of health, education and living standards.

Dimension	Indicator
Health	Measured by adequate *nutrition* and *child mortality* (the death of a sibling under the age of 5 years)
Education	Measured by *years in school* and *attendance at school*
Living standards	Measured by access to *cooking fuel*, *sanitation*, *clean water*, *electricity*, adequate *housing* and *possessions*, such as a radio, TV, bicycle or motorcycle

An individual is considered to be multidimensionally poor if they are deprived (lacking) in more than one of the above indicators.

Why do living standards and income distribution differ *within* countries?

Economic growth unevenly spread

It is unlikely that the higher incomes and wealth that come with economic growth will reach all members of a country's population equally. Individuals with skills and the owners of the factors of production, such as land and capital, tend to gain a larger share of increased income and wealth than those who have limited skills and only their labour with which to generate income. In India, for example, the richest 1% of the country's population owned 53% of the country's wealth in 2016, up from 36.8% in 2000, despite significant economic growth over this period. In contrast, in 2016, the poorest half of India's population owned just 4.1% of national wealth.

Employment by sector

Individuals employed in agriculture (primary sector) tend to receive lower wages than those employed in manufacturing (secondary sector) and services (tertiary sector). This is because jobs in agriculture, particularly in developing countries, are generally lower skilled than those in manufacturing and services. Thus, there is a greater supply of people able to fill job vacancies, leading to lower wages and lower living standards. Rural communities that are dependent on the agricultural sector for employment and food are also vulnerable to drought, crop failure and exploitation, all of which may result in economic hardship and lower living standards.

Education and training

Photo A

Limited access to quality education can also lead to differences in living standards and income distribution. Education for children, particularly in rural areas, may not be affordable or easily accessible in some countries. Those unable to afford or access quality education will have fewer opportunities to earn higher incomes and improve their living standards relative to others in society.

2 Compare photos A and B. What might explain the differences in living standards between these two groups of children now and in the future?

Government policy

Photo B

The extent of the difference in the distribution of wealth and living standards will depend on the tax and welfare system in place within a country. A progressive tax system (see Unit 4.3) will help to redistribute income more equally by taking money from the rich in the form of taxes and giving it to the poor in the form of welfare payments, such as pensions and unemployment benefits. Governments may also provide quality education and healthcare for all members for the population. A higher standard of education and healthcare should help the poor to access better quality jobs in the future, leading to higher incomes and improved living standards.

3 Which of these reasons explains why living standards differ within your country?

Why do living standards and income distribution differ *between* countries?

Level of economic development

Developed countries tend to have higher income, wealth and living standards than developing countries. Efficient progressive tax systems enable them to provide financial support to the poor in the form of welfare payments. Tax revenue is also allocated to the provision of quality education and healthcare for all members of the population and the development of infrastructure. A more skilled and healthier population is able to gain higher-paying jobs in services (the tertiary sector). In developing countries, on the other hand, a large proportion of the population is often employed in agriculture (the primary sector) where wages are lower.

Factor endowments

Some countries are able to generate income and wealth due to the factors of production they are endowed with (have available). For example, countries like Saudi Arabia and Brunei Darussalam are endowed with reserves of oil, much of which is exported, thus earning income for those countries. This can then be invested in improving infrastructure and essential public services.

The state of the economy

Countries suffering from unfavourable economic conditions, such as rapidly rising inflation and high unemployment, are likely to experience a fall in living standards relative to other countries. For example, in 2017, Venezuela, facing an annual inflation rate of over 400% and widespread unemployment, experienced a significant fall in real GDP and the living standards of the population. Many households were unable to access even basic necessities, including food and medicine.

The effectiveness of government

Government policies and decisions can greatly impact the economic wealth and living standards of a population. Responsible government policies that encourage trade, innovation and investment in education, healthcare and infrastructure are likely to result in higher economic growth and employment. Economic mismanagement and widespread corruption, on the other hand, are likely to lead to greater inequality and lower living standards within a population.

War and conflict

Countries engaged in war and violent conflict are unlikely to have the resources available to invest in improving the welfare of their citizens. For example, Burundi, the country with the world's lowest GDP per head ($207) and an HDI of only 0.404 in 2015, has a history of civil war, with devastating effects on the wellbeing of the country's population.

4 What economic policies could a government use to improve living standards?

CASE STUDY

Sri Lanka's human development

In 2015, Sri Lanka's HDI value was 0.766, giving it a ranking of 73 out of 188 countries and placing it in the high human development category. The Maldives, with an HDI value of 0.701 and a ranking of 105, was the only other South Asian Association for Regional Development (SAARD) country to make it into this category. Sri Lanka's HDI value has increased an impressive 22.4% from 0.626 in 1990. Over this period, life expectancy at birth increased by 5.5 years and expected years in schooling increased by 2.7 years.

	2015	1990
HDI value	0.766	0.626
HDI rank	73	–
Life expectancy at birth	75	69.5
Expected years in schooling	14.0	11.3
Average years of schooling	10.9	8.4
Gross national income (GNI) per head	$10 789	$3 639

Several factors have contributed to Sri Lanka's position in the high human development category, despite it being a developing country. These include the end of civil war in 2009, the provision of free education and healthcare for all citizens, a welfare system, and development programmes that provide housing, electricity, clean water and sanitation to the poor.

1. What government policies have helped Sri Lanka to be placed in the high human development category?
2. Why might Sri Lanka's HDI value not be an accurate indicator of overall living standards in the country?

Applying

Project work

Using the internet, research the living standards of two countries of your choice. Compare the two countries in terms of:

a. real GDP per head

b. HDI values

c. other factors affecting living standards, such as access to education, healthcare, clean water, environment and sanitation.

Which country has the higher standard of living? Write a paragraph explaining the reasons for your opinion.

E Create your own indicator of living standards that is designed to overcome some of the limitations of the HDI.

Knowledge check questions

1 Define GDP per capita. [2]

2 Explain **two** advantages of using the human development index (HDI) as a measure of living standards in a country. [4]

3 Explain **two** reasons why living standards might differ within a country. [4]

4 Explain **two** reasons why living standards might differ between countries. [4]

5 Analyse how investment in education could improve living standards within a country. [6]

6 E Discuss whether real GDP per head is the best measure of living standards. [8]

Check your progress

Read the unit objectives below and reflect on your progress in each.

- Identify indicators of living standards, including real GDP per head and the human development index (HDI).
- Describe the components of real GDP per head and HDI.
- Explain the advantages and disadvantages of real GDP per head and HDI.
- Analyse the reasons for differences in living standards and income distribution within and between countries.

I struggle with this and need more practice.

I can do this reasonably well.

I can do this with confidence.

Poverty

Learning objectives

By the end of this unit, you should be able to:

- define absolute poverty and relative poverty
- explain the difference between absolute poverty and relative poverty
- describe the main causes of poverty, including unemployment, low wages, illness and age
- analyse the policies to alleviate poverty and redistribute income, including those promoting economic growth, improved education, more generous state benefits, progressive taxation, and national minimum wage.

Starting point

Answer these questions in pairs:

1. What are the disadvantages of a market economy?
2. What are the differences between progressive, regressive and proportional taxation?
3. What policies could a government use to lower unemployment?

Exploring

Discuss these questions in pairs:

1. Why might people find themselves without enough money for food or housing?
2. What can governments do to prevent hunger and inadequate housing?
3. To what extent is a large income and wealth gap between the rich and poor undesirable for an economy?

Developing

What is poverty?

What would you do if you did not have enough money for food or a place to sleep? You would probably ask your parents. Throughout your life, your parents, or perhaps your government, might provide you with a 'safety net' if you ever find yourself in this situation. However, not everyone in the world who is hungry and homeless is lucky enough to have a safety net.

Poverty is an obstacle which prevents individuals from enjoying opportunities – and thus a decent quality of life – that should be available to everyone. These opportunities include food, clothing, shelter, a quality education, healthcare, clean drinking water, sanitation and other basic services.

There are two broad types of poverty:

- **Absolute poverty** is a situation in which an individual does not have enough income to satisfy even their most basic needs, such as food, clothing, shelter, safe drinking water, sanitation, healthcare and education. For example, an individual who is hungry and malnourished because they cannot afford to buy food, or who is homeless, is said to be living in absolute poverty. The World Bank has set the global line for extreme (absolute) poverty at US$1.90 per day (revised up from US$1.25 in October 2015). In 2013, 10.7% of the world's population (approximately 767 million people) lived below the poverty line on less than US$1.90 per day.
- **Relative poverty** is a situation in which an individual does not have enough income to purchase the goods and services normally consumed by other members of the society in which they live. For example, an individual who cannot afford a mobile phone or internet access when other people in their country normally possess these products, would be considered to be living in relative poverty.

Key terms

Absolute poverty – a situation in which an individual does not have enough income to satisfy their most basic needs of food, clean water, clothing, shelter, education and healthcare

Relative poverty – a situation in which an individual does not have enough income to buy the goods and services normally consumed by members of the society in which they live

The causes of poverty

Unemployment

One of the main causes of both absolute and relative poverty is unemployment. Individuals who are unemployed receive no income from work. As a result, they may not have enough money for even their most basic needs, such as food and shelter. In some countries, governments pay welfare benefits to the unemployed, which may be enough to keep them out of absolute poverty. In other countries, unemployed people may rely on relatives or charities for the money they need to meet their basic needs.

Low wages

Unskilled workers may be forced to accept low wages, making it difficult for them to escape relative poverty. Opportunities for quality education and training are limited in many countries, so the poorer members of the population may be unable to develop the knowledge and skills they need to gain higher-paying jobs and raise themselves out of poverty.

Old age

The elderly are particularly vulnerable to poverty as they are often unable to work due to old age, disability, sickness or discrimination. In some countries, elderly people have traditionally relied on their children to look after and provide for them in their old age rather than saving for their retirements. However, as increasing numbers of young people travel to cities in search of work, their elderly parents are often left to look after themselves with little or no financial assistance from their children, who may also struggle economically. Ageing populations in many countries are contributing to the rise of poverty among the older members of the population.

