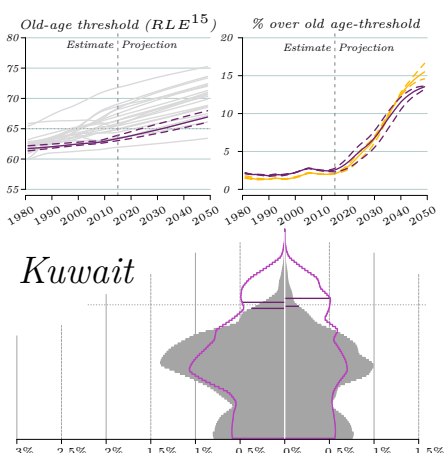
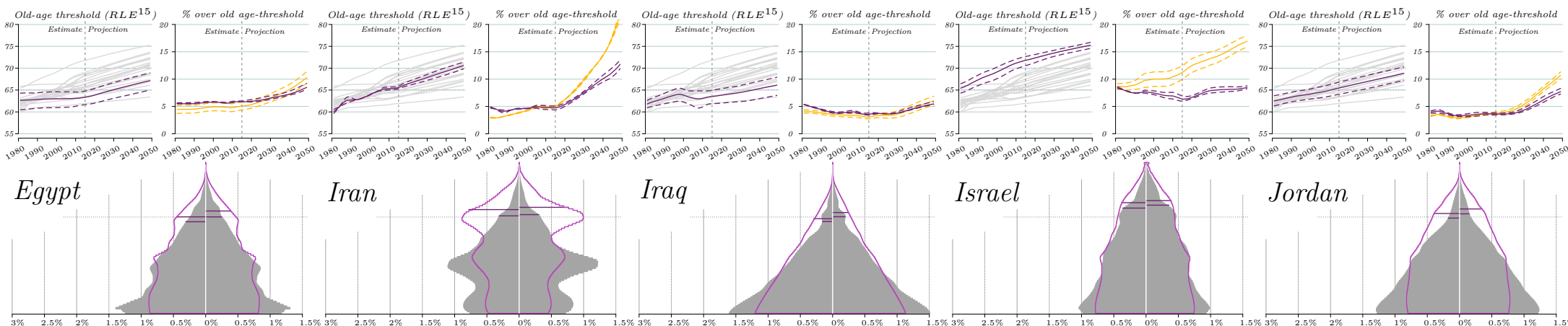
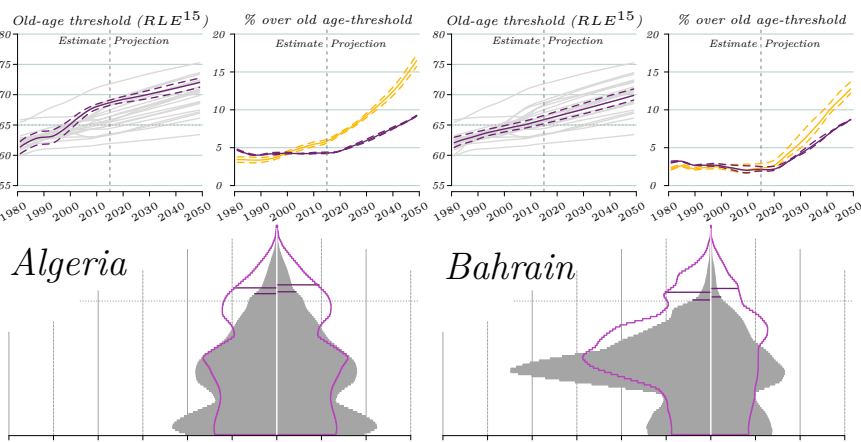
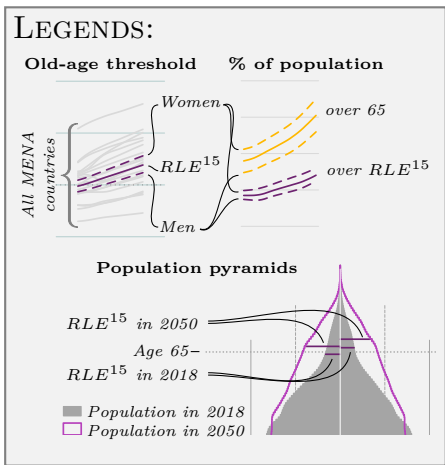


Measuring Population Ageing Using Prospective Instead of Chronological Age

This factsheet explores the ageing of the populations of Middle Eastern and North African countries using *prospective age* instead of chronological age (Sanderson and Scherbov, 2008). Using prospective age is akin to adjusting for inflation when comparing prices. It acknowledges the fact that a particular chronological age—e.g. the age of 65—means something very different in populations with low life expectancy than it does in a population with high life expectancy.

