

FUTURE MIGRATION
SCENARIOS FOR EUROPE



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Future Migration Scenarios for Europe

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Population projections

- National
- Regional
- Local



State-space and Input data

Population distribution (provided by FUME partner Nordregio):

- **A**ge (0-4 to 100+)
- **S**ex
- **E**ducational attainment (6 categories, ISCED-97)
- **C**ountry **o**f **B**irth (201 + Other + Unknown) in 27 EU countries + UK

Transitions

- ASE specific fertility, survival ratios, education transitions, and population distribution derived from the latest WIC projection (Low-Medium-High scenario)
- ASFRs and Life table by education (same by CoB)
- Education transitions (same by CoB)

Multi-dimensional Population Projection Model

• Model

- Extension of the global Age, Sex, Education Wittgenstein Center (WIC) projection model
- Integration of the Potsdam Institute for Climate Impact Research (PIK) migration model, replacing WIC migration projection

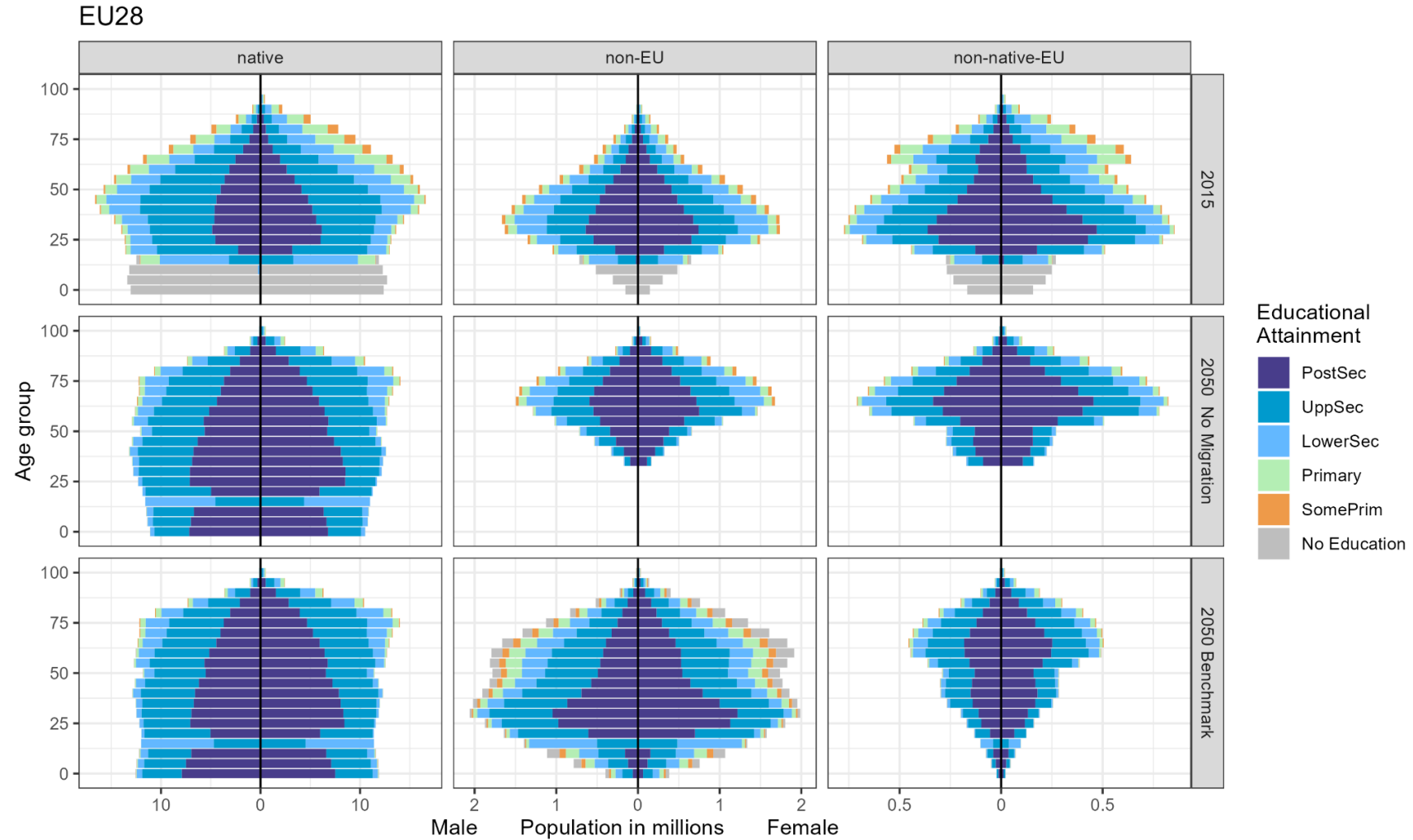
Output

- Population distribution by age, sex, education and country of birth
- 27 EU countries + UK
- 171 countries of birth
- Migration flows (Origin, Destination) for each time period by age, sex, educational attainment and country of birth