Sickness and disability

Some people are unable to work due to long-term illness or disability. Without financial support from the government, relatives or charities, sick and disabled people may be unable to earn any income and may fall into poverty.

Increasing household debt

Increasing household debt due to excessive spending on consumer goods has led to an increase in relative poverty in many countries. Bombarded with advertisements for new cars, televisions and smartphones, many people are borrowing money to purchase goods they cannot afford. Burdened with debt and struggling to repay the money they owe, individuals have less to spend, leading to an increase in relative poverty.

Lack of opportunities in rural regions

The majority of people suffering from absolute poverty in the world live in rural areas and are employed in the agricultural sector. Farmers in developing countries, often burdened with large amounts of debt, are particularly vulnerable to drought, crop failure and natural disasters. In each of these situations, the income that farmers receive from their crops would be significantly reduced. As a result, farmers would face economic hardship, which may result in them (and those working for them) falling into poverty.

War and conflict

Individuals may be displaced (forced from their homes) due to war and violence. Fearing for their safety, some may flee to other countries as refugees in the hope of a better life. These people are often forced to leave all of their possessions behind and are reliant on governments, charities and organisations like the UN to provide them with basic necessities such as food, clothing and shelter. In 2017, after six years of conflict, an estimated

4.8 million Syrian refugees had fled civil war and violence in their home country, with over 3 million ending up in neighbouring Turkey. While Turkey provided Syrian refugees with free access to healthcare and education, many were poorly educated and vulnerable to exploitation.

1 Which type of poverty is most applicable to your country? Why?

Policies to alleviate poverty and redistribute income

From an economic perspective, individuals in absolute poverty lack the opportunities they need to realise their full potential as productive members of society. Poverty therefore reduces the productive capacity of an economy. In extreme cases, people, including children, suffer from hunger, malnutrition and homelessness and have limited access to education, healthcare, sanitation and clean water because of their economic circumstances.

The reality is that the absolute poverty endured by over 700 million people worldwide is preventable. Through the use of appropriate policy measures, many governments have been successful in eliminating absolute poverty in their countries. Other governments, including those in sub-Saharan Africa, which has the highest rate of poverty in the world, are committed to eradicating absolute poverty in their countries by 2030 – a sustainable development goal set by the UN. Some of the policies governments use to alleviate both absolute and relative poverty are described below.

Progressive taxation

Progressive taxation is when the rich pay a higher proportion of their income in taxes than the poor (see Unit 4.3). By structuring tax systems so that they are more progressive, governments are able to redistribute income within an economy. Revenue generated from taxes imposed on the rich can also be given to the poor through the provision of welfare benefits and public services to raise their living standards and alleviate poverty.

Welfare benefits

Governments can use tax revenue to provide financial support through the payment of welfare benefits to those most at risk of falling into poverty, including the sick, disabled, elderly and the unemployed. Most developed countries including the UK have been able to eliminate absolute poverty through the provision of a welfare system. Relative poverty, however, is an ongoing problem and still very much a concern for the governments of these countries.

Education and training

Another way in which governments can combat poverty is by providing equal access to quality education, skills, training and opportunities to all members of society. With access to education and training, the poor are able to develop the knowledge and skills they need to gain higher-paying jobs, breaking the cycle of intergenerational poverty. As well as investing public funds in improving school education, governments may provide subsidies or scholarships to students from poor backgrounds to further their education.

Minimum wage legislation

Governments may impose minimum wage legislation on employers (see Unit 3.3). The legal minimum wage set by the regional government of Shanghai, China, was 19 yuan (US$2.80) per hour in 2016, while in Australia it was A$17.29 (US$13.30) per hour, the highest in the world. A legal minimum wage ensures that low-skilled workers are paid a fair wage that is enough to keep them out of absolute, but not necessarily relative, poverty.

2 Why might a worker earning the legal minimum wage still suffer from relative poverty?

Job creation

Governments may seek to create jobs using demand-side policies aimed at increasing economic growth and lowering unemployment. For example, government spending on infrastructure (expansionary fiscal policy), such as the construction of new roads, may create jobs and provide incomes for workers who may otherwise be unemployed and at risk of falling into absolute or relative poverty (see Unit 4.3).

Alternatively, the government could lower interest rates (expansionary monetary policy) to alleviate poverty (see Unit 4.4). Lower interest rates reduce the cost of borrowing, encouraging increased consumption and business investment. The resulting higher economic growth and lower unemployment are likely to raise the incomes of workers in the economy, thus helping to alleviate both absolute and relative poverty.

However, the benefits of economic growth are not necessarily spread evenly throughout the economy. Some individuals may benefit from a substantial increase in their income and wealth, while the benefits to others, usually the poor, may be negligible.

Subsidies

Governments may choose to use tax revenue to subsidise basic necessities such as food and housing for the poor. As a result, these essential items are made cheaper and more affordable for the poor, preventing them from falling into absolute poverty.

In Thailand, the government subsidises school lunches at a rate of 20 baht (approximately US$0.60) per child, ensuring that all children receive at least one nutritious meal a day at school. Governments may also choose to subsidise producers, such as farmers. A subsidy to rice farmers, for example, would reduce their production costs and enable them to sell their harvested rice crops at more competitive prices. This would increase the income received by farmers, thereby helping to lift them out of poverty. It would also help farmers to continue operating, thus safeguarding jobs and the incomes of workers in the agricultural industry.

3 What would be a potential drawback of paying a subsidy to farmers?

Direct provision of essential goods and services

Many governments provide essential goods and services such as education, healthcare, sanitation, clean water and housing directly to the poor. The direct provision of education ensures that children from poor families have the opportunity to develop important skills, such as reading and writing. With improved knowledge and skills, children will have a better chance of finding well-paid employment when they become adults, raising them out of poverty. The provision of free healthcare and sanitation by the government is likely to reduce the incidence of illness and disease among the poor and increase life expectancy. With adequate healthcare, poor people are in a better position to work and earn an income, preventing them from falling into absolute poverty.

Encourage multinational companies (MNCs) to set up in a country

Governments may seek to attract MNCs into their country, for instance by offering them generous tax benefits (see Unit 6.2). This is likely to create jobs, thus lowering unemployment in the host country. As a result, incomes and living standards are likely to rise, which may lead to a reduction in absolute and relative poverty. Tax revenue generated from the operation of MNCs in the host country could also be used to fund programmes aimed at alleviating poverty, such as training and education for the poor and job creation schemes.

Educate people about how to manage their finances

Some governments introduce programmes that encourage people to live within their means (purchase only what they can afford) and save for their futures. Compulsory savings schemes may also be introduced in which a portion of an individual's income is set aside for their retirement. These initiatives may help some individuals to save, thus reducing the chance of them suffering from absolute poverty in their old age when they can no longer work.

Create new income-generating opportunities for the elderly

Unable to rely on their children or government for financial support in their old age, some elderly people in developing countries are coming up with new ways of generating income. In Thailand, for example, with encouragement from the government, enterprising elderly villagers in rural areas are earning additional income from growing mushrooms and orchids for sale in local markets.

4 Which two policies would be most effective in reducing poverty in your country? Why?

CASE STUDY

Child poverty

A Unicef–World Bank report released in 2016 estimated that 385 million children lived in absolute poverty, surviving on less than US$1.90 per day. The majority of extremely poor children (49%) were living in sub-Saharan Africa, followed by South Asia (36%), despite strong economic growth in these regions over the previous decade.

Children living in absolute poverty suffer from hunger and malnutrition and have limited access to education and other basic services. The report found that extreme poverty restricted children's educational development and reduced their potential to work productively as adults.

The report urged governments to invest in childhood development programmes for the poor, quality schooling, clean water, good sanitation and universal healthcare. It was hoped that these policies would increase the likelihood of children accessing quality jobs as adults, breaking the widespread cycle of intergenerational poverty.

Investment in the agricultural industry was also needed in order to increase productivity and crop yields. Increased availability of food would enhance governments' ability to fight the problems of hunger and malnutrition in children.

1 What are three consequences of child poverty mentioned in the extract?

2 Describe two policies to alleviate child poverty suggested in the report. Which do you think would be most effective and why?

Applying

Project work

Imagine you are working for your country's government. Write a brief report outlining three policies the government could introduce to alleviate poverty in your country. In your report:

- identify the type(s) of poverty that exist in your country
- outline three policy actions the government could take to alleviate poverty
- say which policy you think would be best and why.

Knowledge check questions

1 Define absolute poverty. [2]

2 Define relative poverty. [2]

3 Explain **two** causes of poverty. [4]

4 Analyse how lower interest rates could help to alleviate poverty. [6]

5 E Discuss whether improving education is the best way to alleviate poverty. [8]

Check your progress

Read the unit objectives below and reflect on your progress in each.

▲	I struggle with this and need more practice.
▲▲	I can do this reasonably well.
▲▲▲	I can do this with confidence.

- Define absolute poverty and relative poverty.
- Explain the difference between absolute poverty and relative poverty.
- Describe the main causes of poverty, including unemployment, low wages, illness and age.
- Analyse the policies to alleviate poverty and redistribute income, including those promoting economic growth, improved education, more generous state benefits, progressive taxation, and national minimum wage.

Population

Learning objectives

By the end of this unit, you should be able to:

- describe the factors that affect population growth, including birth rate, death rate, net migration, immigration and emigration
- analyse the reasons for different rates of population growth in different countries
- analyse how and why birth rates, death rates and net migration vary between countries
- explain the concept of an optimum population
- analyse the effects of increases and decreases in population size and changes in the age and gender distribution of a population
- describe a country's age and gender distribution from its population pyramid
- identify whether a country is developed or developing from its population pyramid.

