



# Social Policy Highlight

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## Social security in an ageing world: Adapting to demographic challenges

Demographic change is recognized as one of the most important challenges that social security institutions face. For this reason, better analysis of this challenge is a key commitment of the current programme of work of the International Social Security Association. In 2010, a number of *Social Policy Highlights* will report on the impacts of demographic change on social security and address specific issues including pension financing, family benefits, health-care provision and the role of a preventative culture. As this *Social Policy Highlight* reports, the pace at which national populations shift from a demographic profile characterized by large numbers of children and low life expectancies to one of small numbers of children and long life expectancies differs. Nevertheless, for most countries, the trend over the next decades is towards an increasing proportion of older adults and a corresponding decrease in the proportion of young people. This has profound policy implications for how societies choose to redistribute resources among generations. As this *Highlight* concludes, if all countries are to adapt successfully to the challenges ahead, key policy lessons must be learned.

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### Global population ageing

Global population ageing is one of the key challenges of the twenty-first century. As the demographic transition crosses the globe, shifting populations from high fertility and mortality rates (thus large numbers of children and low life expectancies) to low fertility and mortality rates (thus small numbers of children and long life expectancies), so the number and the proportion of older adults increases, and correspondingly the number and proportion of young people decreases.

The demographic transition is now underway in all regions of the world (see Box 1), with the exception of sub-Saharan Africa, which still retains both a high fertility and mortality rate. Indeed it is Asia and Latin American that are ageing most rapidly. While Europe and North America took around

#### This issue

- Summarizes the evolving nature of global population ageing
- Reports on the challenges of rising elderly dependency ratios for social security systems in ageing societies
- Details the labour market and savings opportunities for societies with falling youth dependency ratios
- Considers how national collective goals may influence adaptation to population ageing
- Presents policy lessons for national social security systems

150 years to complete the transition to a mature population (i.e. more older than younger dependents), their ageing will slow significantly over the next 20 years, the numbers of older people increasing by only 50 per cent by 2030. In contrast, Asia and Latin America, and even some parts of Africa and the Middle East, will age rapidly, facing a near 150 per cent increase in the numbers of older people within two decades. However outside sub-Saharan Africa, all countries will face a significant fall in those younger than age 15, dropping across the globe to less than one fifth in all regions by 2050.

### The demographic transition

- By 2030 half the population of Western Europe will be older than age 50, with a life expectancy at that age of a further 40 years.
- By 2030 one quarter of the total population of the rich industrialized world will be older than age 65 and half of Asia will be older than age 60.
- Europe became mature in 2000, with more people older than age 60 than younger than age 15, and Asia will become mature around 2040.
- Asian countries currently have the lowest Total Fertility Rate (TFR), with Hong Kong (China) at less than one child per reproductive women, and Singapore and the Republic of Korea at just over 1.
- Even Pakistan and Afghanistan, with current TFRs of 4 and 6.6, respectively, are predicted to see fertility rates fall to just above replacement by 2050.
- Life expectancy at birth is predicted to rise across the globe, reaching age 84 for developed regions and age 77 for the less developed by the middle of the century. Thirty-six per cent of Japan's population will be aged 65 or older and 15 per cent 80 or older by 2050.
- By 2050, the elderly dependency ratio will exceed 70 per cent in Italy, Spain and Japan, while remaining below 40 per cent in Denmark, Iceland, Luxembourg, Mexico, Turkey and the United States.
- By 2025, the working-age population of Asia will equate to 68 per cent of the total population.
- The Russian Federation and the countries of Eastern Europe have a different current and predicted demography to the rest of Europe and Asia. Despite the fact that fertility rates are projected to rise, Russia's population is projected to fall from 144 million to 104 million in 2050, and Ukraine's from 50 million to 30 million over the same period.
- Health-care spending on older persons in Latin America by 2030 is projected to rise to 25 per cent in the region as a whole.

## Total dependency ratios

It is thus important to shift the emphasis away from ageing per se and increases in elderly dependency ratios (EDRs) towards the impact of falls in both mortality and fertility, whereby in some countries the fall in young dependency ratios (YDRs) is such that overall total dependency ratios (TDRs) will actually fall. The People's Republic of China (hereafter, China), for example, will see a fall in its overall Total Dependency Ratio, from a peak of 80 dependents for every 100

workers in the 1960s and 1970s to 60 dependents by 2050. Indeed China is currently at an all-time low of only 40 dependents per 100 workers as a result of its rapidly falling fertility that stems from the One Child Policy. Similarly, the United States reached its highest TDR in 1965 when there were 95 dependents per 100 workers.

However, for many countries the rise in the EDRs will be significant. The next decade will see a rapid shift towards increased EDRs in most industrialized countries. Italy will see its EDR double between now and 2050 to reach 70:100 workers. In contrast the United Kingdom's ratio will increase only slightly, reaching 67:100.

