First questions on female data

February 9, 2023

Currently impossible to fit+forecast

- too few data
  - 30) French Polynesia: 3 available years are too few (unless I modified the whole forecasting model)
  - 54) Moldova: 4 available years are too few (unless I modified the whole forecasting model)
  - 64) Peru: 3 available years are too few (unless I modified the whole forecasting model)
  - 67) Quatar: 4 available years and old ones (2010 2011 2012 2014) are too few (unless I modified the whole forecasting model)
- 2019 not available (likely solvable if 2019 is interpolated as previous not-available years)
  - 19) Cuba: missing 2019, what to do?
  - 88) Uruguay: missing 2019, what to do?

Issues with infant mortality

- Bermuda: no infant deaths for all pre-pandemic years but 2014 (impossible to have a infant-soecialized coeff)
- Faroe Islands: no infant deaths in last years
- Liechtenstein: absence of infant deaths in the last period causes some issue (solvable?)
- Montserrat: no infant deaths for all pre-pandemic years but 2015 (impossible to have a infant-specialized coeff)
- Turks and Caicos Islands: No infant deaths for all pre-pandemic years but 2015 (impossible to have a infant-specialized coeff)
- Tuvalu: no infant deaths in the first available years (impossible to have a infant-specialized coeff)

Evident strange age-patterns (it could be solvable, but it denotes issues in actual data)

- Albania: strange age-pattern at highest ages and increasing infant mortality
- Aruba: strange increasing of infant mortality. Actually death at age 0 in 2012 and 2014
- Azerbaijan: odd rapid increase of oldest-age mortality
- Bosnia and Herzegovina: decreasing observed mortality at higher ages (I can force monotonicity over age, but weird data)
- Bulgaria: wiggling age-pattern in first years at old ages (force monotonicity over age?)
- Croatia: wiggling age-pattern in first years at old ages (force monotonicity over age?)

- Lesotho: special treatment is needed (would enforcement of monotonicity be enough?)
- Lithuania: wiggling age-pattern at old ages (force monotonicity over age?)
- Maldives: too strong leveling-off at odest ages and odd data in 2019 (missing 2018)
- Mauritius: very weird 2011 data
- Montenegro: decreasing observed mortality at higher ages (I can force monotonicity over age, but weird data)
- New Zeland: a bit too strong leveling-off at oldest ages in last observed years
- North Macedonia: wiggling age-pattern at old ages (force monotonicity over age?)
- Romania: odd rapid increase of oldest-age mortality
- Serbia: a bit too strong leveling-off at oldest ages in all observed years
- South Korea: wiggling/decreasing age-pattern at old ages (force monotonicity over age?)
- Taiwan: optimal smoothing parameter produces wiggling age-pattern, likely need to impose extra-smoothness
- Turks and Caicos Islands: 3 available years, the fit is possible because they cover 5 years and include 2019.
- Ukraine: optimal smoothing parameter produces wiggling age-pattern, likely need to impose extra-smoothness

Issues only in computing e0

- due to large open-age group
  - Belize: extremely large open-age interval, 65+ =¿ issues in e0 computation
  - Iran: extremely large open-age interval, 65+ =¿ issues in e0 computation
  - Thailand: extremely large open-age interval, 65+ =¿ issues in e0 computation
- general issue (due to GC lifetable code?) also because the fit on log-rates seems OK
  - Colombia: good fit on rates, but likely issues in computing e0
  - Costa Rica: good fit on rates, but likely issues in computing e0
  - Ecuador: good fit on rates, but likely issues in computing e0
  - Honk-Kong: good fit on rates, but likely issues in computing e0
  - Japan: good fit on rates, but likely issues in computing e0
  - Malasya: good fit on rates, but likely issues in computing e0
  - Oman: good fit on rates, but likely issues in computing e0
  - Panama: good fit on rates, but likely issues in computing e0
  - State of Palestine: good fit on rates, but likely issues in computing e0
  - Suriname: good fit on rates, but likely issues in computing e0
  - Uzbekistan: good fit on rates, but likely issues in computing e0

General questions from GC:

- Iceland: data available only from 2013?
- Italy: only by age-group? and from 2011?