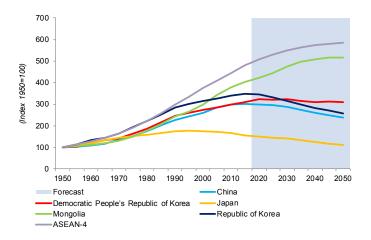


## Population ageing and fiscal sustainability in East and North-East Asia

East and North-East Asia is experiencing unprecedented population ageing. The combined population of the subregion in 2015 accounted for about 22 per cent of the world's total population, while the population aged 65 or older in the subregion constituted 29 per cent of older persons worldwide. It is estimated that, by 2035, the share of the older population in the subregion would increase to 31 per cent of the total for East and North-East Asia.1 Japan has the highest proportion of people aged over 65 in the world, and the country's population size is already shrinking. Similarly, the pace of population ageing is rapid in China. The proportion of people aged 65 or older in the total population is projected to increase from 6.7 per cent in 2000 to 12.1 per cent in 2020 and 27.6 per cent in 2050. As shown in figure 1, all major economies in the subregion, except Mongolia, are likely to face a declining working-age population after 2020. In comparison, the workingage population in the ASEAN-4 countries (Indonesia, Malaysia, the Philippines and Thailand) will continue to grow and reach a plateau only after 2050.

Figure 1. Working-age population, 1950-2050



Source: United Nations, Department of Economic and Social Affairs.

Population projections are based on current levels of fertility and longevity, which change only slowly over time. Adjustments to demographic shifts through net migration could take place more swiftly. However, the subregion's net migration levels have been low, mainly due to the importance placed on homogeneity and national identity. Furthermore, the sheer magnitude of the migration levels required to mitigate the impact of population ageing would make doing so an ambitious strategy. It is estimated that Japan would need to accept more than 600,000 immigrants a year until 2050 in order to keep the size of its working-age population constant at the 1995 level.<sup>2</sup>

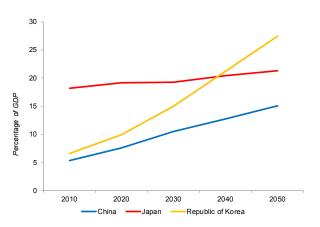
## Fiscal sustainability amid rapid population ageing

The impact of rapid population ageing is enormous and multifaceted. Of particular concern here is the impact on fiscal sustainability. On the expenditure side, population ageing is increasing the fiscal burden of old-age pension schemes and health-care services. On the revenue side, a smaller workforce constrains a country's economic growth potential and undermines government revenue collection. A key question is whether fiscal positions in East and North-East Asian economies will be strong enough to cope with future rises in spending and potential declines in revenue.

Figure 2 depicts the projections of age-related government spending, comprising pension, health care, long-term care and unemployment benefits in China, Japan and the Republic of Korea during the period 2010-2050. It shows that all three countries are likely to experience considerable increases in public expenditure to support their ageing populations. The greatest increase in age-related spending is expected in the Republic of Korea, to nearly 30 per cent of GDP in 2050, because the potential support ratio, or the ratio of persons aged 20-64 over persons aged 65 and older, is projected to decrease rapidly in the coming decades. In particular, this ratio for the Republic of Korea is projected to fall from 16.1 in 1980 to only 1.5 in 2050. These ratios are 13.2 and 2.1 in China, and 7.5 and 1.4 for Japan, respectively.

In terms of the fiscal space needed to tackle an ageing population, three economies in the subregion, namely China; Hong Kong, China; and the Republic of Korea, still have relatively low levels of public debt and have room to cushion future increases in expenditure.

Figure 2. Total age-related spending as a share of GDP, 2010-2050



Source: ESCAP, based on Standard and Poors, "Global aging 2013: rising to the challenge", RatingsDirect, 20 March 2013.