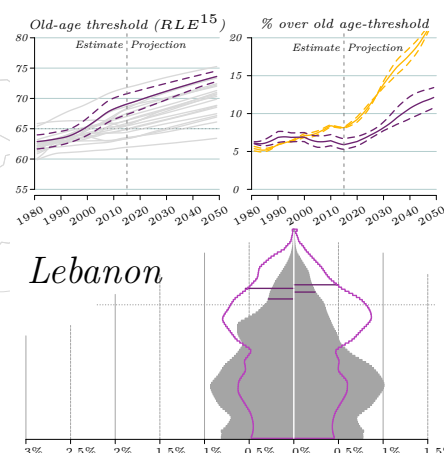
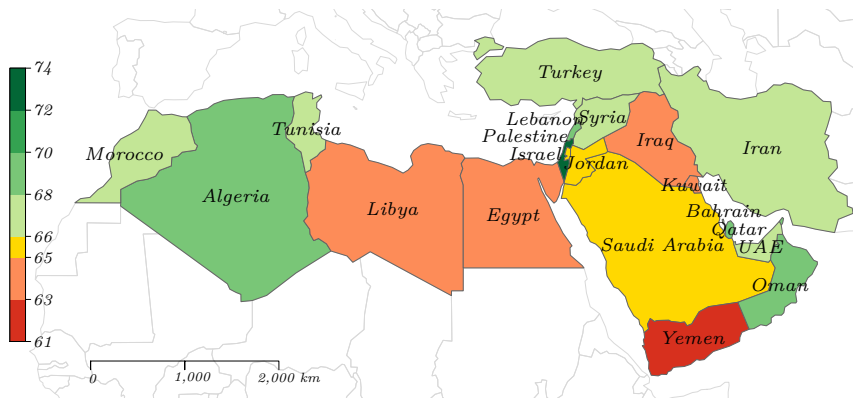
Instead of defining old age as being over 65, we define it as being over an *old-age threshold*: the age where the remaining life expectancy is 15 years (RLE^{15}). The changes in the old-age threshold, and in the proportion of the population over that age, are plotted for each country separately and described in more detail next to the maps below[†].

Population pyramids outline current and future (2050) age structures in each country (UN, 2017), and the horizontal lines allow you to compare the prospective old-age thresholds (in purple) with the more common definition of old age as 65 years old (dashed horizontal line).

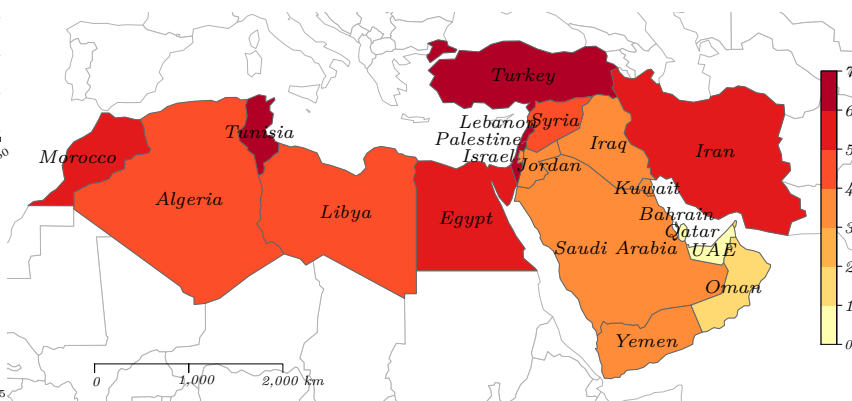


Old-age threshold—the age at which remaining life expectancy is 15 years (RLE^{15})

