

Intergenerational risk sharing in Dutch pension plans

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The Dutch 3-pillar pension scheme

Mercer Global Pension Index 2017



The Dutch 3-pillar pension scheme

- Good points (according to Mercer):
 - Generosity of Dutch pensions
 - Coverage

The second pillar (collective supplementary pensions)

- Points to improve (the Dutch debate):
 - Communication policies of pension funds
 - Little flexibility
 - Wage-earners and self-employed persons
 - Intergenerational risk sharing and redistribution

Intergenerational risk sharing

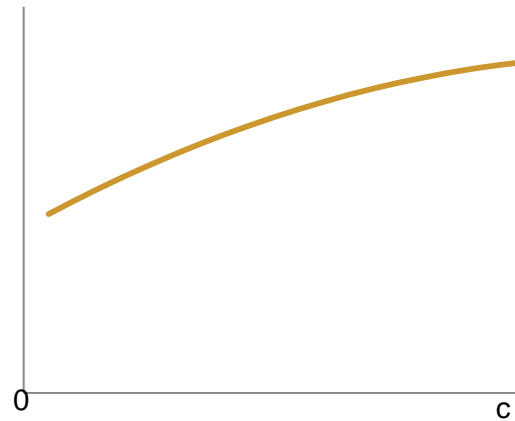
- Collective pension schemes share risks:
 - Equity return risk
 - Interest rate risk
 - Inflation risk
 - Longevity risk
 - Labour productivity risk

Intergenerational risk sharing

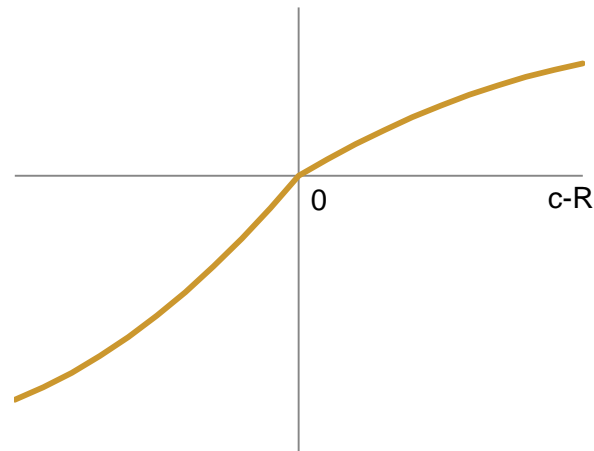
- Risk sharing is welfare-increasing
 - Expected utility:
 - Coefficient of risk aversion
 - Prospect theory:
 - Degree of loss aversion

Intergenerational risk sharing

- Expected utility



- Prospect theory



Intergenerational risk sharing

- *Ex ante*, risk sharing is welfare-increasing
 - For all participating generations
- *Ex post*, it may be perceived as welfare-reducing
 - Again for all generations

Intergenerational risk sharing

- Is risk sharing really welfare-increasing?
 - Equity premium
 - Inflation risk premium
 - Country risk premium

Intergenerational risk sharing

- How do pension funds implement risk sharing?
 - Pension contributions
 - Employers
 - Workers
 - Cuts in the indexation of pensions
 - Pension benefits (retired)
 - Pension accruals (workers)
 - Funding ratio

Intergenerational risk sharing

- Before 2000
 - Pension contribution rate
 - 1/3 employee
 - 2/3 employer
 - Lumpsum payments by employers

Collective pension funds in the Netherlands

	1998	2007	2016
DB, final wage	66.5	3.2	0.2
DB, average wage	25.0	87.8	90.3
DC	0.5	4.7	7.0