Migration scenarios

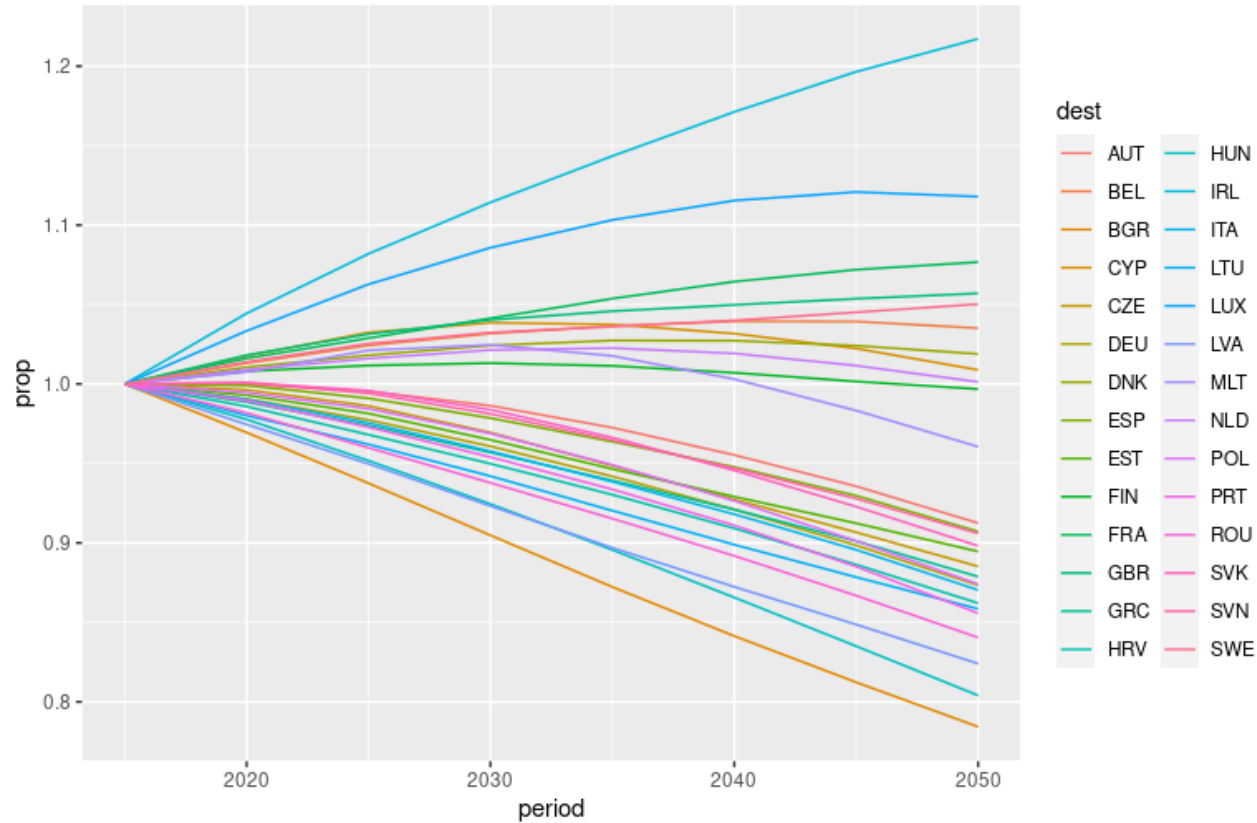
- **Benchmark:** Based on SSP2 (Koch & Leimbach, 2022), including COVID shock but not Ukraine war
- **Ukraine War:** IMF estimate until 2027, linear transition over 5 years back to SSP2 growth rates. Except Ukraine.
- **Recovery in Europe:** After 2027: European countries transition towards the SSP with highest growth rates; developing countries (including emerging economies) transition towards the SSP with lowest growth rates. All other countries (USA, Australia etc.) transition towards SSP2
- **Rise of the East:** Opposite to “Recovery in Europe”: Europe transition towards the SSP with lowest growth rates; developing countries transition towards the SSP with highest growth rates
- **IGC (Intensifying Global Competition):** “Catch-up” behavior of less wealthy countries inspired by the “CAP” and “FAIR” GDP scenarios in Bodirsky et al., 2022
- **No Migration:** No international migration

