

# **Generational Accounts versus System of National Accounts and National Transfer Accounts: From Criticism to Complementary Methods?**

**Jože Sambt**

**University of Ljubljana, Faculty of Economics, Slovenia**

**Intergenerational transfers in a European perspective  
Stockholm 23-24 October 2008**

# Introduction

- Generational Accounts (GA) have been introduced as a criticism of public debt and government deficit with ambition to become an (better) alternative or even to replace them.
- National Transfer Accounts (NTA) are synchronized with System of National Accounts (SNA), introducing age dimension into SNA.
- NTA are currently being extended/accompanied by GA.

# NTA: introducing age into SNA

**SNA**

- System of National Accounts (SNA) as widespread and internationally comparable accounting system of the economy

**GAA**

- Ongoing and forthcoming drastic changes in the population's age structure
- Age profiles as necessary data for analyzing and projecting future economic consequences of changing age structure

**NTA**

- National Transfer Accounts (NTA) as comprehensive method for measuring aggregate intergenerational transfers, synchronized with the SNA

- + projections by years (unlike Generational Accounts)
- + historical accounts (analysis back in time)
- + various other analyses based on NTA results (demographic dividends, for example)

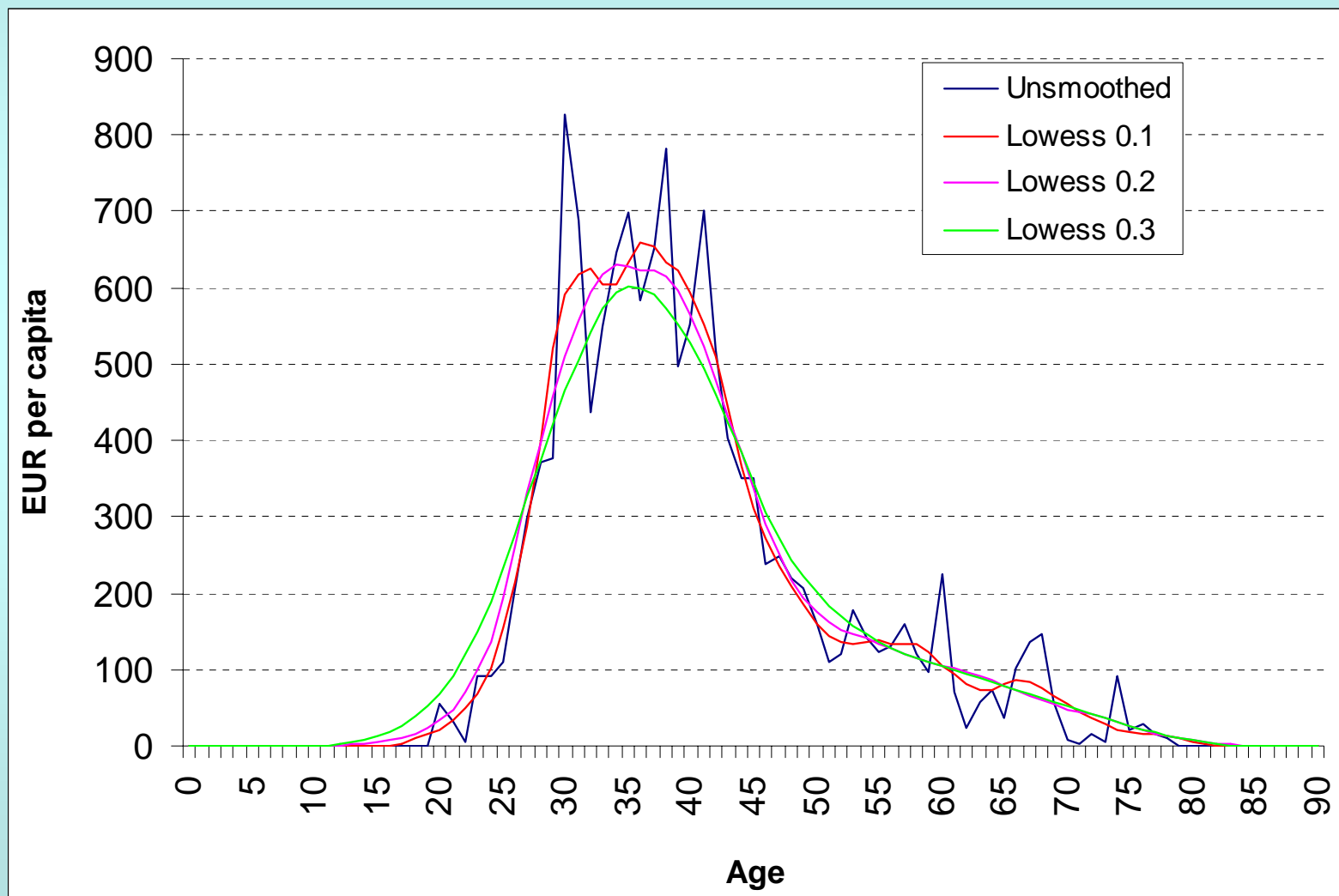
# Questions

- Have been GA also criticism of SNA when criticizing public debt and budget deficit?
- NTA research team currently working on GA, using age profiles from NTA. Parallel methods or plans for combining both methods?
- Is there a need to synchronize GA with NTA and SNA? Should we have all three methods/systems in mind when discussing about how to treat some categories when estimating age profiles (child allowances, for example)?

