

Committee/Council: ECONOMIC AND SOCIAL COUNCIL (ECOSOC)

Issue: The issue of an ageing population in MEDCs and its impact on economic prosperity

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Introduction

Amongst the many issues more economically developed countries have to address nowadays, one is growing uncontrollably without most of the citizens even noticing: the demographic crisis regarding ageing population (meaning the increased amount of senior population). One may wonder why the prosperity of its citizens can harm a nation. Is it bad that, through advanced medical technology and knowledge, the fertility rates are declining, thus enabling seniors to live longer? Short answer: It depends on the nation's birth rate and population amount. If a nation has more citizens to care for than citizens to be cared by, it is understandable that it will be unable to develop itself due to the lack of young citizens. Such a phenomenon could indeed prove to be fatal for the economy of any developed country. And to make matters worse, the problem can be truly apprehended only after having taken immense proportions. Through this study guide we will delve into the issue and see how much of a threat it poses and how it could be resolved.

Definition of Key-Terms

[Please note: This section includes formulas for the calculation of certain growth/increase rates, etc. While it is not necessary at all to learn these by heart, you are advised to at least read them in order for you to be able to comprehend how such rates are calculated, thus greatly raising the level of the debate.]

Population ageing

Population ageing, also referred to as *demographic ageing*, is an event that occurs **when the average age of a population escalates due to the rising life expectancy and the declining death rate**. This is why it is observed in more economically developed countries (MEDCs) that possess advanced medical equipment.

Life expectancy at birth Both sexes, 2015

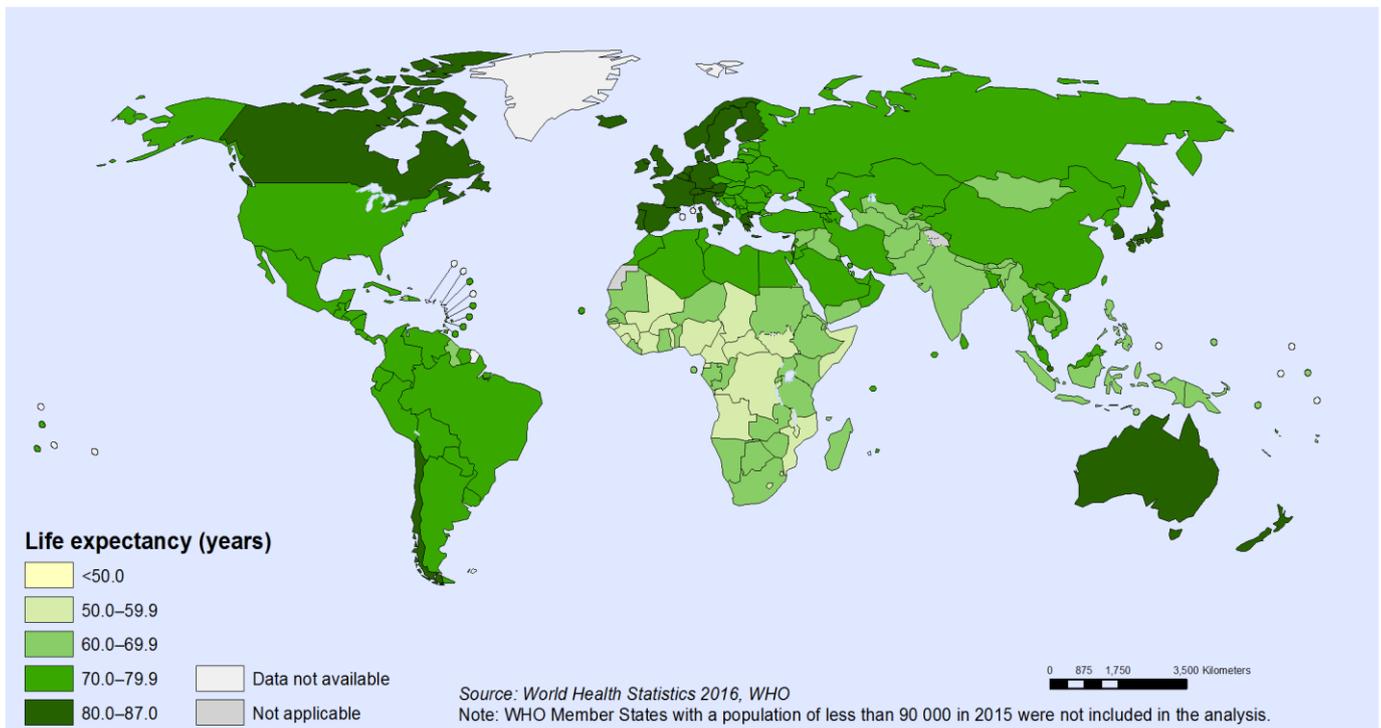


Figure 1.1

Life expectancy (in years) worldwide in 2015 (For both sexes)