Overall Migration pattern

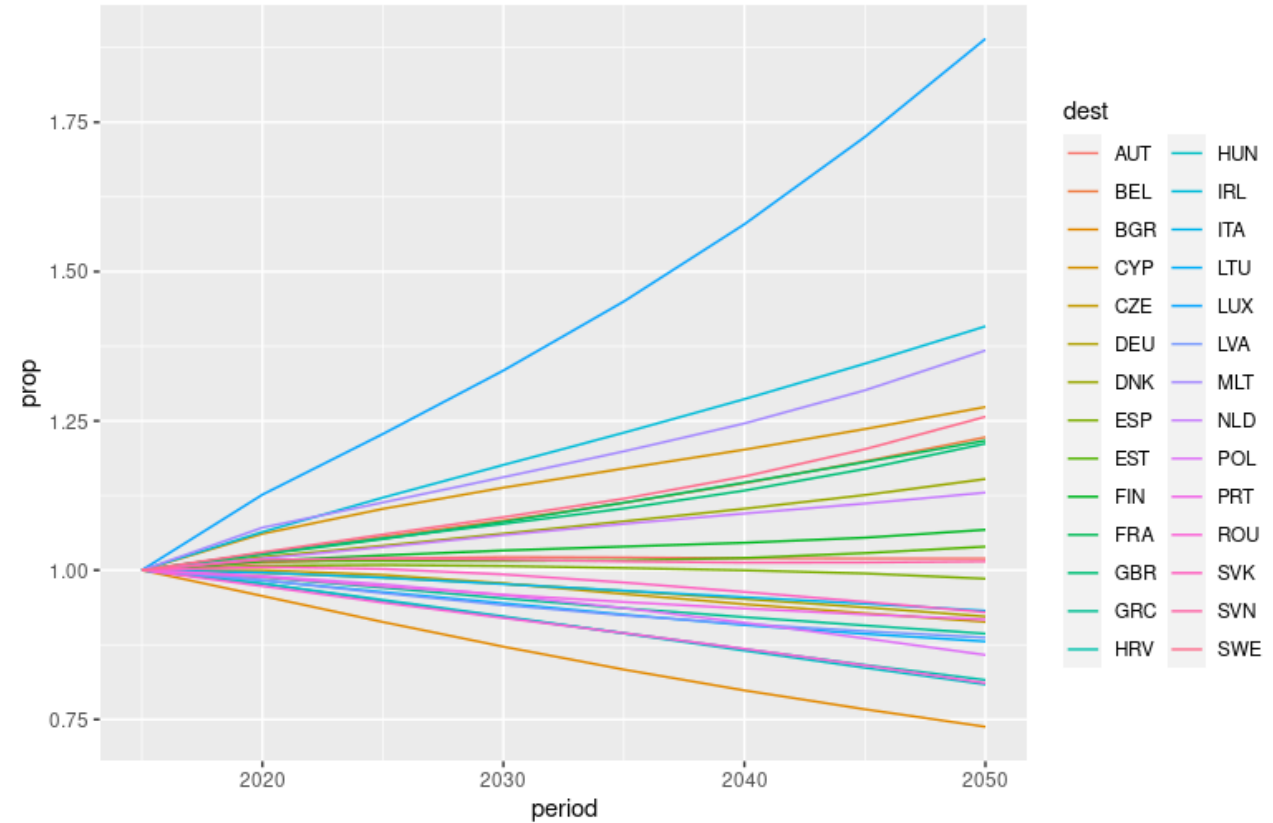


Relative population change

Relative change, No Migration



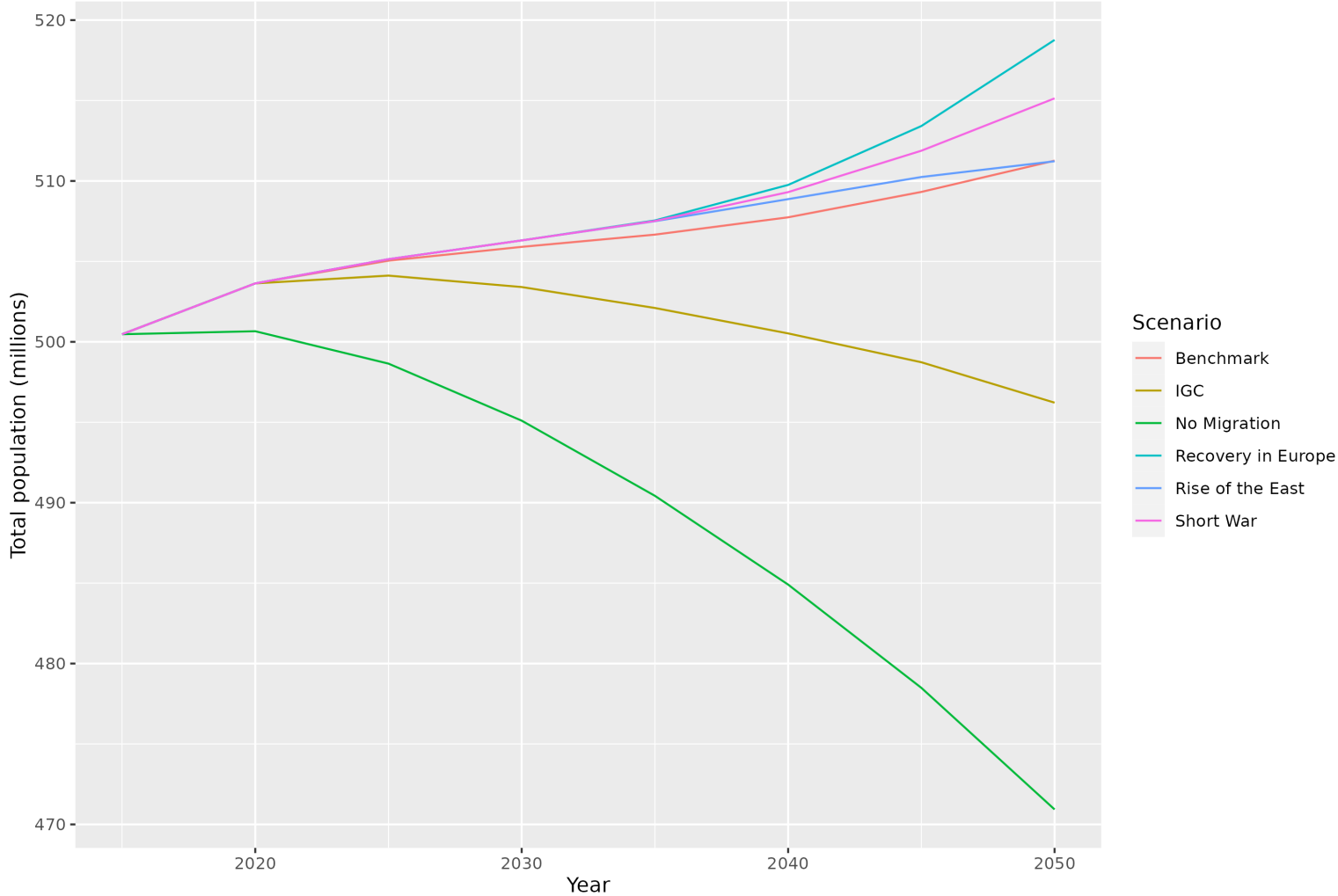