# Dilemmas, originating already from the GA

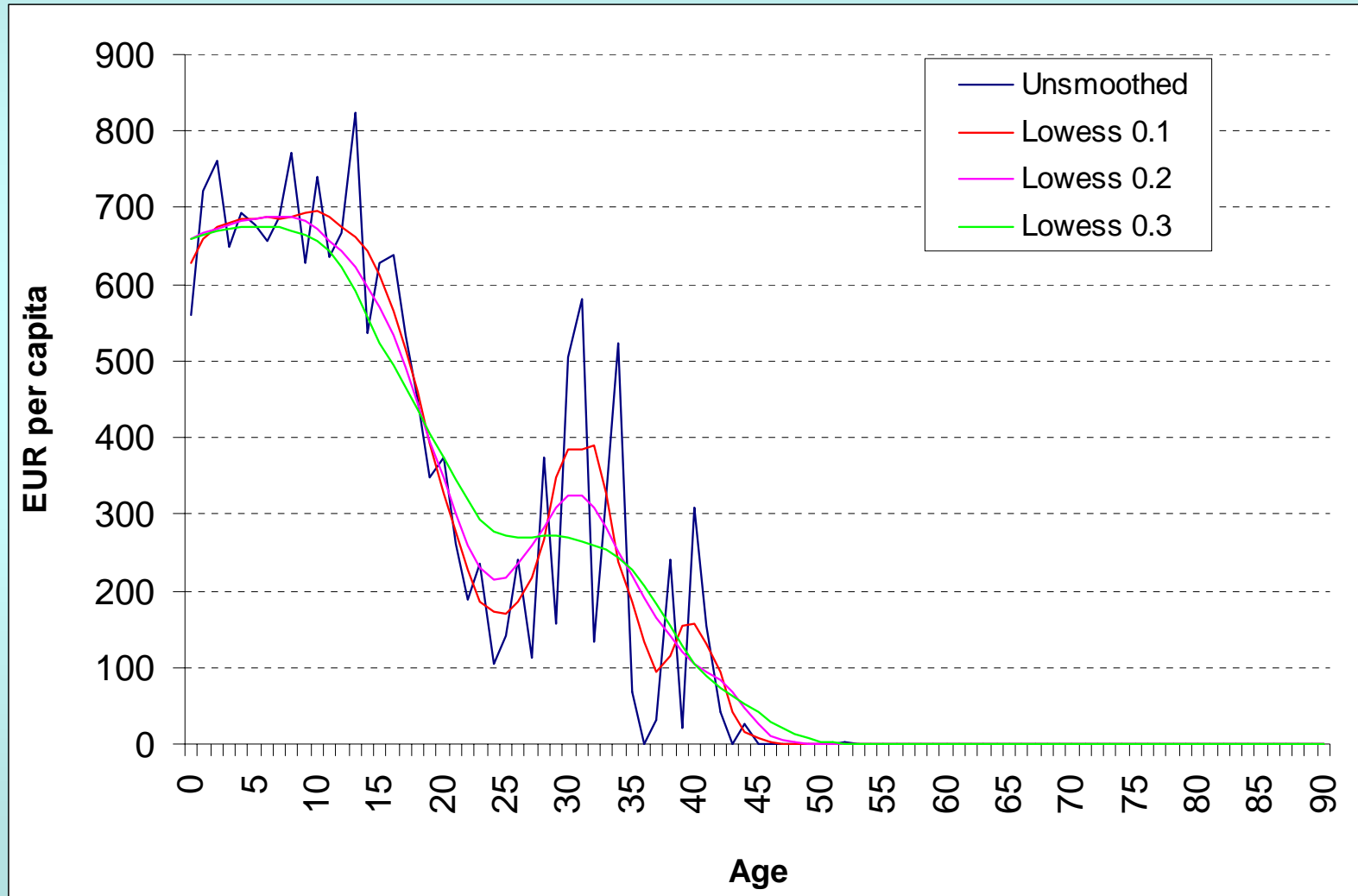
- Should indirect taxes, paid on the children consumption, be assigned to the children or to the parents?
- 1) GA are identifying and quantifying the intertemporal public imbalance.
- 2) GA are showing net taxes (taxes minus transfers) that representatives of certain age groups will pay in their remaining lifetime (discounted back to the base year).
- For analysis under 1) they should be assigned to the children. By applying age profiles on the population projections (children), the identified intertemporal imbalance of the public sector is more realistic in this case.
- For analysis under 2) they should be assigned to the parents; they are really paying those taxes, therefore their remaining net lifetime payments are more realistic.

