BRIEFING PAPER

MAJOR DEVELOPMENTS AND TRENDS IN POPULATION AGEING

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Briefing Paper prepared for the
AARP and United Nations Programme on Ageing/DESA
Briefing Series on Major Developments and Trends in Global Aging
United Nations, New York
February 7-9, 2007

Note: The views expressed herein are for information, debate, and discussion and do not necessarily represent formal policies of AARP.

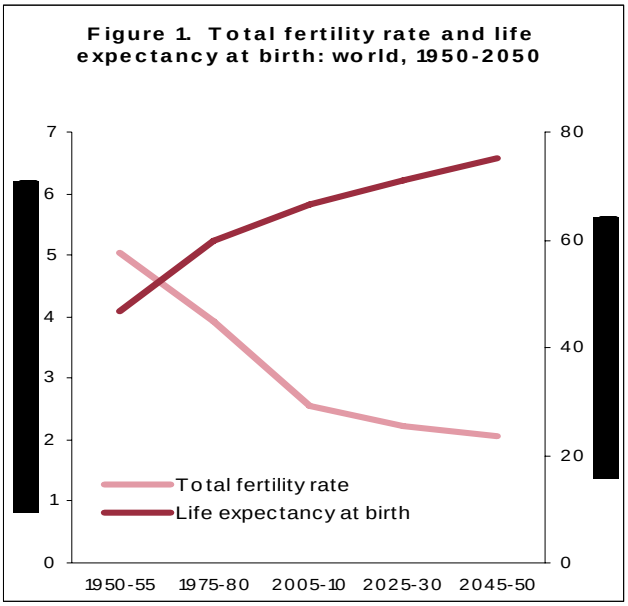
Major Developments and Trends in Population Ageing

Demographic transition

Underlying global population ageing is a process known as the "demographic transition" in which mortality and then fertility decline from higher to lower levels. Fertility decline has been the primary determinant of population ageing. Over the last six decades, the total fertility rate decreased globally by almost half, from 5.0 children per woman in 1950-1955 to 2.7 in 2005-2010, and is expected to drop further to the replacement level of 2.1 children per women by 2050 (figure 1).

Presently, the total fertility rate is below the replacement level in practically all industrialized countries. In the less developed regions, the fertility decline started later and has proceeded faster than in the more developed regions[1]. Great disparities persist within the less developed regions. In Eastern Africa, Western Africa and Middle Africa, total fertility rate remains in excess of 5.2 children per woman. Meanwhile, current rates are 2.4 children per woman or less in Eastern Asia, South-eastern Asia, South America and the Caribbean. In 33 developing countries, the total fertility rate is estimated to be under replacement level already.

As fertility rates move towards lower levels, mortality decline, especially at older ages, assumes an increasingly important role in population ageing. In all regions people are increasingly likely to survive to older ages, and once there they are tending to live longer, as the gains in life expectancy are relatively higher at older ages.



At the global level, life expectancy at birth is currently 66.5 years. Over the next four decades it is projected to increase by about 9 years, to reach 75 years in 2045-2050 (figure 1). Life

[1] The less developed regions include all areas of Africa, Asia (excluding Japan), Latin America and the Caribbean, and Oceania (excluding Australia and New Zealand). The more developed regions include Northern America and all areas of Europe plus the three countries excluded from the less developed regions.

expectancy is significantly higher in the more developed regions (76 years) than in the less developed regions (65 years). As mortality becomes more concentrated at older ages of the population, the gap in life expectancy among regions will tend to decrease. By 2045-2050 it is expected to have risen to 82 years in the more developed regions and to 74 years in the less developed regions.

