Traditional and newly emerging data quality problems in countries with functioning vital statistics: experience of the Human Mortality Database

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on behalf of
the HMD team

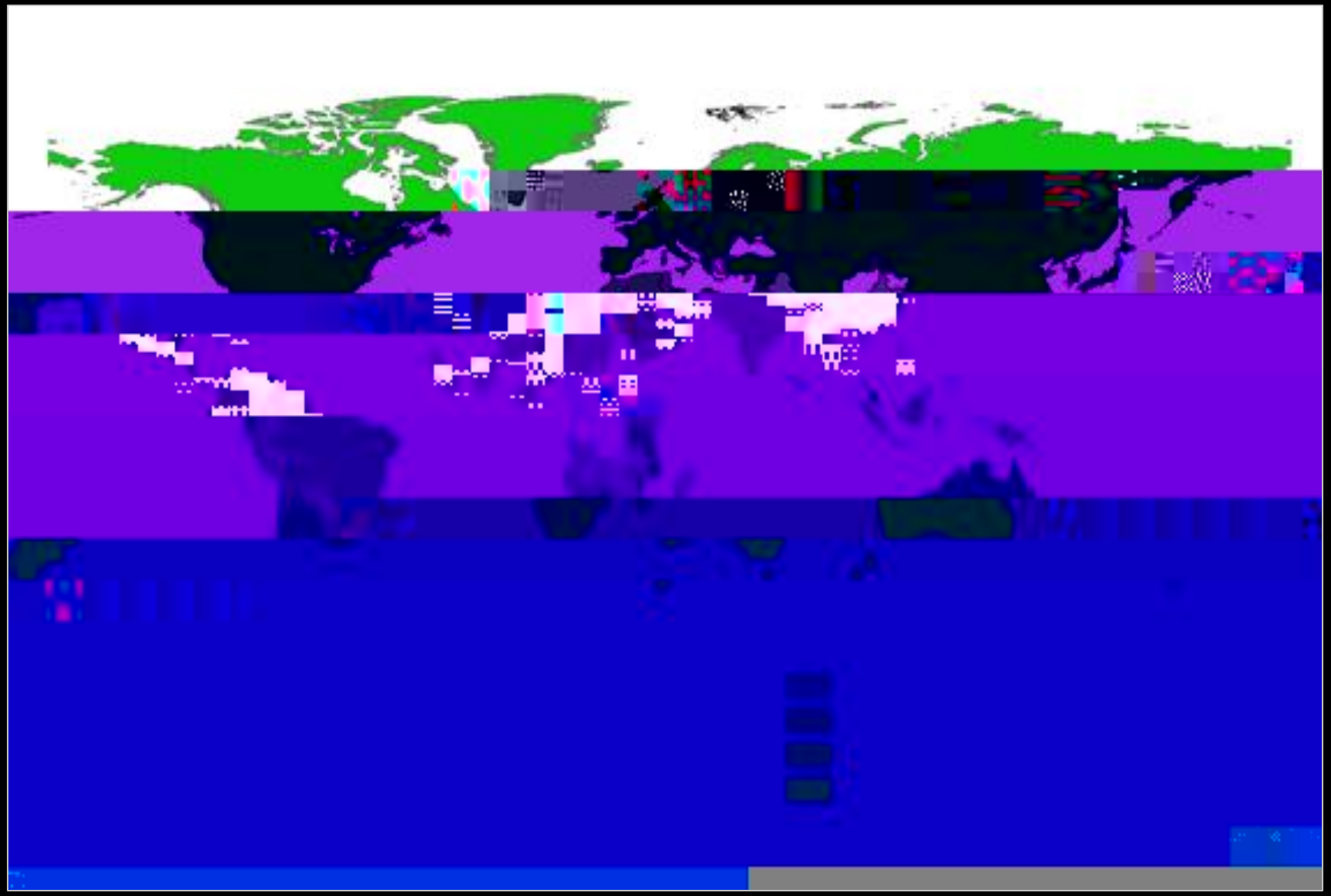
United Nations Expert Group Meeting on the methodology and lessons learned to evaluate the completeness and quality of vital statistics data from civil registration

New York, November 3-4, 2016

MAX PLANCK INSTITUTE FOR DEMOGRAPHIC RESEARCH
MAX-PLANCK-INSTITUT FÜR DEMOGRAFISCHE FORSCHUNG

The Human Mortality Database

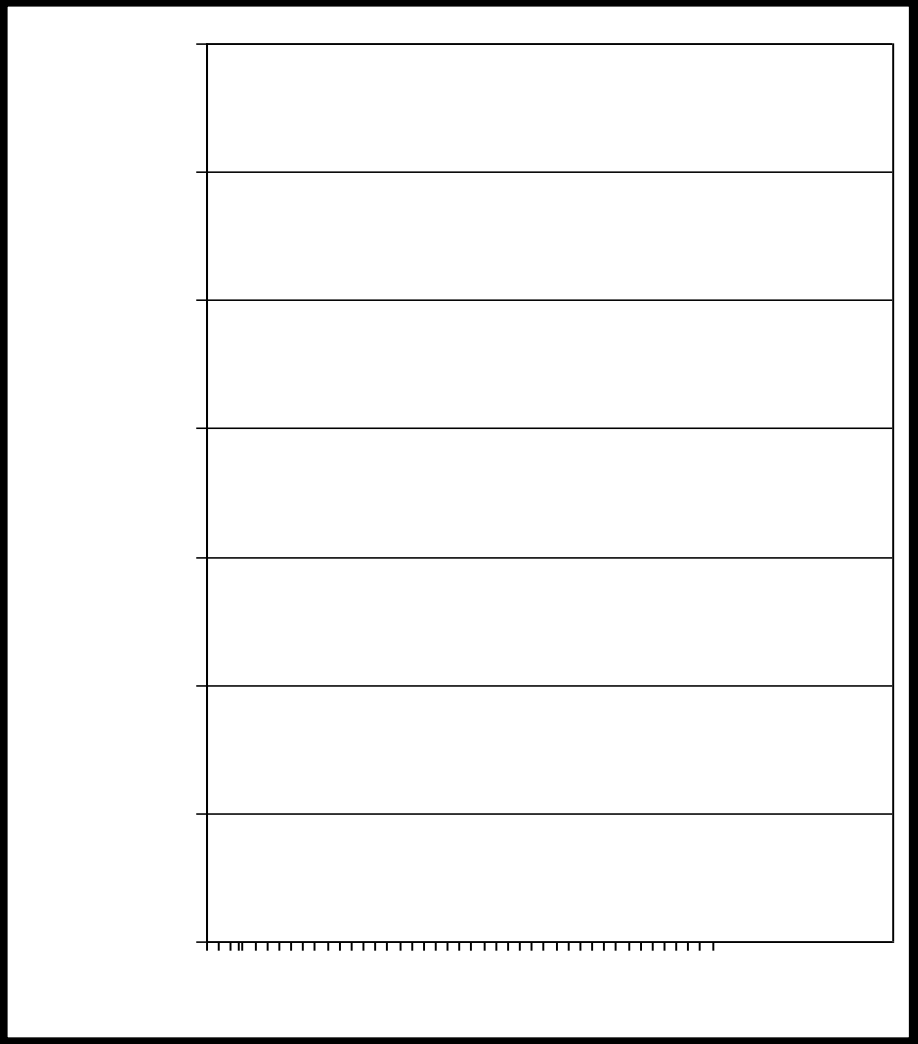
UN assessment of coverage by death registration (Dec 2014)



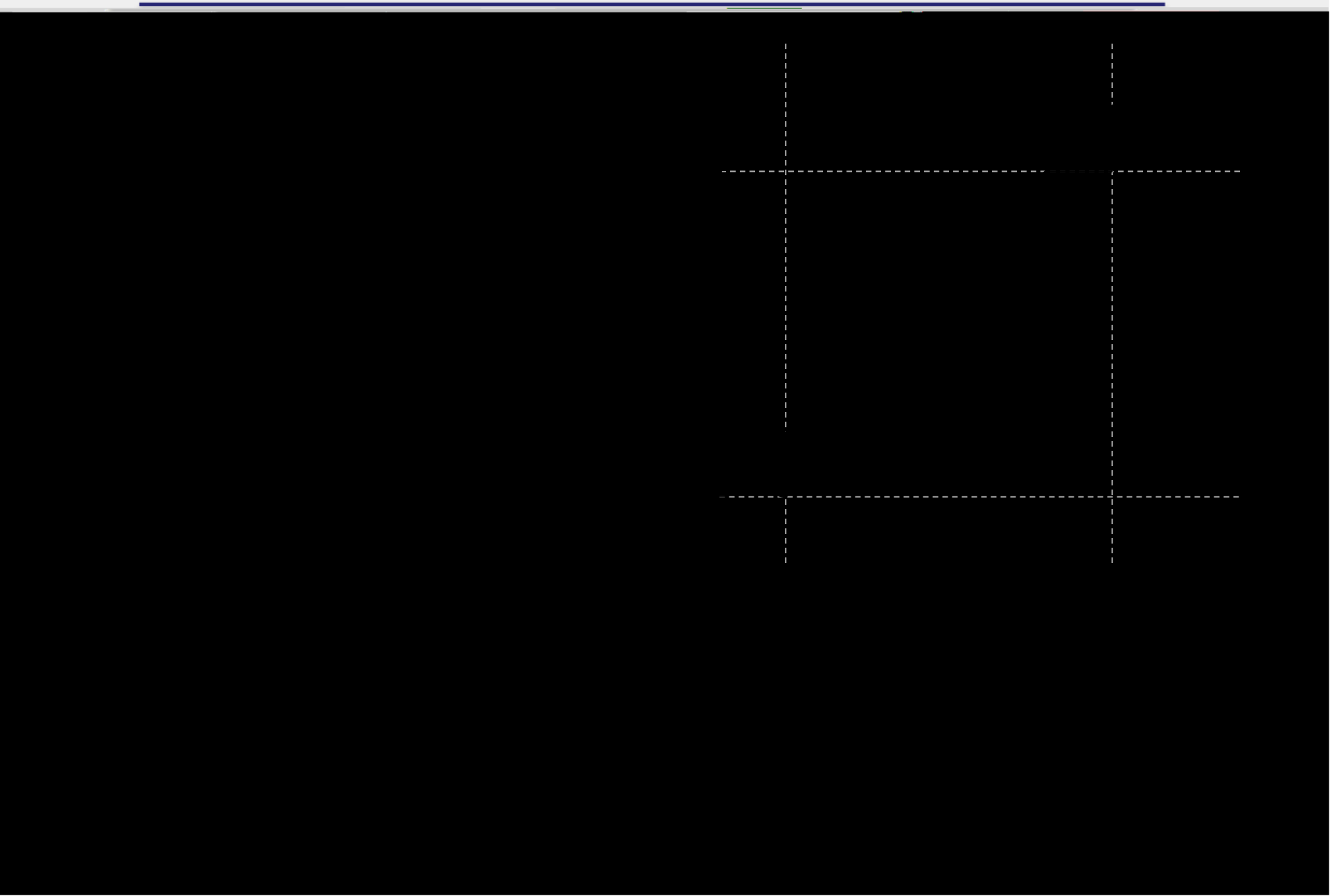
Censuses and assessment of the population denominator