Starting point

Answer these questions in pairs:

1. Do you know anyone who has migrated to live in another country – a friend, a relative, your teacher?
2. Why did they choose to live abroad?
3. What skills and abilities did they take with them to their new home?
4. What were the benefits and drawbacks of living abroad?

Exploring

Discuss these questions in pairs:

1. Using the pictures to help you, describe some of the reasons why people go to live in other countries.
2. What effects might this have on the economies of their home countries?
3. What effects might it have on the economies of the countries they are travelling to?

Developing

According to *World Population Prospects: The 2017 Revision* published by the United Nations (UN), the world population reached 7.6 billion in 2017 and is expected to reach 8.6 billion by 2030 and 9.8 billion by 2050. The world's population is growing by approximately 83 million people a year – over 227 000 people a day!

Factors affecting population growth

The factors that affect **population growth** are described in the following table.

Factors affecting population growth

Factor	Description
Birth rate	The **birth rate** is the number of live births for every 1000 people in a country in a year. An increase in the birth rate of a country will increase the rate of population growth, while a decrease in the birth rate will slow the rate of population growth.
Fertility rate	The **fertility rate** is the average number of live births per woman of childbearing age (between 15 and 44 years) in a country. As men cannot give birth, each woman in a country would need to have at least two children on average during their childbearing years in order to keep the population size constant. A fertility rate higher than two children per woman is likely to increase a country's population growth, while a fertility rate below two is likely to decrease it over time. According to UN data, the 47 poorest countries in the world had a fertility rate of 4.3 births per woman between 2010 and 2015, which corresponded to a 2.4% increase in population size each year. In contrast, the fertility rate in Europe was 1.6 births per woman during the same period.
Death rate	The **death rate** is the number of deaths for every 1000 people in a country in a year. An increase in the death rate will lead to a fall in the rate of population growth of a country, while a decrease in the death rate will raise it.

Key terms

Population growth – the change (increase or decrease) in the number of people living in a particular geographical area

Birth rate – the number of live births for every 1000 people in a country in a year

Fertility rate – the average number of children per woman of childbearing age in a country

Death rate – the number of deaths for every 1000 people in a country in a year

Factor	Description
Infant mortality rate	The **infant mortality rate** is the number of babies who die before their first birthday for every 1000 live births in a year.
Net migration	**Net migration** measures the difference between immigration and emigration. **Immigration** is the movement of people *into* a country to live permanently. **Emigration** is the movement of people *out of* a country to live permanently abroad. If the number of people emigrating from a country is greater than the number of people immigrating to a country, there is **net outward migration**, causing the country's population growth rate to decrease. **Net inward migration**, on the other hand, will cause the population growth rate of the country to increase.

Why do population growth rates differ between countries?

Population growth rates tend to increase more rapidly in developing countries (see Unit 5.4) and more slowly in developed countries. In some developed countries, the population growth rate may even be negative, meaning that its population is declining. There are a number of reasons for differences in population growth rates between countries.

Variations in birth rates

The cost of raising children

The high financial cost involved in raising and providing for children in developed countries discourages some couples from having large families. The relatively lower cost of raising children in developing countries, on the other hand, may mean that it is not a significant factor in people's decision to have children.

Subsistence farming

A **subsistence economy** is one in which people are self-sufficient, producing only enough to satisfy their own basic needs, including food, clothing and shelter, and those of their families. People in some of the poorest economies who still rely on subsistence farming may choose to have large numbers of children as they provide a valuable source of labour that can be used to provide food for the family. As countries develop and move away from subsistence farming, people may choose to have fewer children. Also, compulsory education for children, which is introduced as a country develops, may also contribute to smaller family sizes as it prevents people from using children for labour.

Key terms

Infant mortality rate – the number of babies who die before their first birthday for every 1000 live births in a year

Net migration – the difference between immigration into a country and emigration out of a country

Immigration – the movement of people into a country to reside there permanently

Emigration – the movement of people out of a country to reside permanently elsewhere

Population growth rate – the rate of change (expressed as a percentage) in the number of people residing in a country or a particular geographical area

Key knowledge

net inward migration = total immigration > total emigration

net outward migration = total immigration < total emigration

Key terms

Subsistence economy – an economy in which people are self-sufficient, producing only enough to satisfy their own basic needs, including food, clothing and shelter, and the basic needs of their families

Support for the old

In most developed countries governments provide pensions to elderly people when they reach retirement age. The pensions are usually enough to meet their basic living expenses, such as food, accommodation and electricity. However, many governments in developing countries provide little or no financial assistance to citizens who are too old to work. There is therefore no 'safety net' for people living in these countries in their old age. As a result, many choose to have large numbers of children to ensure there is someone to look after them and support them financially when they are old, thus avoiding absolute poverty.

Infant mortality rate

Due to inadequate healthcare, many of the poorest countries in the world have high infant mortality rates. According to the World Health Organization (WHO), children in developing countries are ten times more likely to die before the age of 5 years than children in developed countries. A significant number of these deaths could be prevented through the provision of safe drinking water, adequate sanitation and improved hygiene. Due to the high chance of one or more of their children dying before the age of 5 years, people in the poorest countries tend to have large families in the hope that some will live into adolescence and adulthood. At these ages, they will be old enough to work and earn an income to help provide for their families.

Social attitudes toward women in work

The proportion of women working varies depending on the culture and traditions of a country. In 2016, the United Arab Emirates had the lowest proportion of women in work, with females making up only 12.4% of the labour force. In Rwanda, on the other hand, women made up 54.4% of the country's labour force. The proportion of female workers in the labour force was 46.4% in the UK, 42.9% in Japan and 24.3% in India. An increasing number of women in a labour force may result in a lower birth rate as it may restrict their ability to take time off to have children. Some women may also choose not to have children, instead focusing on their careers.

Age of marriage

In developing countries, women and men tend to get married at a younger age, giving them more time to have children. In developed countries, on the other hand, men and women tend to be older when they marry, resulting in a lower birth rate. According to the WHO, more than 30% of girls in developing countries marry before the age of 18 and 14% before the age of 15. Once married, there is often social pressure on them to start having children.

A young population

The populations of developing countries tend to be made up of a high proportion of young people, resulting in more women of childbearing age. As a result, birth rates in developing countries tend to be higher than those of developed countries, which have an older median age. For example, many African countries including Burundi, the Central African Republic, Ethiopia, Kenya, Uganda and Zambia had median ages of under 20 years in 2016, with Niger's median age a mere 15.3 years. This contrasts with median ages of 40.5 in the UK, 37.9 in the USA, 46.9 years in Japan and 37.8 in New Zealand.

Awareness and availability of contraception

Sex education and greater awareness of contraception has led to declining birth rates in developed countries and some developing countries. However, in many poor countries, sex education and the practice of birth control is still very limited. Even where people do have knowledge of birth control, contraceptives may not be easily available or affordable or, due to social pressures, women may be too embarrassed or ashamed to access them. One of the consequences of this is a high number of teen pregnancies in these countries.

1 What is the birth rate in your country? What does it indicate about the population of your country?

Variations in death rates

Age structure of the population

Developed countries are likely to have an **ageing population** with a higher proportion of people over the age of 65 years. As a result, more people are likely to die from illnesses related to old age. In developing countries with younger populations, on the other hand, death rates from old age are likely to be lower.

> Key term
>
> **Ageing population** – the increase in the median age of the population of a country over time

Access to healthcare

Advances in medical care are helping to reduce death rates and prolong people's lives, particularly in developed countries where a high standard of healthcare is available to most people. In many developing countries, however, there are still a significant number of people dying from treatable and preventable diseases due to inadequate healthcare. The leading cause of death in low-income countries in 2015 was lower respiratory infections, including bronchitis and pneumonia, which caused 84.9 deaths per 100 000 people. This contrasts with 38.2 deaths per 100 000 people in developed countries. In addition to this, HIV/AIDS, tuberculosis, malaria and birth complications were also leading causes of death in the poorest countries, despite many being treatable with modern medicine.

Safe drinking water and sanitation

Limited access to safe drinking water and inadequate sanitation can also lead to life-threatening waterborne illnesses and disease in the poorest developing countries. In 2015, diarrhoeal infection, partly due to the consumption of contaminated water, was the second most common cause of death in low-income countries.

Lack of education and awareness

Lack of education and ignorance about nutrition, hygiene and harmful habits such as smoking contributes to poor health and higher death rates in some developing countries. A more highly educated population is more likely to lead to healthier lifestyle choices. For example, in Indonesia, 67.4% of males aged over 15 years were smokers in 2017, the highest rate in the world. This was partly due to lack of education and awareness about the harmful effects of smoking. About 200 000 people die in Indonesia each year from smoking-related illnesses.

Higher incomes

People in rich countries can afford to live healthier lifestyles than those in poor countries. The ability to purchase quality food, receive regular health check-ups and engage in fitness activities can prolong the lives of people in these countries. However, an abundance of cheap fatty foods and sugary drinks in developed countries has also led to a growing problem of obesity, which is linked to health problems including heart disease and diabetes. In 2015, heart disease was the leading cause of death in richer countries, killing 144.6 people per 100 000 population, compared to 48.6 per 100 000 in the poorest developing countries. Furthermore, office workers in some developed countries spend long hours at work, leaving little time for exercise and relaxation. In Japan, death by overwork or ‘karoshi’ was recorded as the official cause of death of over 2000 people in 2015.

Laws protecting people’s safety

Many laws protecting the safety of consumers, workers and the public are not strictly enforced in many developing countries. Low food quality and hygiene standards may have a serious impact on the health of consumers, while lenient labour laws regarding safety in the workplace increase the chances of work-related deaths, particularly in the primary and secondary sectors, which employ a high proportion of workers in developing countries. Road accidents are also a leading cause of death in many developing countries, with laws on driving while drunk not strictly enforced by authorities. Thailand has some of the deadliest roads in the world, second only to war-torn Libya. The WHO estimates that 24 000 people die on Thailand’s roads every year, with one in four deaths involving alcohol.