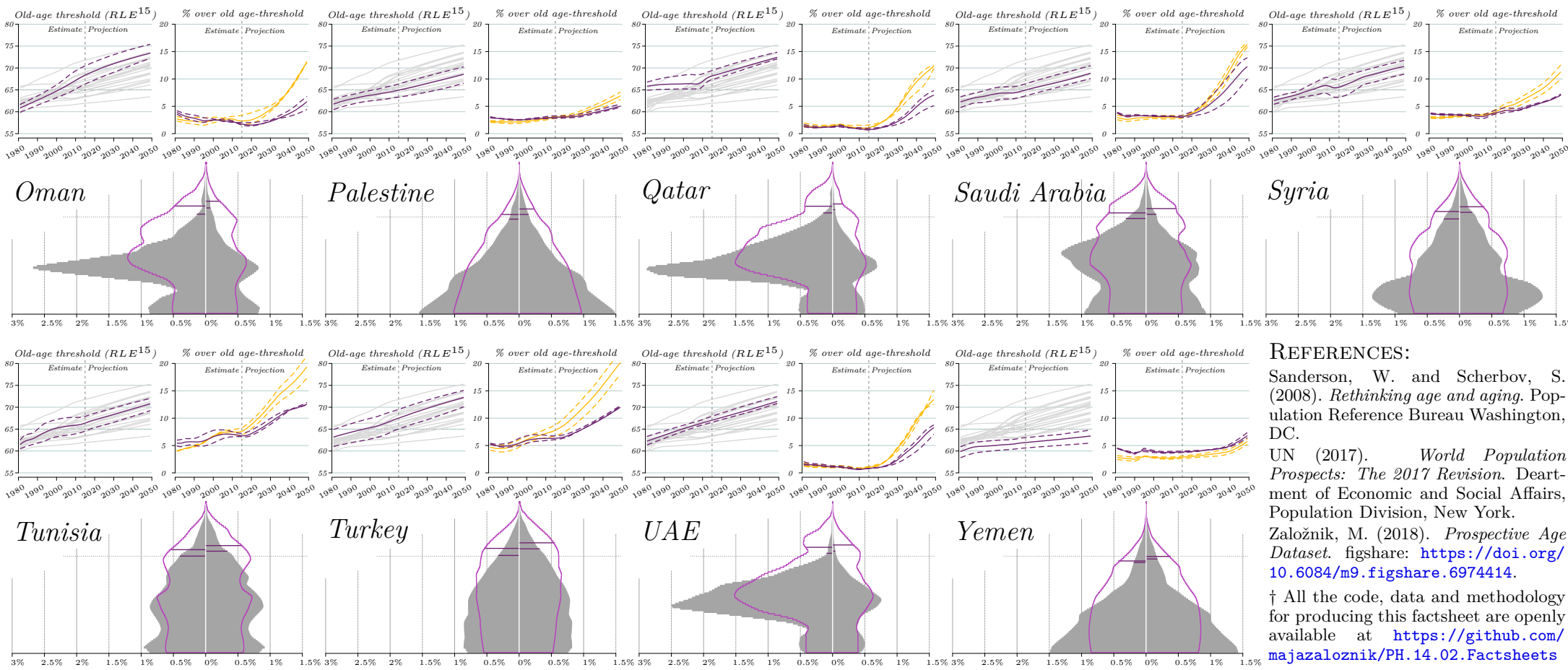
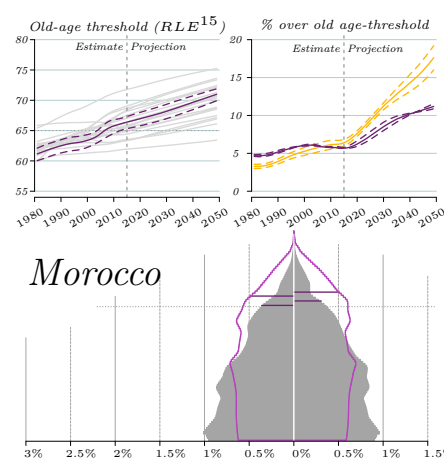
The old-age thresholds have been calculated from abridged life tables (Založnik, 2018). The map on the right shows the current old-age thresholds in each country. Yellow indicates the RLE^{15} is about 65, orange/red means it's lower and green means it's higher. In the latter countries using 65 as a definition of old age might paint a too pessimistic picture of how old their societies are compared to the countries in the red, where the proportion of over 65 is too optimistic a measure.



Proportion of the population over the old-age threshold



A common measure of population ageing is the proportion of people over 65. The map on the left instead shows the proportion of the population over the old-age threshold in each country. This ranks the countries very differently than ranking them normally: now the oldest countries are Tunisia and Turkey rather than Israel and Lebanon. Or take for example Yemen and Algeria that now both have around 4% of old people, compared to Algeria having more than double the proportion of people over 65 than Yemen.



REFERENCES:

Sanderson, W. and Scherbov, S. (2008). *Rethinking age and aging*. Population Reference Bureau Washington, DC.

UN (2017). *World Population Prospects: The 2017 Revision*. Department of Economic and Social Affairs, Population Division, New York.

Založnik, M. (2018). *Prospective Age Dataset*. figshare: <https://doi.org/10.6084/m9.figshare.6974414>.

† All the code, data and methodology for producing this factsheet are openly available at <https://github.com/majazaloznik/PH.14.02.Factsheets>