

Europe's mortality potential – how far or near it is?

Health, Morbidity,
and Mortality
Working Group
European
Association for
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IMPACTS OF DISEASES AND SYSTEMIC RISKS



Content



introduction



Europe's mortality potential



comparison of mortality between Europe's potential
and Czechia



summary

Introduction

How to assess the intensity of mortality?



- national level - development of mortality rates over time
- international level:
 - traditional approach - comparison with a more advanced country or standard
 - less traditional approach - comparison with Europe's mortality potential
- aim: assess how far or near is the Europe's mortality potential for Czechia



Europe's mortality potential

Construction of potential



set of minimal attainable age-specific mortality rates according to age and sex



specifically for particular years of study (1980-2019)




average of the three lowest values of mortality rates

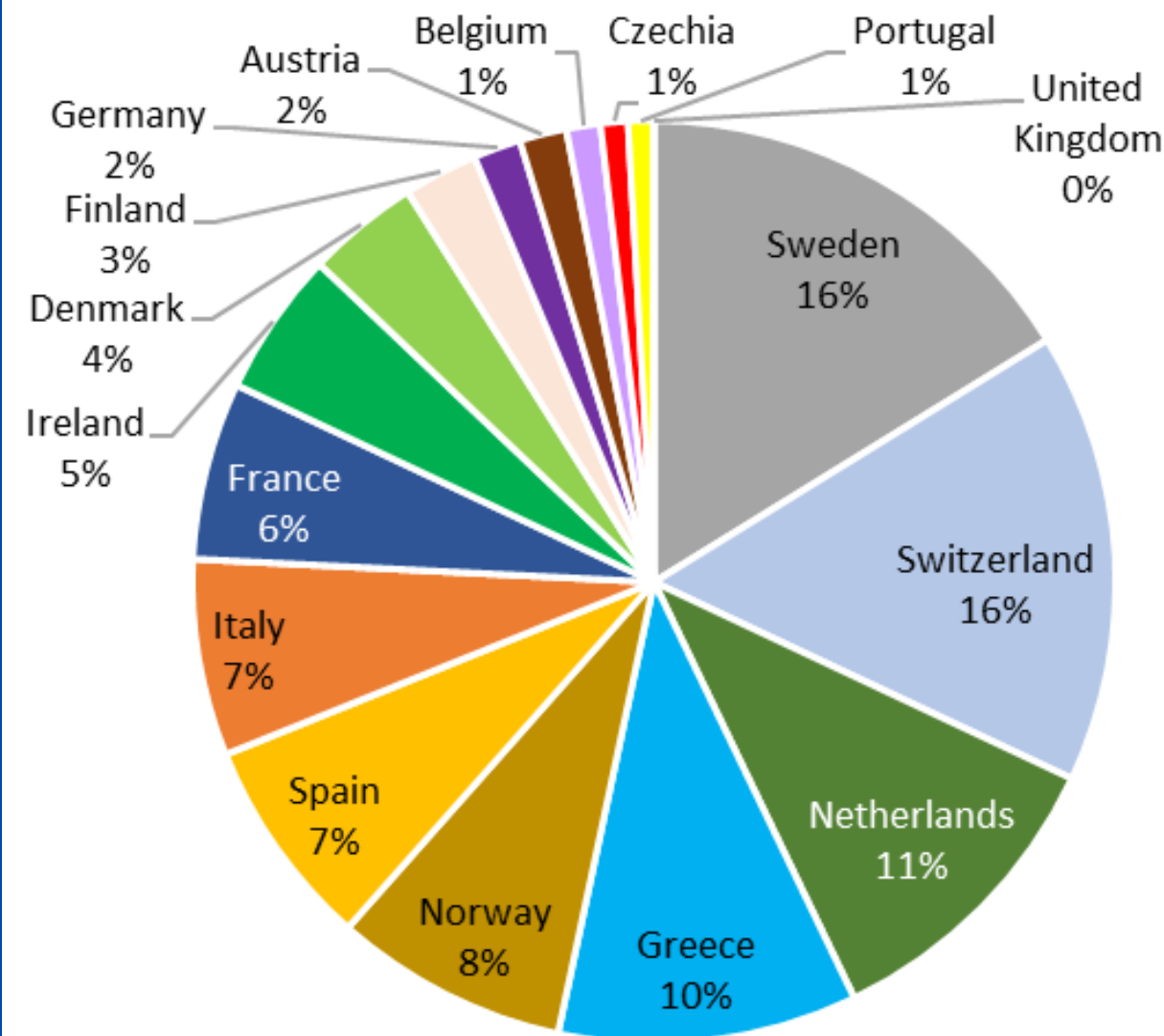


17 most demographically advanced countries in Europe

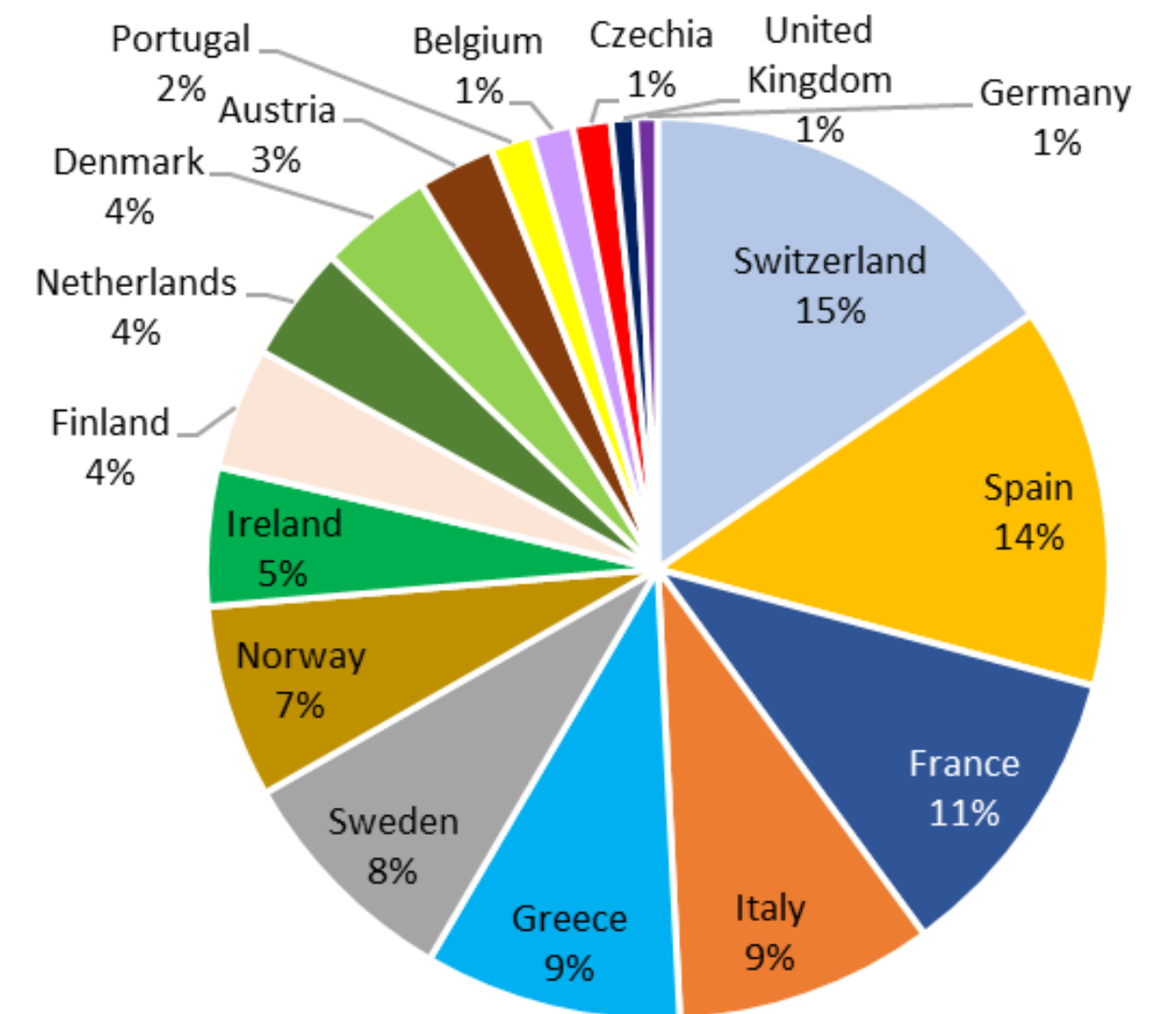
Construction of potential

Eurostat

Dx, Px  average mortality rates of 3 countries with lowest values for each age, sex and year