War and conflict

In 2014, approximately 180 000 people died in 42 armed conflicts in developing countries. This included violent fighting in Syria and Iraq, the Israeli–Palestinian conflict, and fighting in Libya, Yemen and the Central African Republic.

2 What is the death rate of your country? What does it indicate about the population of your country?

Variations in net migration between countries

Movement of migrants

Emigration from developing countries to developed countries slows the population growth of developing countries and increases the population growth of developed countries. About 3.2 million people migrated from developing to developed countries each year between 2010 and 2015 for reasons that included employment, education, being with family or to escape violence.

Movement of refugees

The movement of refugees fleeing persecution and violent conflict also has a significant impact on the population growth of some countries. For example, the Syrian refugee crisis involved net outward migration of approximately 4.2 million people from the Syrian Arab Republic between 2010 and 2015. Most of these refugees went to Syria's neighbouring countries, including Turkey, Lebanon and Jordan.

3 Show the effect of emigration of skilled workers from a developing country using a production possibility curve (PPC).

Advantages and disadvantages for developing countries as a result of net outward migration

Advantages	Disadvantages
• Emigrants may send money back to relatives in their home countries, increasing living standards. In 2016, over US$420 billion in **remittances** was sent from developed to developing countries, making them an important source of income for these countries. • Emigrants may return to their home country in the future, bringing new knowledge and skills that may help to increase the productivity of the labour force. • Emigration will slow population growth and may help to ease pressure on the country's resources if it is suffering from **overpopulation**.	• Highly skilled workers emigrating to developed countries reduces the productive capacity of a developing economy, making it difficult for the country to achieve long-term economic growth and development. • Emigration may decrease the working population, meaning that there are fewer workers to provide the goods and services the dependent population needs. The **dependent population** is made up of citizens who do not work and who therefore rely on the working population to provide for them. It includes young children, old people, the sick, disabled, housewives and the unemployed.

Key terms

Remittance – a sum of money sent by a worker in a foreign country to relatives in their home country

Dependent population – the dependent population of a country consists of people who do not earn an income themselves and rely on others to provide them with the goods and services they need. It includes young children, the elderly, people who cannot work due to illness or disability, as well as those in full-time education.

Overpopulation – a situation where there are not enough resources to sustain the population of a country

4 What problems might a large dependent population create for an economy?

What is the optimum population of a country?

Overpopulation is when a country's available resources are not enough to sustain and provide for the country's inhabitants because there are too many people. This situation is inefficient as overpopulation leads to a shortage (excess demand) of resources such as food and housing, meaning that some people may not receive all of the goods and services they need.

There are two ways in which efficiency could be improved in this situation. The first method would be to reduce the size of the country's population by restricting the population growth rate. For example, China's one-child policy between 1979 and 2015 restricted couples to having only one child to tackle the problem of overpopulation. The second method involves increasing either the quantity or the quality of resources so that there is enough for everyone. For example, food could be imported from abroad (increasing the quantity of resources) or farmland could be used more productively (increasing the quality of resources) in order to increase crop yields so that there is enough food for the whole population.

Underpopulation is when the resources of a country are so abundant that there are not enough people to make full use of them, leading to a surplus (excess supply) of resources. This may lead to some resources being wasted. For example, a country may have fertile land available, but not enough people to farm it to grow food crops. In this situation, the country would benefit from increasing the size of its population so that it could make more efficient use of its resources.

The **optimum population** is when there are enough people in a country to fully use all of the available resources, thereby maximising output. Thus, there is no shortage or surplus of resources and efficiency is maximised. As the quality and quantity of resources in a country change over time due to innovation, technology and a more skilled labour force, its optimum population also changes.

Key terms

Underpopulation – a situation where some of the resources of a country are left unused or wasted because there are not enough people to fully exploit them

Optimum population – a situation where a population is sufficient to ensure that all resources in a country are fully utilised and output is maximised

The effects of an increase in population size

- **Competition for the country's resources**. An increase in the size of a country's population is likely to result in increased competition for the country's resources, including water, food, housing and medical services. If a country is already overpopulated, this will spread resources more thinly across the population. Some goods, such as food, may need to be imported from overseas in order to make up the shortage, potentially leading to a current account deficit on the balance of payments, which may need to be financed by borrowing from abroad (see Unit 6.4). In the long run, the government may need to use supply-side policy to increase the productivity of the economy and/or take measures to reduce the size of the population to the optimal level. If a country is underpopulated, an increase in the size of the population may help the country to use its resources more efficiently, especially if the increase is due to net inward migration of skilled workers. This should increase the size and productivity of the labour force, leading to an increase in output and economic growth.
- **Overcrowding**. Population growth may lead to overcrowding in some countries, especially in the urban slums where poor people live. A **slum** is characterised by lack of durable housing, limited access to safe drinking water and inadequate sanitation and living space. In 2014, about 55% of sub-Saharan Africa's urban population lived in slum conditions. **Overcrowding** in these areas (three or more people living to a room) may put pressure on water supply and sanitation facilities and potentially lead to the spread of life-threatening diseases.
- **Increased demand for goods and services**. An increase in population size is likely to increase the demand for a wide variety of goods and services in an economy, including housing, education and healthcare. This increased aggregate demand will result in more goods and services being produced, thus creating jobs and lowering unemployment. For example, an increase in the demand for housing will provide jobs for builders in the construction of houses. However, it is also likely to lead to rising inflation as higher aggregate demand in the economy puts upward pressure on the general price level.
- **Competition for jobs**. An increase in the size of the **working-age population** may create increased competition for jobs, causing higher unemployment, particularly in low-skilled occupations. Higher unemployment will lead to falling incomes and reduced consumer spending. As a result, production and economic growth in the economy may fall.

Key terms

Slum – an area in a city in which people live in poor conditions characterised by non-durable housing, unpaved paths, and a lack of space, sanitation facilities and access to safe drinking water

Overcrowding – an increase in the number of people to beyond what is comfortable due to lack of living space

Key terms

Working-age population – the proportion of a country's population that is of working age, usually between the ages of 15 and 64

- **Increase in the dependent population**. An increase in population size due to higher birth rates or falling death rates may lead to an increase in the dependent population of the country. This will increase the burden on the working population to provide the goods and services the dependent population needs. For example, the government may need to increase income taxes on the working population in order to provide public services, such as healthcare and education, and welfare benefits to the dependent population.
- **Depletion of natural resources and higher pollution levels**. Increased population size is likely to result in increased use of non-renewable resources and higher levels of pollution and environmental damage. For example, an increase in energy consumption is likely to deplete the world's reserves of non-renewable resources, such as oil and coal. Higher energy consumption is also likely to lead to the burning of more fossil fuels, resulting in worsening air quality and environmental damage.

5 When is an increase in the size of a population not a problem for a country?

The effects of a decrease in population size

- **Lower demand in the economy**. A declining population is likely to result in falling demand for goods and services in the economy. As a result, firms are likely to cut production, leading to higher unemployment and slower economic growth. However, the reduced demand for goods and services may also reduce environmental problems in some countries, such as air pollution and traffic congestion.
- **Lower productive capacity of the economy**. A decrease in population size due to a fall in the number of people of working age will decrease the labour force and the productive capacity of the economy. For example, the emigration of skilled labour from developing countries would reduce the productivity of the labour force, making it difficult for the country to achieve long-term economic growth and development. The emigration of skilled labour would also reduce the number of workers to dependants, increasing the burden on the working population.

- **Inefficient use of resources**. If a country is underpopulated or at its optimum population, a decrease in population size will mean that the country may not have enough workers to use its resources fully. Thus, resources may be wasted, which would be inefficient for the economy. As a result, production would fall, leading to a slowdown in economic growth.
- **Reduction in overcrowding**. A decrease in the size of a country's population may ease overcrowding in some areas.

As a result, people would have more space so the pressure on the supply of clean water and sanitation facilities would reduce, thus decreasing the likelihood of disease and illness.

- **A change in government spending**. A significant fall in the size of a country's population due to an increase in the death rate may be a result of a serious health epidemic or a natural disaster. In these situations, a government would have to increase spending, which may lead to a budget deficit and increased government debt. However, a decrease in the size of a population due to a falling birth rate or rising death rate may lead to reduced demand for public services, such as education and healthcare. As a result, a government may be able to cut spending in these areas, which may lead to a budget surplus.

6 How might immigration help to solve some of the problems of a declining population?

Changes in the age distribution of a population

The **age distribution** of a country is the proportion of people within a population who fall into certain age groups. Figure 5.3.1 provides an overview of the proportion of people in three age groups (0–14 years, 15–64 years and 65+ years) in different countries in 2016. As can be seen from Figure 5.3.1, developing countries generally have a higher proportion of people in the 0–14 age group, while developed countries have a higher proportion of their populations aged 65 and above. This is mainly due to higher incomes, better healthcare and healthier lifestyles of people in developed countries, which result in them living longer. These countries are said to have ageing populations. Many developing countries, in contrast, have a high proportion of young people due to higher birth rates and relatively lower life expectancies.