Hong Kong (China), the Republic of Korea, Singapore and urban China will reach similar EDRs by 2030. The Republic of Korea is ageing particularly rapidly with a predicted doubling of its population older than age 60 and a quadrupling of those older than age 80 by 2030. By 2040, rural China and Thailand will see a rapid increase in EDRs, Malaysia by 2045, and India, Indonesia and the Philippines by 2050. Most striking is Japan whose TDR will increase from one dependent for every two workers in 1950 to 1:1 by 2050.

## The demographic window

Although many Asian and Latin American countries will face a large future EDR, a demographic window will present many with opportunities – referred to as the “demographic dividend” – over the next few decades. This usually occurs late in the demographic transition when a series of large birth cohorts are followed by a set of far smaller ones as birth rates fall. This results in a decrease in young dependents, and thus a fall in the YDR.

This is accompanied by a substantial increase in the potential labour force, and the potential for higher savings rates particularly as the consumption needs of large numbers of dependent children is reduced. This can lead to greater per capita output and economic growth through an enhanced labour force and high investment rates, thus producing the demographic dividend. In addition, this allows the society to increase its aggregate per capita income level before the time the population becomes mature, and to accumulate assets which can be drawn upon to help finance the consumption needs of an elderly population.<sup>1</sup>

China's and Thailand's demographic dividend period is forecast to last until 2035-2040, Malaysia until 2045, India and Indonesia until 2050. In contrast, weak governance and a lack of openness to trade appear to have slowed the potential growth that the demographic dividend might have brought to Latin America.

## Societal challenges and the capacity to adapt

Population ageing will impact upon all social security provisions from health and long-term care, pensions, unemployment and disability programmes, to family structures impacting on family benefits. Some observers, such as the International Monetary Fund (IMF) for example, argue that population ageing poses major structural challenges for

health-care systems that are analogous to those driving reforms in pension systems. However, the majority of empirical research supports the view that non-demographic factors, such as the continually increasing range, sophistication and cost of health-care interventions, alongside the tension between the propensity of patients to demand more health services and the unwillingness of taxpayers to supply additional public finance for health care, are much more important than population ageing. Regardless of the demand, whether health or financial, a key challenge will be society's capacity to adapt to population ageing.<sup>2</sup> This includes:

- the capacity of *individuals* and *households* to make the relevant adjustments to savings behaviour, labour supply, private inter-generational transfers, and investment in human capital;
- the capacity of *institutions* to make the relevant adjustments to enable arrangements for savings, labour supply, public inter-generational transfers, and investment in human capital.

## Social goals and population ageing

As societies attempt to successfully adjust to population ageing, a key public policy question is how national collective goals will influence these necessary societal adjustments, and how such required adjustments will be facilitated or restricted by existing social goals.

*Goal of increasing general prosperity.* This is a primary goal of most countries as general prosperity reduces poverty and increases both the standard of living and health outcomes of the population, though not necessarily quality of life. There is a fear in some quarters that population ageing will reduce economic growth, and the policy challenge is to minimize this effect. Maximizing the benefits of the demographic dividend and adjusting TDRs, through policies that regulate youth entry into and old age exit out of the labour market, (alongside policies, for example, that promote higher female participation and the integration of those with disabilities), are important here.

*Goal of intra- and inter-generational fairness.* The goal of maintaining intra-generational fairness might well form an important government objective in many pension policies. Goals around inter-generational fairness are used to frame policies related to inter-generational transfers. This includes a sense of the appropriate ratio between average retirement income and average worker income. It also includes recognition of the potential impact of public policy on the well-being of different birth cohorts and whether public policy distributes the burden of population ageing fairly across older and younger cohorts.

An important factor here is the concept of inter-generational fairness and whether this will change in the light of current population ageing. The traditional contract between the generations is based on a system of inter-generational reciprocity whereby adults provide for young dependents (children) and in return when those young dependents become adults they provide for older dependents. This is maintained in most societies both at the familial level (parents providing for young children, children providing for elderly parents) and at the societal level with adults within the labour market providing,

via public transfers, for both younger and older dependents, to provide health care and education, and health care and income protection, respectively.

The question for an ageing population that has arisen as a result of fertility and mortality reduction is whether successful cohorts (in terms of both fertility and mortality reduction) pass the cost of such success onto future cohorts via the “traditional” inter-generational contract, or bear the cost of their success via an “adapted” inter-generational contract. This latter contract would require older cohorts to bear the costs of their longer lives through, for example, higher post-retirement contributions to their own welfare and/or a longer working life.

