1.1. Life expectancy at birth

Life expectancy at birth continues to increase remarkably in OECD countries, reflecting sharp reductions in mortality rates at all ages. These gains in longevity can be attributed to a number of factors including rising living standards, improved lifestyle and better education, and greater access to quality health services. Other factors such as better nutrition, sanitation and housing also play a role, particularly in countries with emerging economies (OECD, 2004a).

On average across OECD countries, life expectancy at birth for the whole population reached 79.5 years in 2009, a gain of more than 11 years since 1960 (Figure 1.1.1). Japan leads a large group (including almost two-thirds of the 34 OECD countries) in which life expectancy at birth is currently 80 years or more. A second group, including Portugal, the United States and a number of central and eastern European countries have a life expectancy of between 75 and 80 years. Life expectancy among OECD countries was lowest in Turkey and Hungary. However, while life expectancy in Hungary has increased only modestly since 1960, it has increased rapidly in Turkey, so that it is quickly approaching the OECD average (OECD and World Bank, 2008).

Nearly all OECD and emerging countries have experienced large gains in life expectancy over the past 50 years. Life expectancy at birth in Korea, Turkey and Chile has increased by 20 years or more over the period 1960-2009. Mexico, Portugal and Japan, as well as emerging countries such as Indonesia, China, India and Brazil also show strong gains. South Africa and the Russian Federation are still characterised by high mortality rates and in terms of length of life, they are well below the OECD average.

The gender gap in life expectancy stood at 5.5 years on average across OECD countries in 2009, with life expectancy reaching 76.7 years among men and 82.2 years among women. While the gender gap in life expectancy increased substantially in many countries during the 1960s and the 1970s, it narrowed during the past 30 years, reflecting higher gains in life expectancy among men than among women. This can be attributed at least partly to the narrowing of differences in risk-increasing behaviours, such as smoking, between men and women, accompanied by sharp reductions in mortality rates from cardiovascular diseases among men.

Higher national income (as measured by GDP per capita) is generally associated with higher life expectancy at birth, although the relationship is less pronounced at the highest levels of national income (Figure 1.1.2). There are also notable differences in life expectancy between countries with similar income per capita. For example, Japan and Israel have higher, and the United States, Denmark and Hungary have lower life expectancies than would be predicted by their GDP per capita alone. High rates of mortality for some diseases at older ages, the legacy of smoking and other factors such as obesity and economic inequality have been suggested as possible reasons for the United States' poorer outcomes (Crimmins *et al.*, 2010).

Figure 1.1.3 shows the relationship between life expectancy at birth and health expenditure per capita across OECD countries. Higher health spending per capita is generally associated with higher life expectancy at birth, although this relationship tends to be less pronounced in countries with the highest health spending per capita. Japan and Spain stand out as having relatively high life expectancies, and the United States, Denmark and Hungary relatively low life expectancies, given their levels of health spending.

Variations in GDP per capita may influence *both* life expectancy and health expenditure per capita. Other factors beyond national income and total health spending are required to explain variations in life expectancy across countries.

Definition and comparability

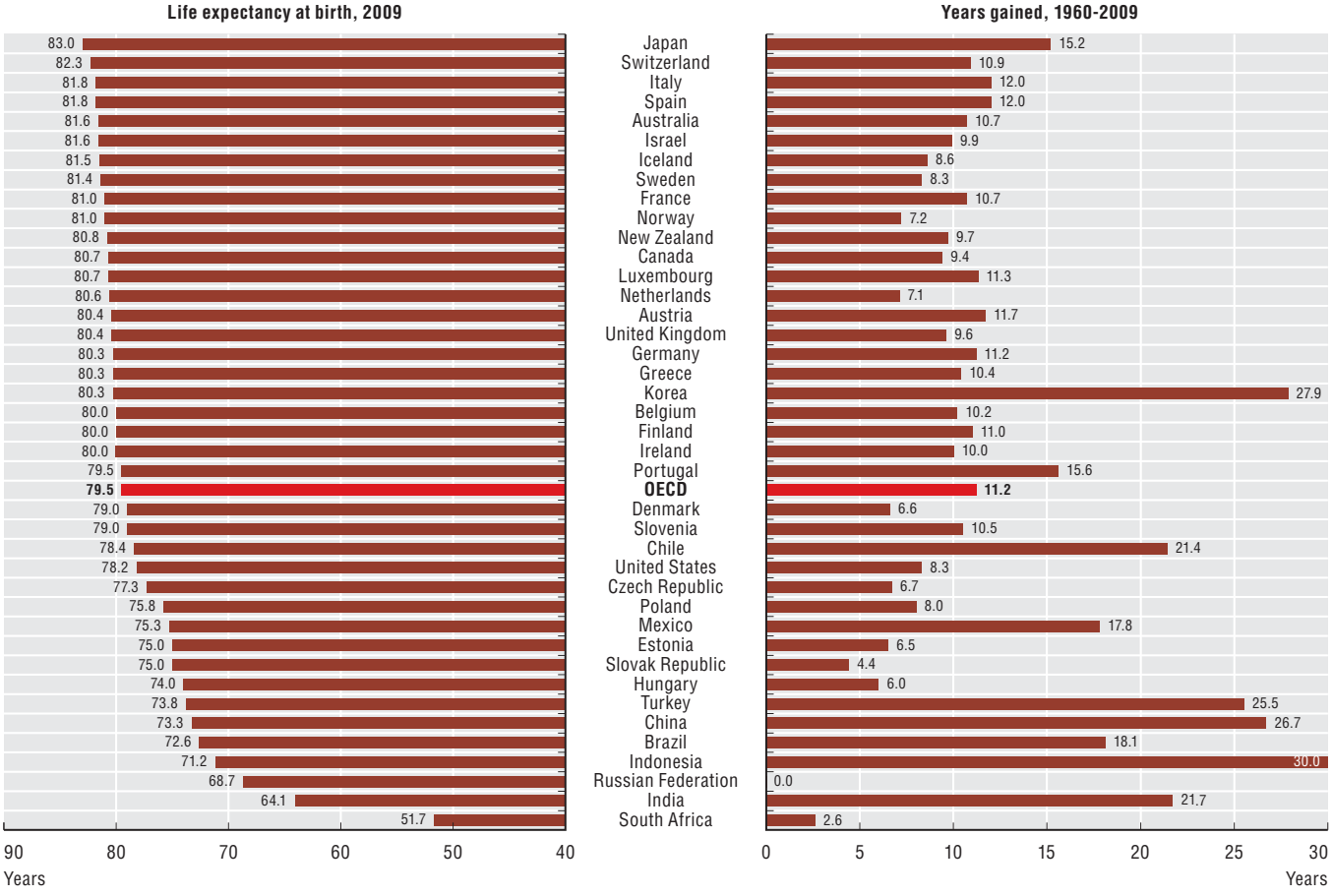
Life expectancy at birth measures how long on average a newborn can expect to live, if current death rates do not change. However, the *actual* age-specific death rate of any particular birth cohort cannot be known in advance. If rates are falling, as has been the case over the past decades in OECD countries, actual life spans will be higher than life expectancy calculated using current death rates.