# Age profile of the family and children transfers when assigning them to the household head; Slovenian case, year 2004



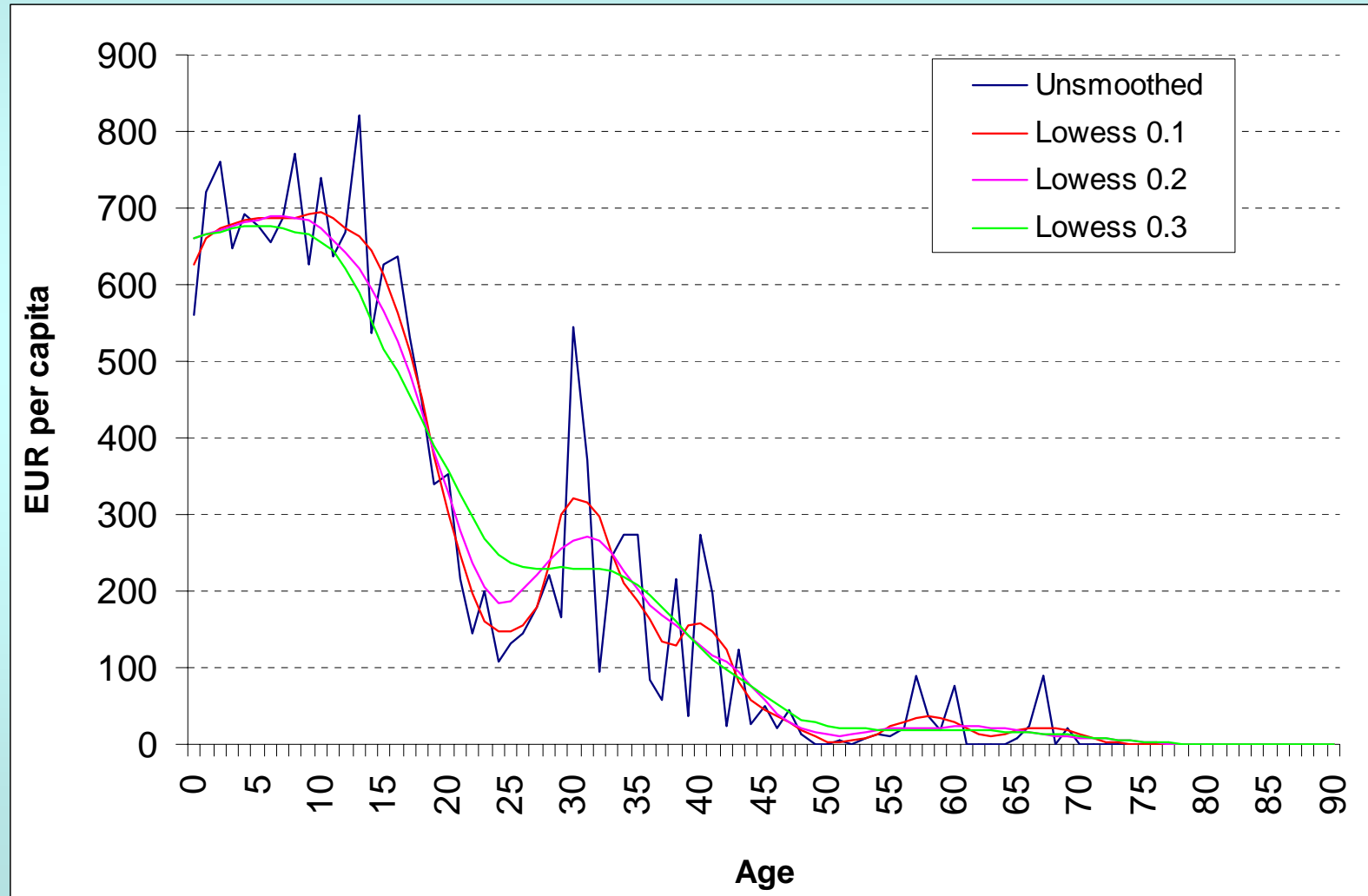
Sources: Statistical office of the Republic of Slovenia; own calculations.

# Age profile of the family and children transfers when assigning them to the children (child allowances) and those who reported transfers (other family and children related transfers); Slovenian case, year 2004



Sources: Statistical office of the Republic of Slovenia; own calculations.