Relative change, Benchmark





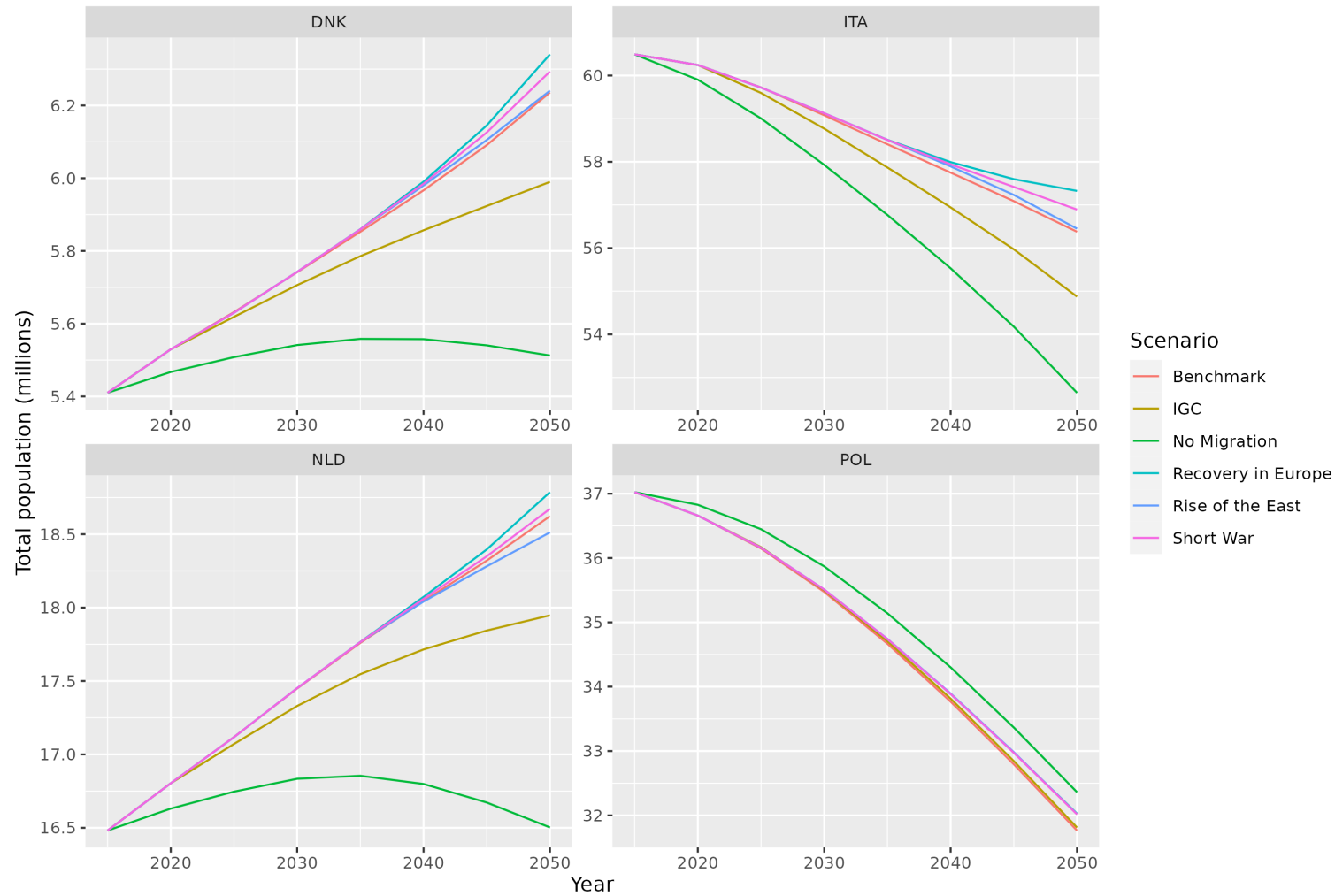
Total population

Population EU, by scenario



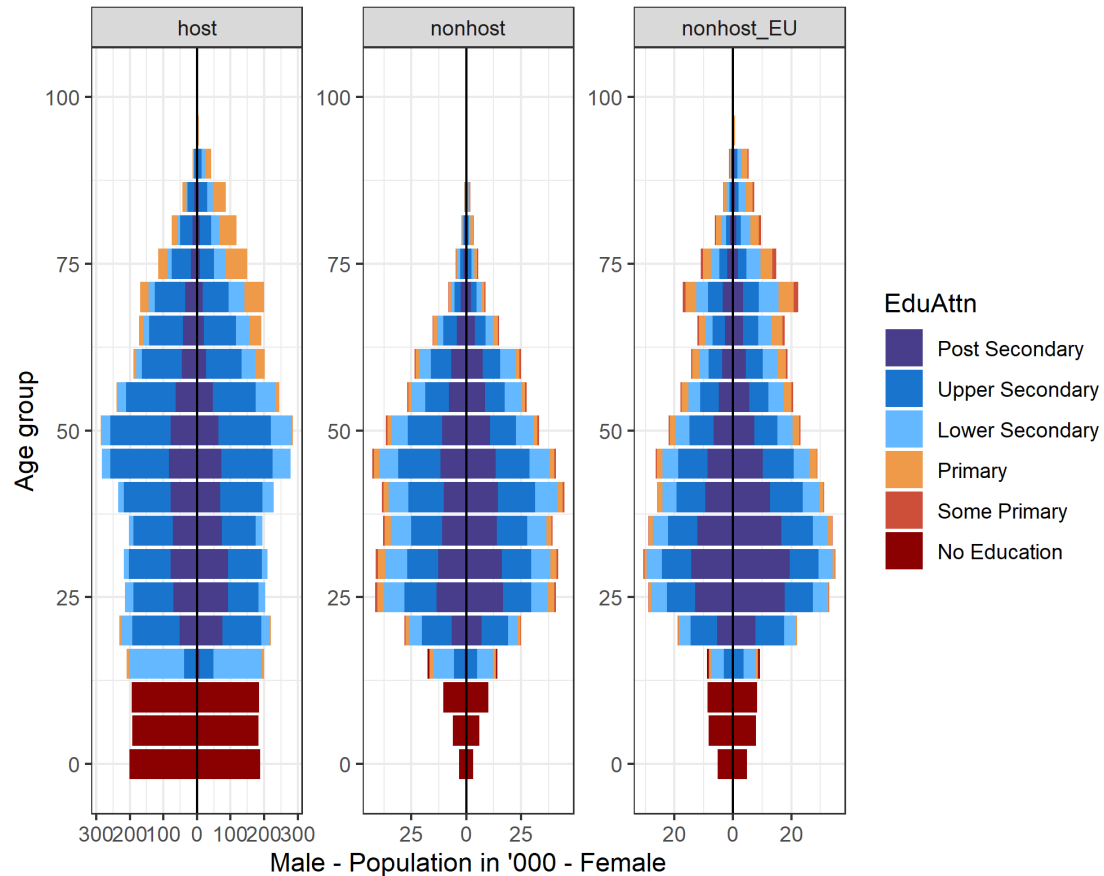
Total population

