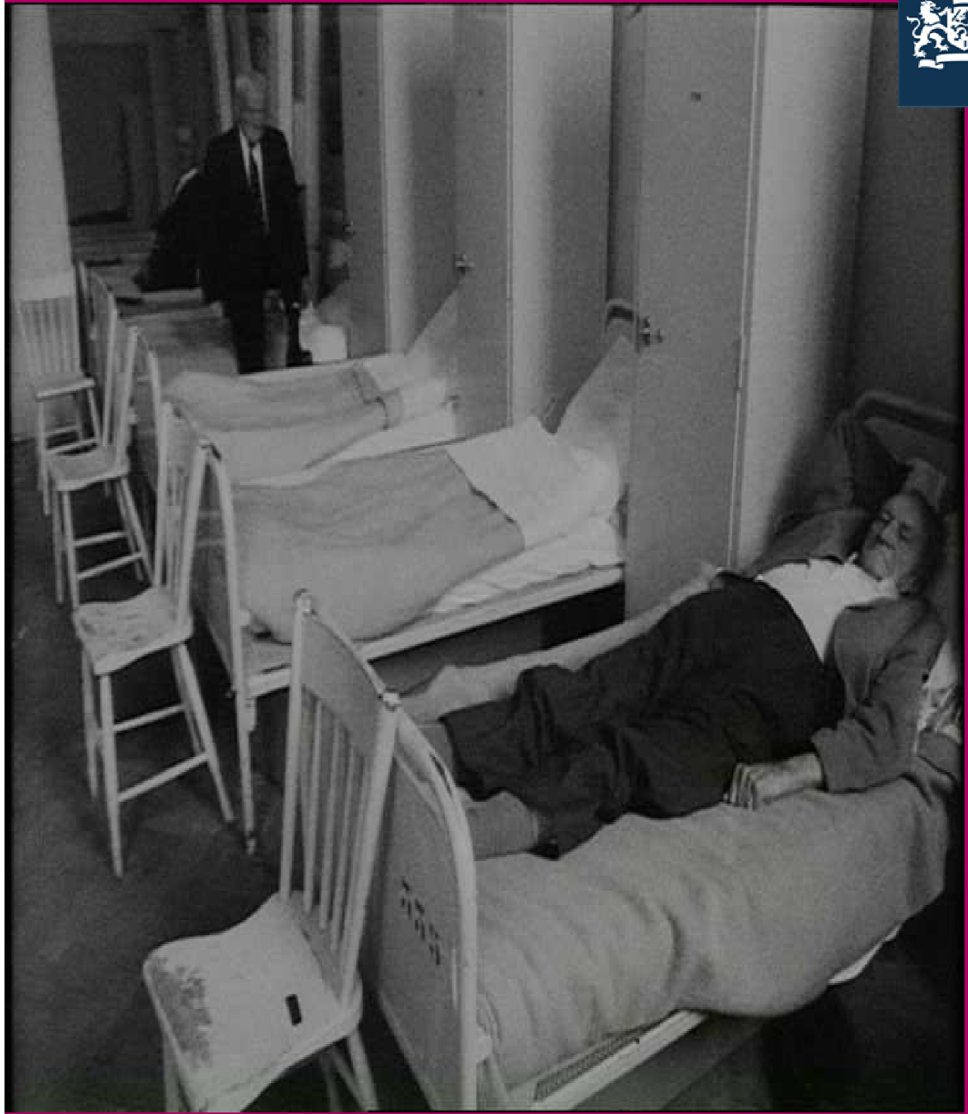
CPB Netherlands Bureau for Economic Policy Analysis



How to finance rising costs of Long Term Care?