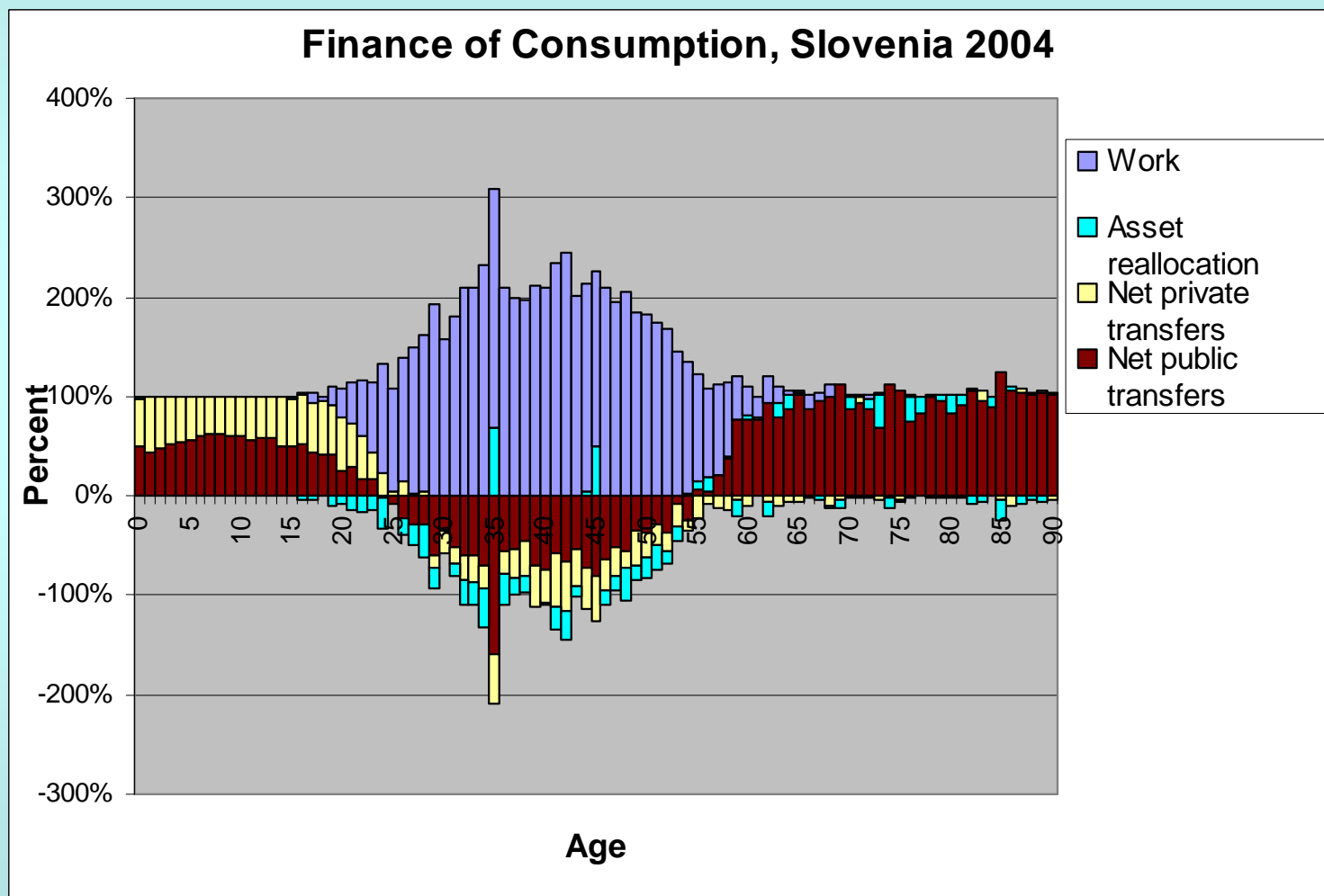
# Age profile of the family and children transfers when assigning them to the children (child allowances) and household heads (other family and children related transfers); Slovenian case, year 2004



Sources: Statistical office of the Republic of Slovenia; own calculations.

