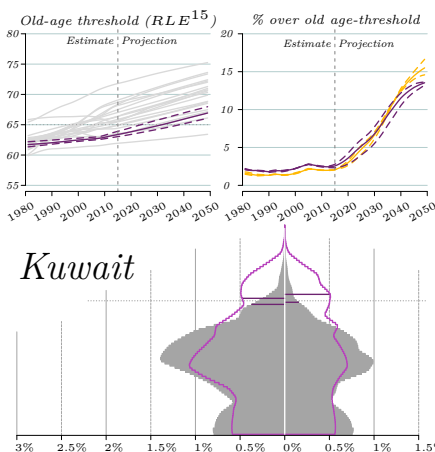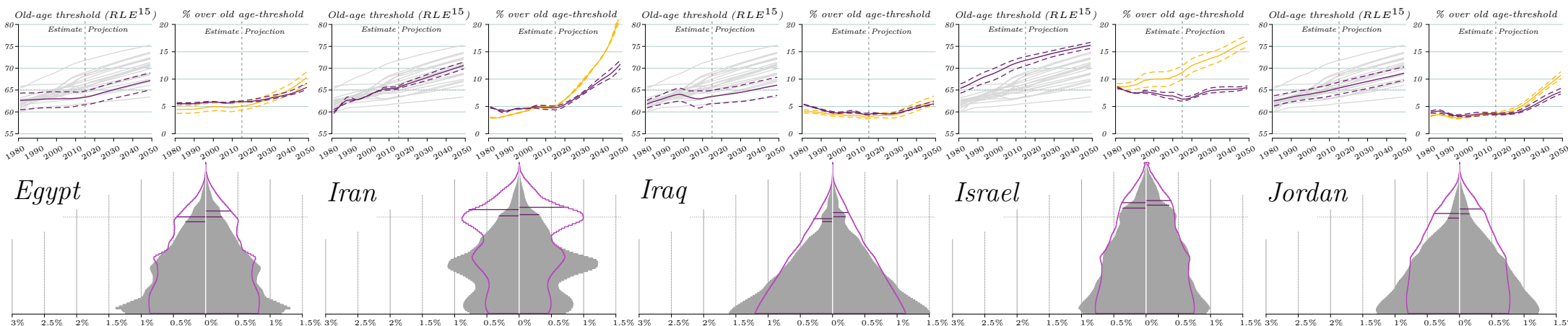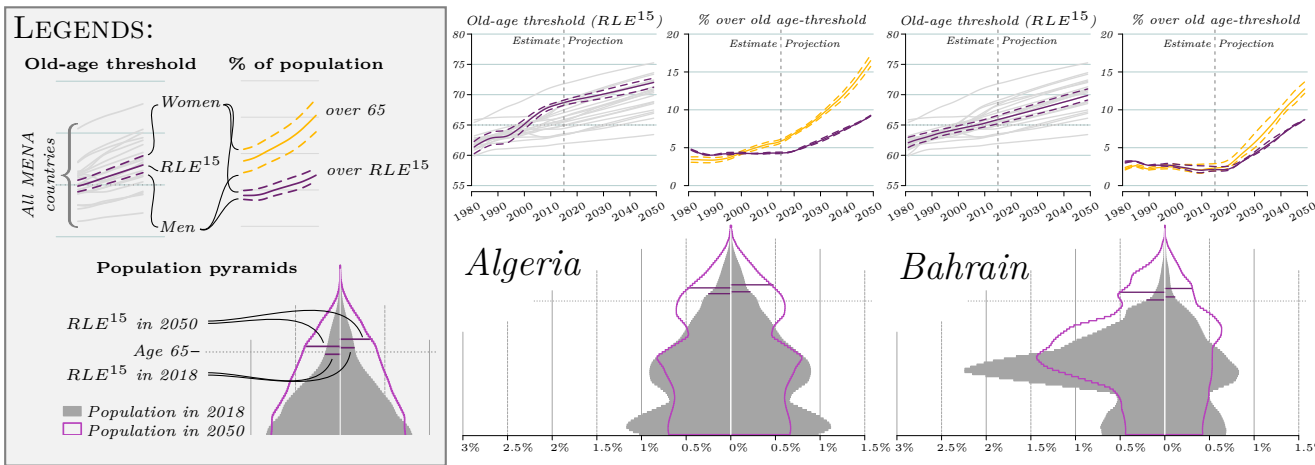# Ageing in the Middle East and North Africa

