The increasing longevity gap – Distributional implications for the pension system

By Peter Haan, Daniel Kemptner and Holger Luethen

Discussant: Adriaan Kalwij

Netspar International Pension Workshop
January 18-20, 2017

Very brief summary

Aims

- To estimate the heterogeneity in life expectancy by lifetime earnings.

[motivation for looking at this]

- Implications for inequality in social security wealth.

Data

Social security records from the German Pension Insurance, cohorts 1910-1945

Findings/Conclusions

- The gap in life expectancy between people at different income deciles has widened with increasing year of birth.
- This has (by construction?) increased inequality in social security (public pension) wealth between cohorts.

Decomposition: rising earnings inequality & rising differential

Data

➢ Social security records from the German Pension Insurance, cohorts. In the end, data has been used for the cohorts 1910 (or 1905 or 1935?)-1945.

➢ A bit more (any!) descriptive statistics would be appreciated.

➢ Sample selection discussion: not entirely clear (somehow a sample of 1.5 million men is reduced to 3000).

For instance, which calendar years/ages are covered (observation window) & the same for all cohorts?

Concern 1 [model/findings]

Equation (1 $\text{Prob}(\text{death}_{itcd}) = \Lambda \left(\beta_0 + \sum_{p=1}^{4} \beta_p t^p + \eta_c + \mu_d + \nu_{cd} \right)$

- It seems a bit restrictive to not use age and cohort dummies. (A zillion observations?)

- Finding: lack of differential mortality among women. This casts some doubts on the use of individual (lifetime) earnings or of the use of earnings deciles.
  - Why not use (equivalized) household earnings? [not possible?]
  - Alternative: suppose you would use log(earnings), is the corresponding differential mortality coefficient changing between cohorts?

Concern 2

Remaining life expectancy at age 65 has been analyzed. May this over- or underestimate the increase in differential mortality between cohorts?

Some thoughts
- The lowest income people of the 1910 cohort are least likely to be in the sample (at age 65), as they are relatively unhealthy. In other words, the distribution is already compressed (at age 65) and this would yield an underestimation of differential mortality for that cohort.
- This underestimation becomes less, the younger the cohort.
- Hence, the increase in the longevity gap may, in part, be an artifact of the sample selection.

What are the life expectancies at birth of persons born in 1910 and 1945?

Concern 3

Do low income people really get a worse deal in terms of social security wealth?

- They may get a worse deal in terms of (individual) pension wealth from age 65 onward, as they receive pension benefits for a shorter period. But what about early retirement?

- Do low income people benefit relatively more from other social security schemes? [disability benefits or medical care]

- How to value the insurance part of the public pension scheme?

- What about survivor pensions? It is a rather important for social security.

- In sum: it may be difficult to extend results on differential mortality to the larger issue of inequality in social security wealth. (too complex?)

To conclude

A very nice and challenging paper!