Bram Wouterse and Bert Smid

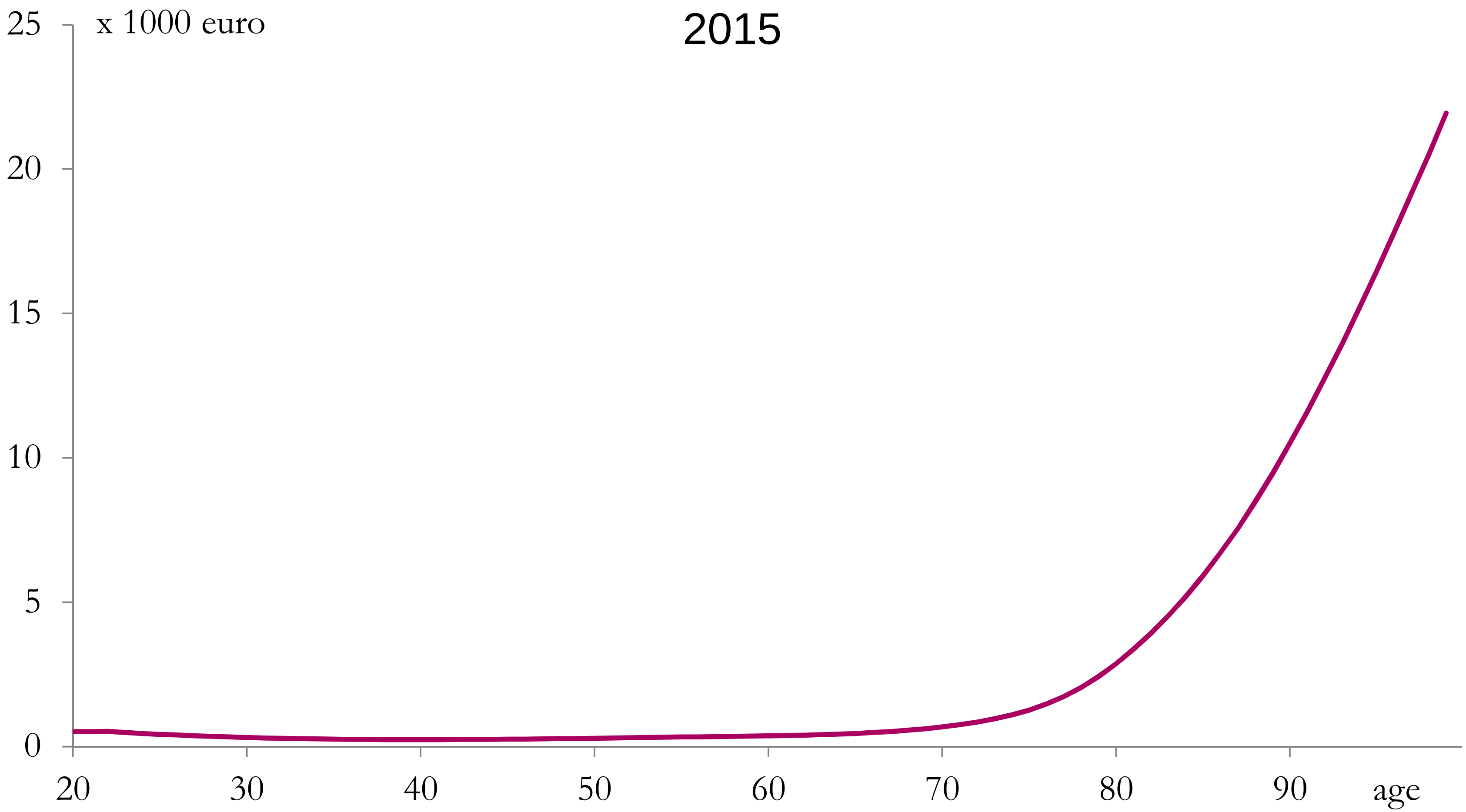
Aims of the paper

- Effect of higher LTC growth on sustainability of public finances
- Analyse effects of alternative financing schemes of additional LTC expenditures
  - generational effects
  - economic effects (employment)

Sustainability of Dutch public finances

- Analyse long-run position of government finances
- Can the current arrangements be maintained, without ever having to raise taxes?
- Or; can future generations benefit from the government in the same way as current generations?