Censuses and inter-censal population estimates

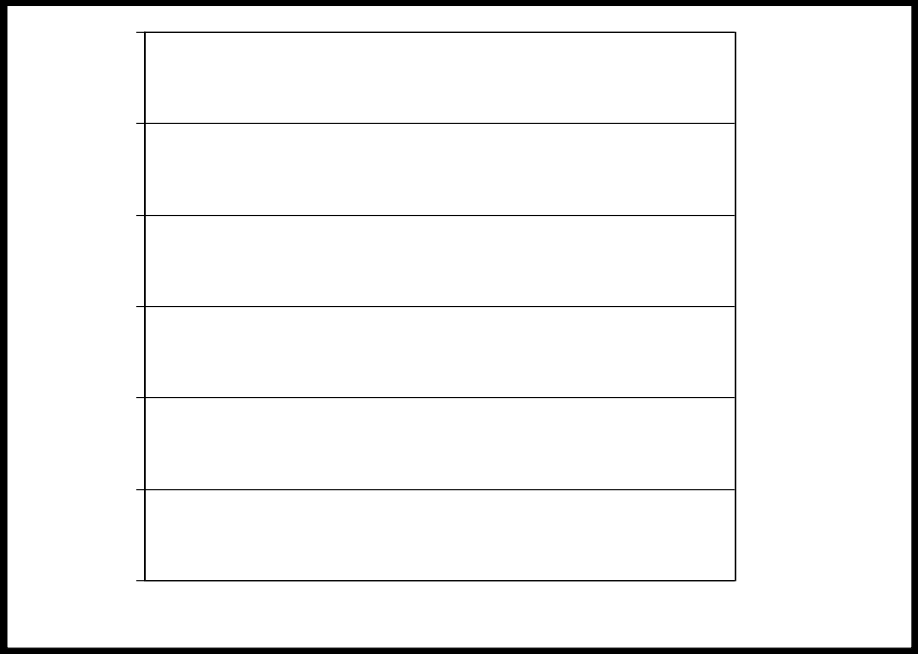
- Migration



Inter-censal population estimates: the HMD approach

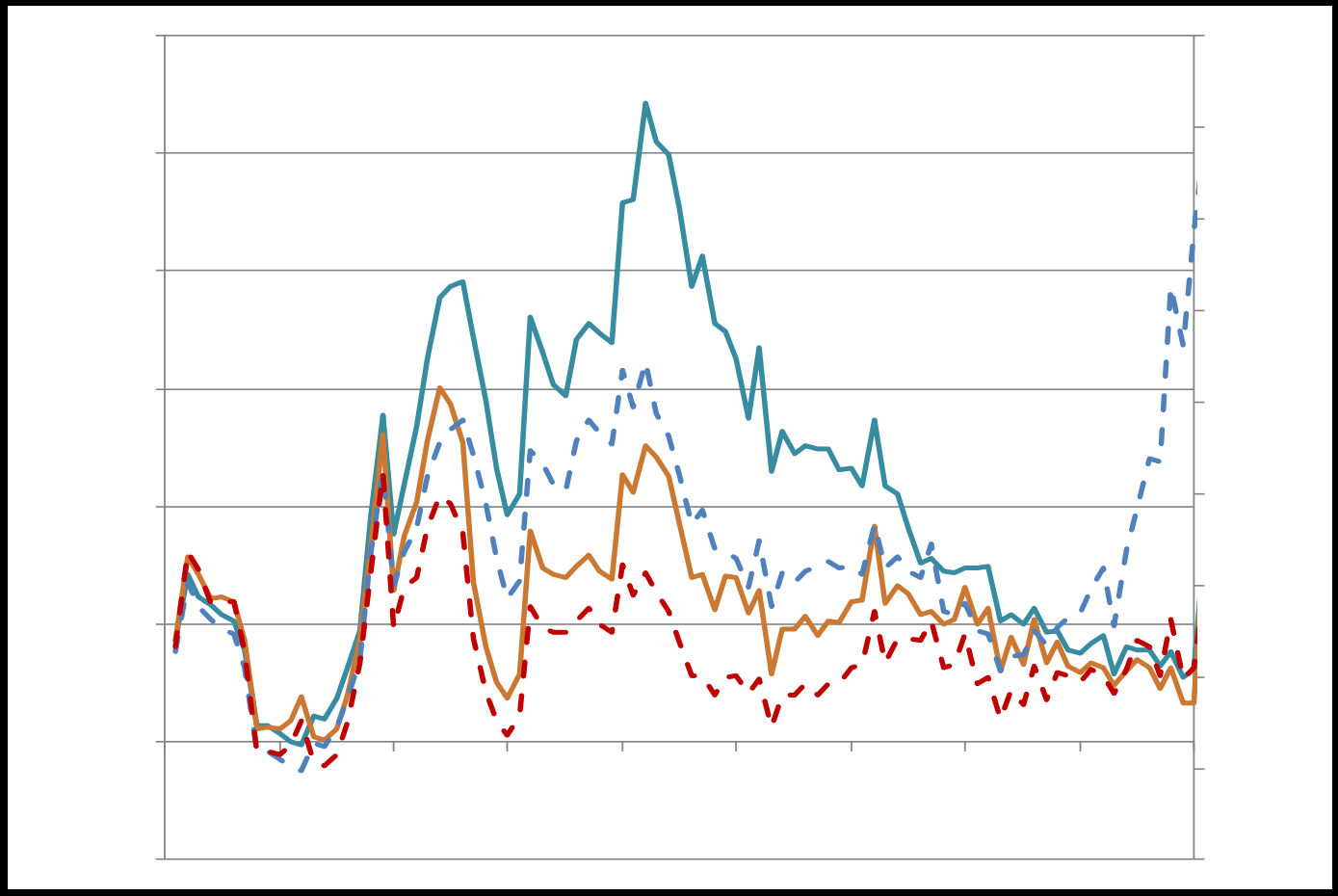


Bulgaria: correction of population data (inter-censal estimates)