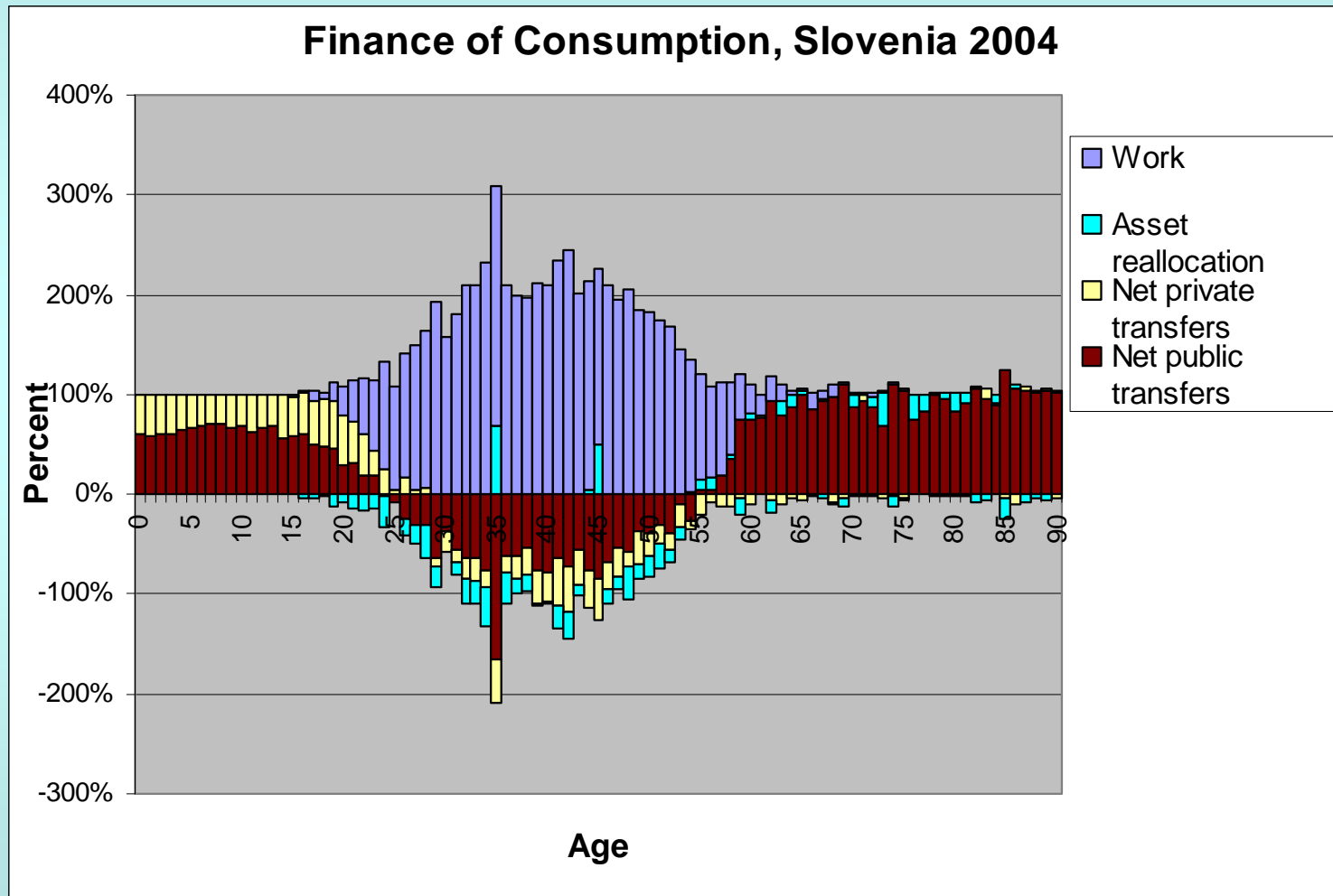


# Finance of consumption when family and children transfers are assigned to the household head; Slovenian case, year 2004



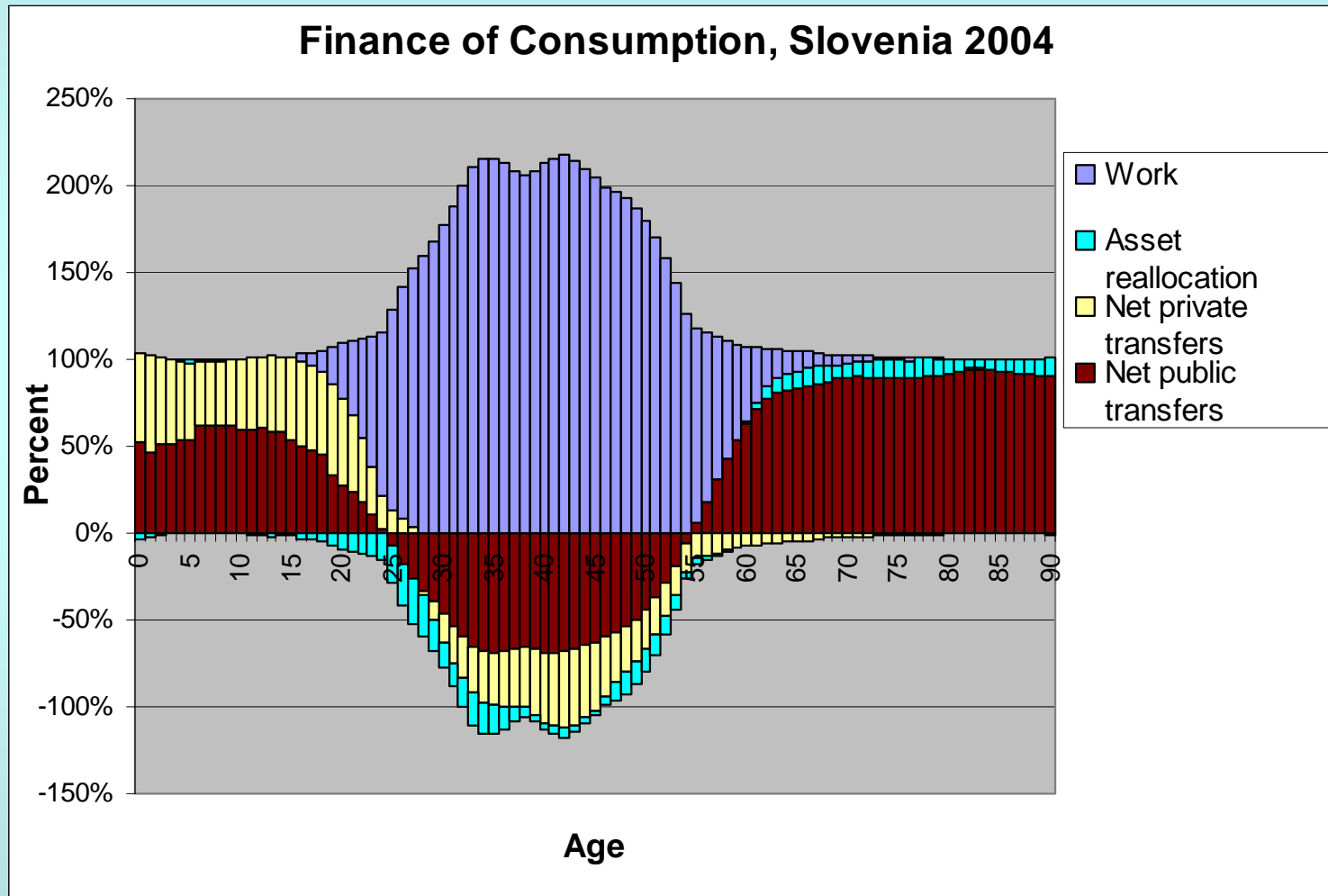
Sources: Statistical office of the Republic of Slovenia; own calculations.