*Goal of maintaining social cohesion.* The goal of maintaining social cohesion will be addressed in very different ways in different societies and cultures. In particular some governments will place a large emphasis on immigration as a policy instrument to mitigate the economic impact of population ageing and this will, to an extent, reflect their migration history and the potential social impacts that may arise from the arrival of large numbers of adults. Thus the United Kingdom and the United States, with their long history of encouraging immigrants from across the globe, have freely used migration to compensate for their ageing populations. While Japan and the Republic of Korea, without such a history, are beginning to consider the potential social impacts of immigration.

## Policy implications

Policy must set the framework of incentives within which individual and institutional decisions are made. A number of policy implications arise from the challenge that population ageing poses for the capacity and need to adjust. Pay-as-you-go social security programmes face the challenge of a low or even potentially negative rate of return when the workforce ceases to grow, as a sustainable rate of return equals the rate of growth in the total wage bill. Capital reserve funded schemes face the effect of the change in population age structure on asset prices.

Key considerations in the light of population ageing include:

- The importance of appropriately integrating the roles of public and private transfers in future social security systems, including understanding the complementary relationship between private and public inter-generational transfers, and the relationship between upward and downward transfers. Research<sup>3</sup> reveals that while public transfers reduce private upward transfers from adult children to older parents, it has far less effect on private downward transfers from older parents to adult children and grandchildren.
- A consideration of inter-generational fairness through sharing out the proceeds of growth between workers and pensioners. This, for example, may occur through maintaining a link between pensions and wages so pensioners receive some share of a nation's economic growth. It may be implemented through linking pensions to increases in prices so pensioners do not see absolute living standards fall as a result of inflation. It could be ensured through pensions being tied to the capacity of the system defined by the growth in total wage bill. Or it may be maintained by a system that integrates several indices.

- Exploring frameworks to support and encourage individual responsibility. It may be argued, for example, that population ageing necessitates a division between government responsibility to keep the population out of poverty and individual responsibility to raise personal standards of living. However, there are considerable variations in the provisions for promoting such responsibility. The role of government remains important to design, implement, regulate and enforce required changes.

## Key policy lessons

Aged societies of the economically-developed global North have relied on human capital in the form of migrant workers from the younger, poorer, global South to support their economies. The dramatic falls in TFRs now occurring in both Asia and Latin America mean that this will not be a viable option in the coming decades. While substitution through new technologies may reduce the need for labour market growth, many countries now recognize the need to retain older workers in the labour market, not only to reduce the pension burden, but also to retain valuable skills and experience in the light of an upcoming global skills shortage.

These are difficult challenges to rise to, even for the most developed economies. Transitional and developing economies are in most cases a long way from achieving such goals. However, elements of these lessons are already integrated into national social security systems: the United States and Canada promote retaining older workers and many governments work to better integrate public and private transfer systems; programmes promoting active ageing are found in Europe (France, the United Kingdom and Germany, for example), Asia (Singapore and Hong Kong (China), for example) and North America; and life-long learning programmes have been established throughout Europe, Asia and North America.

The building blocks for policies to address population ageing are in place in many countries. Industrialized countries are now entering their time of high EDRs and alongside social security programmes need to tackle their TDRs by, among other things, introducing policies to regulate youth entry into and old age exit out of the labour market. Transitional and developing economies still have time to use the opportunity of their demographic dividends and the possibility of substantial increases in the labour force, and even in some cases the potential for higher savings rates, both of which will be needed to offset the challenges of the large EDRs ahead.

Key policy lessons in view of population ageing include the development of broad, coherent and integrated multi-pillar approaches to labour markets and social security. These should:

- Enable and promote longer working lives through life-long training, education and skills updating, and the provision of appropriate working environments for older workers.
- After first ensuring equity in coverage and, at least, a minimum degree of guaranteed adequacy in mandatory social security systems, ensure that private family/household transfers are appropriately integrated into old-age security systems where possible.
- Promote a preventative culture in support of well-being and enable healthy active living to reduce chronic illness and health-care costs and support active contributory life for as long as possible.
- Provide access to education across the life course to ensure that all individuals are better prepared physically, mentally, socially and financially to cope with a greater degree of individual responsibility for old-age security.

## Sources

- <sup>1</sup> Heller, P. 2006. *Is Asia prepared for an ageing population?* (Working paper, No. 06-272). Washington, DC, International Monetary Fund.
- <sup>2</sup> ISSA. 2003. *Ageing and social security: Ten key issues* (A contribution by the International Social Security Association to the Implementation of the Madrid International Plan of Action on Ageing). Geneva, International Social Security Association.
- <sup>3</sup> Harper, S.; Leeson, G. 2009. *Global Ageing Survey 2009*. Oxford, Oxford Institute of Ageing.

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The **International Social Security Association (ISSA)** is the world's leading international organization bringing together national social security administrations and agencies. The ISSA provides information, research, expert advice and platforms for members to build and promote dynamic social security systems and policy worldwide.

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