(Source: [World Health Organization](#))



Life expectancy

The life expectancy, as the name implies, is defined as **how long a person is expected to live** (usually within a specific area and under specific circumstances). It is based on several factors, including sex, country of origin, country of residence and lifestyle. (>Figure 1.1)

Crude birth rate

A country's/state's **crude birth rate** is defined as **the total number of live births per 1,000 of its citizens during the course of one (1) year.**

Crude death rate/Mortality rate

A country's/state's **crude death rate/mortality rate** is defined as **the total number of deaths per 1,000 of its citizens during the course of one (1) year.**

Rate of Natural Increase (RNI)

The **Rate of Natural Increase (RNI for short)** shows by how much a country's population will increase or decrease over time, without taking

immigration/emigration into account. The RNI can be calculated by subtracting the crude death rate of a country from the crude birth rate of said country (crude birth rate minus the crude death rate). The result can then be divided by ten (10) in order for the RNI to appear in the form of a percentage, but that is not necessarily required. The reason behind this is that the crude birth and death rates regard 1,000 citizens. As such, one has to limit that number to 100 citizens by dividing it with 10, so that they can draw a percentage out of it.

[Example:]

In 2015, South Africa was estimated to have the following crude birth and death rates:

Crude birth rate: about 20.42 (live births per 1,000 population)

Crude death rate: about 12.41 (deaths per 1,000 population)

Taking, the above into consideration, one can deduce that South Africa's RNI for 2015 was 20.42-12.41=8.01.

Changed into its percent form, the RNI would equal $\frac{8.01}{10} = 0.801\%$.

Usually, developed countries have either a neutral or a negative RNI (meaning that their population is not increasing or is diminishing respectively), while developing countries tend to show a positive RNI. However, keep in mind that, due to the influx of refugees and immigrants, the population of many developed countries is increasing despite their neutral or negative RNI.

Population growth rate

Not to be confused with the Rate of Natural Increase, **the population growth rate shows the increase or decrease in a country's population over a specific period of time while taking the influx of immigrants and refugees and the departure of emigrants into consideration.**

It can be calculated as a **percentage** through the following formula:

$$\text{Population Growth Rate} = \frac{\text{PPresent} - \text{PPast}}{\text{PPast}} * 100 ,$$

where: PPresent=Present Population Value

PPast= Past Population Value

If one wishes to calculate the **annual** population growth rate as a **percentage**, all they have to do is divide the result of the previous formula by the number of years between the two values (PPresent and PPast).

An example can be found [here](#).

Dependency Ratio

The dependency ratio measures the **percentage of dependent people** (not of working age, meaning both under 15 and over 65 years) **divided by the number of people of working age and then multiplied by 100** (in order for the result to take the form of a percentage).

$$(Total) \text{ Dependency ratio} = \frac{(number \text{ of people aged } 0 - 14 \text{ and those aged } 65 \text{ and over})}{number \text{ of people aged } 15 - 64} \times 100$$

A high dependency ratio is not a good sign for any country, as it means that the people it has to support are more than the people that can (financially) support it, which is harmful for the economy.

Gross Domestic Product (GDP)

The GDP is the total market value of all goods and services produced in a country for a specific time period.

Census

A census is defined as the process of enumerating a country's citizens, with details such as sex, age, occupation, etc. In most countries it takes place every ten years, but, as is to be expected, the time span between each census differs from country to country.

Background Information

Ageing population

As stated previously, population ageing is defined as **the increase of the average age of the population of a country**. This is an issue that occurs in MEDCs due to the facts that the life expectancy there is higher and that the death rates of developed states are sinking. Such a phenomenon is often accompanied by declining birth rates. A population in such a state is considered to be an *ageing* one.