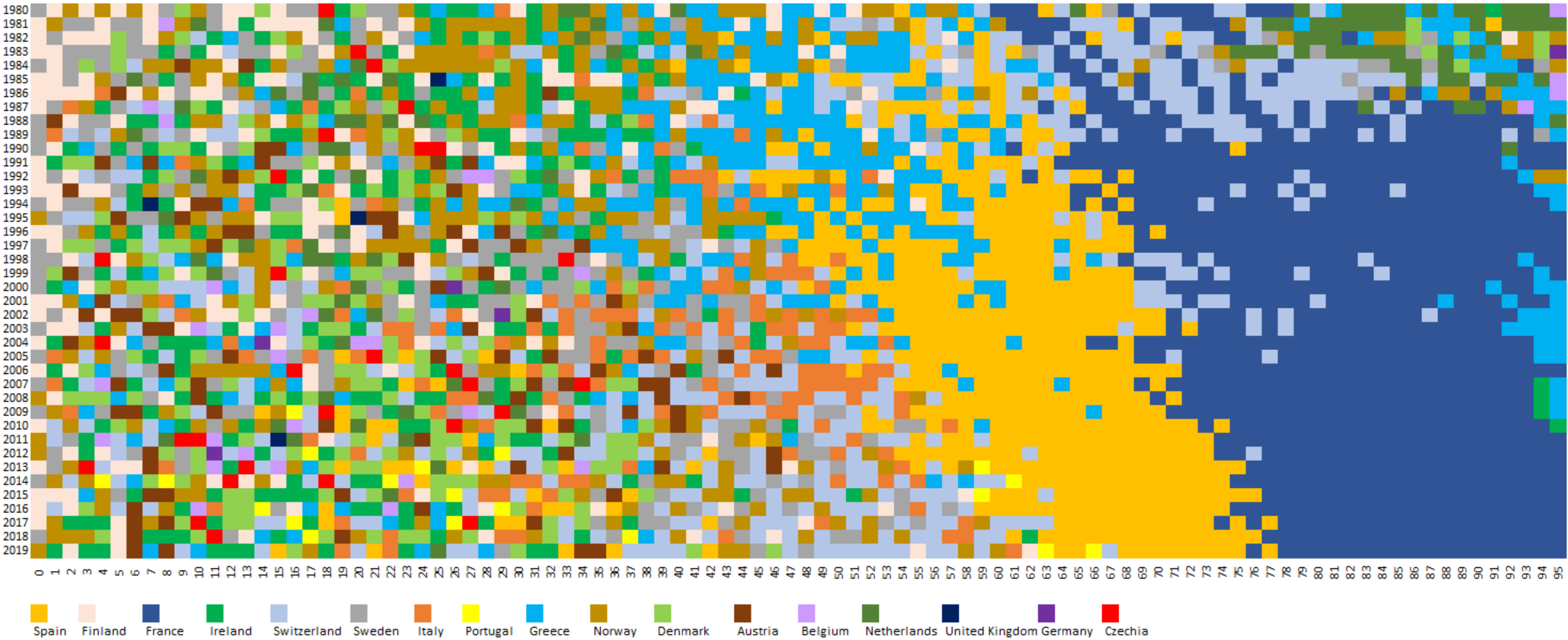


MALES



FEMALES

Best performing countries, females



The background is a solid blue color. There are two large white circles, one in the top right and one in the bottom left, partially cut off by the edges of the frame. A thin white circle is centered on the page, containing the text.

Comparison of mortality
between Europe's
potential and Czechia

How to compare?