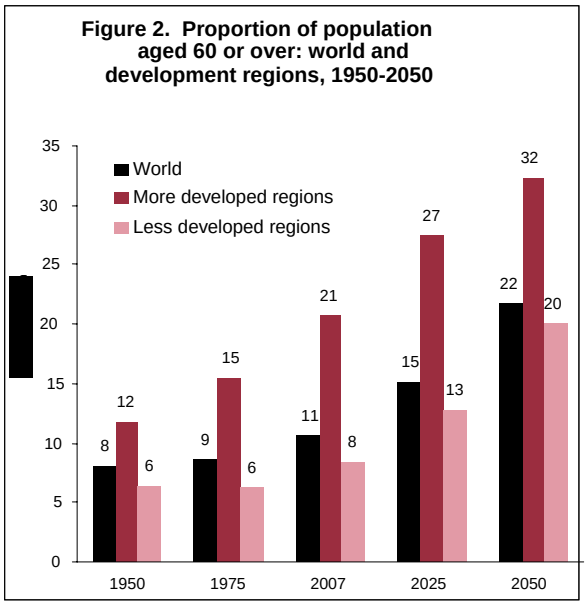
Except for a small number of countries, the risk of mortality is substantially higher among males than among females in practically all age groups. As a result, life expectancy is considerably higher among females than among males. Globally, current life expectancy at birth is estimated to be 64 years among males and 69 among females. In Japan, life expectancy at birth for women is 86 years, currently the highest in the world. In 32 other countries or areas, female life expectancy at birth now exceeds 82 years, including seven from the less developed regions. By 2050, female life expectancy at birth is projected by the United Nations to have surpassed 92 years in Japan and 86 years in 28 other countries.

Magnitude and speed of population ageing

The older population is growing at a considerably faster rate than that of the world's total population. In the current period of 2005-2010, the growth rate of the older population (2.6 per cent) is more than twice as high as that of the total population (1.1 per cent). In the near future, the difference between the two rates is expected to become even larger as the baby boom generation starts reaching older ages in several parts of the world. Projections indicate that the population over age 60 will be growing 3.7 times as rapidly as the total population by 2025-2030 and more than 4 times as fast by 2045-2050.

In absolute terms, the number of older persons has more than tripled since 1950 and will almost triple again by 2050. In 1950, there were 205 million persons aged 60 or over throughout the world. In 2007, this number increased to 705 million, and is projected to increase further to almost 2 billion by 2050.

Figure 2. Proportion of population aged 60 or over: world and development regions, 1950-2050



Because the older population has grown faster than the total population, the proportion of older persons relative to the rest of the population has increased considerably. The percentage of older persons is projected to double worldwide by the middle of this century, from 11 per cent in 2007 to 22 per cent in 2050 (figure 2). At the global level, 1 in every 9 individuals is currently at least 60 years of age and 1 in every 13 is aged 65 or over. By the year 2050, more than 1 in every 5 persons throughout the world is projected to be aged 60 or over, while nearly 1 in every 6 is projected to be at least 65 years old.

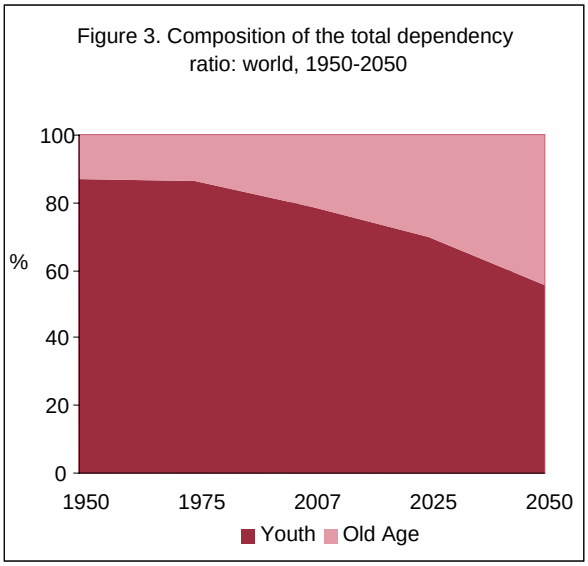
Because the more developed countries are in general at a more advanced stage of the demographic transition, the proportions of older persons in those regions are projected to remain significantly higher than the proportions in the less developed regions well into the twenty-first century. More than 20 per cent of the population in the more developed regions, but only about 8 per cent in the less developed regions is currently aged 60 or over (figure 2).