According to the *National Institute on Aging*, one eighth of the world, namely one billion people, will be over 65 years old by 2030, while, at the same time, the number of people under 15 will have dramatically declined.

The Demographic Transition Model (DTM)

The Demographic Transition Model is a model used to show the expected development of states in terms of population growth. This model suggests that a **country cycles through different phases in terms of population during the course of its development**. Below you will find a graph showcasing the different stages of population growth during a country's development according to the Demographic Transition Model. (>Figure 2.1)

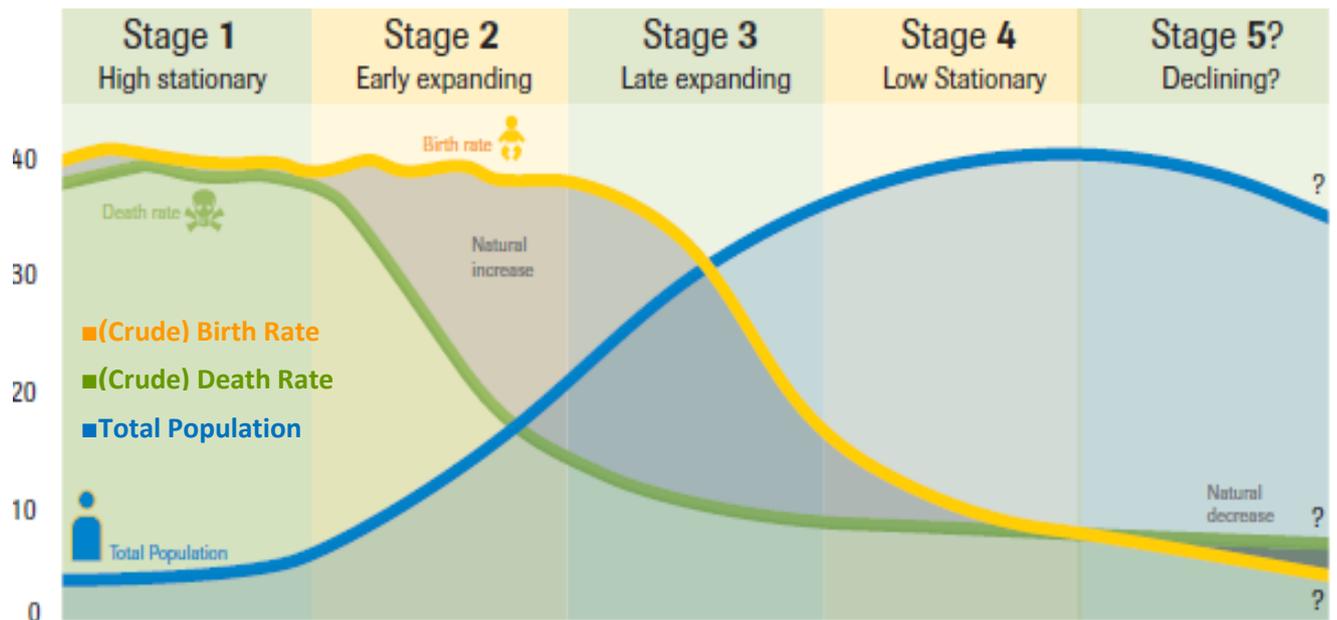


Figure 2.1

The main stages of population growth during a country's development according to the Demographic Transition Model (Source: <https://www.populationeducation.org>)

The state's birth & death rate and its total population seem to be inversely proportional, with the former declining and the latter rising as the state evolves from a developing to a developed one.

Population ageing in MEDCs

There are many reasons as to why this phenomenon is observed only in MEDCs. Some of the most important ones are listed below.

Better life conditions

It is undeniable that MEDCs offer superior life conditions to their citizens. This means that the quality of life is improved. When it comes to seniors, such a peaceful environment can play a huge role in the length of their lives, enabling them to lead a protracted life.

Exceptional healthcare

The citizens of MEDCs are receiving first-class medical treatment, as a plethora of well-manned hospitals and medical facilities is at their disposal. Moreover, developed countries are investing in the medical sector, meaning that they will be able to discover and offer cures for almost all sorts of illnesses, even newly encountered ones. As such, one can expect the residents of MEDCs to live longer than they normally would, thus increasing the life expectancy of their country, a factor that contributes to the phenomenon of population ageing.