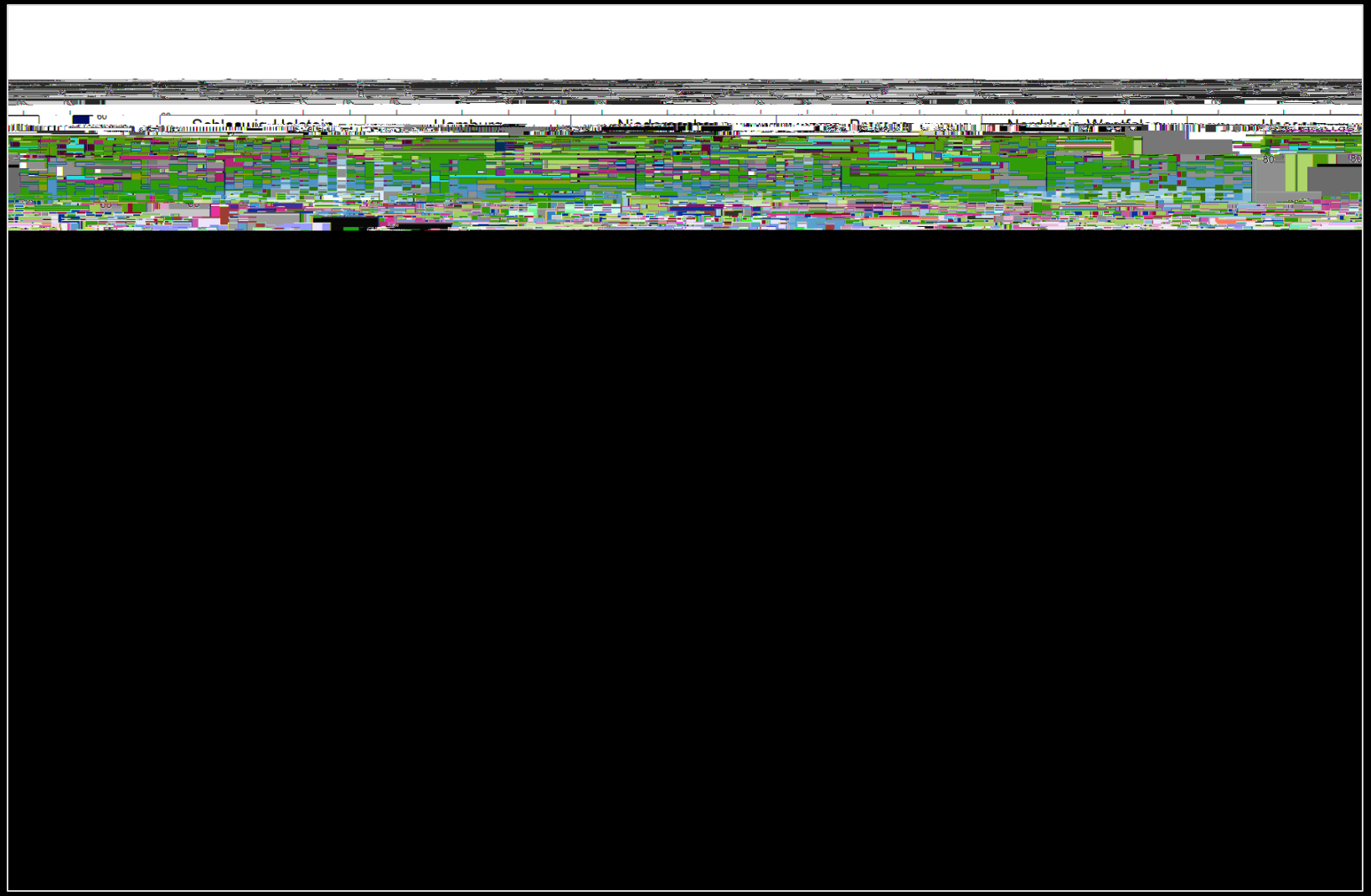


HMD Solution:

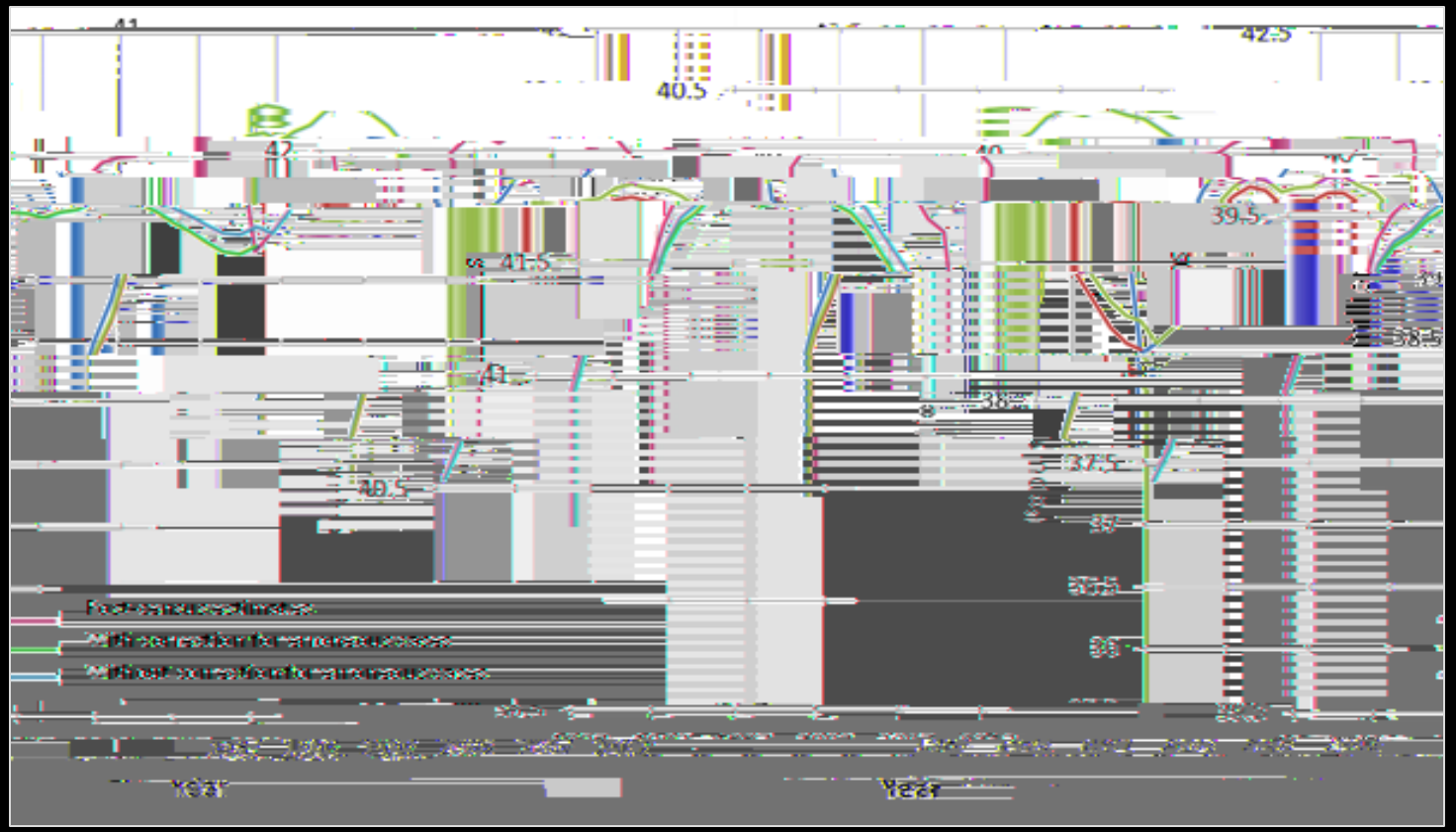
Germany: three decades between censuses



External outmigration intensities by age for the German lands, males

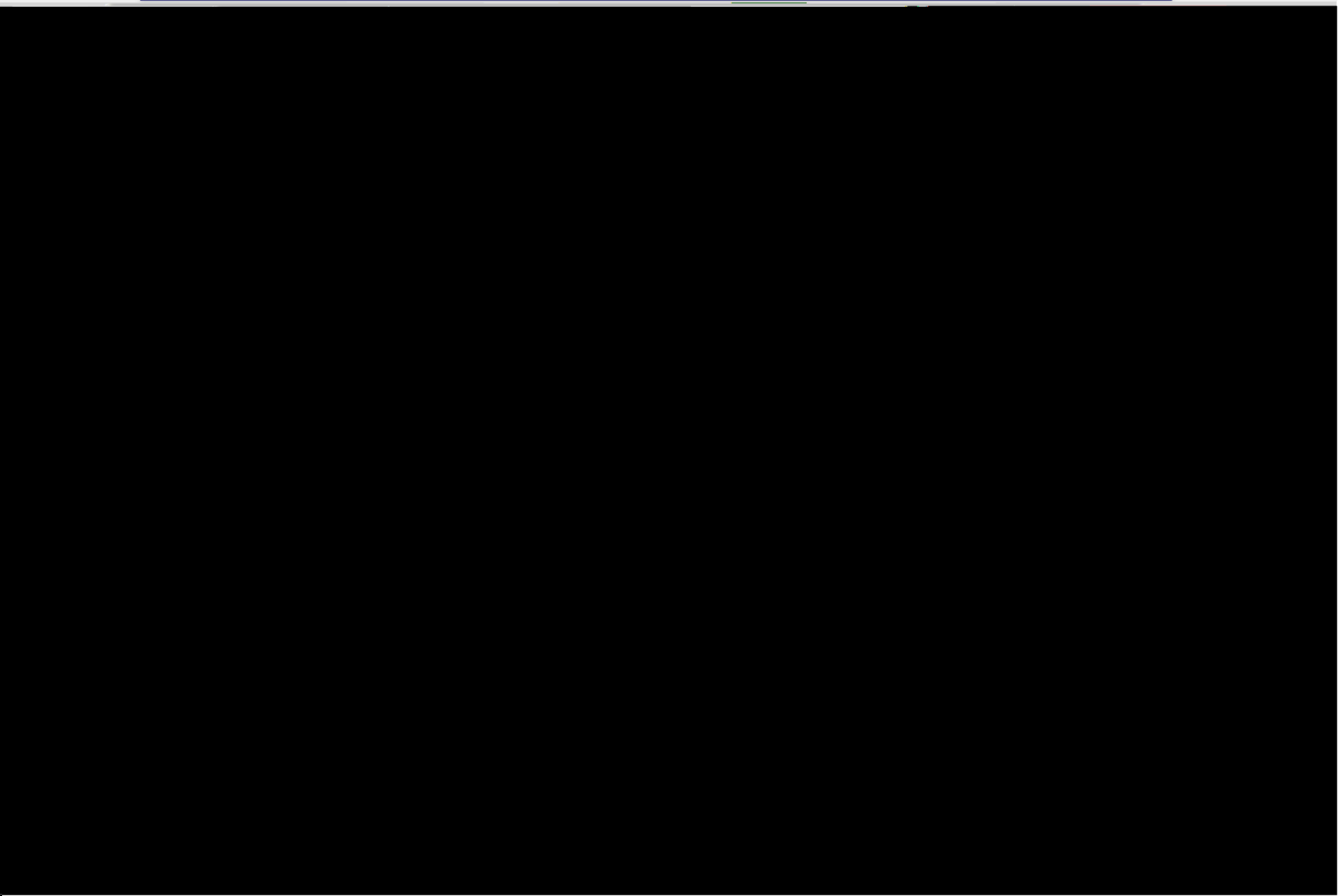


The HMD inter-censal estimates for Gerrmany