Although the highest proportions of older persons are found in the more developed regions, this age group is growing considerably more rapidly in the less developed regions. As a consequence, the older population will be increasingly concentrated in the less developed regions. Whereas the number of persons aged 60 or over in the more developed regions will increase by about 60 per cent between 2007 and 2050 (from 252 million to 400 million), in the less developed regions the older population will more than triple during this same period (from 453 million to 1.6 billion). By 2050, nearly four fifths of the world's older population will be living in the less developed regions.

Dependency ratios

The total dependency ratio (number of persons either under age 15 or over age 65 per hundred persons aged 15-64) is a commonly used measure of the potential need for social support. It is based on the simple notion that all persons under age 15 or over age 65 are likely to be in some sense dependent on the population in the working ages of 15-64. However, since not all young and old persons require support, nor do all working-age persons actually provide direct or indirect support, it must be recognized that the dependency ratio gives no more than a rough approximation of the burden of dependency.

Figure 3. Composition of the total dependency ratio: world, 1950-2050



From 1950 to 1975, the total dependency ratio increased globally from 65 to 74. This change was mainly due to the substantial increases in the proportion of children observed in most countries of the less developed regions. Then, as fertility declined sharply over the more recent decades, the total dependency ratio also went down, to 54 in the year 2007. This decreasing trend is projected to continue at least through the first quarter of the current century, before the total dependency ratio starts increasing again. By 2025, the ratio will slightly fall to 53, but by 2050 it will increase to 58, a level similar to that of the year 2000. However, in the more developed regions, the increase in the total dependency ratio is expected to start earlier, so that by 2025 the ratio will rise to 58, up from 47 in 2007, and by 2050 it will climb further to 71.

Although the world's total dependency ratio is projected to change little between 2007 and 2050, the composition of the ratio will undergo important changes over the period. Currently, the younger population accounts for the large majority of the world dependent-age population. In the future, the balance between the youth component of the dependency ratio and the old-age component will become more equal. By 2050, the share of the old-age component is projected to more than double, from the current 21 per cent to 44 per cent (figure 3).

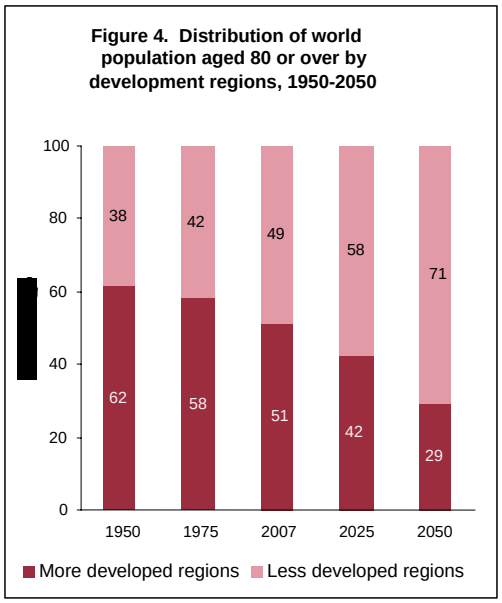
An increase in the old-age dependency ratio indicates a situation in which an increasing number of potential beneficiaries of health and pension funds (mainly those aged 65 and over) are supported by a relatively smaller number of potential contributors (those in the economically active ages of 15-64). This trend tends to impose heavier demands on the working-age population (in the form of higher taxes and other contributions) in order to maintain a stable flow of benefits to the older groups. There are factors, however, that can help to offset the rising costs of pension and health systems. For example, an increase in healthy life expectancy in conjunction with an extension of the retirement age would allow people to remain in the workforce longer. In fact, a process of gradual increase in retirement age is currently in effect in several countries and in many developed countries there is evidence that people are enjoying a longer period of healthy life.