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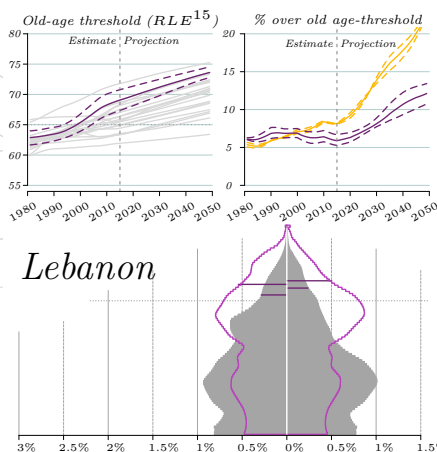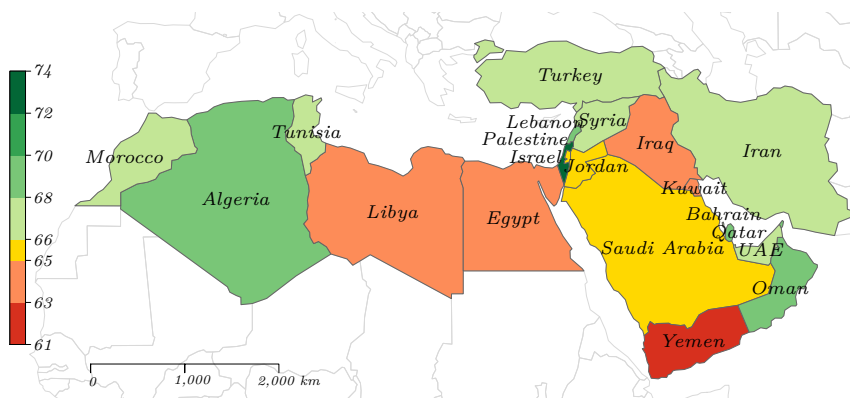
Instead of defining old age as being over 65, we define it as being over an *old-age threshold*: the age where the remaining life expectancy is 15 years (RLE^{15}). The changes in the old-age threshold, and in the proportion of the population over that age, are plotted for each country separately and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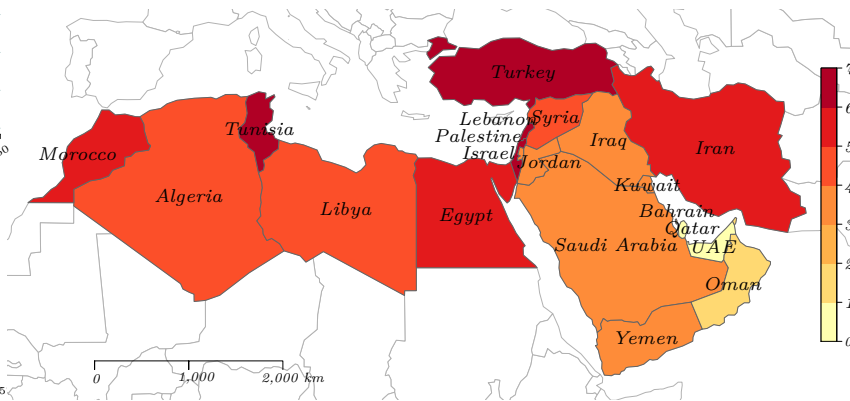
LEGENDS:

Old-age threshold — % of population

All MENA countries — Women, RLE^{15}, Men — over 65, over RLE^{15}

Population pyramids

RLE^{15} in 2050
Age 65
RLE^{15} in 2018

Population in 2018 (grey)
Population in 2050 (purple outline)