Stressful and time-consuming jobs – Family planning

Younger residents of more economically developed countries who live in urban areas are reported to suffer from extremely high stress levels usually caused by their demanding job. Due to stress, lack of free time, their mediocre economic status and the option of family planning, many couples decide *not* to have children, thus contributing to the downswing of the country's crude birth rate.

These are the three main reasons that cause the ageing of MEDCs' population by:

- a) increasing the life expectancy in MEDCs,
- b) decreasing the crude death rate in MEDCs and
- c) decreasing the crude birth rate in MEDCs, which are exactly the symptoms of an ageing population.

Economic impact of population ageing in MEDCs

Population ageing can unfortunately cause a lot of damage of economic nature. Simply put, an ageing population is one that has plenty of people who require assistance and few to no people who can provide it. As such, the country's economic life cycle gets disturbed as only an outflow and no influx of funds is to be observed. In the long run, said country will end up having used its available funds without a way of counterbalancing any of its expenses.

This is what is referred to as a high dependency rate. An increased dependency rate has the following results on a state's economy:

- Less people are economically active and pay taxes, while more claim pension and/or health care benefits. In order for the state to keep up, it will either have to impose extremely high taxes to the working citizens or increase the age after which a citizen can/has to retire. Both are, of course, not ideal options, but if the state does not implement them it will most probably go bankrupt.
- The government will have to direct its investments towards pensions and healthcare, which are essential for the economic and physical prosperity of elderly citizens respectively. As such, the funds the country will be able to invest in other sectors of development, such as infrastructure, will be limited. This means that the country will be underdeveloped in a great many sectors.
- Since there is a shortage of working citizens, wages are bound to become inflated as a means of attracting potential employees. Yet wage inflation would then influence the prices of market products, which would have to adapt to the new economic standards, thus making the domestic economy unbalanced.
- An increase in the average age of a population will cause the market to change its approach towards it by offering more goods and services for seniors, thus changing the primary market sectors of that state.

As the issue is a rather topical one, such results have not been observed to a great extent yet, but unless the situation is significantly improved, they are expected over the course of the next few years.

Major Countries and Organizations Involved

Organizations involved

World Health Organization (WHO)

The WHO has introduced the so-called “**Global strategy and action plan on ageing and health**”, a strategy aimed at promoting healthy ageing and covering the needs of older adults in ageing societies.

The goals and objectives of the project as well as more information about it can be found on the official WHO [website](#).

National Institute on Aging (NIA) – A Department of the National Institutes of Health (NIH)

The NIA is an institute researching healthy ageing that tries to extend the average life length. Moreover, it is the primary Federal agency conducting Alzheimer's disease research.

(The [NIA](#) is one of the 27 departments of the [NIH](#).)

HelpAge International

Helpage is an international organization with the purpose of promoting the rights of the elderly, protecting them from discrimination and helping them overcome daily problems in urban areas.

You can find more information about the organization on its [website](#).



National Institute
on Aging



World Health
Organization



More ageing-related organizations can be found here:

- 1) <http://info-centre.jenage.de/ageing/organisations.html>
- 2) <http://www.populationmatters.org/>

Countries involved

Below you can find a list with the countries with the largest amount of citizens over 65 years old in the World: (>Figure 3.1)

Rank	Country	% of population over 65 years old
1	Japan	26.3 %
2	Italy	22.4 %
3	Greece	21.4 %
4	Germany	21.2 %
5	Portugal	20.8 %
6	Finland	20.5 %
7	Bulgaria	20.0 %
8	Sweden	19.9 %
9	Latvia	19.4 %
10	Malta	19.2 %
11	France	19.1 %
12	Denmark	19.0 %
13	Croatia	18.9 %
14	Estonia	18.8 %
15	Lithuania	18.8 %

Rank	Country	% of population over 65 years old
16	Spain	18.8 %
17	Austria	18.8 %
18	Belgium	18.2 %
19	Netherlands	18.2 %
20	Czech Republic	18.1 %
21	Slovenia	18.0 %
22	Switzerland	18.0 %
23	Hungary	17.8 %
24	United Kingdom	17.8 %
25	Romania	17.3 %

Figure 3.1

(Source: <http://www.worldatlas.com>)

The countries with the largest amount of citizens over 65 years old in the world.