# Finance of consumption when family and children transfers are assigned to the children (for child allowances) and household heads (other family and children related transfers); Slovenian case, year 2004



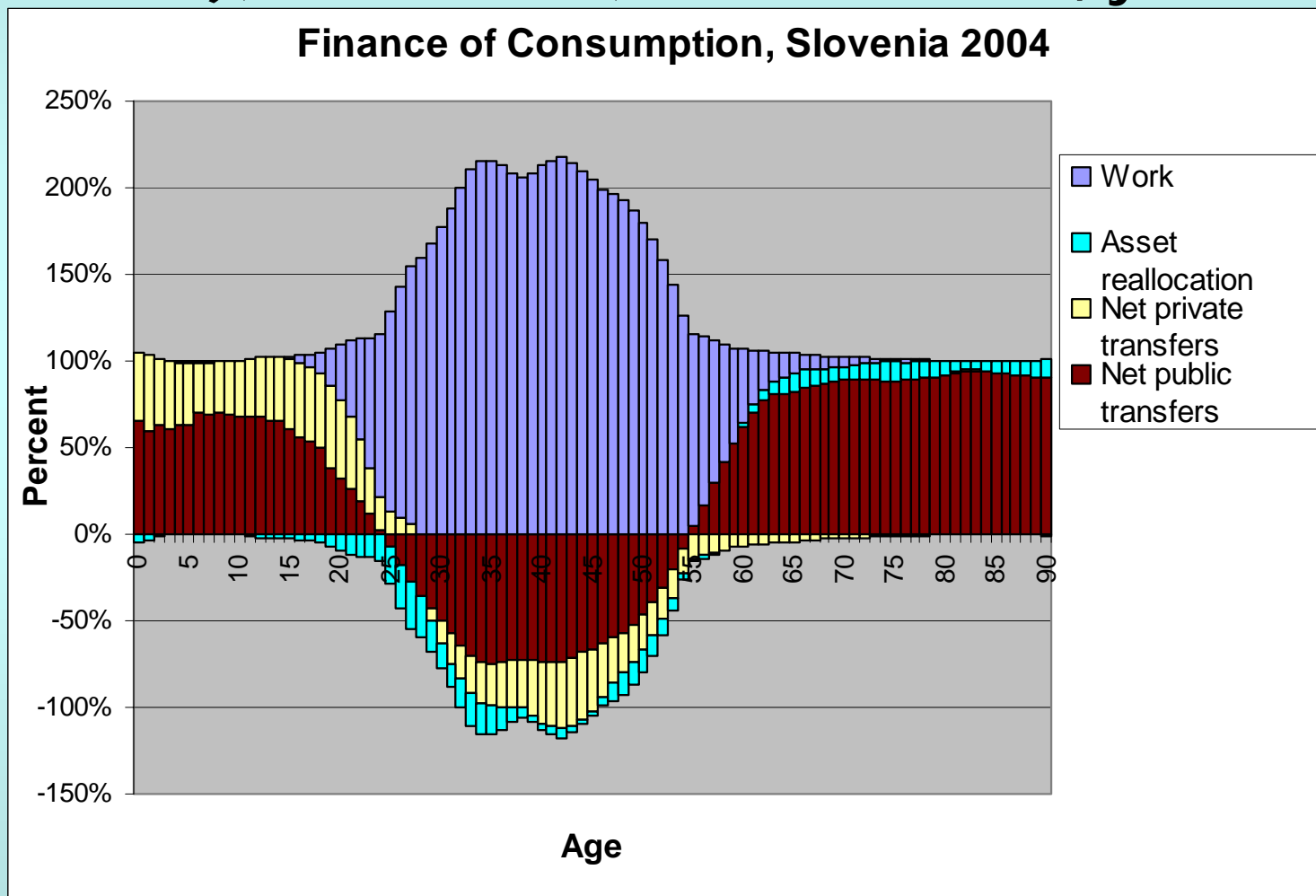
Sources: Statistical office of the Republic of Slovenia; own calculations.

