

Frontiers in Pension Finance and Reform: The case of the Netherlands

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Outline

- Pension systems in crisis
 - Ø Public pay-as-you go (PAYG) schemes
 - Ø Corporate defined-benefit (DB) schemes
 - Ø Individual defined-contribution (DC) schemes
- Institutional innovation required
 - Ø Collective stand-alone pension funds
 - Ø The Netherlands as case study
 - § Strengths of Dutch occupational pensions
 - § Remaining challenges

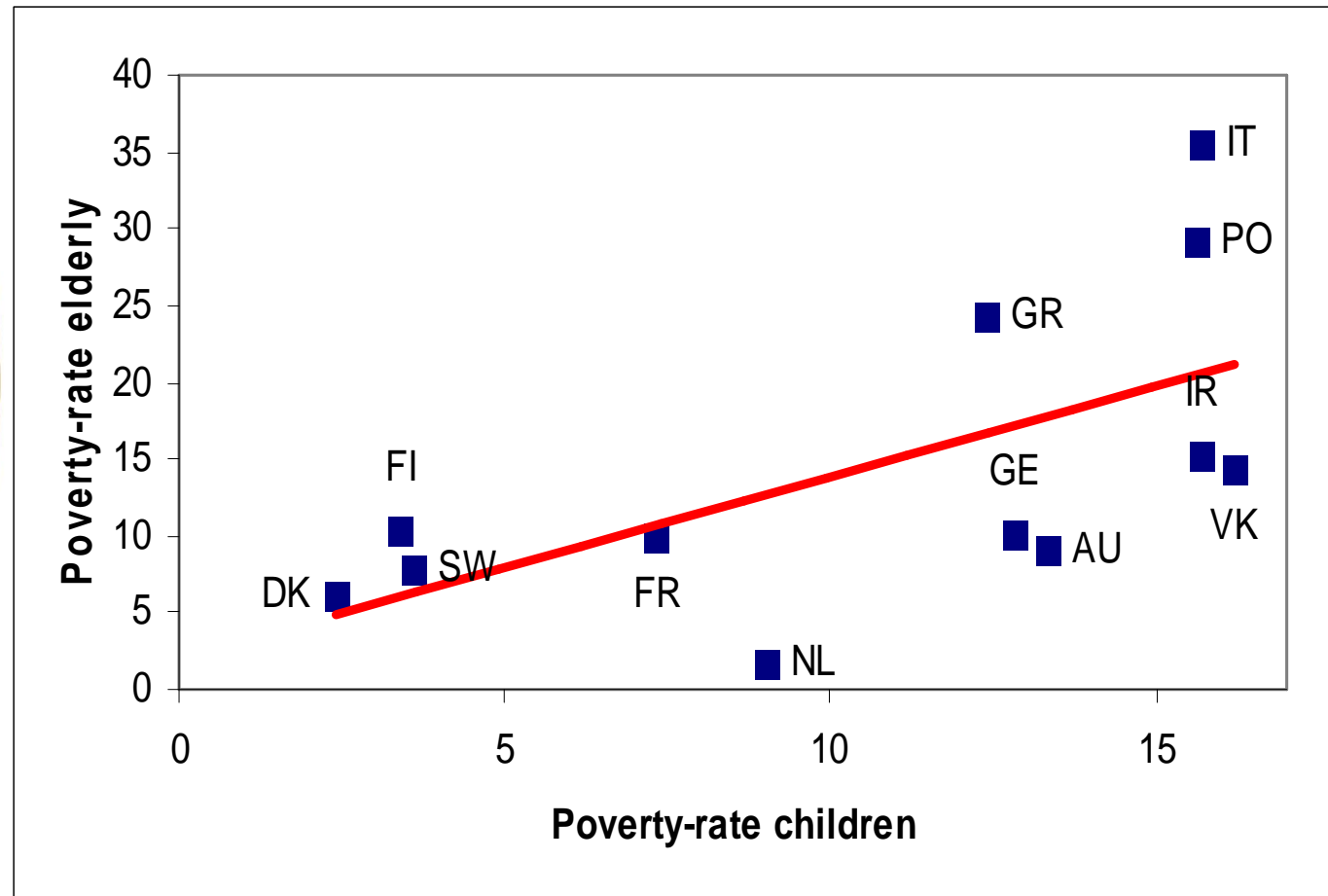
Pensions around the world

	The Netherlands	Germany	France	Italy	Spain	Swiss	UK	US
	% of current pension income							
1 st pillar	50	85	79	74	92	42	65	45
2 nd pillar	40	5	6	1	4	32	25	13
3 rd pillar	10	10	15	25	4	26	10	42
Source: Börsch-Supan (2004)								