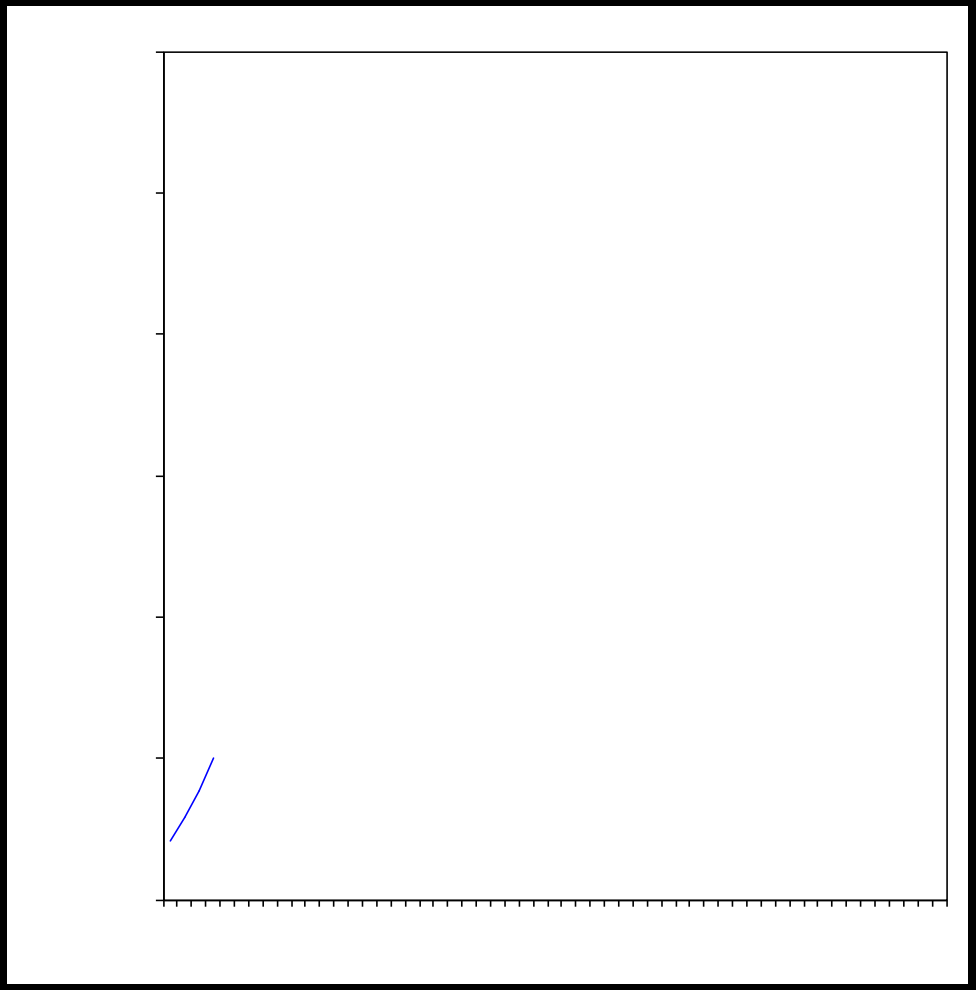


Changeable population definitions across time

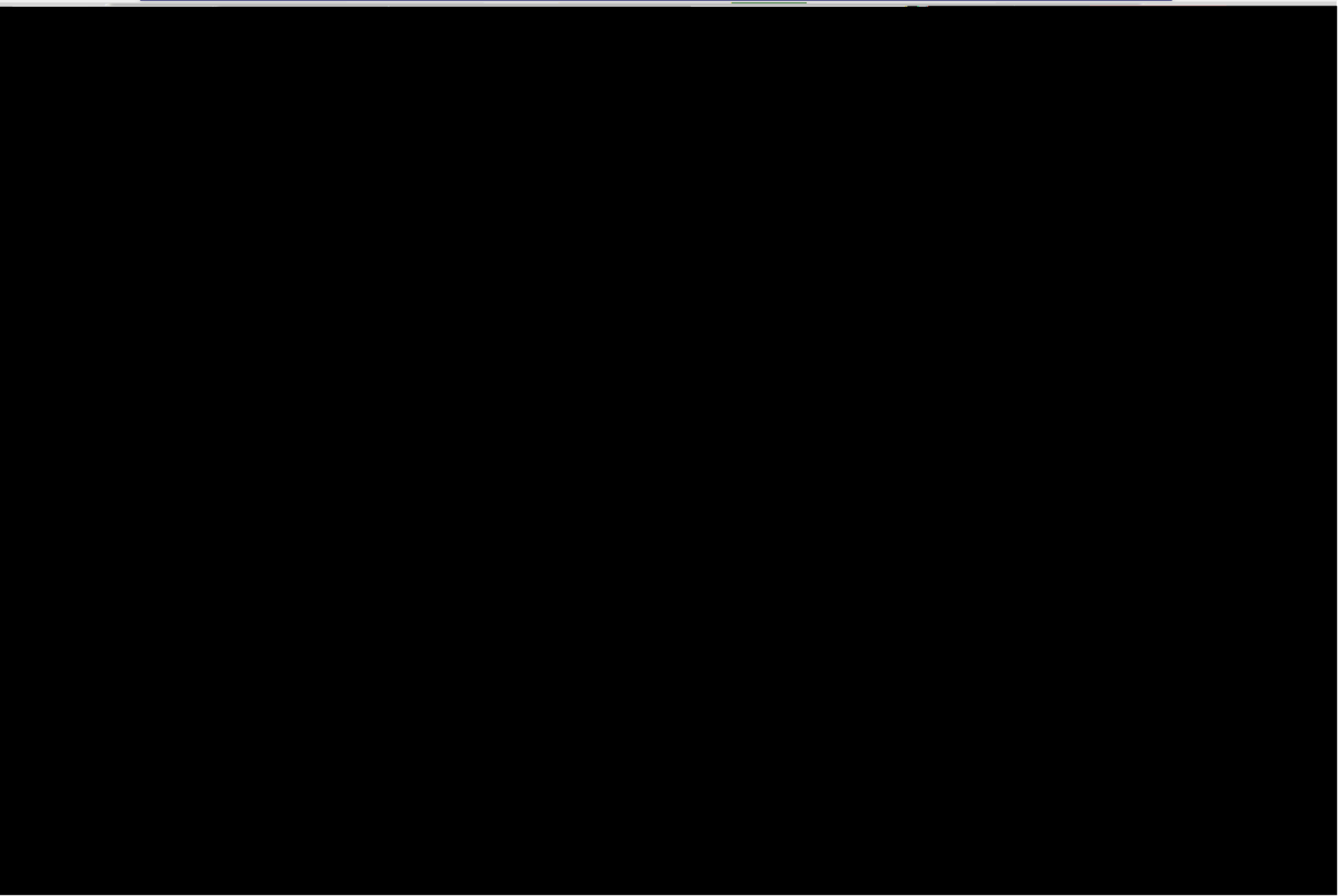
Numerator-denominator bias: case of Moldova



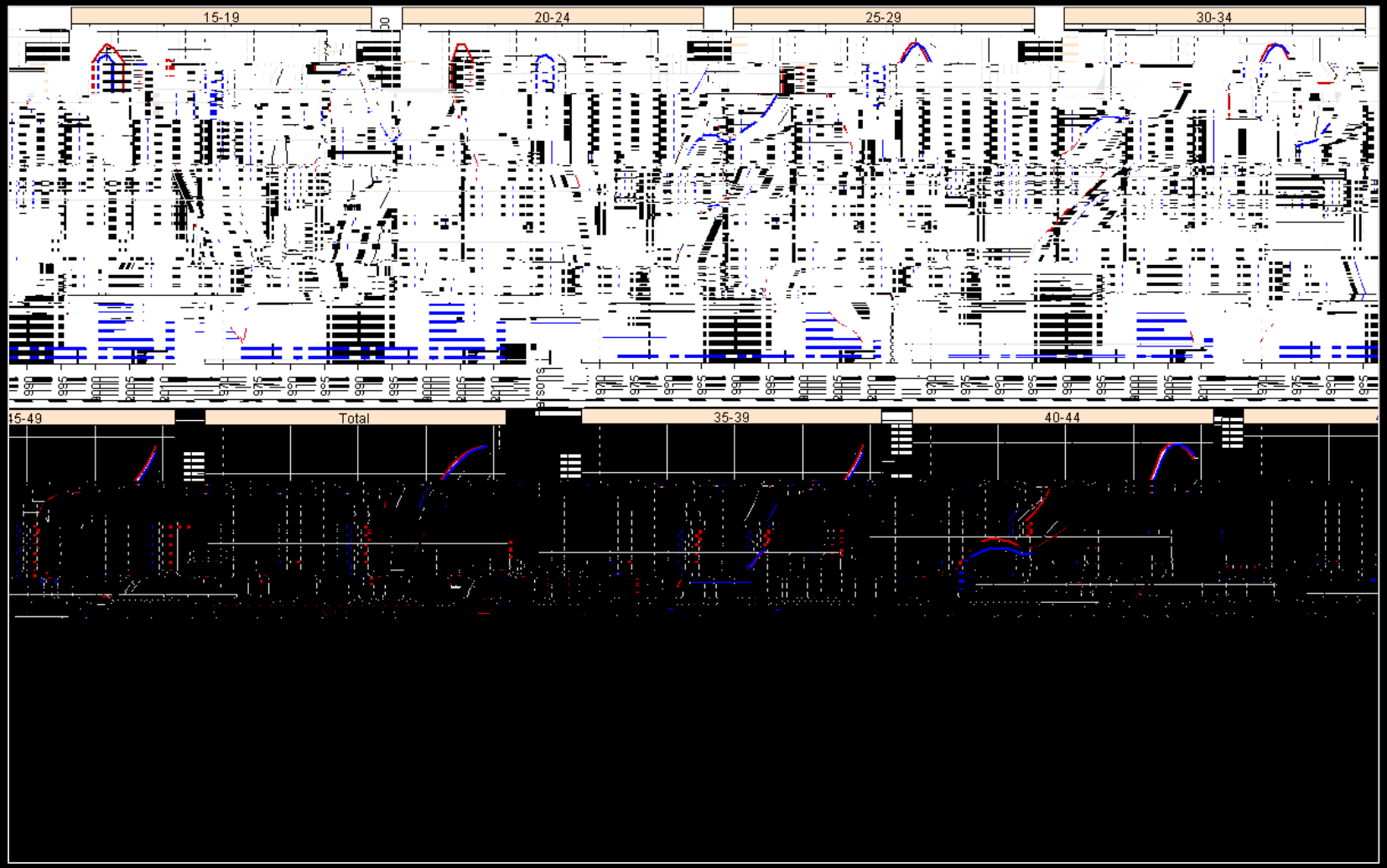
Changes in the definition of population: Poland



