Prospective Age Dataset Codebook

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Background

This file describes the dataset `2017_prospective-ages.csv` which contains the calculated prospective old age thresholds for 241 countries and regions, 1950—2100, for men, women and both together, as well as the proportions of the population (male, female and total) over these thresholds.

The dataset is deposited in the figshare data deposit Propsective_Age_Dataset which is the authoritative version. A suggested citation is:

- Založnik, M.. (2018). Prospective Age Dataset (Version 17). figshare. https://doi.org/10.6084/m9.figshare.6974414.v17

or better yet: click on the `Cite` button on the figshare page to format according to your prefered citation style. This will also automatically ensure you cite the correct version of the fileset.

The methods of analysis used to produce the data are available in the same deposit as the data (`methods.pdf`) - but for background see Sanderson and Scherbov (2008).

For an application of the data see the factsheet on Middle East and North African countries Založnik (n.d.), which is accessible here and will be published in the Population Horizons journal shortly.

This figshare deposit is uploaded directly from the following GitHub repository: ProspectiveAgeData. Comments and issues should be raised there.

The original data used in the calculations are UN (2017):

- UN World Population Prospects [Standard Projections]; accessed 13.08.2018
- UN Life Tables—Mortality Indicators; accessed 13.08.2018

Description of the dataset

Rows

Each row is a location-time-group combination e.g.: *Algeria-1956-female*. There are 241 locations and 151 times, and three groups (male, female and total) giving a total of 109,173 rows.

Columns

1. **location**—name of the region, subregion, country or area [string].

- 241 unique names
- Source: UN (2017)

2. **time**—single year for which the data refer to [numeric].

- range: 1950—2100
- Source: UN (2017)

3. **female**, **male** and **total**—this are the old-age thresholds for each of the population groups (RLE^{15}) [numeric]

- Data for men and women (but not total) randomly cross-checked with Scherbov, Andruchowitz, and Sanderson (2018) and are all correct.
- Source: own calculation using splines from abridged life-tables.

5. **prop.over.65_female**, **_male** and **_total****—proportion of the population aged 65 or over for each of the three population groups.

- Data cross-checked with World Bank Data and all are correct.
- Source: own calculation using WPP standard projections.

6. **prop.over.threshold_female**, **_male** and **_total**—proportion of population older than old-age threshold [**threshold** above] for each of the three population groups.

- The proportions of males and females are calculated as those older than the old-age threhsold for males and females respectively, not the total old-age threshold.
- For three countries was possible to visually cross-check the total with Scherbov, Andruchowitz, and Sanderson (2018), in all are correct.[1]
- Source: own calculation using splines from abridged life-tables and WPP standard projections. See the methods.pdf file in this fileset for more details on the calculation.

References

Sanderson, Warren, and Sergei Scherbov. 2008. *Rethinking age and aging.* Population Reference Bureau Washington, DC.

Scherbov, S, S Andruchowitz, and W Sanderson. 2018. "Aging Demographic Data Sheet 2018." International Institute for Applied Systems Analysis.

UN. 2017. *World Population Prospects: The 2017 Revision.* New York: Deartment of Economic; Social Affairs, Population Division.

Založnik, Maja. n.d. "Ageing in the Middle East and North Africa–Measuring Population Ageing Using Prospective Instead of Chronological Age." *Population Horizons.*

[1] The Scherbov, Andruchowitz, and Sanderson (2018) datasheet is the only validation source known to me. They only calculate the proportions over the threshold age for Korea, Italy and the US and these values are plotted, not reported numerically. Despite this it seems by visual inspection that their values for the proportions exactly the same as mine checking for the years 1983, 2015 and 2050 which are the easiest to read from the charts.