Large continental European countries

- Large PAYG systems are not sustainable in current form
 - Ø Especially vulnerable to lower fertility
- More funding
 - Ø Less investment in human capital calls for more investment in financial capital
 - Ø Better diversification of financial, political and demographic risks
- How more funding?
 - Ø Focus PAYG on poverty alleviation in old age
 - § Lower benefits for middle- and higher incomes
 - § Higher age at which benefits become available
 - Ø Gradual reforms to protect currently old
 - § Incomplete indexation or gradually higher retirement age

Poverty elderly and poverty children

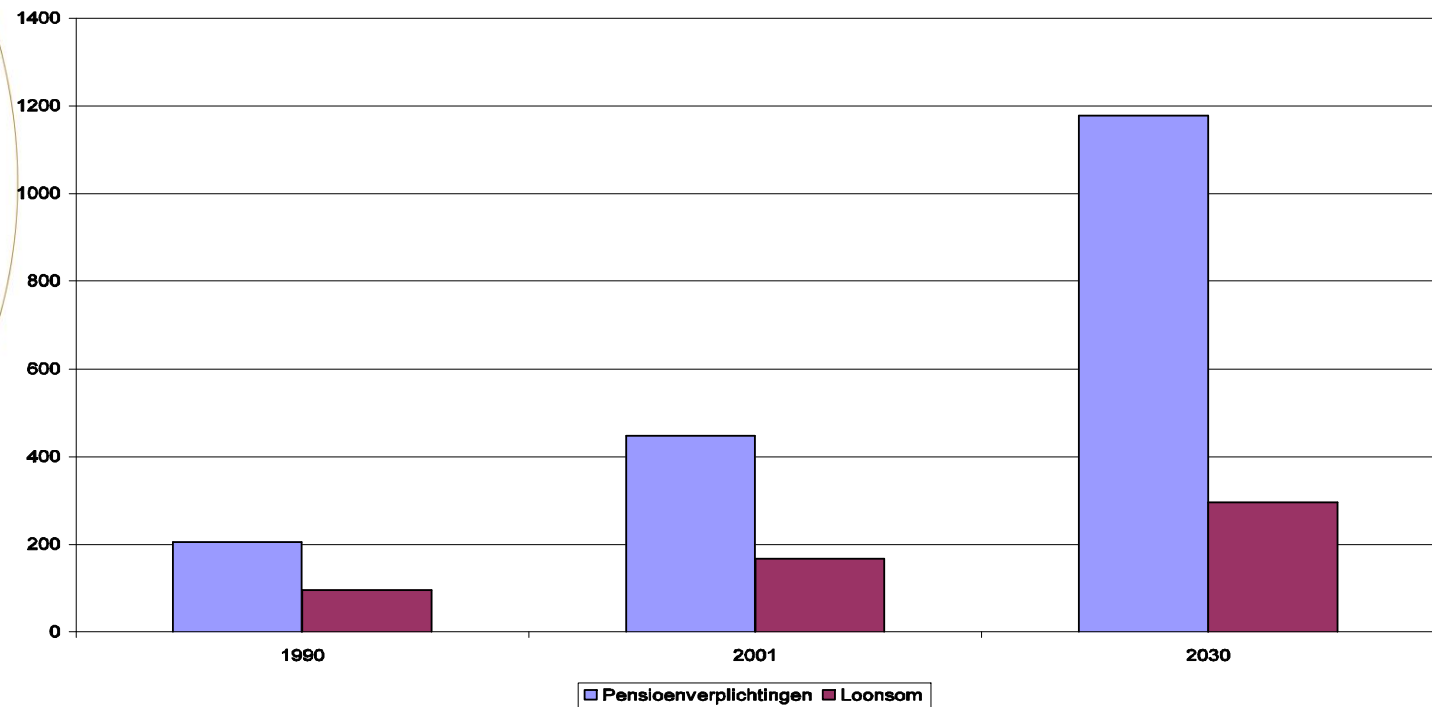


Corporate defined-benefit plans

- Guarantees (DB) become more expensive
 - Ø Aging and maturing of pension schemes
 - § Pension risks dominate core activities
 - Ø Accounting (IFRS) enhances market discipline
 - Ø Intense competition and creative destruction
 - § Credit risk: companies can offer less security
- More flexible labor markets and complete capital markets
 - Ø Back-loading (aimed at bonding) harms portability and exposes workers to credit risk
 - § Diversify risks in capital and labor markets
- Incomplete risk-sharing contracts
 - Ø Who owns the surplus?
 - Ø Governance problems: conflicts of interests

Aging and risk taking: Risk-return trade off worsens

Pension obligations versus wage income in the Netherlands



Individual DC plans as alternative

- Imperfect individual decision making
 - Ø Financial illiteracy and complex decisions
 - Ø Procrastination and lack of will power
 - Ø Marketing costs: products are sold rather than bought
- Imperfect governance
 - Ø Agency issues: lack of discipline
 - Ø Lack of bargaining power buyers
 - Ø Inadequate product design
 - § Excessive choice
 - § High expenses
 - § Imperfect risk management (e.g. conversion risk)
- Imperfect markets
 - Ø Lack of financial instruments to trade macro risks
 - § Longevity, standard-of-living risk, inflation
 - § Large transaction costs for some asset classes
 - Ø Incomplete annuity markets: selection