Intergenerational risk sharing

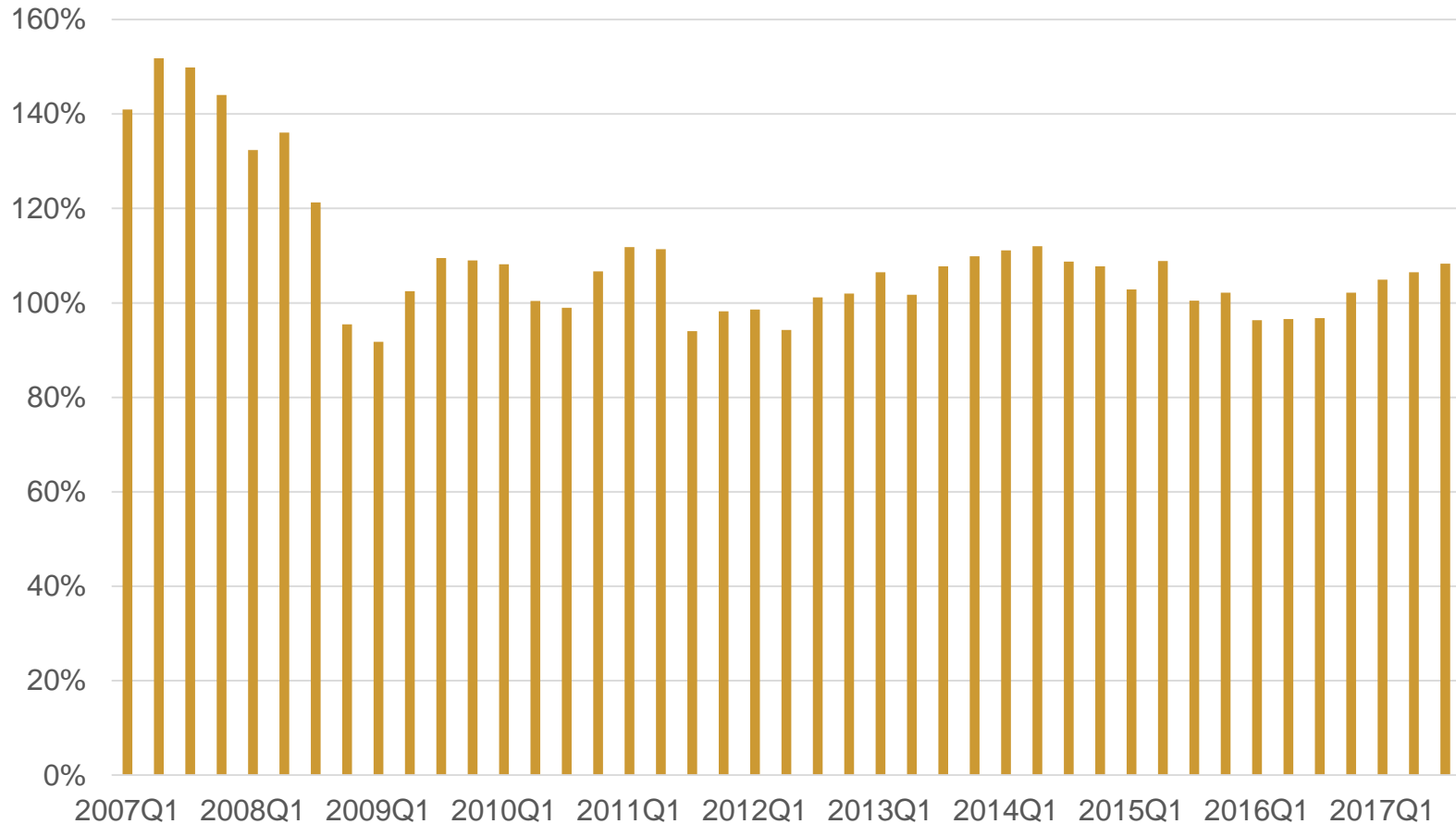
- After 2000
 - Indexation cuts
 - Cuts in nominal pensions
- According to expected utility theory
 - The two are equivalent
- According to prospect theory
 - The two may be very different

Intergenerational risk sharing

- Smaller role for pension contributions
 - Intergenerational risk sharing ↓
- Bigger role for indexation cuts
 - Intergenerational risk sharing -
- Bigger role for funding ratio
 - Intergenerational risk sharing ↑

Collective pension funds in the Netherlands

Average funding ratio



Funding ratio

- “Balance” between
 - Shocks in life expectancy and interest rate
 - Indexation cuts

Loss of purchasing power

- 2007-2017, the Netherlands:
 - 5-6 percent loss due to indexation cuts
 - 2 percent loss due to nominal cuts
 - Total: 7-8 percent loss
- 2011-2017, ABP, the largest pension fund in the NLs:
 - 13 percent loss

Loss of purchasing power

- *Ex post*, intergenerational risk sharing may be perceived as welfare-reducing
 - By all generations
- Series of cuts in indexation and nominal pensions have led to an intergenerational conflict
 - The old: back to guaranteed pensions
 - The young: get rid of any guarantees

Coalition agreement

- Abolish uniformity pricing
- Move towards a system of individual pensions with a collective buffer
- Investigate the option of lumpsum take-ups at retirement

Abolish uniformity pricing

- Less redistribution between young and old workers
- Less distortion of the decision to become a wage earner or self-employed
- But: transition problem
 - How to compensate all working generations for their excess contributions?

A system of individual pensions with a collective buffer

- Every participant has his or her own account
 - Greater transparency
- Via the buffer, intergenerational risk sharing will be preserved
- Details unknown yet:
 - Buffer cannot be negative
 - Size buffer is limited
 - Intergenerational risk sharing ↓

Lumpsum take-ups at retirement

- Investigate option to take up part of accrued pension wealth upon retirement
- The Netherlands are unique, together with Norway
- Greater amount of flexibility
- Take care of unwarranted take-ups
 - Limits to lumpsum amounts
 - Financial choice architecture

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