Key term

Age distribution – the proportion of people within a population who fall into certain age groups, for example, young (0–14 years), of working age (15–65 years) and old (65 years and above)

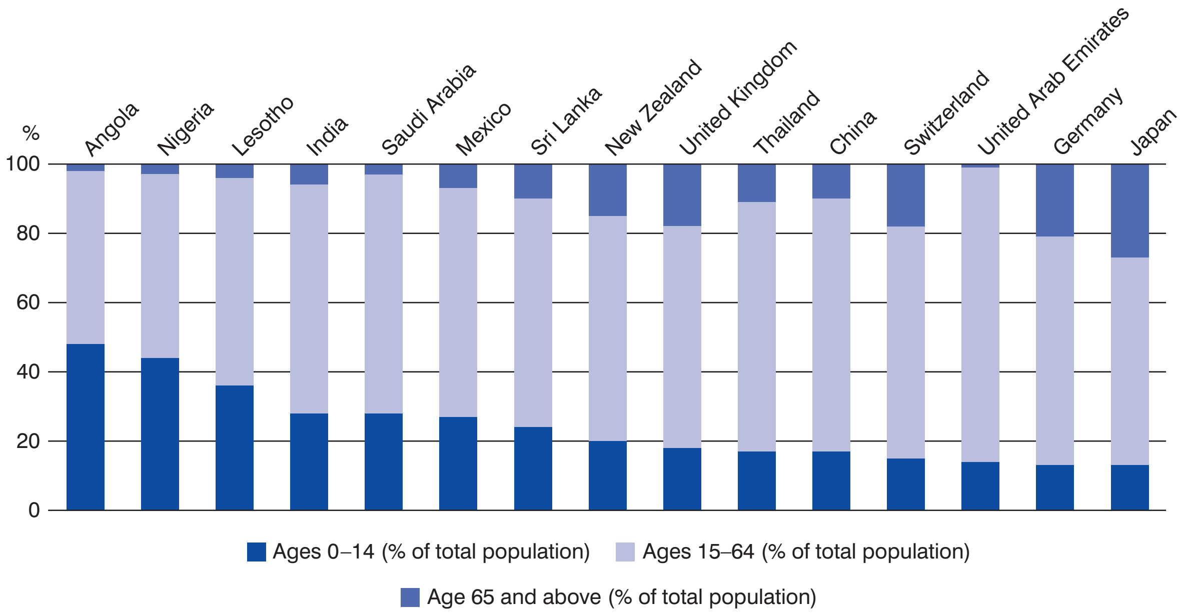

Figure 5.3.1 The proportion of people in different age groups in different countries in 2016 (as a percentage of total population)

The effects of an ageing population

An ageing population is when the median age of a country's population is increasing over time. This has a number of potential consequences, especially for those countries with a growing proportion of their populations aged 65 years and older.

Increase in the dependent population

An ageing population, which increases the proportion of people aged 65 years and over, will increase the dependent population of a country. As a result, there will be an increased burden on the working population to provide goods and services for a rising number of senior citizens who are too old to work.

Higher income taxes

In order to cover the higher costs of healthcare and pensions that come with an increasing number of old people, the government may have to raise more tax revenue by increasing income taxes on the working population. This reduces the disposable incomes of those in work, which may lead to a fall in their standards of living. Higher income taxes may also act as a disincentive to work, thus reducing the productivity and output of the labour force.

Increased government spending

A higher proportion of old people in a country is likely to result in an increase in government spending on healthcare and the provision of pensions. This will have an opportunity cost for society as investment in the economy, such as spending on infrastructure, may have to be given up in order to fund healthcare and the payment of pensions to the elderly.

Shortage of workers

The labour force may decrease in size as the population ages and an increasing number of workers retire from their professions. If not replaced by younger workers, the quantity of labour in the country will fall, reducing the productive potential of the economy. As a result, the output and economic growth of the country may decrease.

Reduced labour mobility

Younger workers tend to be more flexible, willing to retrain, try out new occupations and move to other geographical locations in search of work. As a country's population ages, older workers, who are often tied to a particular profession or geographical area for financial and family reasons, will be reluctant to change occupations or relocate for work purposes. As a result, the **occupational mobility** and **geographical mobility** of the population will be reduced.

Key terms

Occupational mobility – the ease with which an individual can change from one job in a particular field or industry to one in another field or industry

Geographical mobility – the ease with which an individual can change from one location to another for work purposes

Increase in productivity

One of the advantages of a higher proportion of older workers is the high level of knowledge, skills and experience they bring to a job. As a result, older workers are likely to be more productive than their younger counterparts, thus contributing to increased output and higher economic growth. They may also be able to pass some of their knowledge and expertise on to the next generation of workers, helping to further increase productivity.

Indicator of high living standards

An ageing population is an indication of a quality healthcare system and healthier lifestyles, which lead to longer lives and an improved living standard within the population.

What can governments do?

Governments can use a number of policies to alleviate the potentially harmful effects of an ageing population. One thing they can do is to encourage couples to have more children. For example, the Japanese government pays couples a 'baby bonus' – a financial incentive to encourage them to have babies. In one part of Japan, parents were paid 100 000 yen (about US$940) for the first baby and 1 million yen (about US$9400) for the fourth.

The government could also tackle the problem of an ageing population by raising the retirement age. For example, in 2017 the government of the UK announced a plan to raise the age at which people would receive a state pension from 67 to 68 from 2037. This change meant that 34 million people would have to work an additional year before receiving their pension from the government. This would have the effect of increasing the productive capacity of the UK economy and also delay government spending on the provision of state pensions.

A government may also choose to encourage the immigration of skilled workers into its country from abroad. Attracting skilled workers from other countries would increase the productive capacity of the economy as well as increase the working population so it is better able to provide for the dependent population.

7 Who is likely to benefit most from an ageing population in an economy?

Changes in the gender distribution of a population

Gender distribution is the proportion of people in a country who are male and female. The table below provides data on males and females as a proportion of total population for selected countries in 2016. If left entirely to nature, the number of boys born is slightly higher than the number of girls. However, this ratio evens out over time as women live longer than men, on average. This is due to riskier behaviour in males and a higher likelihood of them suffering from serious health problems or dying in violent conflict.

Key term

Gender distribution – the proportions of people in a country who are male and female

Males and females as a proportion of total population in different countries in 2016

Country	Males (% of total population)	Females (% of total population)
United Arab Emirates	72.9	27.1
Bahrain	61.9	38.1
Saudi Arabia	56.5	43.5
India	51.8	48.2
China	51.5	48.5
Nigeria	50.9	49.1
Bangladesh	50.5	49.5
Norway	50.4	49.6
Maldives	50.1	49.9
Kenya	50.0	50.0
Lesotho	49.6	50.4
Mexico	49.7	50.3
Burundi	49.4	50.6
United Kingdom	49.3	50.7
Brazil	49.2	50.8
New Zealand	48.9	51.1
Japan	48.6	51.4
Portugal	47.3	52.7
Russian Federation	46.5	53.5
Latvia	45.9	54.1

8 Are you surprised by any of the data in this table? Why or why not?

One of the largest gender imbalances in the world is in Asia and the Middle East where, according to the UN, there were an estimated 100 million more males than females in 2017. In India, there were 107.6 men for every 100 women in 2015, while in China there were 106.2 men for every 100 women, according to UN estimates. Vietnam also had an imbalance of 112.8 boys for every 100 girls at birth. In contrast, Europe had a surplus of 26 million females in 2015. Thailand also had more females than males, with 96.2 men for every 100 women, according to the country's 2010 census.

There are a number of reasons for the high overall proportion of males to females in Asia:

- **A preference for sons**. In countries such as India, China and Vietnam, there is a strong preference for sons as males are traditionally responsible for looking after their parents in old age. Daughters, on the other hand, tend to live with their husband's family after marriage in some countries, including India.
- **Immigration of male workers**. Some countries have significantly more males than females due to the immigration of male workers. The main reason why the United Arab Emirates and Qatar have the lowest proportion of females in the world (just 27.1% and 27.8% of their total populations, respectively) is the immigration of workers in the gas, oil and construction industries, which are heavily male dominated.

A significant gender imbalance can have serious economic and social consequences for a country:

- **Lower economic growth**. Having fewer female workers may limit the potential growth of an economy. Some jobs, especially those that require a high level of concentration and consistency, tend to be performed much more productively by women than men. With fewer women to do these jobs, the productive capacity of the economy may be reduced, thus resulting in lower economic growth.
- **Fewer marriages**. In countries such as India and China, some men are struggling to marry due to the shortage of women. Those most affected are men who are poor, uneducated and living in rural areas as they are less able to attract a bride.
- **Rising crime rates**. Some studies have found a slight correlation between a high proportion of males in a country and an increase in the rate of violent crime.
- **Increase in human trafficking**. Increasing numbers of unmarried men have resulted in a rise in the incidence of **human trafficking**. There has been an increase in the number of complaints to human rights organisations about women being trafficked from countries including Cambodia and Vietnam for marriage purposes.

Key term

Human trafficking – the forced and illegal transport of human beings from one country to another

Extension topic

Changes in occupational and geographical distribution of a population

Occupational distribution refers to the proportion of people working in the primary, secondary and tertiary sectors of an economy. In the early stages of development, a large proportion of a country's population is employed in farming and agriculture in the primary sector. As the country develops, the proportion of workers in the primary sector declines as people find work in manufacturing and construction in the secondary sector. At the later stages of development, a more educated labour force seeks higher wages and improved working conditions in service industries in the tertiary sector. As a result, the proportion of people employed in the primary and secondary sectors declines. Figure 5.3.2 shows a comparison of employment in the primary, secondary and tertiary sectors between two countries, Tanzania (a developing country) and Sweden (a developed country).