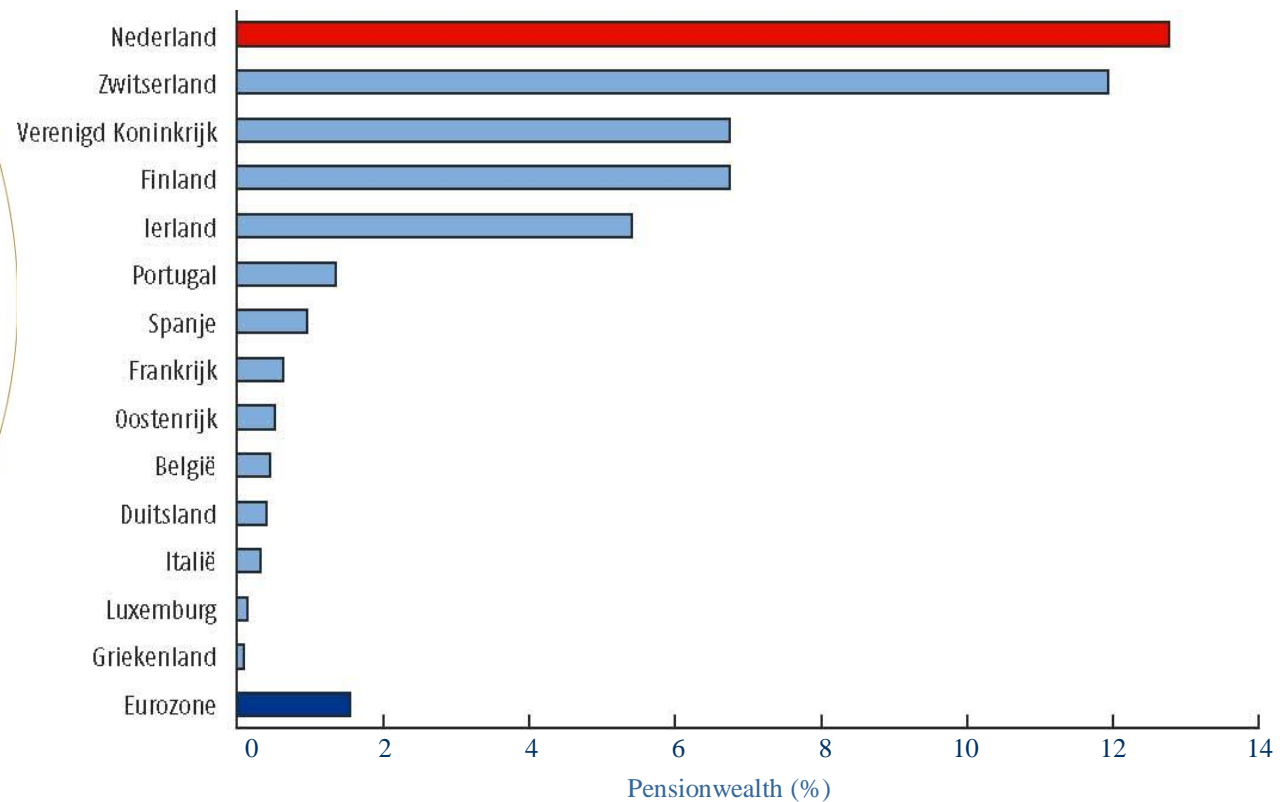
Challenge: institutional innovation

- Government and corporations are withdrawing as risk sponsors
 - Ø *Derisking* their balance sheets
- Individuals, markets and institutions fail
- Collective stand-alone pension schemes as the third way between corporate DB and individual DC?
 - Ø *Collective*: compulsory (or default) participation in insurance pools to combat selection, individual foibles, and transaction costs
 - Ø *Stand alone*: trade risk on capital markets, among participants and with insurance companies
 - Ø *Single purpose*: participants are owners
 - Ø *Division of labor and scale economies*:
Collective scheme delegates to professionals

Dutch pension system

- First pillar aimed at poverty alleviation
 - Ø Related to minimum wage (=social assistance benefit)
 - Ø Not earnings related
- Second pillar is important
 - Ø Corporatist tradition: unions and employers
 - § Sectoral funds
 - Ø Private but with public assistance
 - § Semi-compulsion: > 90 % covered
 - § Tax benefits
 - Ø Run as DB plans
 - § Earnings-related guarantees and ambitions
 - § Back loading of benefits
 - § Cooperative arrangement with governing board appointed by social partners: linked to employment