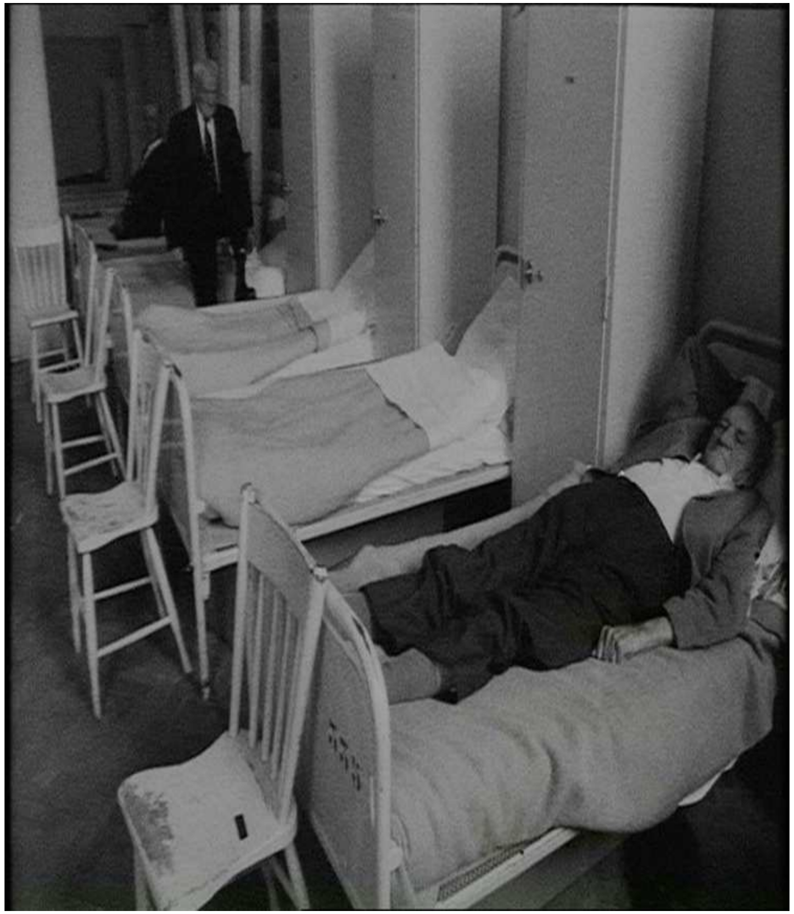
Age profile of LTC costs (WLZ)



Baseline Scenario

- Current arrangements
  - growth: dem+wages
  - constant number of personnel per patient

- Implicit assumption: additional LTC-expenditures are paid for by out-of-pocket payments



In past, HC expenditures have grown a lot faster

Average annual growth in LTC spending in the Netherlands, 1973-2010

	% per year
Nominal growth (a)	7.4
Growth under constant arrangements (b)	5.8
nominal wage growth	4.5
population size and composition	1.9
health	-0.6
Growth above constant arrangements (a-b)	1.6

Approach

- Baseline: public finances are exactly sustainable
- Alternative: 1 % extra annual growth until 2060
  - 4.6 % GDP in 2060 (instead of 3.2 %)
  - raises sustainability gap by 1% GDP
- Sensitivity analysis: focus on different financing alternatives to close sustainability gap

How to finance higher LTC expenditures? (1)

We analyse four alternatives of financing additional LTC expenditures

1. Pay-as-you-go (PAYG)
   - income-related premium (current system)

2. Pensioner tax
   - additional premiums on pension income
   - costs and benefits more aligned

How to finance higher LTC expenditures? (2)