Population case study countries, by scenario

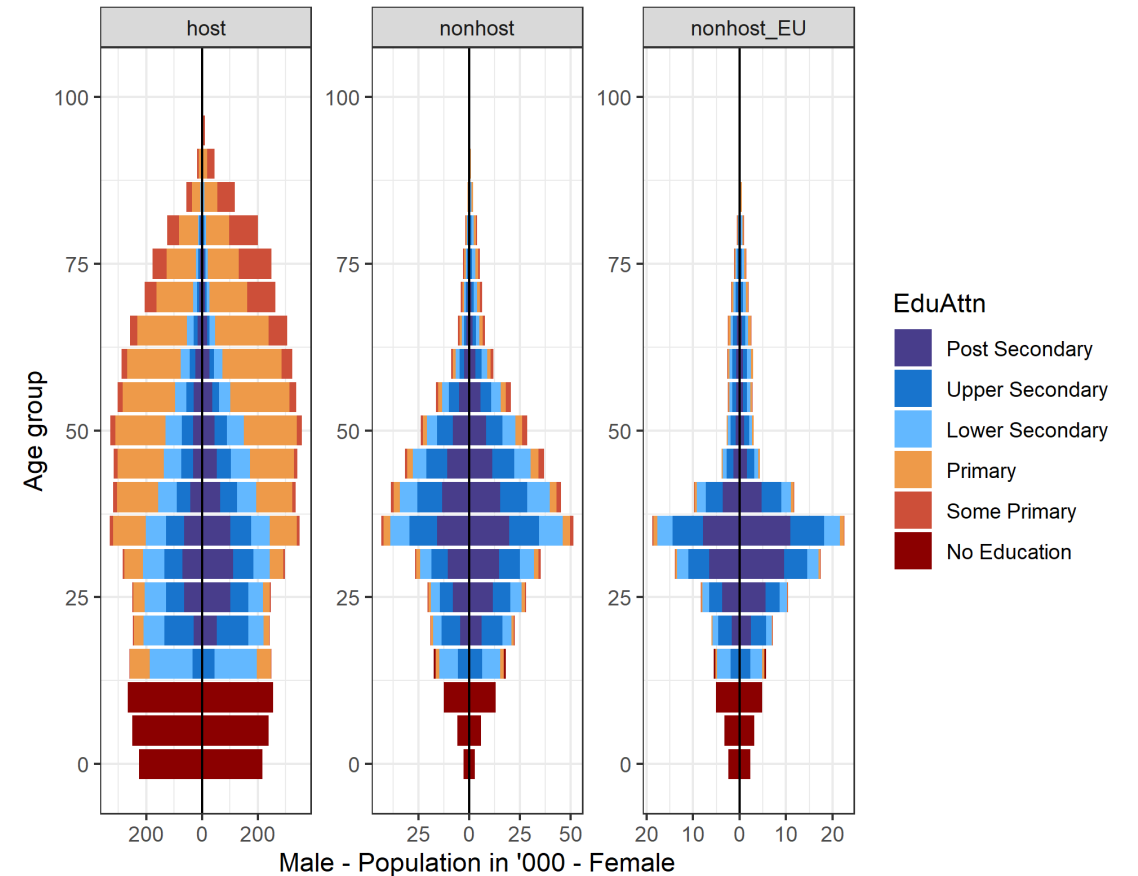


Population distribution by Country of Birth

AUT: Population Distribution by Country of Birth in 2015