The methodology used to calculate life expectancy can vary slightly between countries. This can change a country's estimates by a fraction of a year.

Life expectancy at birth for the total population is calculated by the OECD Secretariat for all OECD countries, using the unweighted average of life expectancy of men and women.

Information on data for Israel: *http://dx.doi.org/10.1787/888932315602*.

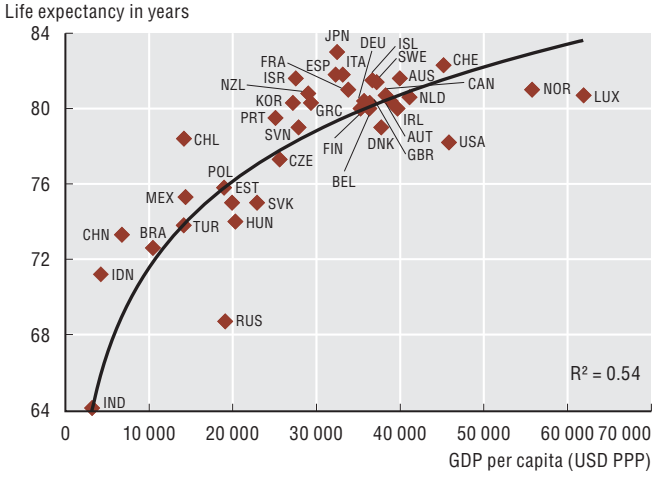
1.1.1 Life expectancy at birth, 2009 (or nearest year), and years gained since 1960



Source: OECD Health Data 2011; World Bank and national sources for non-OECD countries.

StatLink http://dx.doi.org/10.1787/888932523253

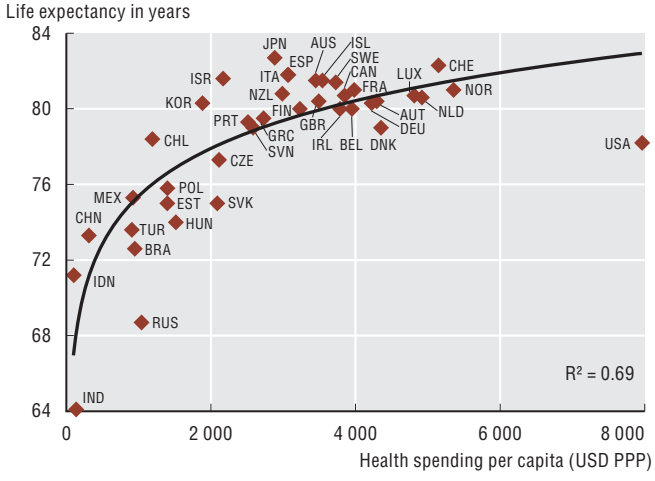
1.1.2 Life expectancy at birth and GDP per capita, 2009 (or nearest year)



Source: OECD Health Data 2011; World Bank and national sources for non-OECD countries.

StatLink http://dx.doi.org/10.1787/888932523272

1.1.3 Life expectancy at birth and health spending per capita, 2009 (or nearest year)



Source: OECD Health Data 2011; World Bank and national sources for non-OECD countries.

StatLink http://dx.doi.org/10.1787/888932523291