

How can we obtain comparable data on mortality differentials by educational attainment for the EU Member States?

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Content

- Background.
- Methodological issues.
- Eurostat proposal.
- Next steps.

Background

- Eurostat has been requested to develop comparable information on mortality by socio-economic status group (SEG) on a regular basis for all EU Member States.
- Proposal prepared by Eurostat and discussed with the countries in June 2009.
- Technical Task Force set up to tackle and resolve methodological and practical issues linked to the regular production and dissemination of such indicator.

Methodological issues

1. Choice of SEG characteristic.
2. Choice of mortality indicator.
3. Cross-sectional/unlinked vs. prospective/record linked studies.

Choice of SEG characteristic

- Possible choices: educational attainment, occupational status, income (economic status or wealth).
- Decision: use educational attainment as proxy for socio-economic group.

Choice of mortality indicator

- Several choices: death rates, life expectancy and life table based information, potential years of life lost, etc..
- Decision: life expectancy.
- Calculations done by Eurostat for all available countries.

Cross-sectional vs. record linked studies

1. Cross-sectional studies: numerator-denominator bias.
2. Record linked studies: linkage of death certificates with census information or population registers.

Choice of matching variables: unique identifier, deterministic linkage, probabilistic linkage.

Eurostat proposal

1. Short term approach: use death and population series from the annual demographic questionnaire.

Educational attainment is collected using ISCED97 broad groups: ISCED0_2, ISCED3_4, ISCED5_6:

- deaths by sex, age and educational attainment:
CZ,DK,EE,IT,HU,MT,PL,RO,SI,FI,SE;NO,HR,MK,RS.

- population by sex, age and educational attainment:
DK,MT,FI,SE;NO.

Alternative for population: Labour Force Survey data.

Eurostat proposal

2. Medium term approach: linkage of death certificates with census information from the 2011 censuses, broken down by educational attainment.

The aim is to achieve a complete coverage of the countries but longer implementation time is needed.

2009

2010

2011

2012

2013

DK,MT,FI,SE,NO;
CZ,EE,IT,HU,PL,
RO,SI,HR,MK,RS

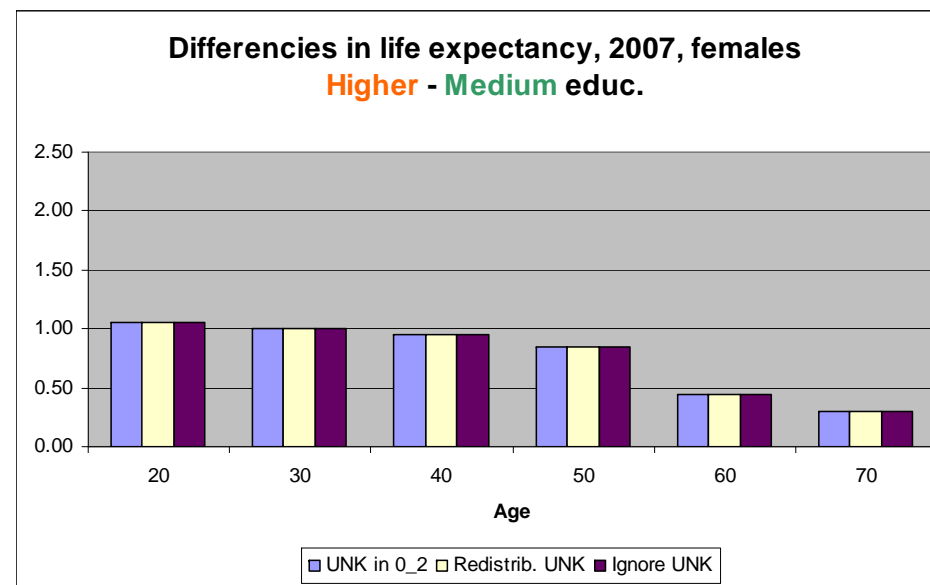
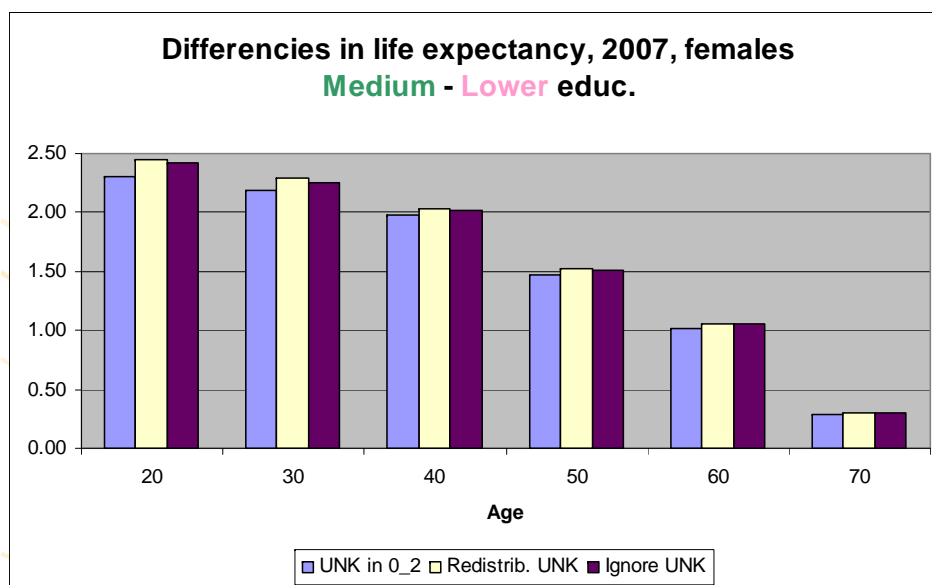
CENSUS