The oldest-old

A notable aspect of the global ageing process is the progressive demographic ageing of the older population itself. For most nations, regardless of their geographic location or developmental stage, the population aged 80 or over is growing faster than any younger segment of the older population. At the global level, the average annual growth rate of persons aged 80 years or over (3.9 per cent) is currently 50 per cent higher than the growth rate of the population over 60 years of age (2.6 per cent). In 2007, among persons aged 60 or over, 1 in 8 is 80 or over; in 2050, this ratio is expected to increase to approximately 1 in 5.

Although the oldest-old still constitute a small proportion of the total population, their numbers are becoming increasingly important, especially in the less developed regions. By 2050 people aged 80 years or over are projected to number almost 395 million worldwide, about 4 times as many as in 2007 (94 million persons). In 1950, they numbered less than 14 million.

In the course of the next four decades, the population aged 80 years or over is expected to grow significantly faster in the less developed regions than in the more developed regions. As a consequence, the global proportion of people aged 80 or over living in the less developed regions will increase from 49 per cent in 2007 to more than 70 per cent in 2050 (figure 4).



Although the proportion of people who live beyond the age of 100 is still very small, their number is also growing rapidly. In 2007, there are an estimated 310,000 centenarians throughout the world. By 2050 they are projected to number 3.7 million, roughly a twelve-fold increase from current levels.

Gender imbalance

Because women's life expectancy is greater than men's, older women greatly outnumber older men in most countries. In many cases, the difference is so large that the concerns of the older population should in fact be viewed primarily as the concerns of older women. This is especially true in the case of the oldest-old populations, as the female share increases markedly with age. Currently, the global sex ratio of the population aged 60 or over is 82 males per hundred females. Thus, there are approximately 70 million more women aged 60 years or older than there are men of the same age. Since female mortality rates are lower than male rates at older ages, the proportion of women in the older population grows substantially with advancing age. In 2007, women outnumber men by almost 4 to 3 at ages 65 or over, and by almost 2 to 1 at ages 80 or over.

Marital Status

Marital status can strongly affect the emotional and economic well-being of older persons, particularly those with an illness or disability, as it has a direct impact on living arrangements and hence on the availability of caregivers. In general, older men are much more likely to be married than are older women due to a combination of factors, including higher life expectancy among women, the tendency for men to marry women who are slightly younger, and higher remarriage rates among older widowed men than widowed women. One implication of this situation is that older men are more likely to receive assistance from a spouse, especially when health fails, than are older women.

At the global level, an estimated 62 per cent of the population aged 60 years or over is married. The variation between sexes, however, is huge. Among older women less than half (48 per cent) are married, whereas among older men this proportion reaches 80 per cent. On average, there are

only 31 unmarried older men per 100 unmarried older women. This general pattern is observed in both the more developed and the less developed regions.

Older persons living alone

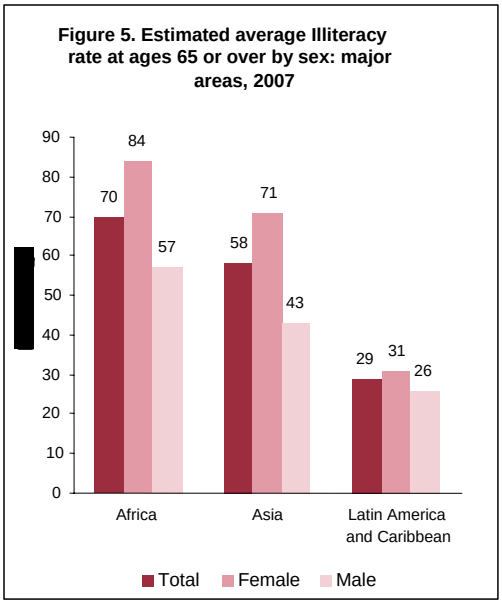
Older persons living alone constitute a group of special social and policy concern as they are at greater risk of social isolation and economic deprivation. For the world as a whole, the proportion of the population aged 60 years or over living alone is estimated to be 14 per cent. On average, the proportion of older persons living alone is significantly higher in the more developed regions (25 per cent) than in the less developed regions (7 per cent).