Pension wealth in Europe

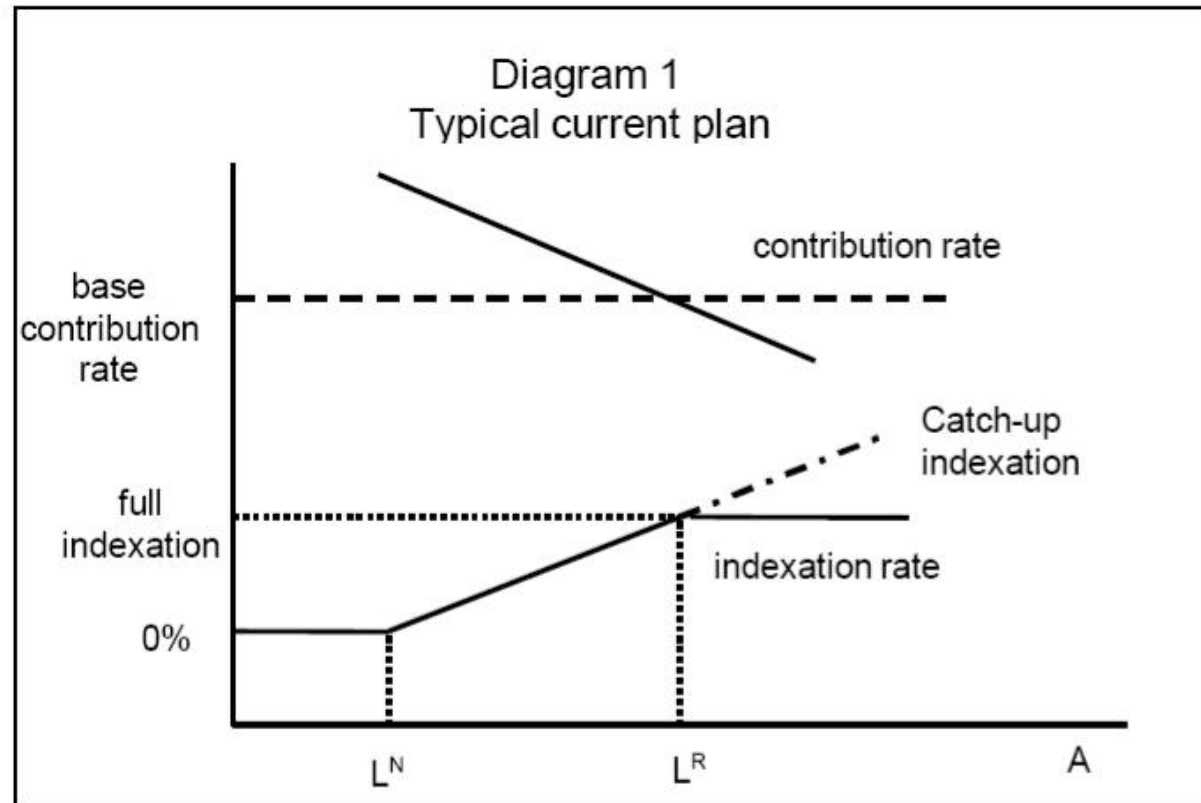


Size Pensionwealth in Eurozone, VK en Zwitserland (Source: OECD)

Stand-alone funds: from guarantees to ambitions

- More complete contracts in policy ladders
 - Ø Only nominal rights are guaranteed
 - Ø Indexation of pension rights is conditional
- Limit fluctuations in recovery contributions (=implicit taxes)
 - Ø Premium based on market value of aggregate new pension rights
- Shift from final pay to career-average system
 - Ø *Conditional* indexation in career-average system
 - § Also for active members less guarantees
 - Ø More risks with members in terms of pension rights
 - § Evolution to *stand-alone* pension funds
 - § Members rather than contributors are risk bearers
 - ü Hybrid DB(=guarantees)/DC(=ambitions)

Policy ladder



Strengths Dutch schemes

- Stand-alone funds
 - Ø No credit risk sponsor: diversify risks
 - Ø Clear ownership of assets: members rather than firms
- Delegation of complex choices to cooperatives run in the interests of members
 - Ø Trust: Non profits and involvement employers
- Delegation to professionals who can discipline for-profits suppliers
 - Ø Low expenses: competition at wholesale level
- Advanced risk management
 - Ø Integrate accumulation and decumulation
- Completion of financial markets
 - Ø Generations trade risks that are not yet traded on markets (longevity, standard-of-living)
 - Ø Pooling of longevity risks avoids selection

Further innovations

- More complete risk-sharing contracts
- More advanced risk sharing among generations
- More flexibility to absorb risks
- Link retirement age and longevity