Algeria

Bahrain

Egypt

Iran

Iraq

Israel

Jordan

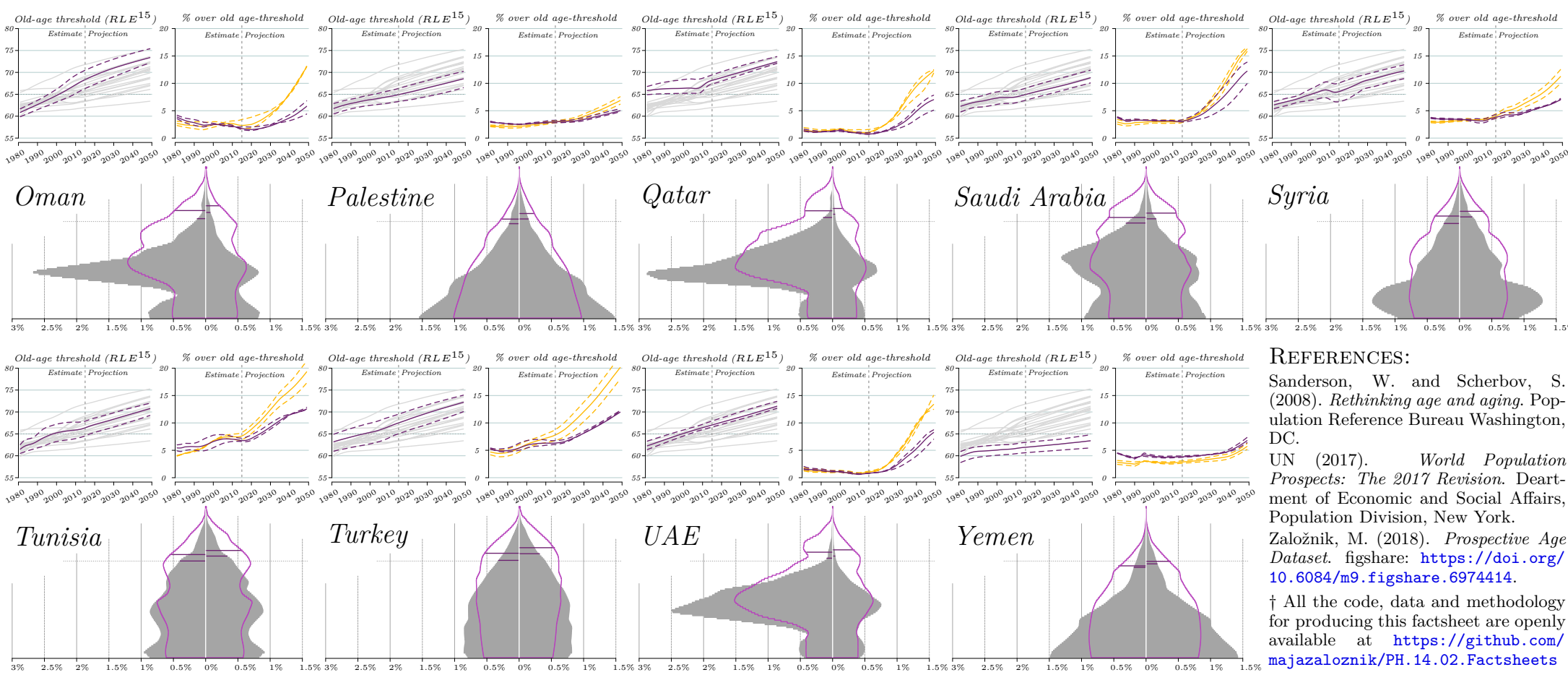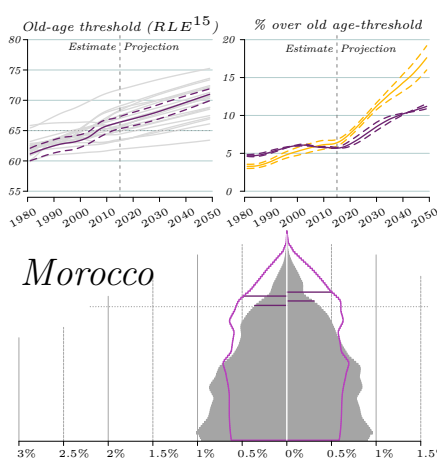## Old-age threshold—the age at which remaining life expectancy is 15 years (RLE^{15})

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.

Map legend: 74, 72, 70, 68, 66, 65, 63, 61

Kuwait

Lebanon

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.

Map legend: 7%, 6%, 5%, 4%, 3%, 2%, 1%, 0

Libya

Morocco

Oman

Palestine

Qatar

Saudi Arabia

Syria

Tunisia

Turkey

UAE

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.* Deartment 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

Chart axis labels (repeated across all country panels): Old-age threshold (RLE^{15}), % over old age-threshold, Estimate | Projection, 1980 1990 2000 2010 2020 2030 2040 2050