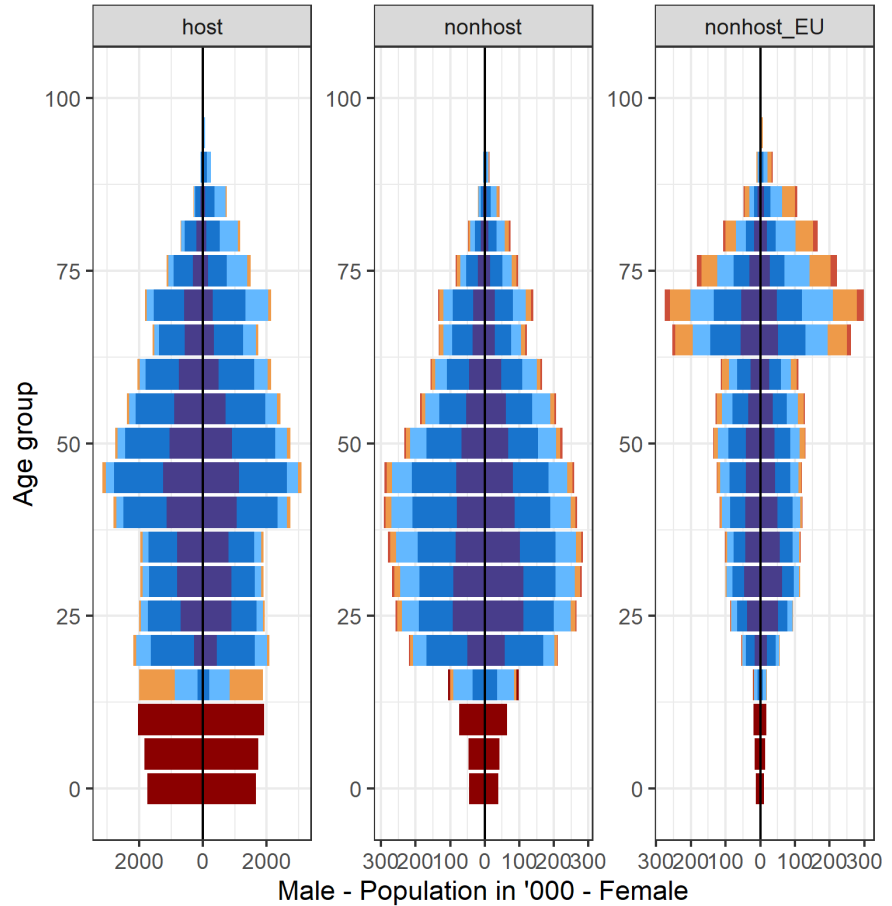


PRT: Population Distribution by Country of Birth in 2015

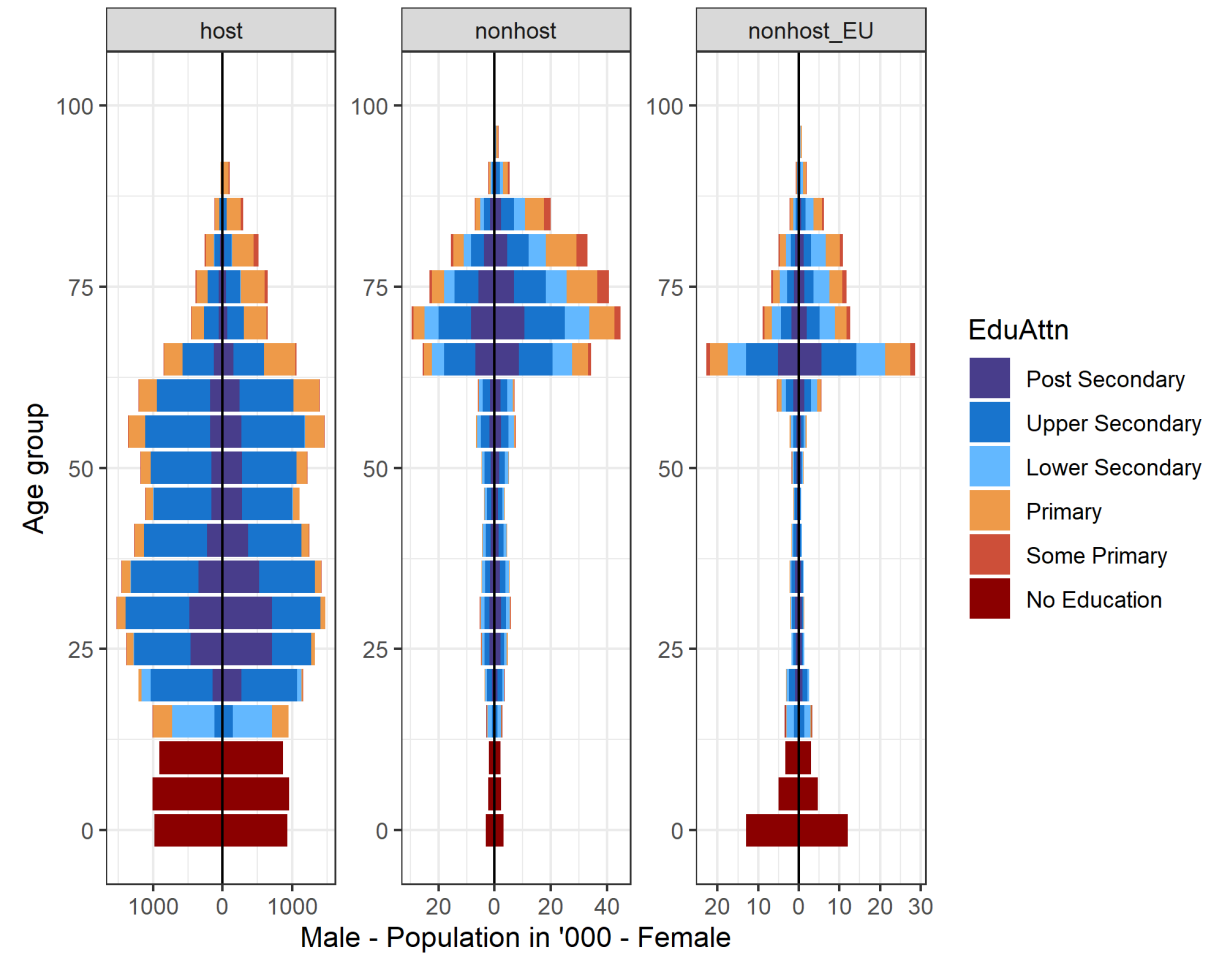


