The elderly population (those aged 65 years and over) in OECD countries increased almost three times faster than total population between 1995 and 2005. In 2005, the elderly population was equal to $14 \%$ of the total population.
In Japan, Italy and Germany the elderly population was almost one-fifth of total population in 2005. On the other extreme, in Turkey, Korea and Mexico the elderly population represented less than $10 \%$ of the total population (Figure 12.1).
As the elderly population may be more concentrated in a few areas in each country, regions face different economic and social challenges raised by an ageing population. In $2005,35 \%$ of the elderly population lived in only $10 \%$ of OECD regions. The share has not changed significantly in the past ten years with the exception of Ireland, due to the increase of the overall population including the elderly population in the region of Dublin (Figure 12.2).
The geographic concentration index compares the geographic distribution of the elderly population and the area of all regions in a country. According to this index, Canada (82), Australia (82) and Iceland (65) were the countries with the highest concentration of the elderly population in 2005, compared to the OECD average (38). A relative geographic concentration of the elderly population can facilitate the provision of services (Figure 12.3)
The concentration of the elderly population may be a function of the total population - more people, therefore more elderly people - or may be due to regional disparities in the age structure, with the same population but more elderly people. A comparison of the concentration indexes of total and elderly population shows that in 2005 on average the elderly population was less concentrated than the total population (Figure 12.3).
Urban areas (i.e. areas with a high geographic concentration of the total population) attract younger people thus elderly people remain in areas with a lower geographic concentration index for the overall population. This is evident, in particular, in Korea, Portugal, France, New Zealand, Japan and Ireland where the concentration of the elderly population is higher in the "peripheral" regions, areas far from the agglomerated regions. On the contrary, in Poland, Belgium, the Slovak Republic and Hungary the share of the elderly population seems to be higher where population is more concentrated, generally in urban regions (Figures 12.5-12.7).
From 1995 to 2005, only $23 \%$ of OECD rural regions have increased their share of population (over the national average), while half of the urban regions and
$45 \%$ of intermediate regions increased their share. Only in Belgium, Germany and Poland did the rural regions post a higher population share increase than the percentage of urban or intermediate regions (Figure 12.4).

## Definition

The regional elderly population is the regional population of 65 years of age and over.
The elderly dependency rate is defined as the ratio between the elderly population and the working age (15-64 years) population.
The geographic concentration index offers a picture of the spatial distribution of the elderly population within each country, as it compares the elderly population weight and the land area weight over all TL3 regions (see Annex C for the formula). The index ranges between 0 and 100: the higher its value, the larger the regional concentration of population. International comparisons of the index can be affected by the different size of regions.

## Source

OECD Regional Database, http://dotstat/wbos/, theme: Regional Statistics.
See Annex B for data sources and country related metadata.

## Reference years and territorial level

1995-2005; TL3

## Further information

Territorial grids, www.oecd.org/gov/regional/ statisticsindicators.

## Figure notes

Figures 12.1 to 12.4: First available data: Australia 1996, Austria 2001, Iceland 1997, Poland 2000, Slovak Republic 1996.

Figure 12.4: As a share of regional population over national population.

### 12.1 National elderly population as a percentage of the total population

In 2005, 20\% of population was 65 years age or older in Japan, 6\% in Mexico.

12.3 Geographic concentration index of the elderly population and population (TL3 regions), 2005 The elderly population tends to be less concentrated than the total population.

12.2 Per cent of the elderly living in the $10 \%$ of TL3 regions with the highest elderly population
$35 \%$ of the elderly population lives
in only $10 \%$ of OECD regions.

12.4 Percentage of TL3 regions by type of regions which have increased their population, 1995-2005
In 1995-2005, population increased in 23\% of rural regions, $50 \%$ of urban ones and 45\% of intermediate ones.


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### 12.5 Regional elderly dependency rate: Asia and Oceania

Ratio between the elderly population and the working age population, TL3 regions, 2005


### 12.6 Regional elderly dependency rate: Europe

Ratio between the elderly population and the working age population, TL3 regions, 2005


# 12.7 Regional elderly dependency rate: North America 

Ratio between the elderly population and the working age population, TL3 regions, 2005


## Challenges of the ageing population in rural regions

The elderly dependency rate - i.e. the ratio between the elderly population and the number of people of working age (15-64) - gives an indication of the balance between the economically active and retired populations. In 2005 this ratio was on average $20 \%$ in OECD countries. There was a substantial range between countries ( $30 \%$ in Japan versus $9 \%$ in Turkey and Mexico). Differences among regions within the same countries were also large. The higher the regional elderly dependency rate the higher the challenges faced by regions in generating wealth and sufficient resources to provide for the needs of elderly people. Concerns may arise about the financial self-sufficiency of these regions to generate taxes to pay for these needs.
In 2005, the elderly dependency rate across OECD regions was higher in rural (21\%) than in urban regions (20\%) with the exception of Poland, Belgium, the Czech Republic and Hungary. This general pattern was more pronounced in certain countries, like Portugal, France, Finland, Japan, Spain and Korea (Figure 12.8).
Besides the elderly dependency rate, a second factor affecting a region's ability to cope with ageing is the concentration of elderly people. Regions with a large elderly population may exploit economies of scale in the provision of certain services, in particular health care and personal services. Regions with a small elderly population may bear higher costs by virtue of having an insufficient population for achieving economies of scale.
Only $24 \%$ of the OECD elderly population lived in rural regions in 2005; with more of the elderly residing in urban regions (44\%) than in intermediate regions (32\%) (Figure 12.9). As such, rural regions are more likely to face the challenge of ageing due to higher elderly dependency rates and lower concentrations of the elderly.

### 12.8 Elderly dependency rate: country average and in PR and PU TL3 regions, 2005

In 25 countries, the elderly dependency rate was higher in rural regions than in urban ones.



### 12.9 Distribution of the elderly population in PU, IN and PR TL3 regions, 2005

Only 24\% of the elderly population lived in rural regions in 2005.


StatLink Ailsk http://dx.doi.org/10.1787/523815348841


## From:

OECD Regions at a Glance 2009

Access the complete publication at:
https://doi.org/10.1787/reg_glance-2009-en

## Please cite this chapter as:

OECD (2009), "Geographic concentration of the elderly population", in OECD Regions at a Glance 2009, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/reg_glance-2009-16-en

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