# Finance of consumption when family and children transfers assigned to the household head; SMOOTHED; Slovenian case, year 2004



Sources: Statistical office of the Republic of Slovenia; own calculations.

# Finance of consumption when family and children transfers assigned to the children (child allowances) and household heads (other family and children related transfers); SMOOTHED; Slovenian case, year 2004



Sources: Statistical office of the Republic of Slovenia; own calculations.

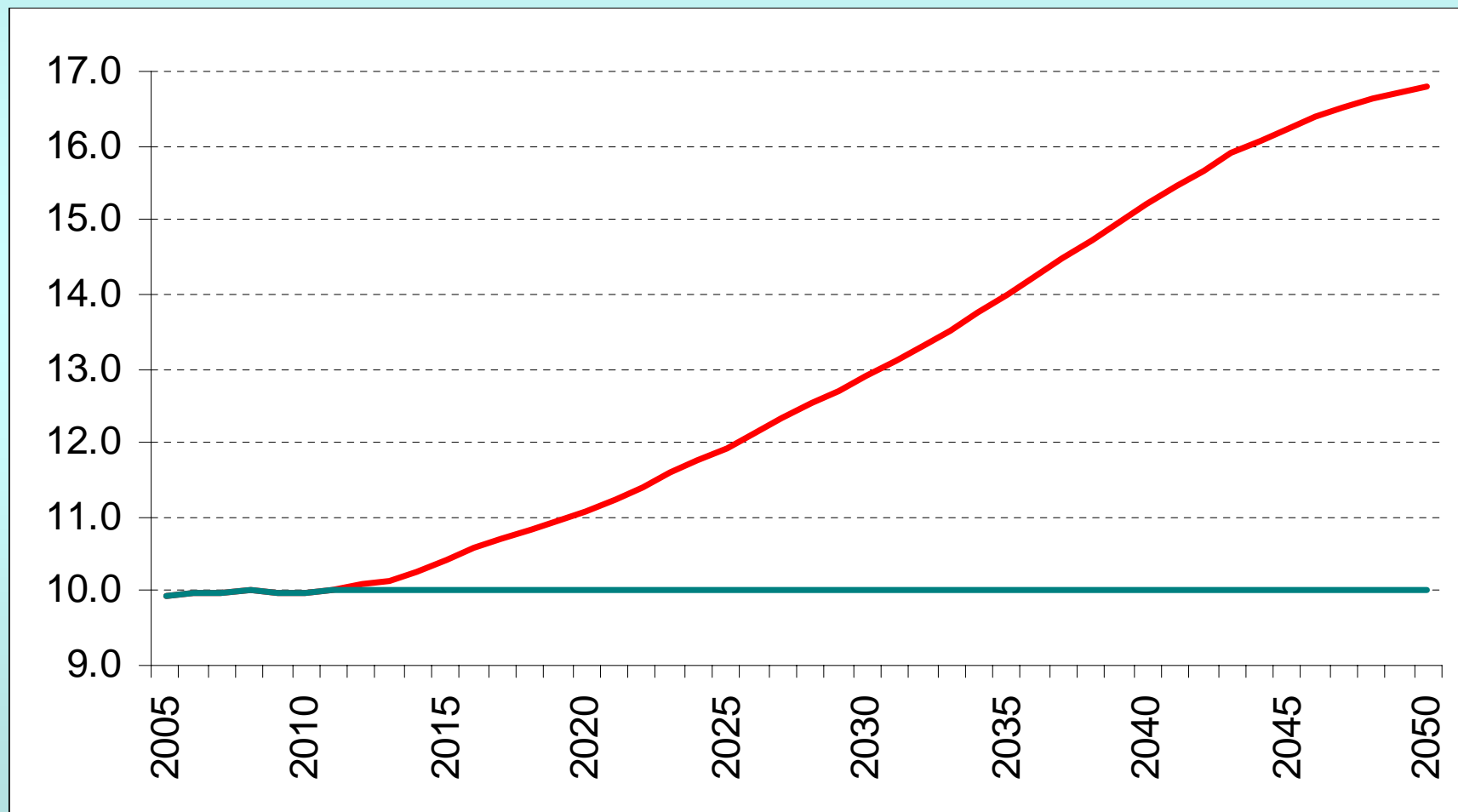
# Possible usage of NTA results, combining them with other methods/calculations