The European Union's stance:

The EU is keen on improving the key sectors negatively affected by the issue so that these will be able to withstand the impact, as seen in the EU report "Population ageing in Europe: facts, implications and policies" on the outcomes of EU-funded research on the issue:

"A wide scope of policies addressing population ageing was advocated already in March 2001 by the Stockholm European Council, which agreed on the overall framework with a three-pronged strategy of:

- (i) reducing public debt at a fast pace;
- (ii) raising employment rates and productivity; and
- (iii) reforming pension, health care and long-term care systems — with a view to coping with the challenges posed by ageing populations."

The report also includes the goals of the EU on the resolution of the issue:

"Both at EU and at national levels it will be necessary to review existing policies to determine whether they need to be adjusted to take account of the changing demography of the EU [...]. The core policy directions were identified as follows:

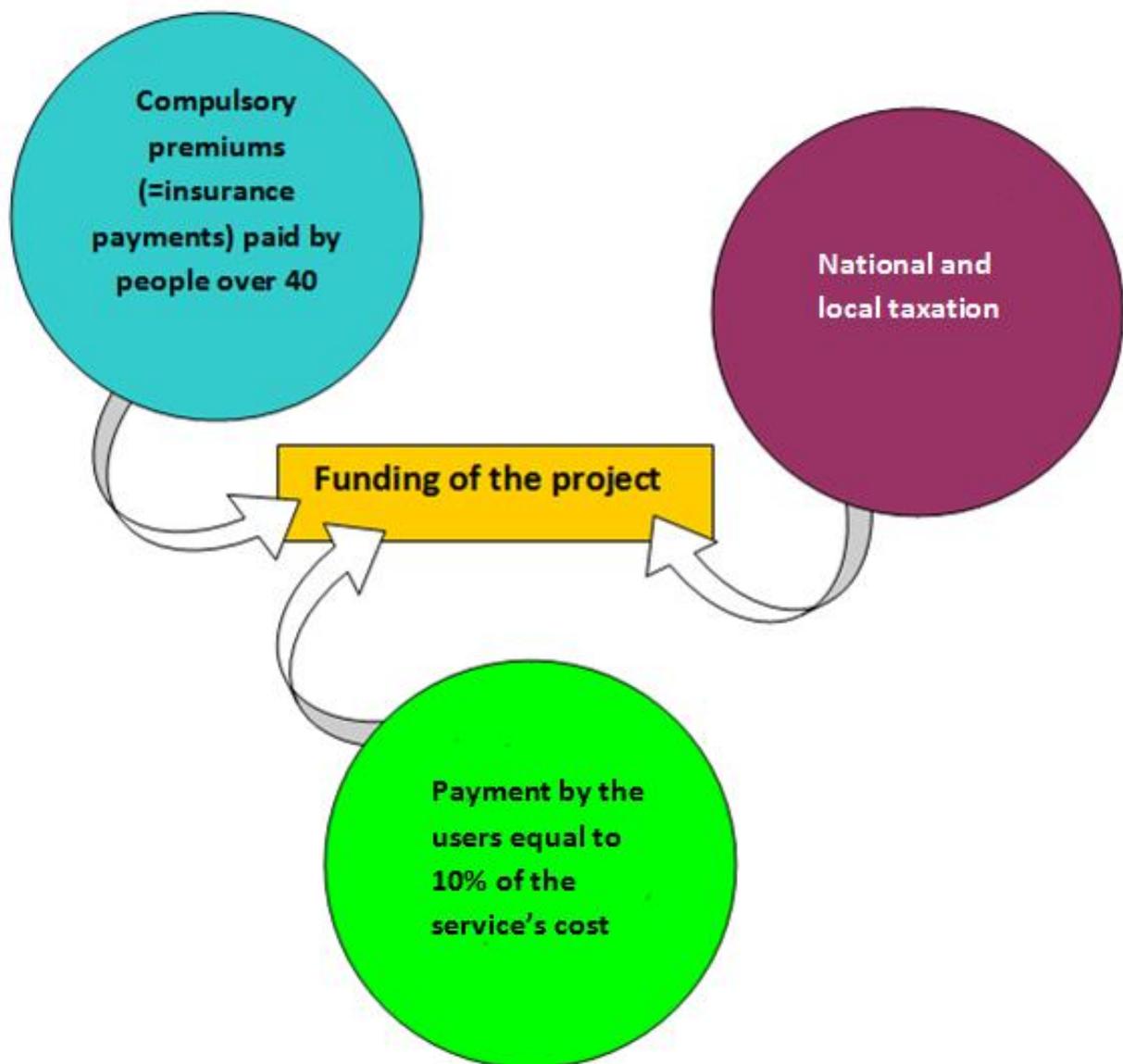
1. Support demographic renewal through better conditions for families and improved reconciliation of working and family life;
2. Boost employment—more jobs and longer, better quality working lives;
3. Raise productivity and economic performance by investing in education and research;
4. Receive and integrate migrants into European society;
5. Ensure sustainable public finances to guarantee adequate pensions, health care and long-term care."