In Mongolia, while public debt levels are higher and have raised concerns in recent years, population ageing is progressing at a much slower pace than in other subregional peers. On the other hand, Japan has been facing fiscal pressures at a time when population ageing is already at an advanced stage. Nevertheless, while fiscal consolidation is certainly needed in Japan, public debt is viewed as stable as the Government holds large amounts of assets; net public debt was approximately 90 per cent of GDP in 2013. Also, the central bank holds nearly one third of all outstanding government debt. These factors have enabled government bond yields to remain low despite the high levels of debt.

## Reform measures

In the light of the projected demographic changes and growing age-related spending, the subregional economies have implemented various policy reforms to improve the well-being of older persons while keeping government debt at manageable levels.3 In 2015, the Government of China abolished the one-child policy and removed the dual-track urban pension system under which government employees were exempted from making pension contributions. In Japan, recent measures included extending employees' pension insurance to more part-time workers, shortening the period needed to be eligible for the national pension from 25 to 10 years and setting up a new pension service to reduce the operating cost of public pension schemes. Finally, the Republic of Korea undertook extensive pension reforms, extended mandatory severance-pay plans to firms with five or fewer workers, increased childcare benefits and a lump-sum grant on birth and set up an electronic information system for collecting social security contributions.

A number of European economies with ageing populations, such as Spain and Greece, have undergone painful pension reforms in the recent past. They experienced growing intergenerational tensions as the pay-as-you-go schemes relied on current pensions being supported by current workers who would then receive a lower pension due to the shortfall in contributions when they reached retirement age. This experience suggests that it is critical to start early to implement and sustain reforms in order to avoid abrupt adjustments and massive build-ups of debt. Doing so would help to ensure orderly payments of ageing-related expenditures, such as health-care costs.

An urgent priority for East and North-East Asian economies is therefore to maintain fiscal sustainability through tax reforms. In a recent study it was found that, given a currently low tax-to-GDP ratio, there is significant room to raise taxes without causing major economic distortions in China, Japan and the Republic of Korea.<sup>4</sup> Recent efforts to increase tax revenues in the subregion include the sales tax increase in Japan in 2014; the Republic of Korea is considering adding another income tax bracket at the top end of the pay scale. Beyond maintaining fiscal sustainability, there is need to provide a social protection floor, increase female labour force participation, raise the retirement age, and use other untapped labour potential, such as persons with disabilities.

Although the issue of an ageing population poses serious challenges to the economic and social development of the subregion, it can however be turned into an opportunity, if adequately addressed. For example, the expectation of a longer life can increase the savings rate, which in turn creates higher stimulus for investments and can lead to a "second demographic dividend".

The MPFD Policy Briefs aim at generating a forward-looking discussion among policymakers, researchers and other stakeholders to help forge political will and build a regional consensus on needed policy actions and pressing reforms. Policy Briefs are issued without formal editing. This issue is prepared by Yejin Ha of ESCAP Subregional Office for East and North-East Asia. This policy brief benefitted from comments by Hamza Ali Malik, and Vatcharin Sirimaneetham. For further information on this issue, please contact Aynul Hasan, Director, Macroeconomic Policy and Financing for Development Division, ESCAP (escap-mpdd@un.org).

<sup>&</sup>lt;sup>1</sup> See United Nations, "World Population Prospects, 2015 Revision" (New York, 2015). Available from www.un.org/en/development/desa/publications/world-population-prospects-2015-revision.html.

<sup>&</sup>lt;sup>2</sup> See United Nations, "Replacement Migration: Is It a Solution to Declining and Ageing Populations?" (New York, 2001). Available from www.un.org/esa/population/publications/migration/migration.htm.

<sup>&</sup>lt;sup>3</sup> This conclusion is based on data contained in Organisation for Economic Co-operation and Development, *Pensions at a Glance 2013: Retirement-Income Systems in OECD and G20 Countries* (Paris, OECD Publishing, 2013). Available from http://dx.doi. org/10.1787/pension\_glance-2013-en. It is also based on information from various other sources.

<sup>&</sup>lt;sup>4</sup> See Poesoro, Adri A.L., "Narrowing Tax Gap: Cross countries experience", Tax Law Design and Policy Working Paper Series No. 0915, February. (Jakarta: Danny Darussalam Tax Center, 2015).