We analyze four alternatives of financing additional LTC expenditures

3. Savings fund
   - one-time increase in HC-premium -> fund

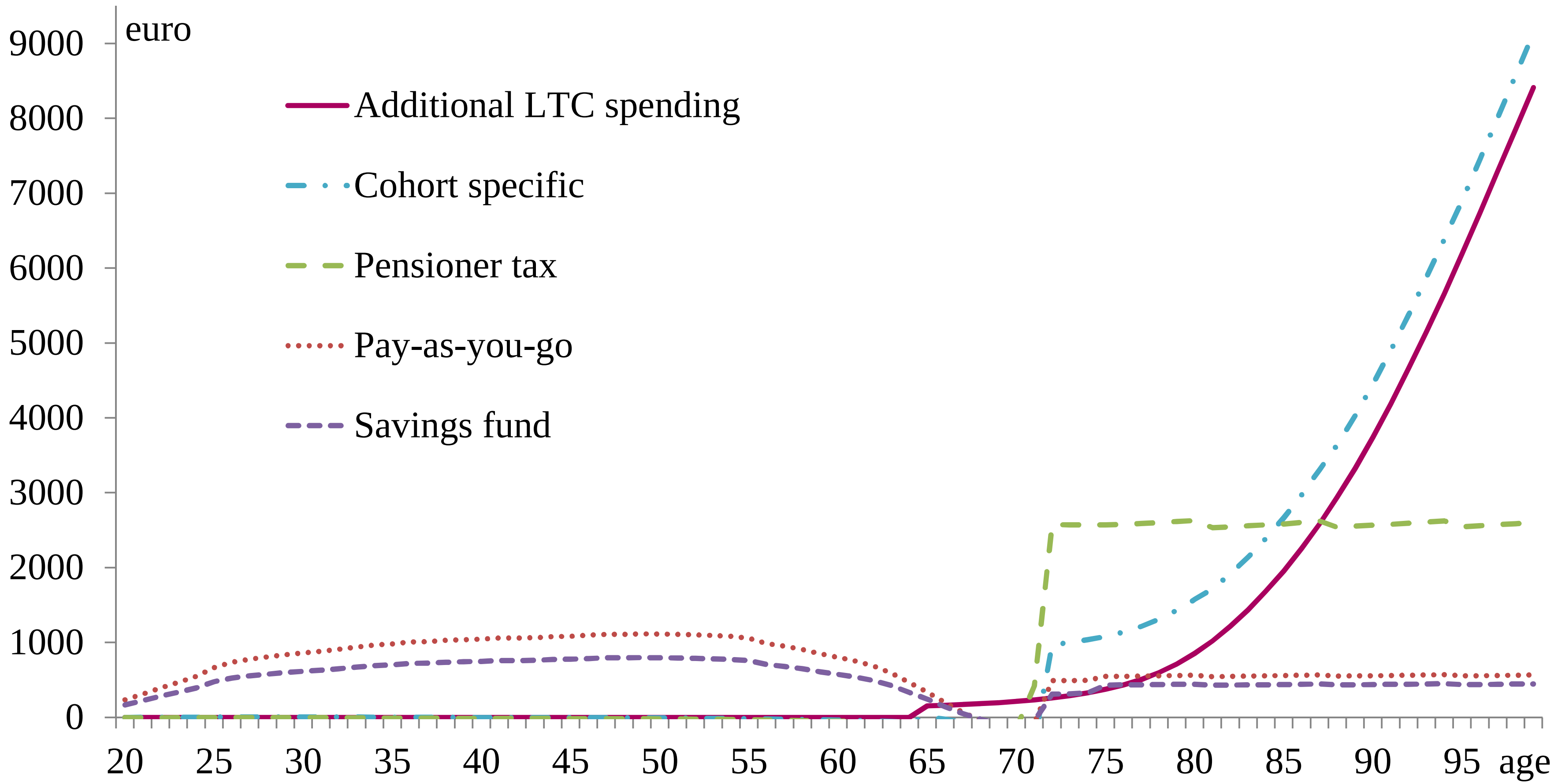
4. Cohort-specific premiums / savings fund
   - age-specific LTC premiums
   - each cohort pays for its own additional expenditures
     - › no effect on intergenerational distribution
   - savings needed-> fund

