# Exercise walk-through

## Population ▪ 5.3

eXercise

# You must be able to

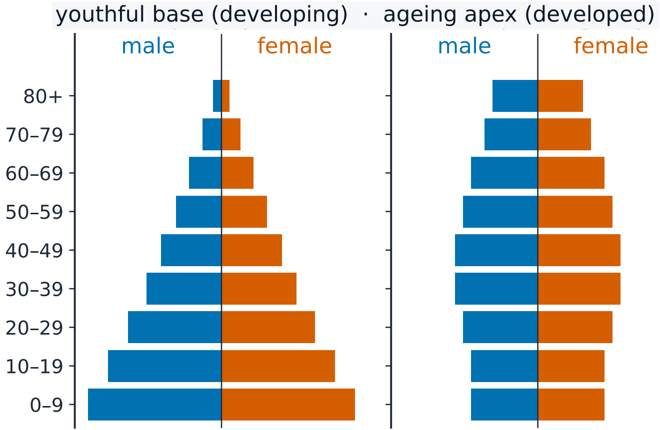
- explain what changes a country's population size
- read a population pyramid
- analyse the effects of an ageing population

# Method — Population change and structure

- **Birth rate 出生率** / **death rate 死亡率**: births/deaths per 1000 people per year.
- **Migration 移民**: **immigration 迁入** (in) and **emigration 迁出** (out); **net migration 净移民** = in − out.
- **Ageing population 人口老龄化**: people live longer and have fewer children → more retired people per worker, higher pension and healthcare costs.

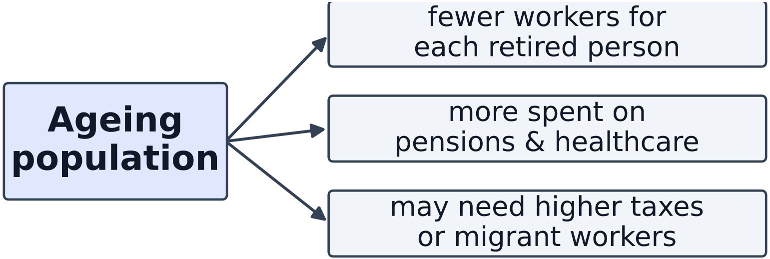
**Answer shapes:** K + App + An + Ev (a justified judgement, for discuss questions).

# Method — Population change and structure




*A youthful pyramid (developing) versus an ageing one (developed)*

# Method — Population change and structure




Exam: ageing raises dependency ratio — pressure on pensions, healthcare, and tax base

*A growing share of older people leaves fewer workers supporting each retiree*

# Practice 2.1 ▪ 2 marks

Define the term *birth rate*.

# Solution 2.1

Method: Population change and structure

**Worked steps**

the number of births each year for every 1000 people in the population (2 for a clear definition; 1 for a partial idea).

# Practice 2.2 ▪ 2 marks

State when a country's population grows.

# Solution 2.2

Method: Population change and structure

**Worked steps**

when births plus immigration are greater than deaths plus emigration (2 for a clear statement; 1 for a partial idea).

# Practice 2.3 ▪ 2 marks

Define the term *net migration*.

# Solution 2.3

**Worked steps**

immigration minus emigration — the net number of people moving into a country (2 for a clear definition; 1 for a partial idea).

# Exam-style 3.1 ▪ 1 mark

A country's population will rise if:

**A** the death rate is higher than the birth rate

**B** births plus immigration exceed deaths plus emigration

**C** emigration is higher than immigration

**D** the birth rate falls

# Solution 3.1

**A** the death rate is higher than the birth rate

**B** births plus immigration exceed deaths plus emigration ✓

**C** emigration is higher than immigration

**D** the birth rate falls

## Worked steps

**B**. Population rises when births + immigration exceed deaths + emigration.

# Exam-style 3.2 ▪ 4 marks

Explain two reasons why a country might have an ageing population.

# Solution 3.2

Method: Population change and structure

**Worked steps**

*[4]* For **each** of two reasons: K 1 + An 1 — *longer life expectancy*: better healthcare means people live longer → more old people; *a falling birth rate*: families have fewer children → the share of young people falls, so the population ages.

# Exam-style 3.3 ▪ 6 marks

Analyse the effects of an ageing population on a country's economy.

# Solution 3.3

Method: Population change and structure

**Worked steps**

*[6]* K/App/An — an ageing population has more retired people and fewer workers → each worker must support more people → the government spends more on pensions and healthcare → it may need higher taxes or more immigrant workers to fill the gap → so an ageing population raises costs and can slow growth unless productivity rises.