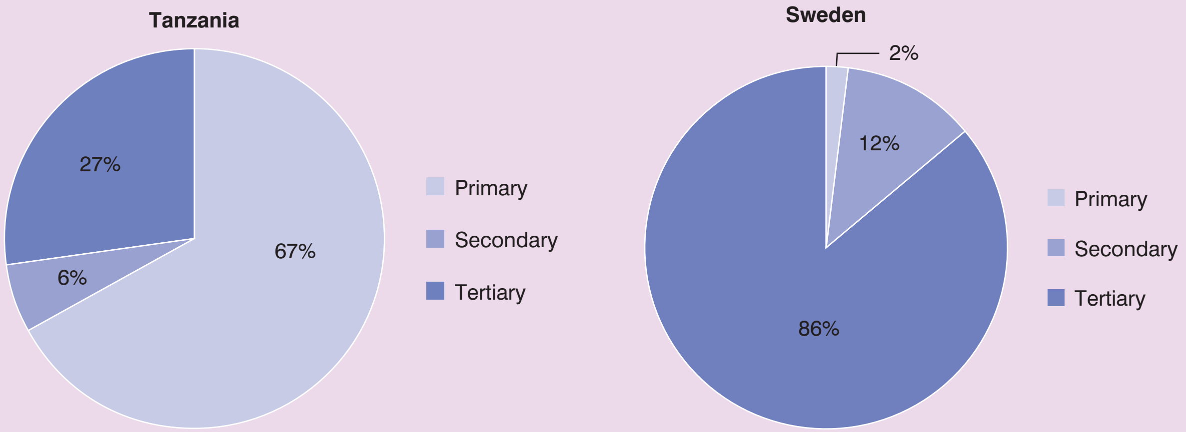

Figure 5.3.2 A comparison of employment by sector between Tanzania and Sweden

Source: World Bank/International Labour Organization

Geographical distribution refers to where people live and the way they are spread across a country or region. As an economy develops, there tends to be migration away from rural areas towards cities as people search for better employment and education opportunities. While this may lead to higher incomes and improved living standards for some, it is also likely to increase the **population density** in urban areas, which may result in overcrowding. According to UN-Habitat data, the most crowded city in the world in 2017 was Dhaka in Bangladesh, with a population density of 44 500 people per square kilometre. Mumbai in India was the second most densely populated city, followed by Medellin in South Africa in third place. Manila in the Philippines had the fourth highest population density in the world.

The population pyramid

A **population pyramid** shows the age and gender distribution of the population of a country. Figure 5.3.3 shows a population pyramid for a typical low-income developing country, and Figure 5.3.4 shows a population pyramid for a typical high-income developed country. Take a minute to examine the diagrams. What information indicates that these are developing and developed countries?

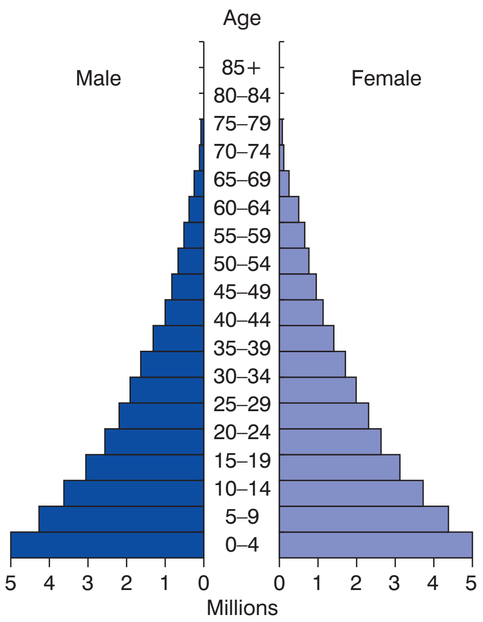

Figure 5.3.3 Population pyramid for a developing country

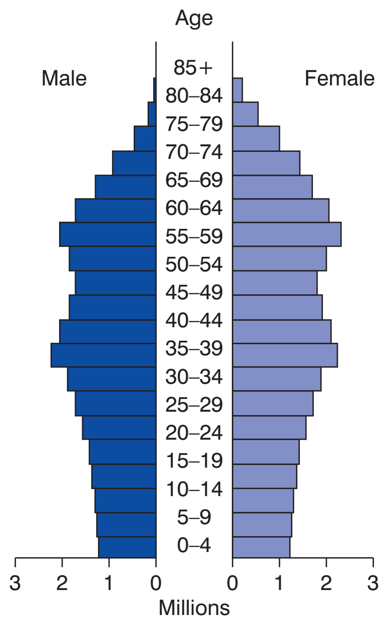

Figure 5.3.4 Population pyramid for a developed country

You may have noticed that a high proportion of the population in Figure 5.3.3 falls in the 0–4 age group, indicating that the country has a high birth rate. Furthermore, a low proportion of its population are aged 65 years and over, indicating low life expectancy. Both of these features are characteristics of a typical developing country. Figure 5.3.4, on the other hand, shows a much lower proportion of the population falling within the 0–4 age group, indicating a comparatively lower birth rate. Also, a high proportion of the population in Figure 5.3.4 is aged 65 years and above, indicating a high life expectancy and an ageing population. A low birth rate and ageing population are characteristics of a developed country.

Key terms

Occupational distribution – the proportion of people working in each of the primary, secondary and tertiary sectors of an economy

Geographical distribution – the way people are spread across a country or region, for example, the proportion of the population living in urban and rural areas

Population density – the number of people living in a certain area, usually one square kilometre

CASE STUDY

Population growth in Malawi

In 2017, Malawi had one of the highest population growth rates in the world. According to the CIA *World Factbook*, the rate was 3.32%, caused by a birth rate of 41.3 births per 1000 people compared with a death rate of only 8.1 deaths per 1000 people. In addition, the net migration rate was zero.

The main cause of the high birth rate in Malawi was improvements in maternal and child healthcare. In both rural and urban areas expectant mothers received improved prenatal care and skilled birth assistance. In addition, most children were vaccinated. These developments led to a lower infant mortality rate and fewer mothers dying during childbirth. Despite the lower infant mortality rate, Malawi's fertility rate remained high at 5.5 children per woman.

Rapid population growth and the high population density put pressure on the land, water and forest resources of Malawi. As Malawi's economy is mainly based on agriculture, the increased population reduced plot sizes per family. In addition, the increasing vulnerability to climate change further threatens the sustainability of Malawi's economy and could worsen the food shortages.

1 Give two reasons for Malawi's rapid population growth.

2 Using examples from the extract, give two problems created by Malawi's rapid population growth.

Applying

Project work

With the help of the internet, research the populations of two countries of your choice, one a developing country and the other a developed country. What are the differences between the populations of the two countries?

1. Identify three differences between the populations of the two countries.
2. Explain the reason for each difference.
3. Explain one way in which each difference might affect the economy of the country.

Write your research up in the form of a table, poster or mind map. Be ready to share your findings with your classmates.

Knowledge check questions

1 Define birth rate. [2]

2 Define death rate. [2]

3 Explain **two** reasons why population growth increases more rapidly in developing countries than developed countries. [4]

4 Define optimum population. [2]

5 Analyse the effect of an ageing population on the economic growth of a country. [6]

6 E Discuss whether an increase in population size will always increase unemployment. [8]

Check your progress

Read the unit objectives below and reflect on your progress in each.

- Describe the factors that affect population growth, including birth rate, death rate, net migration, immigration and emigration.
- Analyse the reasons for different rates of population growth in different countries.
- Analyse how and why birth rates, death rates and net migration vary between countries.
- Explain the concept of an optimum population.
- Analyse the effects of increases and decreases in population size and changes in the age and gender distribution of a population.
- Describe a country's age and gender distribution from its population pyramid.
- Identify whether a country is developed or developing from its population pyramid.

I struggle with this and need more practice.

I can do this reasonably well.

I can do this with confidence.

Differences in economic development between countries

Learning objectives

By the end of this unit, you should be able to:

- define economic development
- explain the characteristics of developed and developing countries
- analyse the causes of differences in income; productivity; population growth; size of primary, secondary and tertiary sectors; saving and investment; education; and healthcare between developed and developing countries
- analyse the impact of these differences on the economic performance of developed and developing countries.

Starting point

Answer these questions in pairs:

1. What is economic growth?
2. Other than economic growth, what factors influence the living standards of a population?
3. What can governments do to improve these factors?

Exploring

Discuss these questions in pairs:

1. Using the pictures below, what three differences can you identify between developed and developing countries?
2. Why might these differences exist?
3. What impact might these differences have on the lives of the people in these countries?

Developing

What is economic development?

Economic development refers to the economic, social and political wellbeing of the people in a country. It includes the ability of a nation to provide its population with basic needs such as food, safe water, electricity, education and healthcare. The quality of the environment, people's ability to afford consumer goods, such as mobile phones and televisions, and the distribution of income within the country are also important indicators of its economic development. Political stability, the enforcement of laws protecting property rights, the level of corruption, as well as political freedom, free speech and self-esteem are also important factors.

1 What might be the common characteristics of a country with a low level of economic development?

Developing and developed countries

A **developing country** is a country that has a low level of economic development. Such a country is characterised by low GDP per head and may have a low HDI ranking, indicating low living standards across the population. Life expectancy and access to education may be limited. Absolute poverty is likely to exist, particularly in rural parts of the country. The population growth rate is likely to be high and a large proportion of the labour force will be employed in low-skilled and low-paid jobs in agriculture (the primary sector). The farming methods are likely to be labour intensive and the infrastructure of the economy, including roads, communications and power supply, may be underdeveloped.

A **developed country**, on the other hand, is a country with a high level of economic development. It is likely to have high GDP per head and a high HDI ranking. In most developed countries, absolute poverty has been eradicated due to an efficient progressive tax system and the provision of welfare benefits to those most in need, such as the unemployed and pensioners. Infrastructure is highly developed and all members of the population have access to healthcare and education. As a result, life expectancy is high and a high proportion of the labour force have the skills to work in services (the tertiary sector). Only a small proportion of the labour force is employed in agriculture (the primary sector), in which farming methods are highly mechanised and capital intensive.

In practice, many nations share some of the characteristics of both developed and developing countries. Sri Lanka, for example, has many of the characteristics of a developed country but needs to

Key terms

Economic development – an improvement in the living standards and quality of life of the population of a country as it transitions from being reliant on the primary sector for employment and output towards the secondary and tertiary sectors

Developing country – a country that has a low income and is generally reliant on the agricultural industry for its employment and output

make further progress in areas including education, healthcare and productivity to reach a higher level of economic development. The Central African Republic, in contrast, which had the lowest HDI ranking in 2015, has many of the characteristics of a developing country. In order to be considered a 'developed country', a nation must satisfy almost all of the characteristics of a developed country outlined above. Countries including the USA, Canada, the UK, Germany, Japan, South Korea, Singapore, Australia and New Zealand are considered to be developed countries.