(Source: https://ec.europa.eu/research/social-sciences/pdf/policy_reviews/kina26426enc.pdf)

Japan's stance:

The Japanese government introduced long-term care insurance that offers social care to citizens over 65 years as a means of dealing with the needs of the excessive amount of elderly citizens. The system is part-funded by compulsory premiums for all those over the age of 40, and part-funded by national and local taxation. Users are also expected to contribute a 10% co-payment towards the cost of the service.

The project is funded as follows:



But is that really a sustainable approach to the problem? While it may have made access to healthcare much easier, the program has been so popular amongst the older members of Japan's population since its introduction that the Japanese government now has to cope with the immense expenses of the project. Japan's solution to this was the introduction of higher co-payments for wealthier adults.

Figure 3.2
 (Source: <https://zgeography.wordpress.com>)
 The age structure in Japan (in 2000, the beginning of the 21st century). Notice how it differs from the age structure of a developing country. (>Figure 3.3)

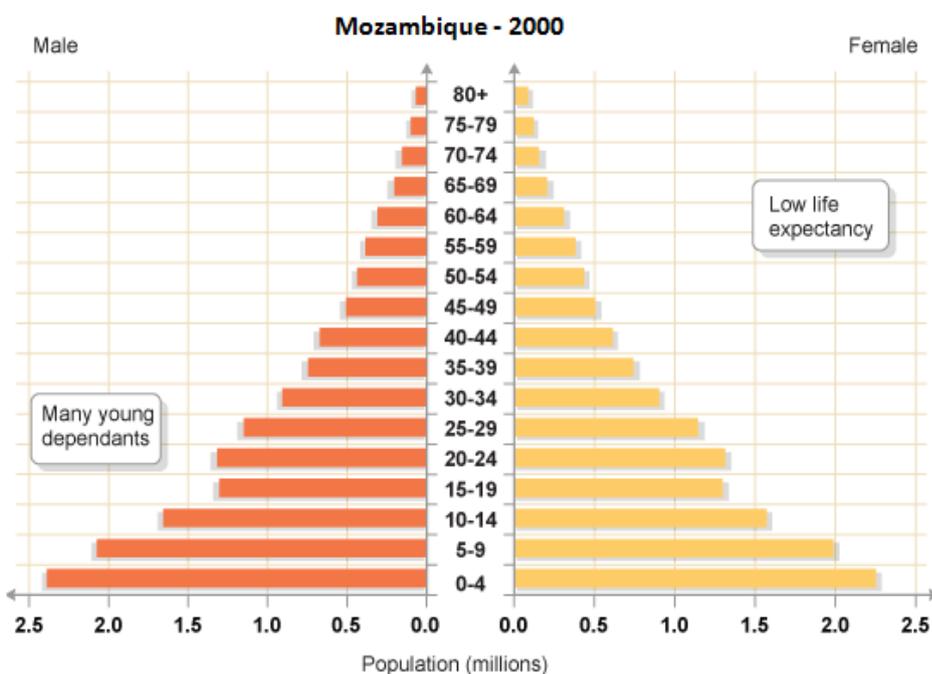
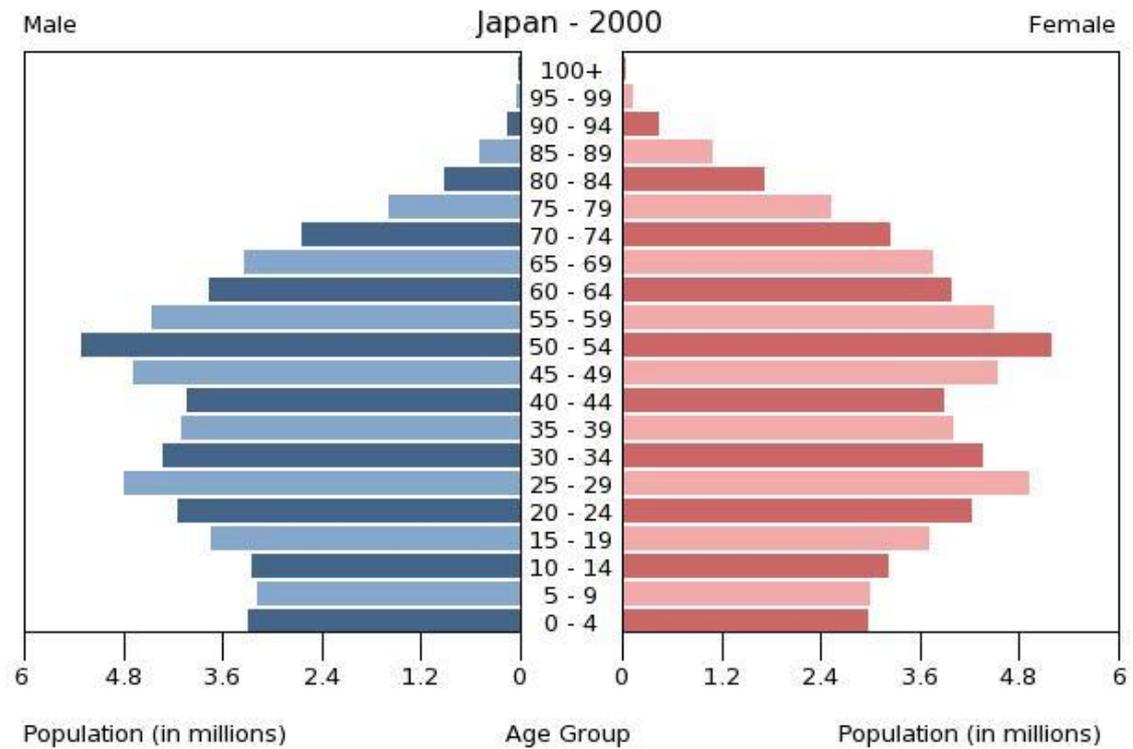