- Mark-to-market contributions at cohort level
- Professional governance in interests of risk-bearers

More complete contracts

- Clarify ownership 'buffers' = indexation reserve
 - Ø What happens if (nominal) funding rate falls below 105% or above 140%?
- Policy ladder is guideline and does not have legal status
 - Ø Political risks: discretionary power board

More advanced risk sharing

- Now *nominal* guarantees for *everyone*
 - Ø Wrong guarantees for the wrong people
 - Ø Matching nominal guarantees: vulnerable to inflation risk
- Workers with ample human capital and long recovery horizon should take more advantage of risk premia
 - Ø Consumption less dependent on pension rights
 - Ø Allocation hedging(DB=debt)/return(equity) portfolio age-dependent
 - Ø Portfolio composition of aging fund remains appropriate for young
- Redesign liabilities of DB schemes
 - Ø Duration of fixed-income liabilities declines
 - Ø Young, active participants owners
 - Ø Supply of risk-taking capital maintained

Flexibility to absorb risks

- Young exploit long recovery horizon: flexible premium
 - Ø Integrate pensions with financial planning
 - § More tailor-made defaults
 - § Integrate individual and collective products
 - ü Disability and unemployment insurance
 - ü Housing and health care
 - Ø Digital infrastructure to exchange information
- Flexible labor market: work effort as buffer
 - Ø One year more work provides 8% more income during rest of life
 - Ø More flexible, transitional labor market for elderly
 - Ø Flexibility to move between jobs
 - § Portability pension rights and human capital imply better diversification in competitive environment