INDEXES

of age-specific mortality rates
- Czechia vs. Europe's potential

DIFFERENCES IN LIFE EXPECTANCY AT BIRTH

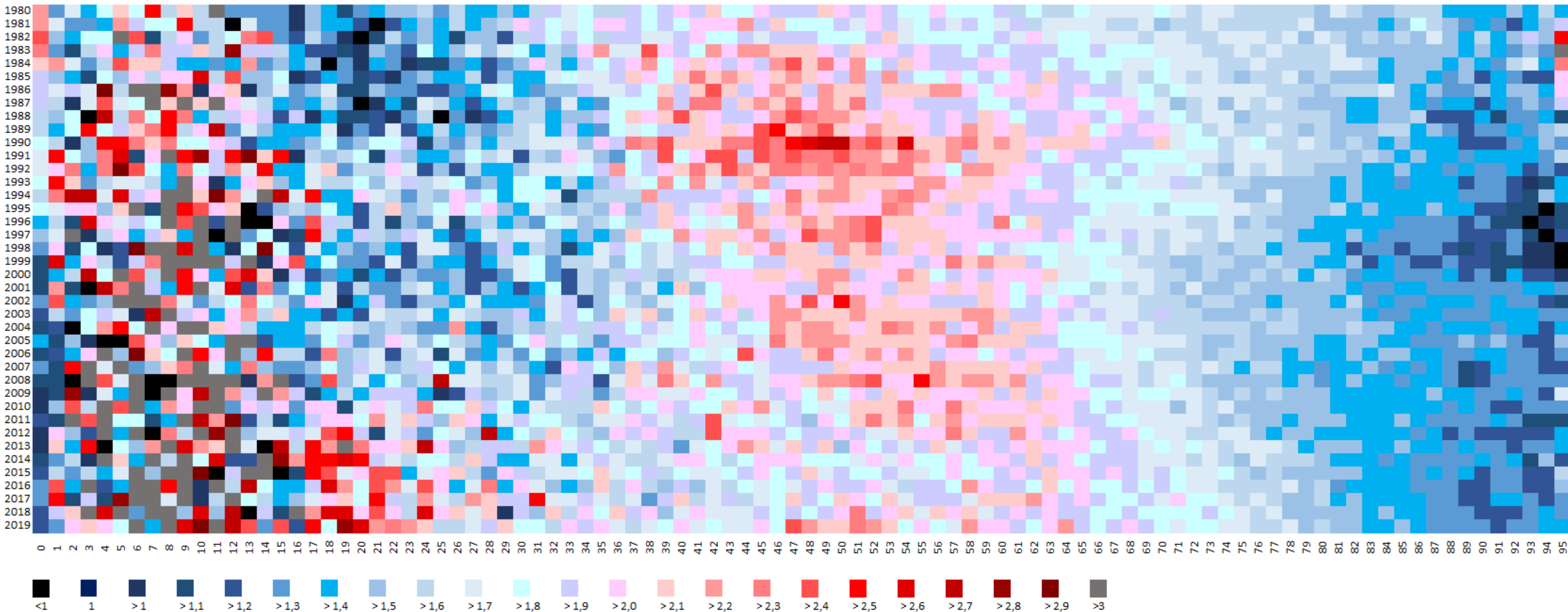
between Czechia and Europe's
potential

DECOMPOSITION OF DIFFERENCES IN LIFE EXPECTANCY AT BIRTH

between Czechia and Europe's
potential