GAMMA

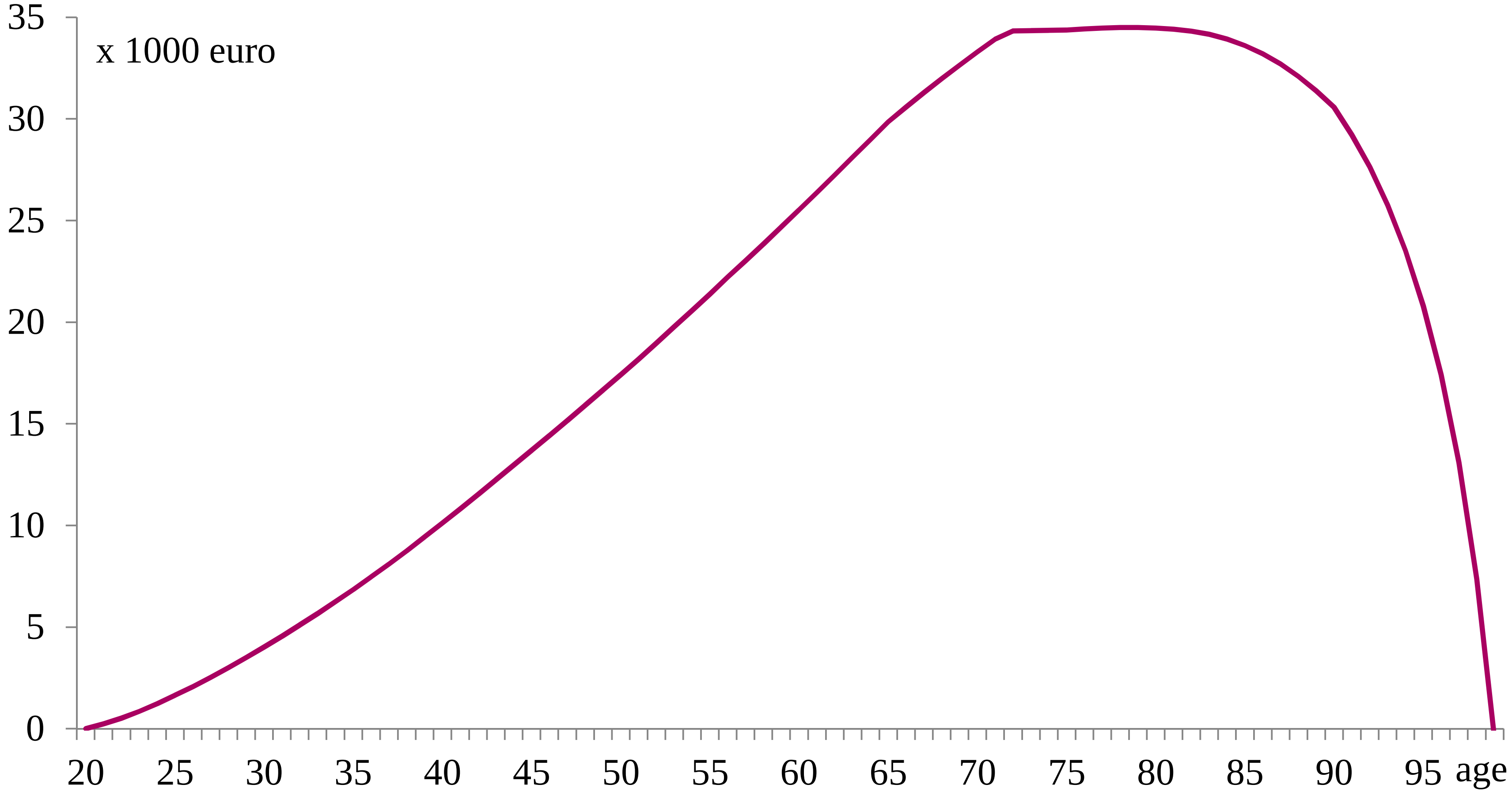
- OLG model with 100 age groups.
- CGE model, rational expectations
- Endogenous saving, labour supply and investment behaviour, derived from theoretical optimization problems
- No bequests, full annuitization

- Accounts for the distortionary nature of taxes and contributions to social security and private saving effects of pension reforms

