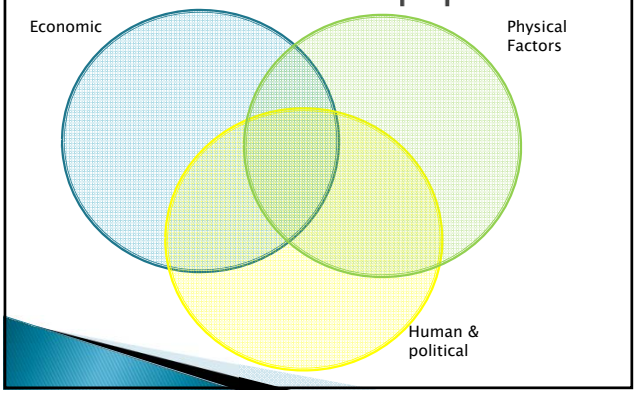
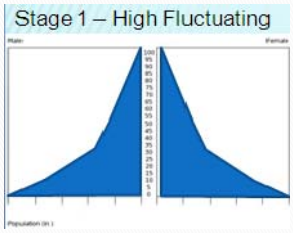
What factors can affect the distribution of a population?



$$\frac{\text{\% pop aged 0 -14 + \% pop aged 65+}}{\text{\% of population aged 15-65}} \times 100$$

- **The ratio for an MDC usually lies between 0.5 and 0.75.**
  - **The UK had a ratio of 0.49 in 2010 meaning that for every young or old dependent person there were approximately 2 working age people**
- **The higher ratio, the greater the number of dependents that have to be provided for from the taxes on the workforce.**
  - **The ratio for an LDC is typically higher. Mexico, with a youthful population structure, has a dependency ratio of 1.04. A ratio of 1 means that for every working age person there is one dependent person.**

Stage 1 – High Fluctuating

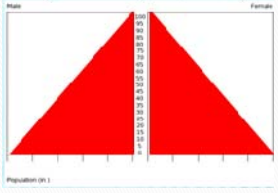


- **expectancy and concave profile**
- **No significant population growth**
- **No countries still in this phase**
- **Reflects tribal society**
- **Children not expected to survive so families breed spares**
- **No family planning**
- **Poor hygiene & nutrition**
- **Large families may be seen as a sign of virility**

A population pyramid typical of stage 1 - note the wide base, low life

Tribal societies of Amazon rainforest but no countries

Stage 2 – Early Expanding

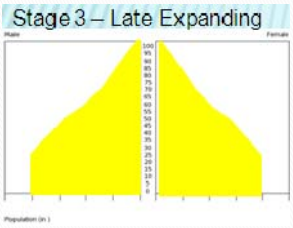


- **Taller pyramid means population surviving longer**
- **Better healthcare (modernization)**
- **Improved sanitation**
- **Higher standard of living**
- **high dependency ratio**
- **Strain on resources**
- **Low status of women (not part of the economy)**

A population pyramid typical of stage 2 - note the wide base, lengthening life expectancy and pyramidal profile

Very few people survive to old age (the average life expectancy in Sudan was 52 years in 2010)

Stage 3 – Late Expanding

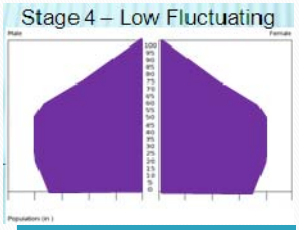


A population pyramid typical of stage 3 - note the narrowing base, increasing life expectancy and rocket shaped profile

- Expanding workforce
- industrialization
- Family planning
- Better education
- Lower infant mortality
- Youthful population, which can spark creativity, adaptability, emigration
- Less need for immigrant labor
- Less need for elder social supports

China, India & Cuba

Stage 4 – Low Fluctuating

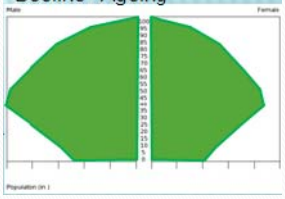


A population pyramid typical of stage 4 - note the narrowing base, long life expectancy and vase shaped profile

- Educated workforce
- Discretionary income does not need to be spent on education
- Might need immigrant labor: allows citizens to take higher-order jobs
- Improved education of women, more women working, delays in starting families
- Children are an economic liability in MDCs, too expensive to have several, societal norms
- Birth control
- More urban societies: less need for kids to work farm
- government and private pensions reduce "children as pension"

Switzerland, Japan, U.S.

Stage 5 – Population Decline - Ageing



A population pyramid typical of stage 5 - note the ever diminishing base and very long life expectancies

- Negative growth rate meaning there are less births than deaths so that the country's population size is decreasing
- Financial & social independence of women
- Increased economic pressure on the labor force (dependency ratio-elderly)
- Economic pressure on adult children
- Possible future labor shortage
- Rise of single sex relationships

A country such as Sweden is currently entering into the negative growth rate meaning that leading to problems.