Change in the definition of ethnicity: New Zealand Māori

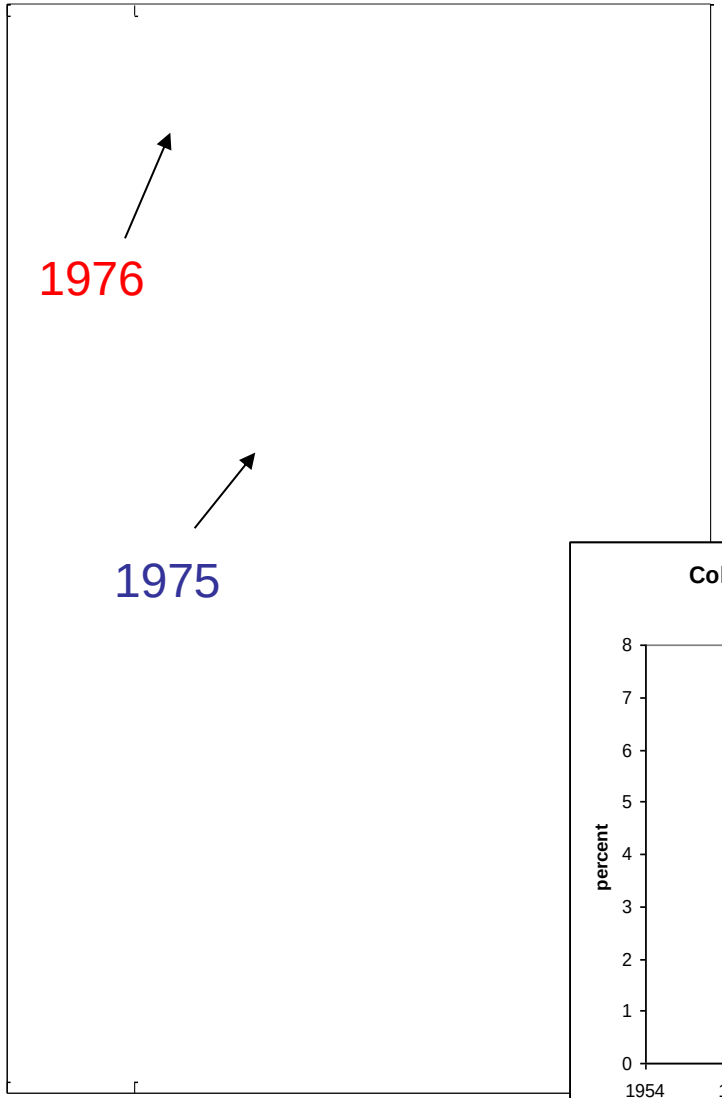


Impact of migration at working/reproductive ages on mortality and fertility estimates

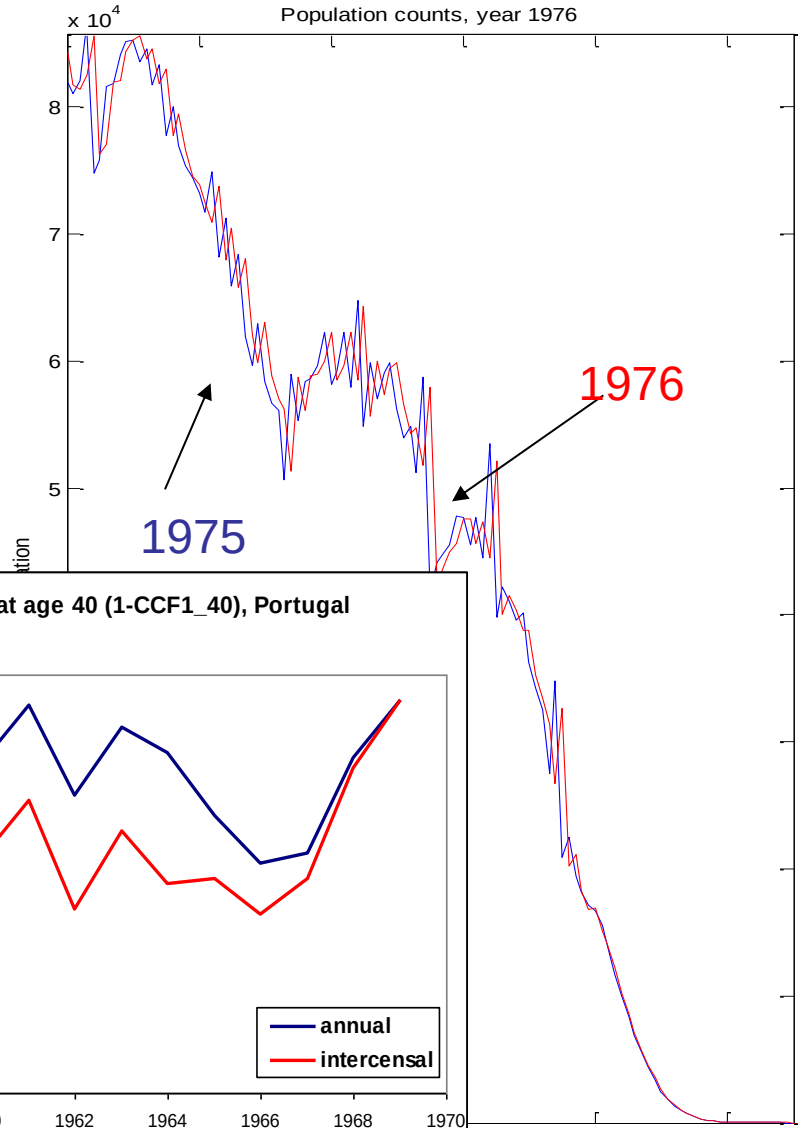


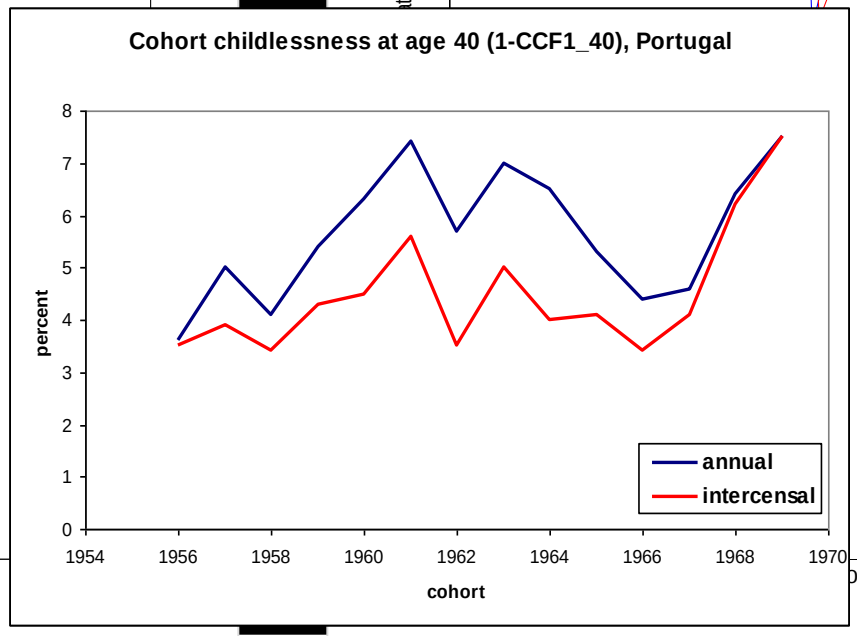
Inter-censal population estimates and fertility indicators: Portugal in 1975-76