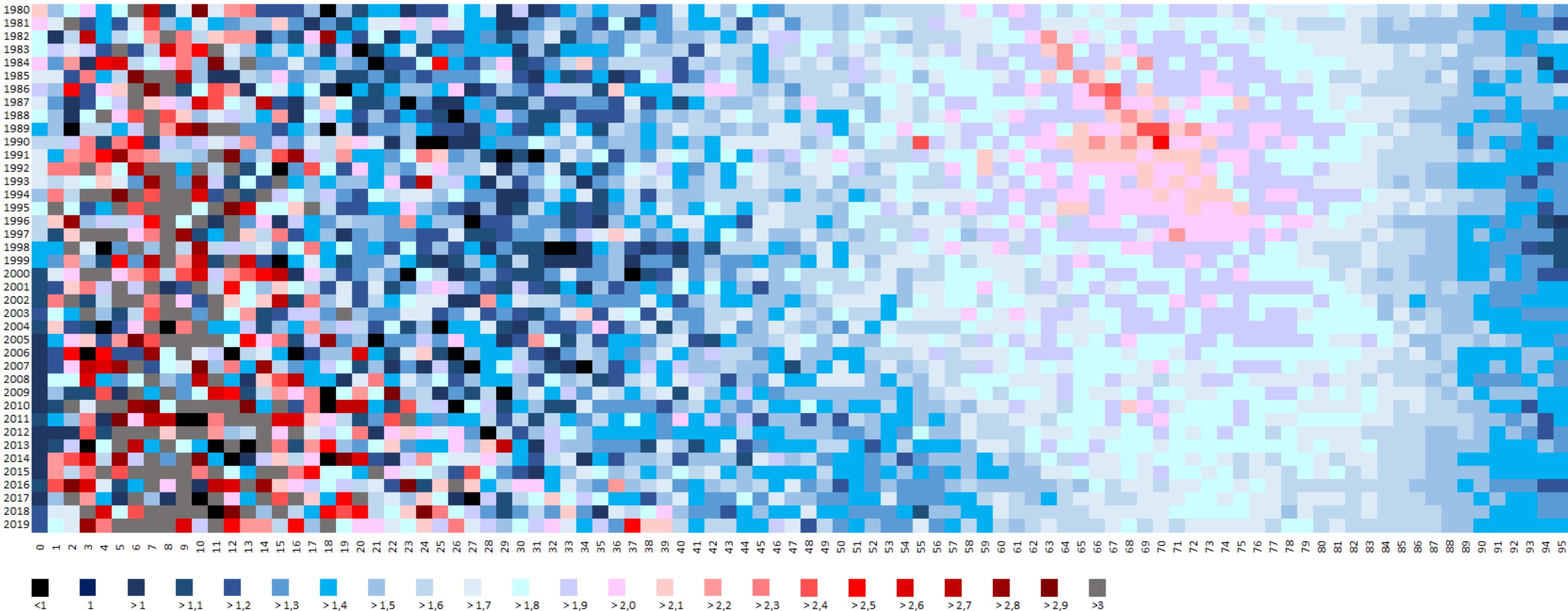


Indexes of age-specific mortality rates, males



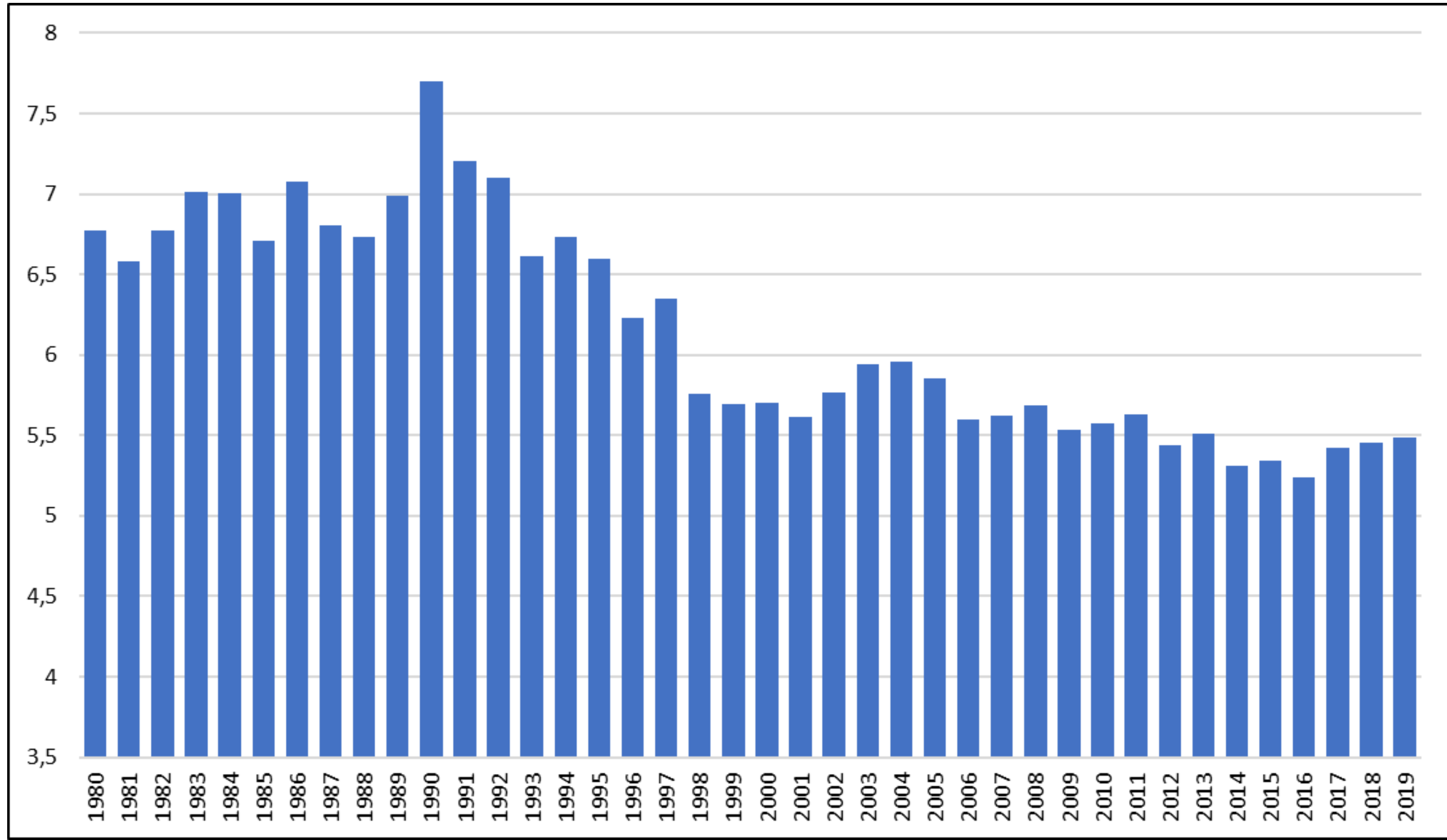


Indexes of age-specific mortality rates, females



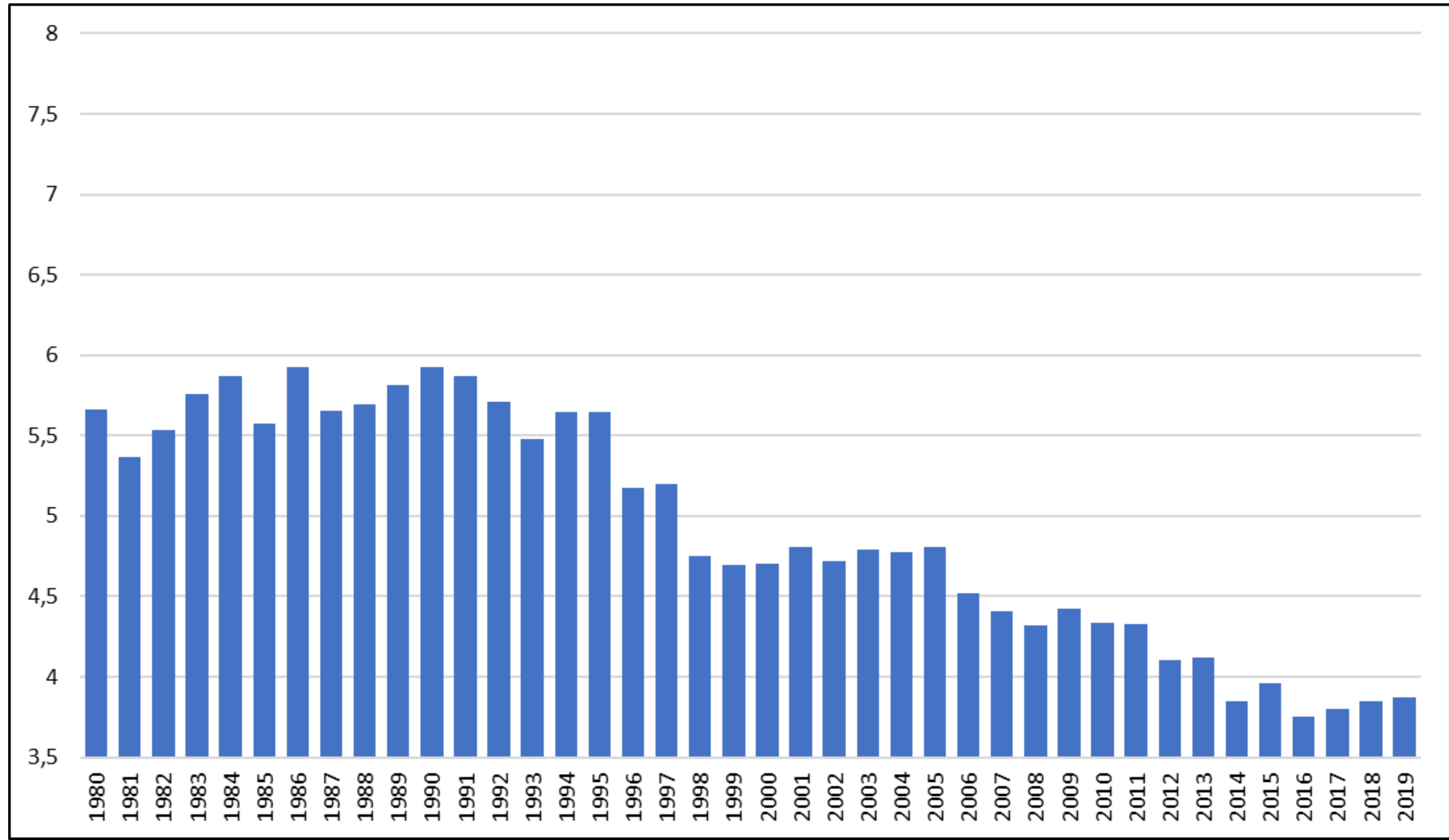


Differences in life expectancy at birth in years, males