Financing extra LTC in 2060, by age



Size savings fund, cohort 2010

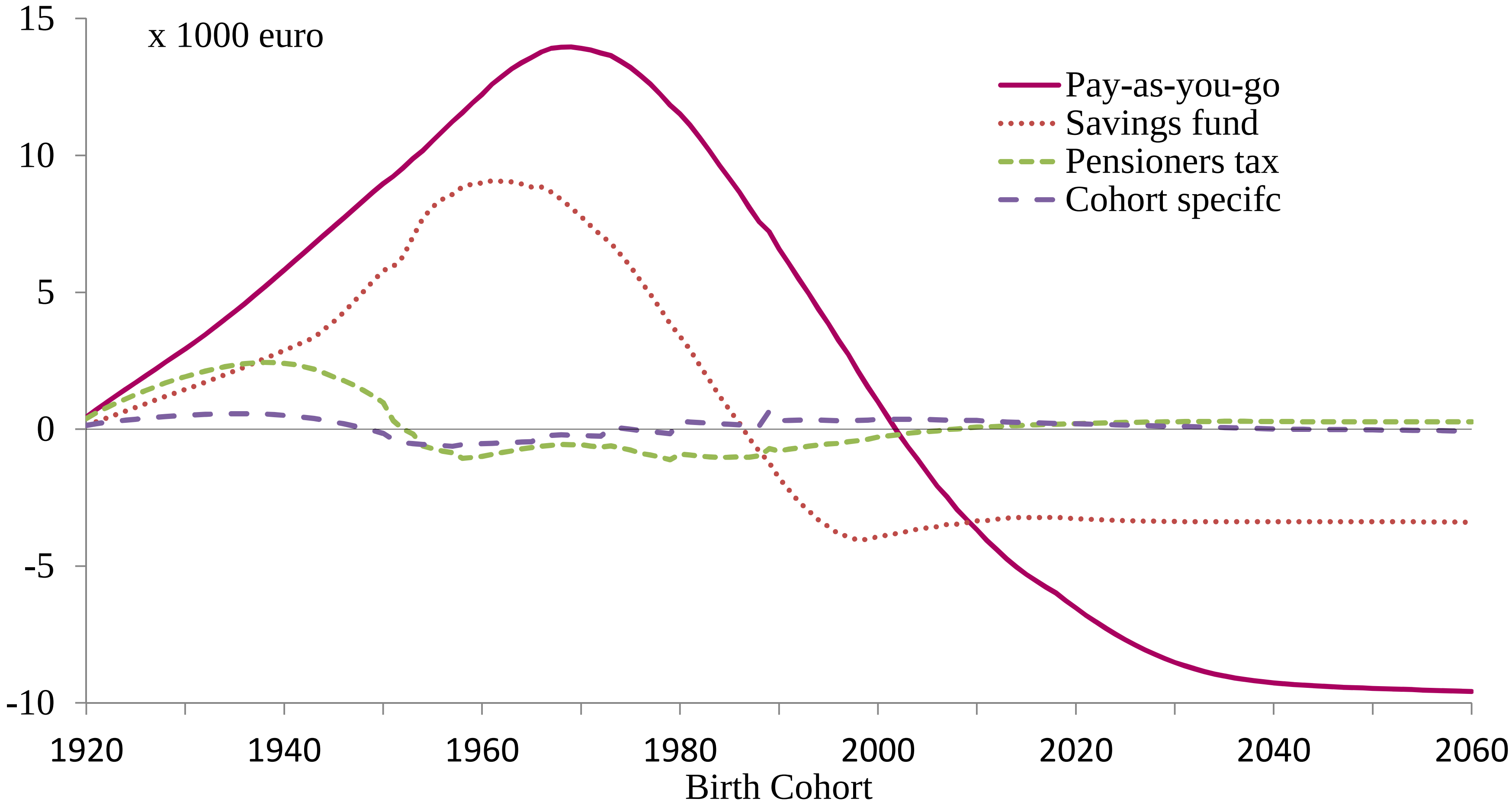


Effects on employment (years)

Relative change (%) compared to baseline

	2018	2060
Pay-as-you-go	0.0	-0.9
Savings fund	-0.7	-0.7
Pensioner tax	-0.2	-0.3
Cohort-specific	-0.1	-0.4

Change in net benefits, by birth cohort



Conclusions

- Four financing alternatives lead to very different redistributions over the lifetimes.
  - PAYG system and the savings fund
    - most substantial redistribution of lifetime net benefits between generations
    - Least substantial redistribution between age groups in one year

- Economic effects, caused by behavioural responses to policy changes, also differ in severity and timing.

- To do: risk sharing within and between generations