> **Key term**
>
> **Developed country** – a country that has high income and living standards with most of its economic activity based in the tertiary sector

2 Is your country classified as a developed or developing country? Why?

Differences between developed and developing countries

There are various differences between developed and developing countries. Some of these are outlined below, followed by a discussion of the impact that each difference might have on the economic performance of a country.

GDP per head (income)

Developed countries generate income from the production of a wide range of high-value goods and services. A highly skilled labour force and capital-intensive production methods increase productivity and output. Developing countries, on the other hand, generate much of their income from the production of agricultural goods. Prices of agricultural goods may be low, leading to low incomes. Protection policies, such as tariffs, are imposed on agricultural goods by some countries, reducing export revenue for developing countries. In 2015, Luxembourg had an annual GDP per head of $107 036, while Burundi's was a mere $207.

Impact on economic performance

The poorest countries struggle to earn the income they need to improve their level of economic development. They may therefore be forced to borrow money from abroad to invest in their economies, resulting in increased foreign debt. In countries like Burundi, a large proportion of the population lives below the (absolute) poverty line of $1.90 per day.

Distribution of income and wealth

Developed countries generally have efficient progressive tax systems in place and provide welfare benefits to the poor. Developing countries, in contrast, tend to have relatively large informal economies, making the imposition and collection of taxes difficult. They therefore may not have the tax revenue to provide welfare benefits or to invest in public services, such as education and healthcare. **Corruption** may also prevent public money from reaching the poorest sections of the population.

> **Key term**
>
> **Corruption** – the dishonest behaviour of people in power for their own personal gain

Impact on economic performance

A large proportion of the population of some developing countries may suffer from absolute poverty, particularly in rural areas. Those developing countries that have managed to minimise extreme poverty may still have a relatively large proportion of the population living just above the poverty line of $1.90 per day. Absolute poverty has been eradicated in most developed countries, but relative poverty is still a concern.

Productivity

Developed countries tend to have a high productivity level due to a skilled labour force and investment in modern technology. Many developing countries, on the other hand, have a comparatively unskilled labour force due to a poor education system and limited training opportunities. Furthermore, poor countries may not have the funds to invest in capital equipment and machinery. Each of these factors is likely to contribute to low productivity.

Impact on economic performance

Low productivity in developing countries is likely to lead to fewer goods and services being produced and lower income (GDP). As a result, these countries are unlikely to have the income they need to invest in improving their economies and their levels of economic development.

Population growth

Developed countries tend to have relatively slow population growth rates (see Unit 5.3). This is partly due to some women choosing to focus on their careers, marrying later and having fewer children. The high cost of raising children is another reason for lower birth rates in developed countries. Many developing countries, in contrast, have rapidly growing populations due to high birth rates (see Unit 5.3). In 2016, the population growth rate in sub-Saharan Africa, the poorest region in the world, was 2.7%, compared with 0.4% in the European Union and −0.3% in Central Europe and the Baltics.

Impact

Rapid population growth in developing countries puts a strain on resources, which have to be shared across a growing number of people. Absolute poverty may rise if there are not enough resources, such as food, for everyone. The poorest developing countries tend to have large dependent populations, putting pressure on the working population and government to provide for them. For example, over half of Niger's population (51%) were aged under 14 in 2016.

Size of primary, secondary and tertiary sectors

The majority of the labour force of a developed country has jobs in the tertiary sector, which generally requires a higher level of education and skill. Developing countries, on the other hand, have a high proportion of workers employed in the primary sector in agriculture. As a country develops, an increasing proportion of its labour force is employed in the secondary sector in manufacturing. Figure 5.4.1 shows employment by sector in a range of countries.

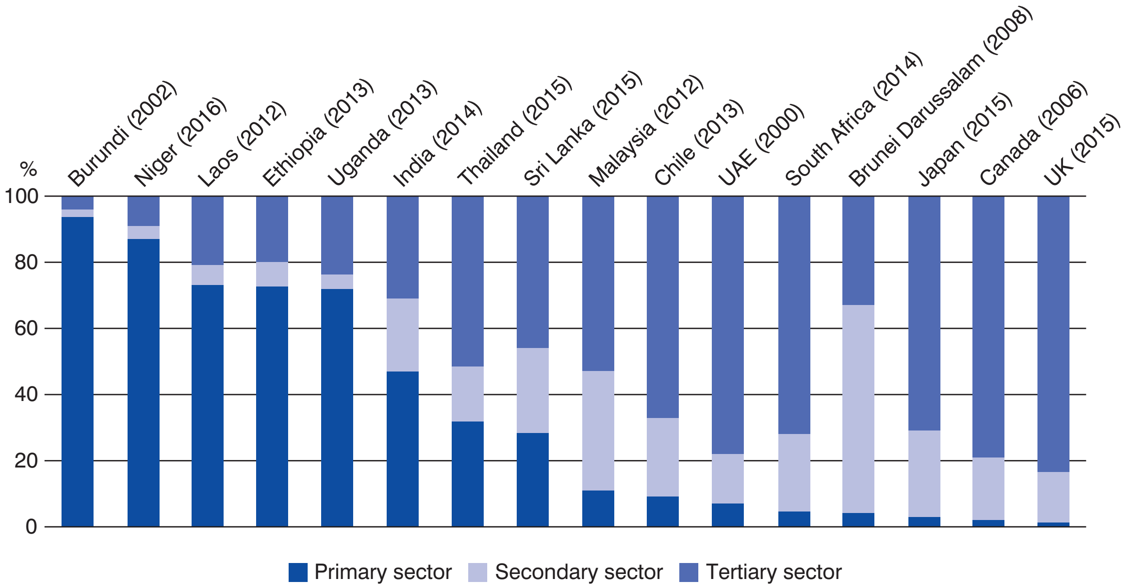

Figure 5.4.1 Estimated levels of employment by sector in a range of developed and developing countries

Source: Data from the CIA *World Fact Book*

3 Which countries in Figure 5.4.1 would you expect to be developed and which would you expect to be developing? Why?

Impact on economic performance

Farming practices in developing countries tend to be labour intensive. Workers are unskilled and receive low wages. Drought, crop failure and fluctuations in the prices of agricultural goods may result in higher absolute poverty. As an economy develops and the secondary sector expands, pollution levels may rise, reducing the quality of life of the population.

Saving and investment

The high incomes of developed countries enable them to save and invest in the purchase of capital equipment and the development of new technology to increase productivity and expand production. The poorest developing countries with the lowest incomes, on the other hand, find it difficult to save. Without savings, domestic investment in capital equipment remains low, leading to low productivity and low economic growth.

Impact on economic performance

The poorest developing countries may become trapped in a **poverty cycle** of low income, low saving, low investment, low productivity and low economic growth (illustrated in Figure 5.4.2). These countries may therefore have to borrow money from foreign countries to invest in their economies, leading to high levels of foreign debt. Debt repayments are likely to be large and countries may not be able to meet them. For these countries, further borrowing – which could improve their economic development – is difficult and interest rates on loans are likely to be high.

Key term

Poverty cycle – a situation in which a developing country is unable to develop economically due to low income, leading to low savings, leading to low investment, leading to low productivity, leading to low economic growth and, thus, again leading to low income

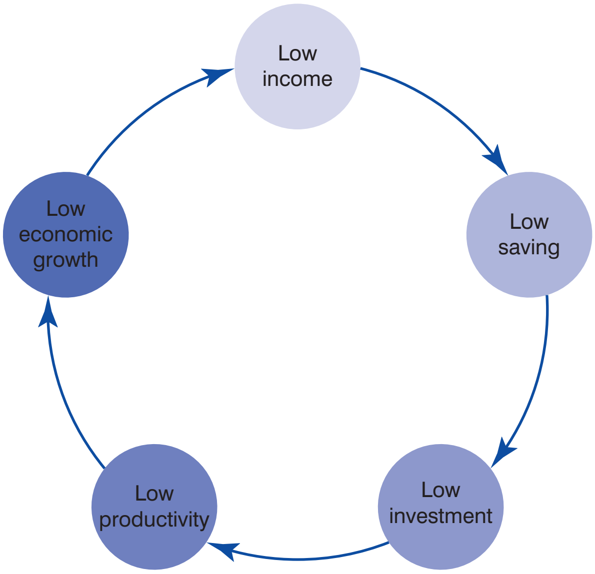

Figure 5.4.2 The poverty cycle

Education

In developed countries, a high quality of school education is accessible to all members of the population, with many going on to study at universities and vocational institutions. This results in a knowledgeable and skilled labour force, increasing the productivity of the country. Poor developing countries, on the other hand, lack the income to invest in providing a high standard of education to their people. As a result, the skill level and productivity of the labour force is likely to be low. A poor education system makes it difficult for people to raise themselves out of poverty.

Impact on economic performance

Without access to quality education, the poor are unable to improve their knowledge and skills and thus become trapped in a cycle of **intergenerational poverty** – poor people born into poverty have children who also suffer from poverty due to lack of education. Poor education also limits the productivity of the labour force, resulting in low economic growth for a country.

Key term

Intergenerational poverty – the continuation of poverty from one generation to the next, mainly due to lack of access to quality education

Healthcare

A high standard of medical care tends to be accessible to all citizens in most developed countries. People also have access to healthier food and a cleaner and safer environment. In the poorest developing countries, a large proportion of populations may lack access to even basic medical care, such as vaccinations against preventable diseases, including cholera and tuberculosis. Safe water and sanitation may also be unavailable, increasing the spread of potentially life-threatening disease and illness.