Current population estimates



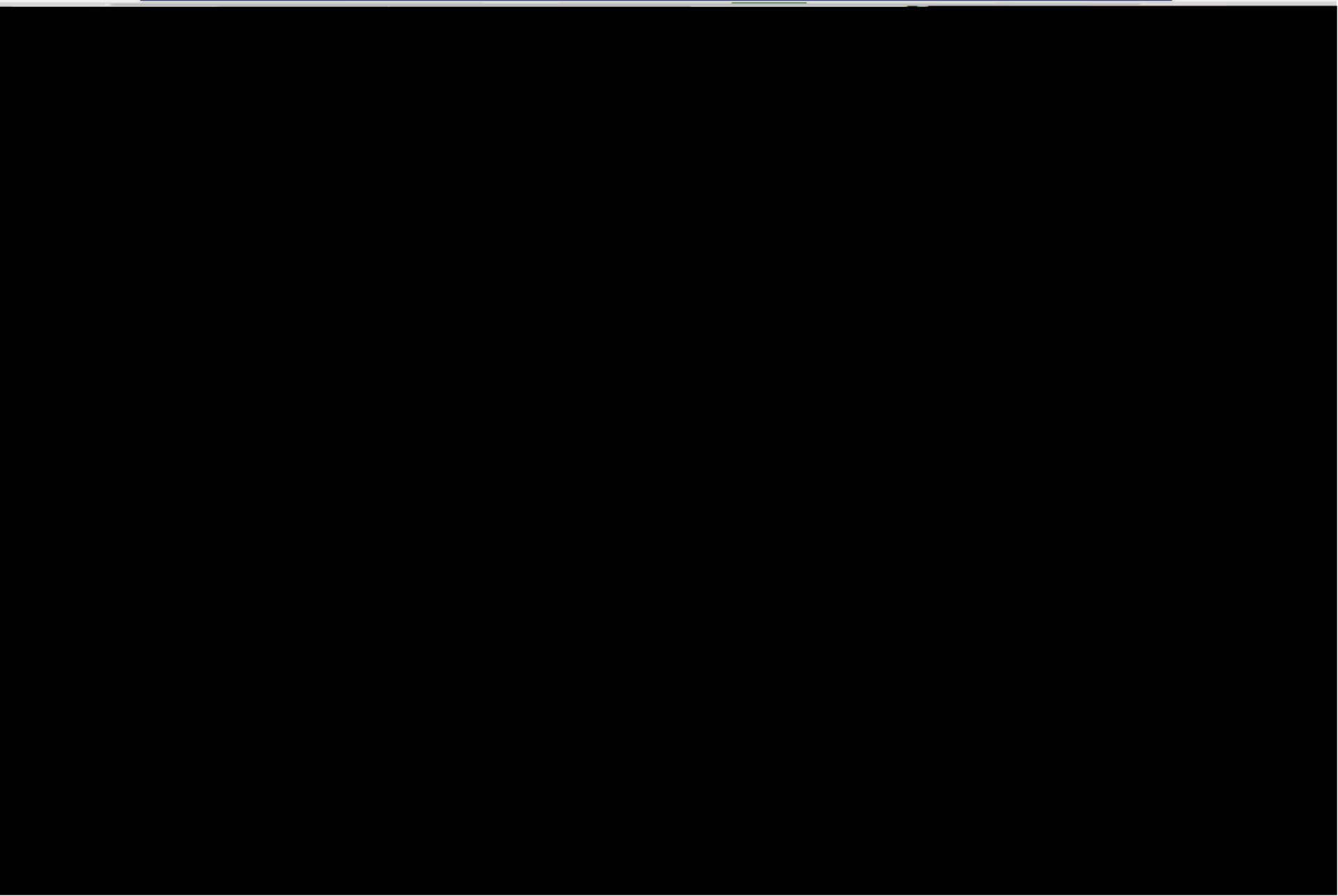
HMD inter-censal estimates



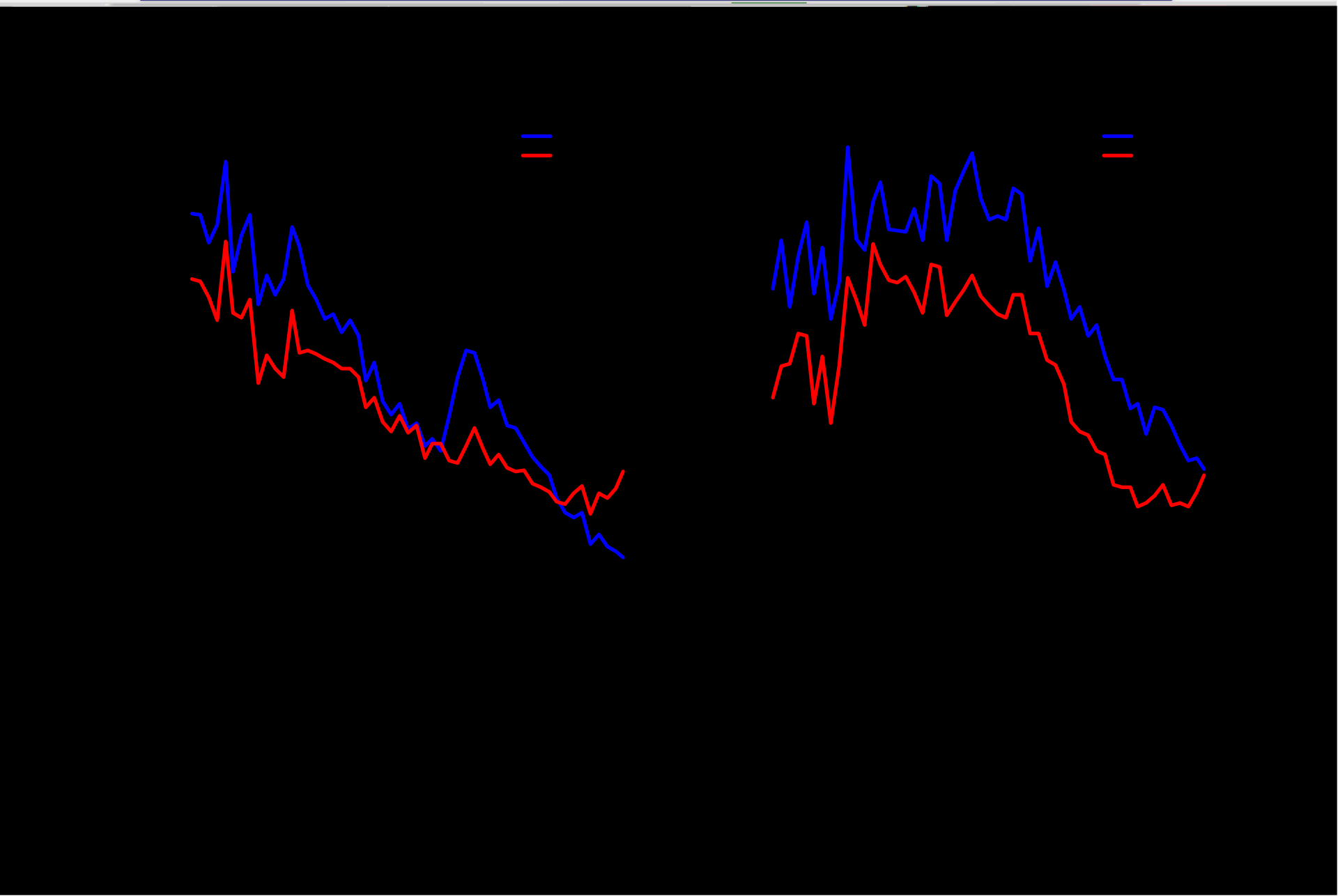


Mortality at advanced ages

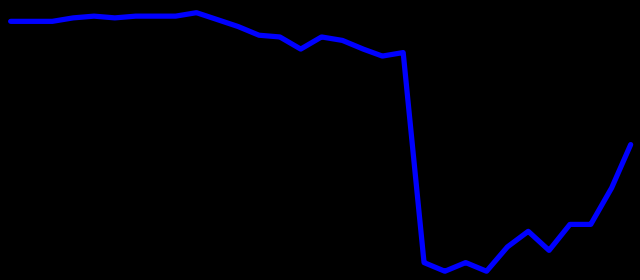
Mortality estimates at old ages



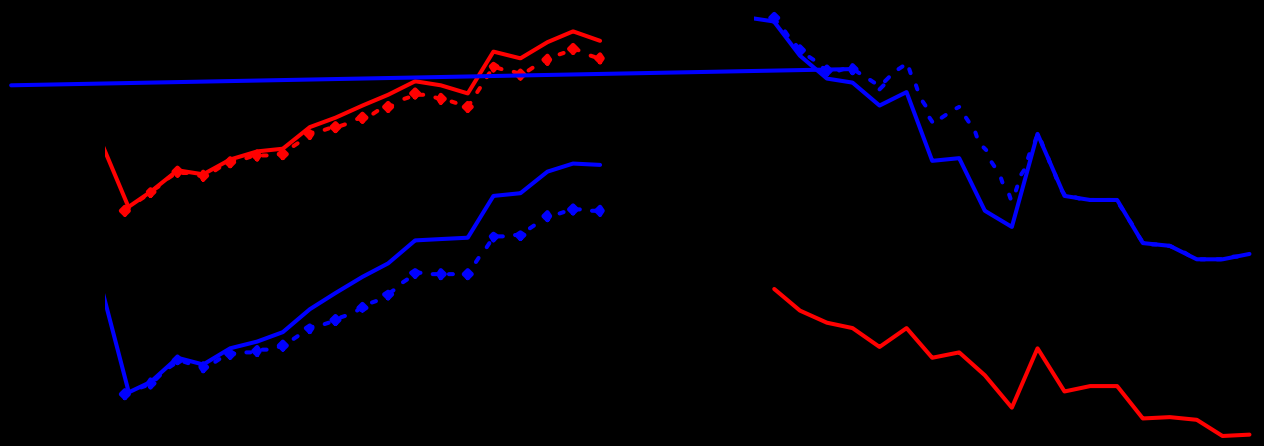
Germany: old ages



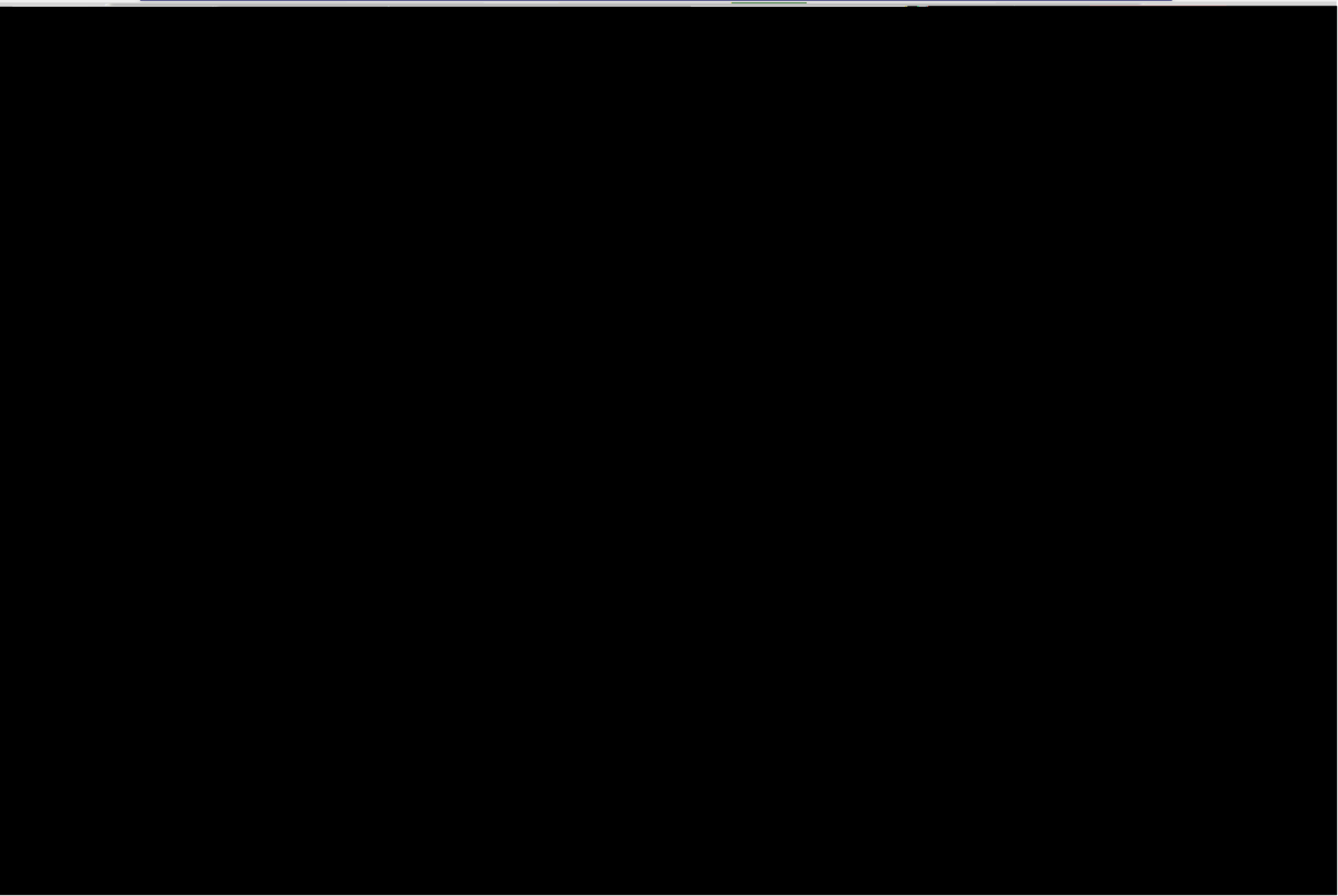
Germany: old ages (cont.)



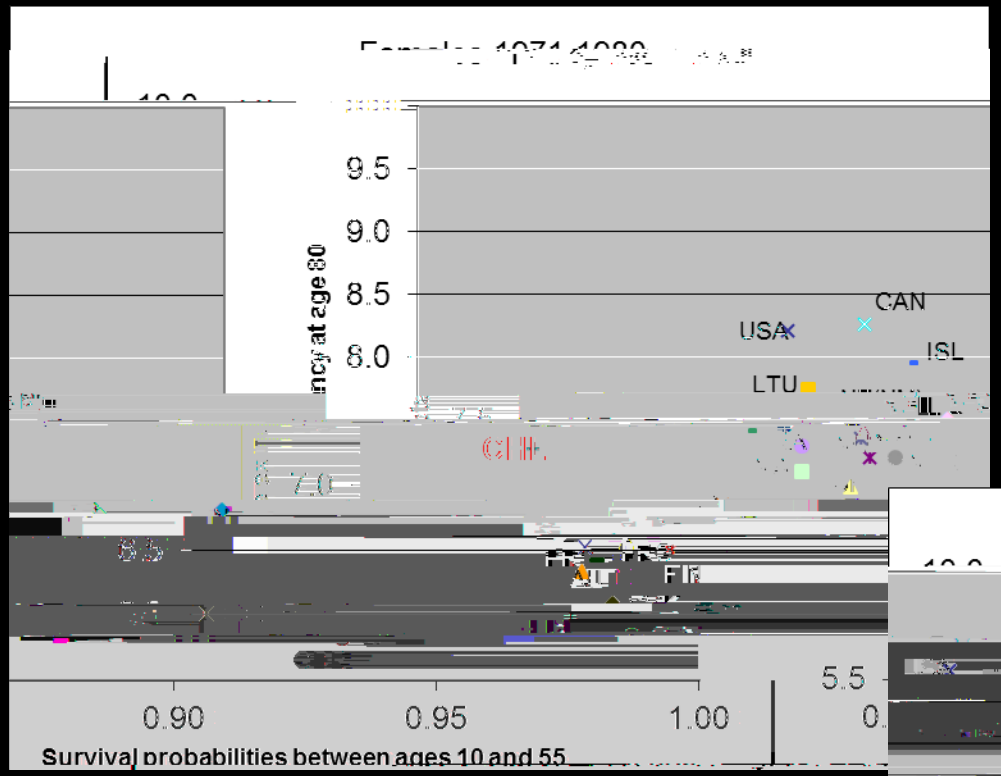
Life expectancy and probability of death for the corrected and the original data, West Germany, 1990-2008

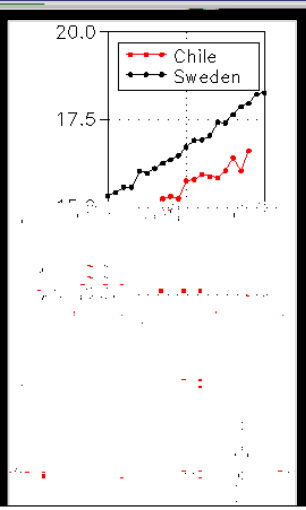


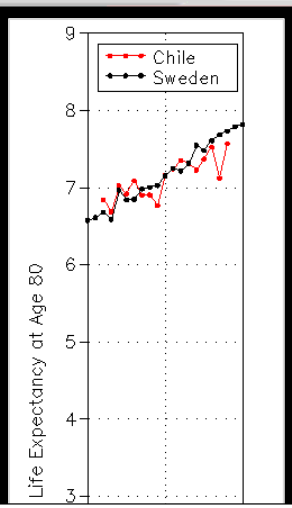
Relative difference (per cent): HMD (2011 Census) vs. official population