- GA: 
$$N_{t,k} = \sum_{s=\max(t,k)}^{k+D} T_{s,k} P_{s,k} (1+r)^{-(s-t)}$$
- Possible exercise in the form of cohort model for projecting future public expenditures, based on the age profiles, obtained from the NTA and other matrices. For pensions, for example (in Slovenian case there is principle of equal benefits for individuals with the same pension conditions, regardless of the time when they retire - which makes such projections easier):

$$PENS_{a,t} = PROF_{a,t} P_{a,t} C_{a,t} G_t$$

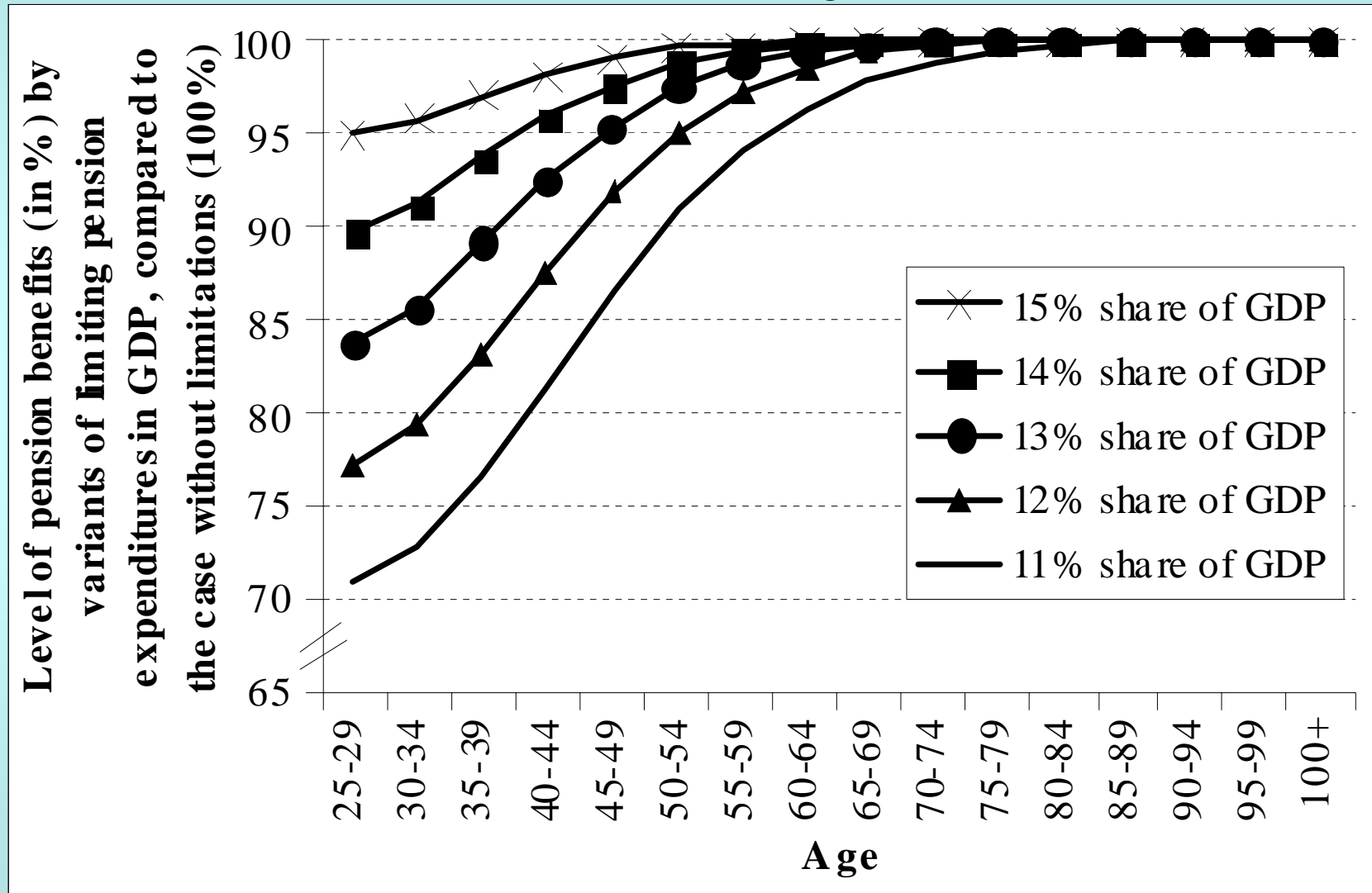
- Or: combining both methods, obtaining results, relevant for policy makers: simulating the effects on different cohorts when introducing various measures (at various time points); calculating remaining "wealth" ("pension wealth", for example).

# Share of pension expenditures (old-age, disability and survivor pensions) in GDP [%] and assumption about limiting their share after reaching certain level; Slovenian case, year 2006



Sources: Various sources; own calculations.

# Reduction in pensions wealth (by cohorts) when limiting future pension expenditures to certain level of GDP; Slovenian case, year 2006



Sources: Various sources; own calculations.