Impact on economic performance

Life expectancy tends to be high in developed countries, many of which have ageing populations. This may result in higher taxes, as governments seek revenue to provide the growing number of old people with pensions and health services. The number of elderly people living in relative poverty may also rise. Life expectancy in many developing countries, in contrast, is significantly lower. Poor health and shorter lifespans will reduce the productive capacity of developing economies. In 2015, Swaziland had the lowest life expectancy at birth in the world at just 49 years, while Japan had one of the highest at 84 years.

Infrastructure

Developed countries have the money to invest in modern infrastructure, including roads, transport links and communication networks. Many developing countries, on the other hand, lack the funds to invest in infrastructure, which may result in problems such as poor roads and an unreliable power supply.

Impact on economic performance

Poor infrastructure reduces the productivity and productive capacity of an economy. For example, poor roads and transport links may result in goods being spoiled or damaged while being transported.

CASE STUDY

South Korea's economic development

After the Korean war ended in 1953, South Korea was one of the poorest countries in the world with a real GDP per head of only $64 – about the same as the poorest countries in Africa at the time. In 2016, South Korea was the fifteenth largest economy in the world with a real GDP per head of $35 751, not far behind Spain ($36 310) and New Zealand ($39 059).

Grants and loans of $60 billion from the USA between 1946 and 1978, along with policies which encouraged private enterprise and exports, have driven South Korea's economy, which grew an average of 7% per year for the 50 years leading up until 2014. This economic success corresponded with the eradication of absolute poverty, the modernisation of infrastructure and improvements in public services that have dramatically improved the living standards of the country's population.

With South Korean schools regularly topping international league tables and high household spending on university education, South Korean workers are among the most highly educated in the world. The high cost of educating children partly explains South Korea's low fertility rate, which was only 1.2 births per woman in 2015. A low birth rate combined with life expectancy at birth of 82 years in 2015 mean that South Korea has a rapidly ageing population and faces increasing relative poverty among the elderly.

1 What characteristics mentioned in the extract make South Korea a developed country?

2 What impact might an ageing population have on South Korea's future economic growth?

Applying

Project work

Investigate a developing country of your choice.

- Identify and explain five characteristics that make it a developing country.
- Explain the impact of each characteristic on the country's economy.

Present your findings in the form of a spider diagram, with the name of the country at the centre and information about each of the five characteristics branching off from it. Use pictures to support your analysis.

Knowledge check questions

1 Define economic development. [2]

2 Identify **three** characteristics of a developed country. [3]

3 Identify **three** characteristics of a developing country. [3]

4 Analyse how investment in education may lead to an improvement in the economic development of a country. [6]

5 E Discuss whether economic development is always going to benefit the population of a country. [8]

Check your progress

Read the unit objectives below and reflect on your progress in each.

- I struggle with this and need more practice.
- I can do this reasonably well.
- I can do this with confidence.

- Define economic development.
- Explain the characteristics of developed and developing countries.
- Analyse the causes of differences in income; productivity; population growth; size of primary, secondary and tertiary sectors; saving and investment; education; and healthcare between developed and developing countries.
- Analyse the impact of these differences on the economic performance of developed and developing countries.

Chapter review

Multiple-choice questions

1 What is the problem with using real GDP per head as a measure of living standards?

A It considers only the production of goods and services.

B It considers the health and education of the population.

C It does not take into account the effects of inflation.

D It does not take into account the effects of population growth.

2 Which of the following is a possible reason why income distribution within a country might be unequal?

A The government imposes high income taxes on the rich.

B The government pays welfare benefits to the poor.

C Some workers are employed in the primary sector.

D Some workers emigrate to other countries in search of higher-paying jobs.

3 Which statement about poverty is correct?

A Absolute poverty causes the production possibility curve of an economy to shift outwards.

B Both relative and absolute poverty deny people access to clean water.

C Both relative and absolute poverty limit people's access to opportunities.

D Relative poverty occurs only in developed countries.

4 What is a potential cause of absolute poverty?

A A fall in employment

B A fall in inflation

C An increase in government spending

D An increase in the minimum wage

5 What is **most** likely to cause the population of a country to increase?

A Net inward migration / a falling birth rate / a rising death rate

B Net inward migration / a rising birth rate / a falling death rate

C Net outward migration / a falling birth rate / a falling death rate

D Net outward migration / a rising birth rate / a rising death rate

6 Which is **not** a characteristic of a typical developed country?

A A high proportion of employment in the tertiary sector

B A large informal economy

C A low birth rate and a low death rate

D Capital-intensive farming methods

7 The table shows the percentage change in the age structure of the population of a country.

Age group	Change (as a % of total population)
0–14	–5%
15–64	–8%
65 and above	+12%

Which statement **must** be correct?

A The country is becoming more developed.
B The population of the country has increased.
C The population of the country is getting older.
D The population of the country is getting younger.

8 What is **most** likely to improve the economic development of a poor country?

	Savings	Investment	Economic growth
A	Decrease	Decrease	Increase
B	Decrease	Increase	Decrease
C	Increase	Decrease	Decrease
D	Increase	Increase	Increase

9 In 2016, an estimated 2.2 million Filipinos (the native inhabitants of the Philippines) had emigrated abroad to work. What impact is this **likely** to have had on the Philippine economy?

A A decrease in cash transfers to the Philippines
B A decrease in the productive potential of the Philippine economy
C An increase in the Philippine labour force
D An increase in the productivity of the Philippine labour force

10 Which is **most** likely to be a developed country?

	Life expectancy	Expected years in school	Real GDP per head (US$)	Annual population growth rate (%)
A	56	10	12,122	4.2
B	65	16	13,551	2.7
C	48	8.5	4,337	8.3
D	68	15.5	16,879	1.4

Structured questions

1 Mongolia

Mongolia is a landlocked country in East Asia which borders China to the south and Russia to the north. It is endowed with agricultural resources and vast reserves of minerals, including copper, gold and coal, which are mostly unexploited. The country's economy is heavily dependent on the extraction and export of natural resources for its income and economic growth.

Mongolia's economy experienced an economic boom period from 2010, recording double-digit growth in 2011, 2012 and 2013. However, the country's growth slowed to 1% in 2016 due to falling export prices for its minerals and a slowdown in the Chinese economy, which purchases approximately 90% of Mongolia's exports.

	2010	2011	2012	2013	2014	2015	2016
GDP growth rate	6.4%	17.3%	12.3%	11.6%	7.9%	2.4%	1.0%
Real GDP per head	$2,650	$3,770	$4,368	$4,385	$4,182	$3,944	$3,686
Population (000)	2,713	2,762	2,814	2,869	2,924	2,977	3,027
Population below the poverty line	38.8%	33.7%	27.4%	–	21.6%	–	–
HDI*	0.695	0.706	0.714	0.722	0.727	0.735	–

Source: The World Bank

*Source: UNDP

Employment by sector in Mongolia, 2015	
Sector	**% of total employment**
Primary	28.4
Secondary	20.3
Tertiary	51.3

Age structure of Mongolia's population, 2016	
Age group	**% of total population**
0–14	28.6
15–64	67.3
65 and above	4.1

Source: The World Bank

Mongolia's poverty rate has declined steadily with the rise in economic growth. However, in 2014, over one-fifth of the country's population still lived in absolute poverty, with many people living only marginally above the poverty line of $1.90 per day. In 2015, Mongolia's HDI value was 0.735, ranking it 92 out of 187 countries.

Slums called Ger districts on the outskirts of Ulaanbaatar, the coldest capital city on earth, are home to about 700,000 people, most of whom live in absolute poverty. These districts lack water supply systems, forcing people to buy well water from nearby stations. Essential infrastructure including plumbing, sewage and paved roads are also not in place. These districts also lack schools and adequate medical facilities.

(a) Using information from the extract, identify **three** characteristics which make Mongolia a developing country. [3]

(b) Calculate Mongolia's population growth rate from 2015 to 2016. [3]

(c) Using information from the extract, explain **two** reasons why Mongolia's economic growth slowed in 2016. [4]

(d) Explain **two** ways in which Mongolia could increase its HDI value. [4]

(e) Discuss whether GDP per head is a good indicator of living standards in Mongolia. [8]

(f) Analyse how increased investment in education might lead to a reduction in absolute poverty in Mongolia. [4]

(g) Discuss whether Mongolia will benefit from immigration. [8]

2 In 2016, the number of births in Japan fell below one million for the first time since records began. With the country's death rate higher than its birth rate, Japan is facing a decline in the size of its population. This is having an effect on the job and housing markets, consumer spending and business investment, all of which are likely to worsen as Japan's population ages.

(a) Define birth rate. [2]

(b) Explain **two** causes of a declining population. [4]

(c) Analyse how a falling population can result in a reduction in economic growth. [6]

(d) Discuss whether an ageing population is always a problem for a country. [8]

3 With an estimated population of 50 million, Tanzania's economy grew by 7% in 2016. Tanzania had an HDI value of 0.531 in 2015, placing it 151 out of 188 countries in terms of human development. Life expectancy was 65.5 years and expected years in schooling at the age of 5 was 8.9. An estimated 47% of Tanzania's population lived in absolute poverty in 2016.

(a) Define absolute poverty. [2]

(b) Explain **two** causes of absolute poverty. [4]

(c) Analyse how higher savings in an economy can result in increased economic development. [6]

(d) Discuss whether an increase in HDI always indicates an increase in a country's living standards. [8]

4 In 2015, China began the process of phasing out its one-child policy, which it first implemented in 1979 to prevent overpopulation. The policy restricted couples to having only one child. As well as slowing population growth, the policy created a gender imbalance. In 2016, there were approximately 42 million more males in China than females.

(a) Define optimum population. [2]

(b) Explain **two** economic consequences of a gender imbalance. [4]

(c) Analyse how overpopulation may result a more unequal distribution of income within an economy. [6]

(d) Discuss whether net outward migration will reduce the economic growth of a country. [8]