## Ageing in the European regions

Population ageing is universal, inevitable and the outcome of changes which have been aspired to through large parts of human history – mortality decline and individual childbearing choices.

foreseeable demographic changes and only initiated required policy responses – the need to extend the working life – at an unnecessary late point in time.

The United Nations 60th World Economic and Social Survey from 2007 concluded that "a substantial degree of population ageing is expected over the next few decades in all regions of the world ... [It is] unlikely that policy interventions intended to encourage childbearing in low-fertility countries could substantially alter this expectation. ... [N]o plausible assumption about international migration levels would have more than a moderate impact on the expected degree of population ageing that will be experienced in future decades by countries all over the world."

Although Europe is one of the first world regions to experience population ageing, a large part of Asia including China is projected to undergo rapid ageing, and fears that it unlike Europe "grows old before it grows rich", suffering larger challenges to old age social security. The decline in mortality and fertility has occurred over a longer time period in Europe than in most other world regions: a sustained mortality decline was in several European countries initiated already by the eighteenth century, while similar mortality reductions only took place later in the rest of the world. The decline in fertility from six to seven children to replacement fertility levels and below took more than a century for several countries in Europe, while for Asian countries such as China, the transition has taken only three to four decades. This has given European governments a longer time to adapt compared to most other ageing regions in the world.

Nevertheless, several governments disregarded

The age structure of a population can be projected with a substantial degree of accuracy. Although un-

certainties in migration, fertility and mortality will have some impact on the age composition, ex-post analyses of past projections have shown that the age composition has been predicted relatively well. In particular, one can predict with a relatively low degree of uncertainty the age structure and numbers of individuals above the age of fifty half a century into the future as these individuals are already born.

Policies intended to increase fertility will not halt population ageing, but could slow it down. This would be in accordance with European women's fertility preferences which tend to be higher than realized fertility levels. The largest potential could be for the tertiary educated, which is where the gap between wanted and actual fertility is the highest. Reforms to the education systems could narrow this gap, for example by providing better financial support for those who choose to combine childbearing with a period of study. Also introducing more efficient school systems allowing one to graduate from tertiary education at a younger age could decrease the trade-off between education and fertility.

Ageing tends to follow a distinct spatial pattern, where the impact is more pronounced in rural than urban areas. Densely populated urban areas will tend to experience much less ageing or decline in population size, particularly due to strong urbanisation trends for the youth. Some rural areas of Europe, including parts of Germany and Sweden, are projected to experience both ageing and popula-

tion decline, which poses challenges to local economies, health and elderly care provision.

An increase in retirement age could imply for several countries that the economically active/inactive ratio remains constant, or only moderately decreases, in spite of ageing. Male effective retirement age varies substantially across Europe. Between 2000 and 2005, the French retired at 59, the Icelanders retired at 69, while other Europeans retired at ages in between. Improvements in health and education levels of current and future older age groups imply that the productivity potential among the elderly is increasing over time. This suggests that there is a large potential for extending the working life in many countries, given appropriate changes to pension systems, seniority based earnings systems, age-discriminatory practices and norms for when one should retire.

Population ageing and lower population growth could also have positive effects. Although other factors can be more important (for exemple consumption patterns; heating needs, urbanisation, living arrangements, productivity levels), a smaller population size can lead to less use of resources and reduced climate change. Ageing *per se* can also provide environmental gains to the extent that older individuals commute and consume less than younger individuals. In addition, the distinct income and savings patterns of older individuals can have indirect implications for demand that result in lower environmental emissions.

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