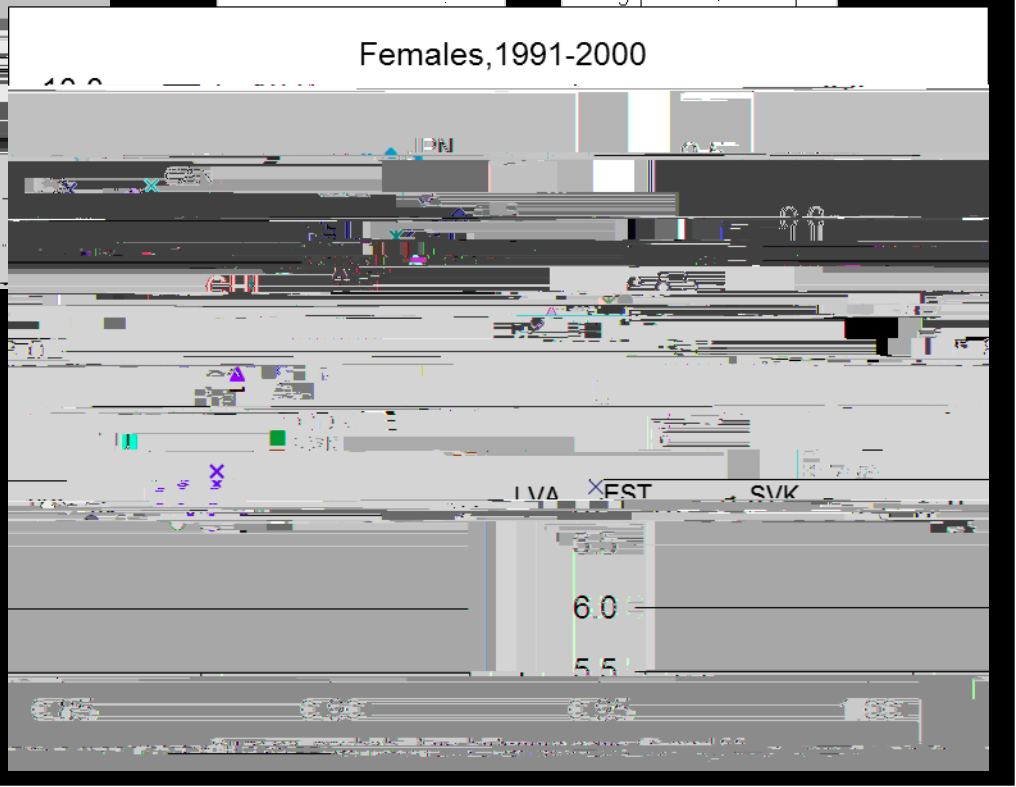


Chile: old ages

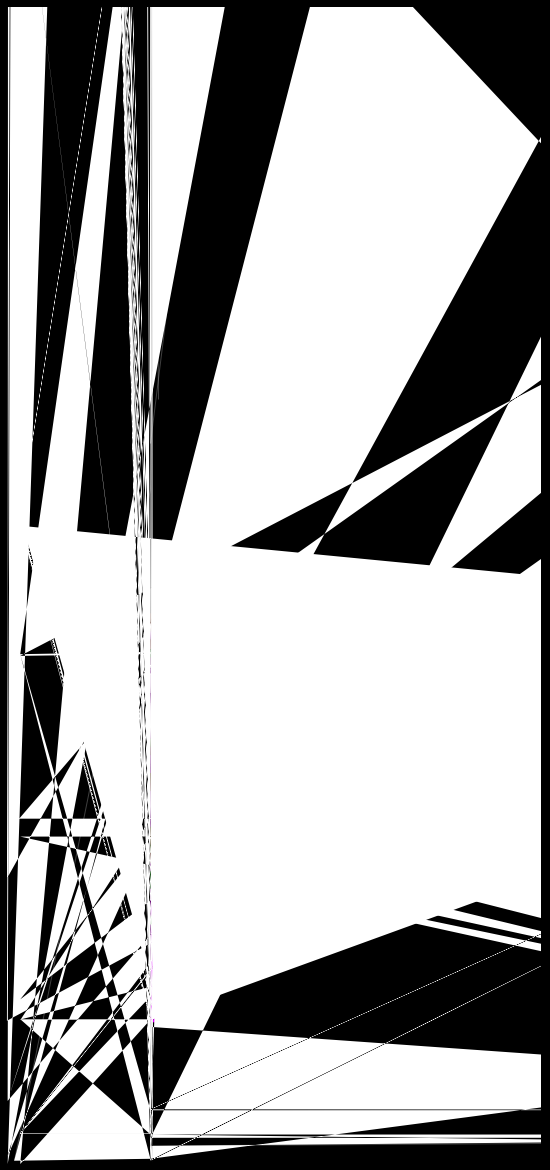








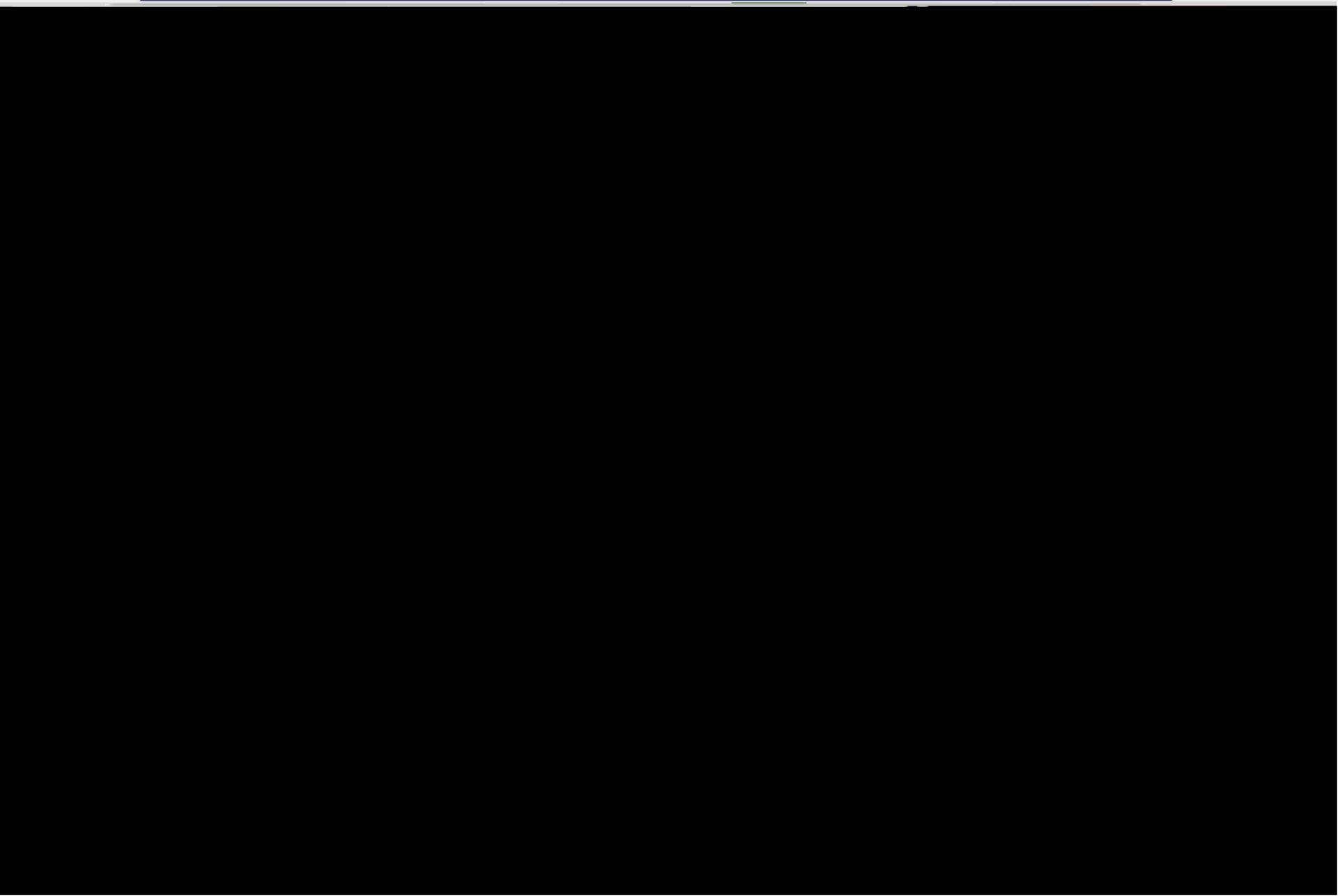
Costa-Rica: death rate ratios, males



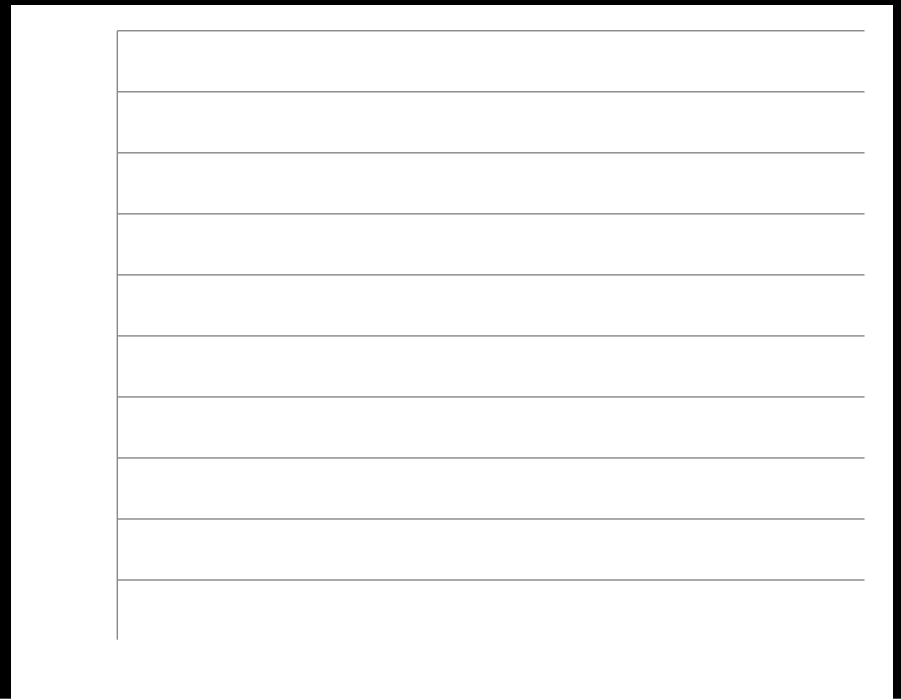
Costa-

Infant mortality

Underestimation of infant mortality: adjustment by mortality trend



South Korea: preliminary analysis



Conclusion

Thank you!