DATA -> INDICATORS

Task Force

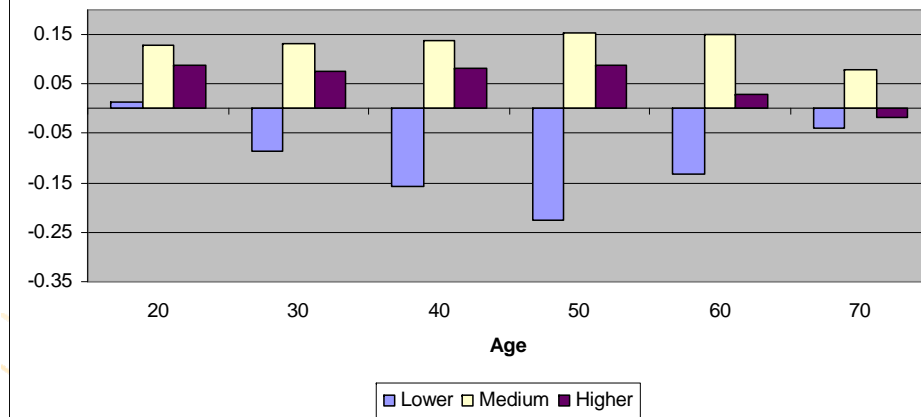
1. Treatment of « unknown » and « not applicable » ISCED categories.
2. Use of LFS data.
3. Closing the life table.
4. International migration.
5. Guidelines on census linkage:
 - follow-up period,
 - linkage procedure and software,
 - handling of non-matched deaths,
 - actual calculation of death rates,
 - possible sources of bias.

Sensitivity analysis - 1

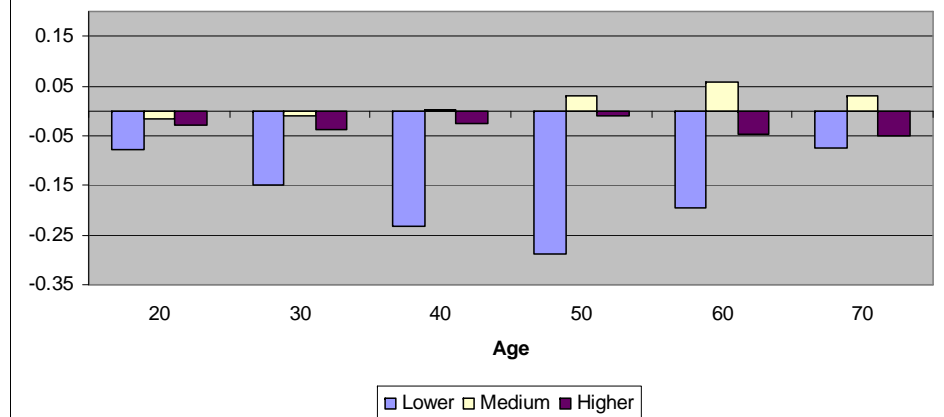


Sensitivity analysis - 2

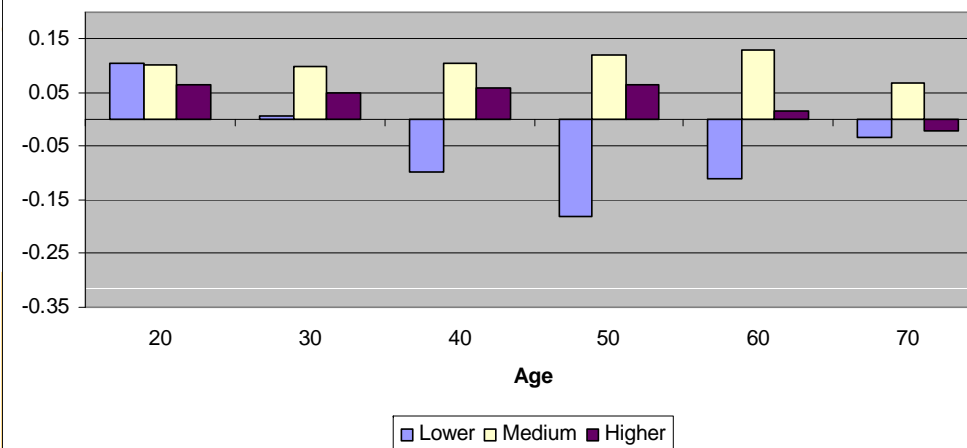
Differences of life expectancy, 2007, females
Demographic data collection vs. Labour Force Survey
UNK in lower educ.



Differences of life expectancy, 2007, females
Demographic data collection vs. Labour Force Survey
Ignore UNK



Differences of life expectancy, 2007, females
Demographic data collection vs. Labour Force Survey
Redistrib. UNK



Next steps

- Conclusions on the « sensitivity analysis ».
- Update of the information by the countries on data sources and on census linkage.
- Publication of life tables for available countries by January 2010.
- Finalisation of guidelines for census linkage.

Thank you!

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