Population distribution by Country of Birth

DEU: Population Distribution by Country of Birth in 2015

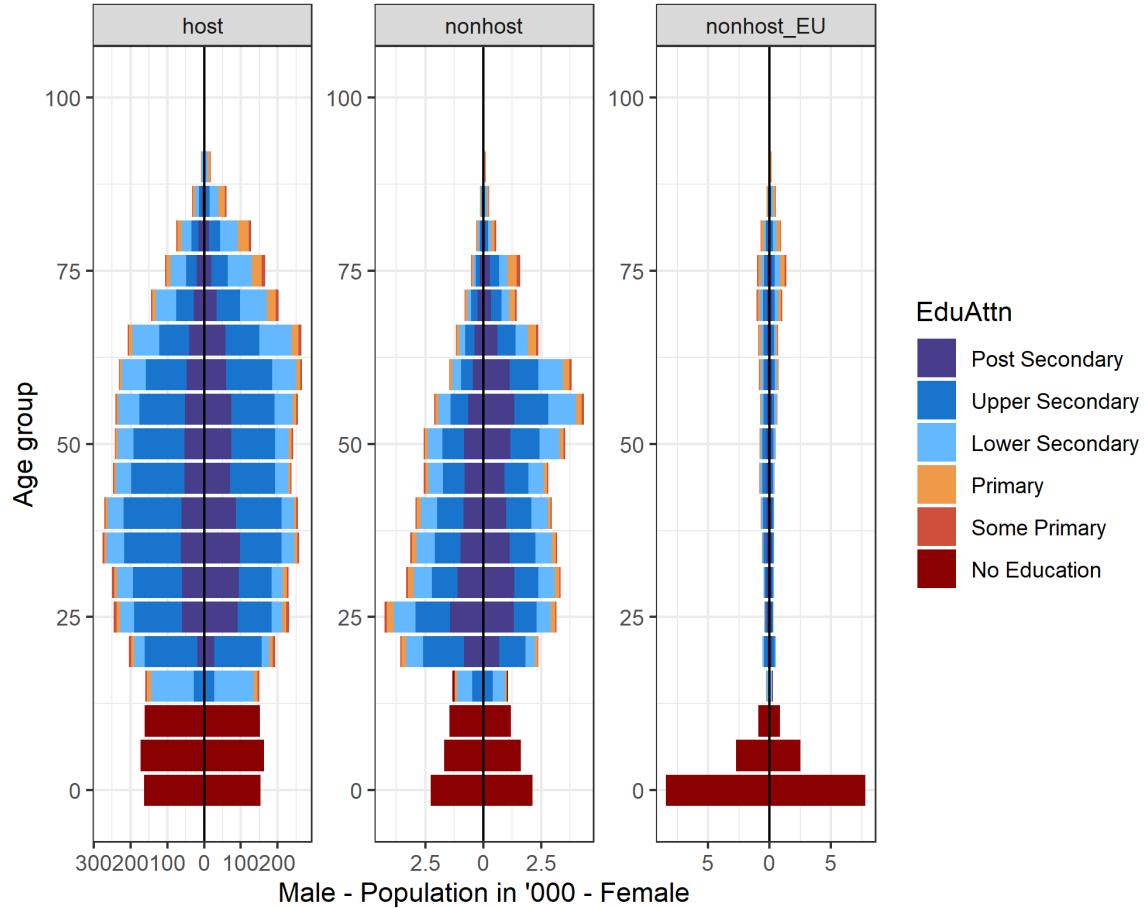


POL: Population Distribution by Country of Birth in 2015



Population distribution by Country of Birth

BGR: Population Distribution by Country of Birth in 2015



LVA: Population Distribution by Country of Birth in 2015