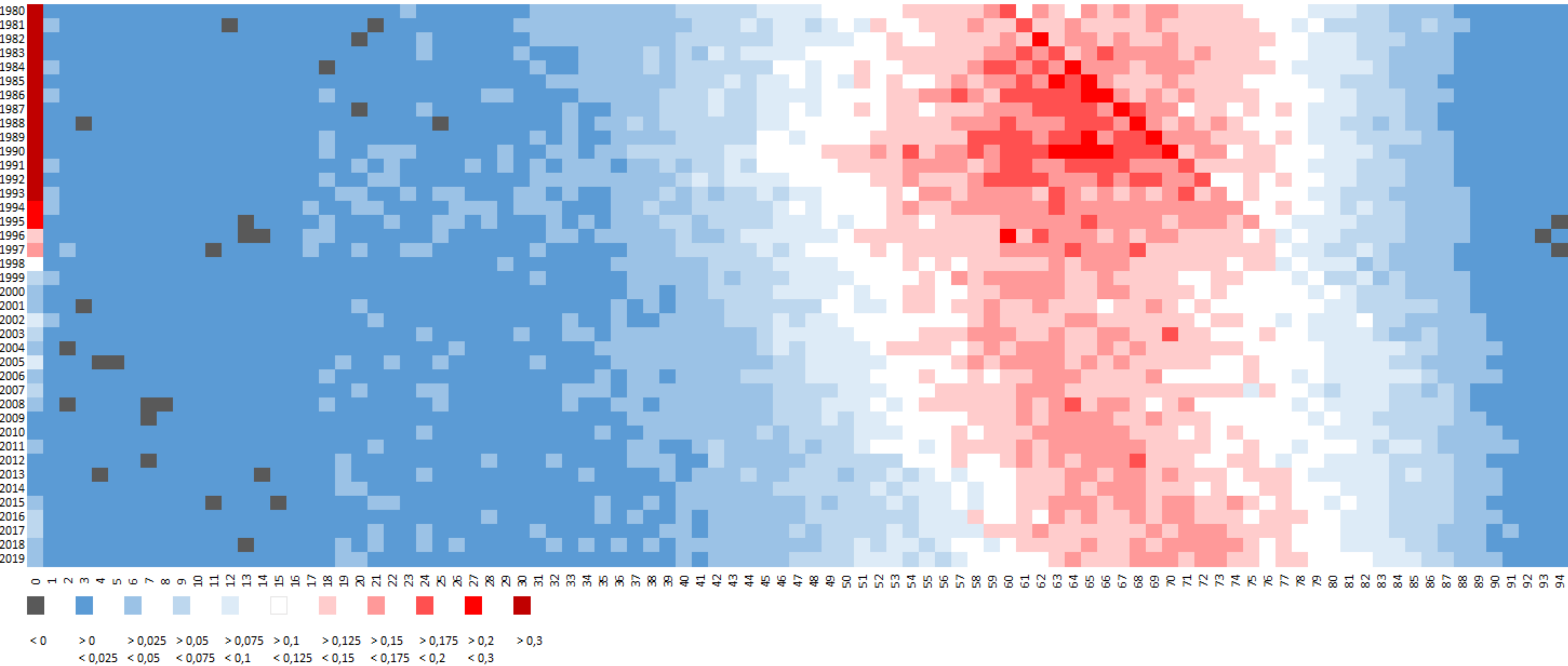


Differences in life expectancy at birth in years, females



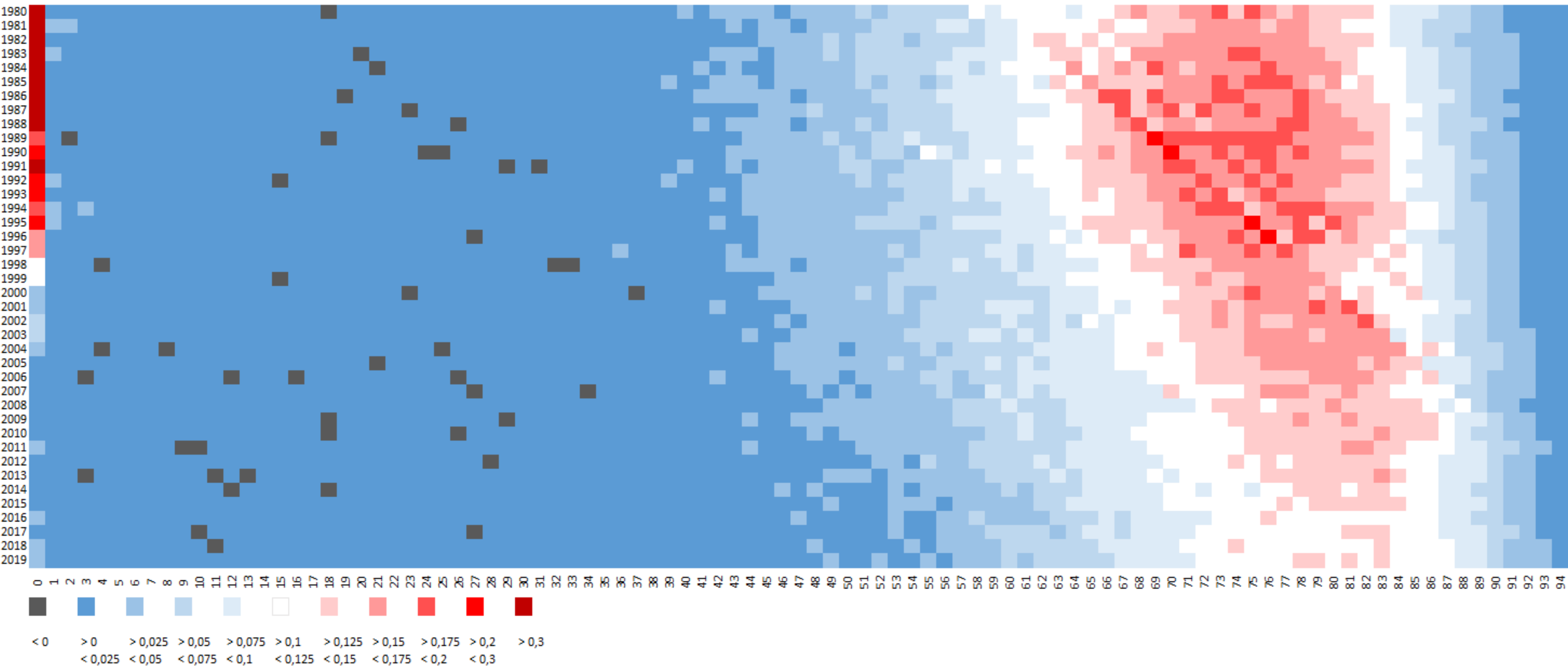


Decomposition of differences in life expectancy at birth, males





Decomposition of differences in life expectancy at birth, females



Summary

Europe's mortality potential = set of minimal attainable age-specific mortality rates according to age and sex



Sweden, Switzerland, Netherlands



Switzerland, Spain, France

comparison of mortality between Europe's potential and Czechia:

- more pronounced lag behind potential in the male population
- convergence of mortality rates over the follow-up period, particularly at ages 40-65 for men and 50-80 for women
- cohort effect, more evident in the female population
- ages 55-80 for men and 70-90 for women contribute most to divergence of mortality

Thank you for your attention!