Figure 3.3
 (Source: <http://www.bbc.co.uk>)
 The age structure in Mozambique (in 2000). Notice how it differs from the age structure of a developed country. (>Figure 3.2)

Timeline of Events

Date	Description of event
26 th July - 6 th August 1982	<p>World Assembly on Ageing</p> <p>The (first) World Assembly on Ageing was held in <i>Vienna</i>. During the assembly a Political Declaration and, more importantly, the <i>Vienna International Plan of Action on Ageing</i> (VIPAA) was endorsed (resolution 37/51). It is considered to be a basis for the formulation of policies on the issue of ageing, as it is the first international instrument on ageing, and includes recommendations for action in fields such as research on ageing and analysis of collected data, health and nutrition of the elderly, education on ageing, family, housing and environment of seniors, etc.</p>
14th December 1990	<p>The UN declares that the 1st of October is the annually held “International Day of Older Persons”</p>
16 December 1991	<p>The General Assembly adopts the United Nations Principles for Older Persons through resolution 46/91.</p>
1 st October 1998 (International Day of Older Persons)	<p>1999 gets declared the “International Year of Older Persons” by UN Secretary General Kofi Annan (the same fact is stressed again in A/RES/47/5, Operative Clause 3 – see Relevant UN Treaties, Resolutions and Events)</p>
8th - 12th April 2002	<p>Second World Assembly on Ageing</p> <p>The Second World Assembly on Ageing took place in <i>Madrid</i>. The countries participating in the assembly adopted the <i>Madrid International Plan of Action on Ageing</i> (MIPAA), an action plan that makes recommendations for improvement of certain sectors in order to improve the life conditions and ensure the well-being of senior citizens. Furthermore, this plan of action tries to address the primary issues posed by ageing.</p>

Relevant UN Treaties, Resolutions and Events

- > [Check Section ‘Timeline of Events’ for VIPAA and MIPAA](#)

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- [Implementation of the International Plan of Action on Aging and related activities, 14th December 1990 \(A/RES/45/106\)](#)
 - [Implementation of the International Plan of Action on Ageing and related activities, 16 December 1991 \(A/RES/46/91\)](#)

These resolutions tried to ensure that the measures proposed in the VIPAA would be implemented and they also featured other minor measures on the issue, yet the most important measure these resolutions had to offer were the **United Nations Principles for Older Persons** (introduced in **A/RES/46/91**), which are pretty much the special rights the elderly should possess, separated in five different categories: **Independence, Participation, Care, Self-fulfilment, Dignity**. You can find them in the resolution.