Because older women are less likely than older men to be married, mainly because of widowhood, a significantly higher proportion of older women than older men live alone. Worldwide, the average proportion of women aged 60 years or over living alone (19 per cent) is more than double the proportion for men in the same age group (8 per cent). It is worth noting, however, that among the unmarried, older men are more likely than older women to live alone in most countries.

Illiteracy rates

Illiteracy rates among older persons remain high in most of the less developed regions. This situation is of special concern as higher levels of education are generally associated with better health and economic status within the older population. Combining the data from the 80 developing countries for which information was available, an average of 53 per cent of persons currently aged 65 or over are estimated to be illiterate. In all countries, the illiteracy rate among older persons was higher among females than among males. On average, 65 per cent of women and 42 per cent of men aged 65 years or over are estimated to be illiterate in the developing countries, a gender gap of 23 percentage points.

Figure 5. Estimated average Illiteracy rate at ages 65 or over by sex: major areas, 2007



Variations in illiteracy rates are marked between major areas. The average rates of 70 per cent in Africa and 58 per cent in Asia are significantly higher than in Latin America and the Caribbean,

where the aggregate rate is less than 30 per cent (figure 5). In addition, the gender gap in illiteracy is much lower in Latin America and the Caribbean (5 percentage points) than in Africa (27 percentage points) or Asia (28 percentage points).

Labour force participation

Traditionally, the proportion of older men who are economically active has been notably higher than the proportion of older women. Nearly everywhere, however, the trend has been towards lower levels of economic activity among older males and higher levels among older females. At the global level, labour force participation at older ages has dropped among men from 35 to 30 per cent and risen among women from 10 to 12 per cent between 1980 and 2007. During this same period, the female share of the older work force increased from 28 per cent in 1980 to 33 per cent in 2007.

Old-age support systems in the form of pension and retirement programmes are much less prevalent in the less developed regions than in the more developed regions. It is not surprising, therefore, to find higher proportions of older persons in the labour force in the less developed regions. Currently, these rates are 26 per cent in the less developed regions and 9 per cent in the more developed regions.

Although lower levels of labour force participation at older ages are usually a sign of higher levels of social security coverage, they may also result from other factors such as a shortage of employment opportunities and obsolescence of skills and knowledge.

Statutory pensionable age

In many countries, women become eligible for full pension benefits at lower ages than men, even though women generally have a longer life expectancy. Although the norm has been for a gender differential of about 5 years, an emerging trend toward equalizing the statutory pensionable age seems to be under way. As of 2006, men and women had the same statutory pensionable age in the majority of countries (60 per cent) for which data were available. For both men and women pensionable ages tend to be higher in the more developed countries.

In the less developed countries, the most prominent pension-related issue is the coverage gap and the need to extend coverage to excluded groups such as women, migrants, rural agricultural workers, and urban informal sector workers. It is estimated that less than 25 per cent of the world's population currently has access to adequate social security coverage, and half of the population does not enjoy any form of social protection.

Final remarks

As the twentieth century drew to a close, population ageing and its social and economic consequences were drawing increased attention from policy-makers worldwide. Currently, many countries, especially in the more developed regions, have already achieved population structures that are older than ever observed in human history.

The twenty-first century will witness even more rapid population ageing than did the century just past. By the middle of the century, the population of the less developed regions will have about the same percentage of persons aged 60 years or over as the current percentage in the more developed regions. The developing countries will also reach that stage of demographic history over a much shorter period of time than was required by the more developed regions. In many

cases, rapid population ageing will be taking place in countries where the level of economic development is still low. In general, the challenge for the future is "to ensure that persons everywhere are able to age with security and dignity and to continue to participate in their societies as citizens with full rights" (United Nations, 2002. *Report of the Second World Assembly on Aging, Madrid, 8-12 April 2002,* para. 10. Sales No. E.02.IV.4).