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- [Proclamation on Ageing, 16th October 1992 \(A/RES/47/5\)](#)

This resolution:

- a) urged the international community to implement previous resolutions and conventions, such as the Vienna International Plan of Action on Ageing,
- b) promoted the rights of the elderly in modern societies and focused on disseminating the **United Nations Principles for Older Persons**,
- c) stressed once again that the year 1999 is to be considered the International Year of Older Persons.

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- [\(1st\) Follow up to the Second World Assembly on Ageing, 16th January 2003 \(A/RES/57/167\)](#)
 - [\(2nd\) Follow-up to the Second World Assembly on Ageing, 30th January 2007 \(A/RES/61/142\)](#)
 - [\(3rd\) Follow up to the Second World Assembly on Ageing, 22nd October 2009 \(A/RES/67/143\)](#)

All three “Follow-ups to the Second World Assembly on Ageing” are resolutions stressing the importance of the MIPAA and trying to ensure that the measures it proposed are implemented by “guiding” the actions of Member States on the issue.

Previous Attempts to solve the Issue

The primary previous attempts to resolve the issue are the Vienna International Plan of Action on Ageing (VIPAA) and the Madrid International Plan of Action on Ageing (MIPAA), as well as other minor resolutions revolving around them.

Both of these plans strived for improvements in many sectors as it was believed that the improvement of these sectors would be a major step towards addressing the issue effectively.

More specifically the VIPAA aimed towards enhancing the following sectors:

- i. Research on ageing,*
- ii. data collection (on ageing) and analysis,*
- iii. Training and education (on ageing),*
- iv. Health and nutrition of seniors,*
- v. Protection of elderly consumers,*
- vi. Housing and environment,*
- vii. Family,*
- viii. Social welfare of older people,*
- ix. Income security and employment of elders.*

Then, in 2002, the MIPAA focused on the following topics:

- i. Older people and development,*
- ii. Advancing health and well-being into old age;*
- iii. Ensuring enabling and supportive environments.*

Possible Solutions

There are some possible solutions to the issue, however the question remains: Are they truly sustainable and effective?

- Increasing the retirement age:

By increasing the retirement age, citizens will be economically active for a longer period of time, which means that the state will profit from taxes by more people as the dependency ratio will be more balanced. However, is a state really willing to potentially “sacrifice” the physical prosperity of its citizens in such a way? What if these citizens develop health issues because of exhaustion? What will happen to citizens who retired early through early retirement offers?

- Improvements in the healthcare sector

Countries should definitely invest in their healthcare sector, as this sector is the one that will be needed the most in the era of population ageing because it is essential for the prosperity of older citizens.

- Encourage more births in MEDCs

In order to counterbalance the increasing average age, states could see to the upswing of the birth rate. This could be achieved through:

- a) Cash bonuses and other types of bonuses to families that give birth to children (A similar policy exists in Singapore),
- b) Introducing media campaigns with the aim of informing young citizens about the impact of population ageing so as to encourage them to have more children and thus prevent it to a possible extent, of course. Such campaigns may have a high cost but, should they achieve their goal, they could prevent much more serious economic losses.

- Increase of students

By spending funds on education, the government will increase the appeal of the country's universities, which will then attract young people from other countries to study there. This equals an influx of young and energetic people who will not only complete their studies in said country but will potentially work and live there, thus counterbalancing the situation.

However, although such an action will boost the country's economy by attracting **young** people who will have expenditure, pay taxes, etc. (**income for the state**), it is a rather difficult and risky operation as it:

- a) requires a lot of funding, which may not be available,
- b) may not have immediate or even any results, which would worsen the country's economy even more.

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-The sources of figures are stated next to them as plain links- ■