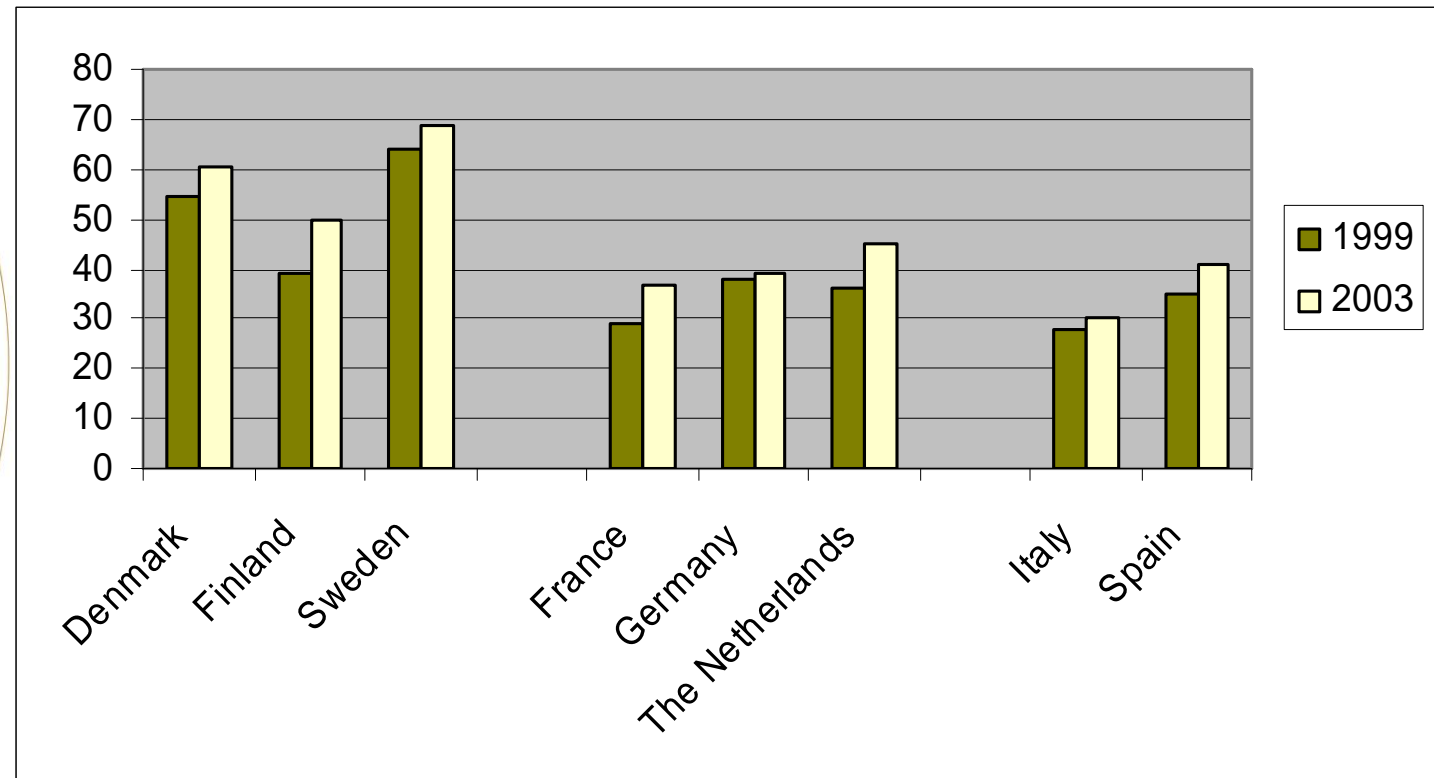
Welfare effects of various pension schemes

	<i>First best</i>	<i>DC</i>	<i>DB</i>	<i>No risk taking</i>
Welfare loss w.r.t. first best	0%	6.1%	5.2%	9.1%
Average percentage of assets invested in stocks	<u>45%</u>	<u>25%</u>	<u>29%</u>	0%
Average contribution level	<u>7%</u>	19%	<u>6%</u>	21%
Average benefit level	<u>109%</u>	<u>106%</u>	72%	79%

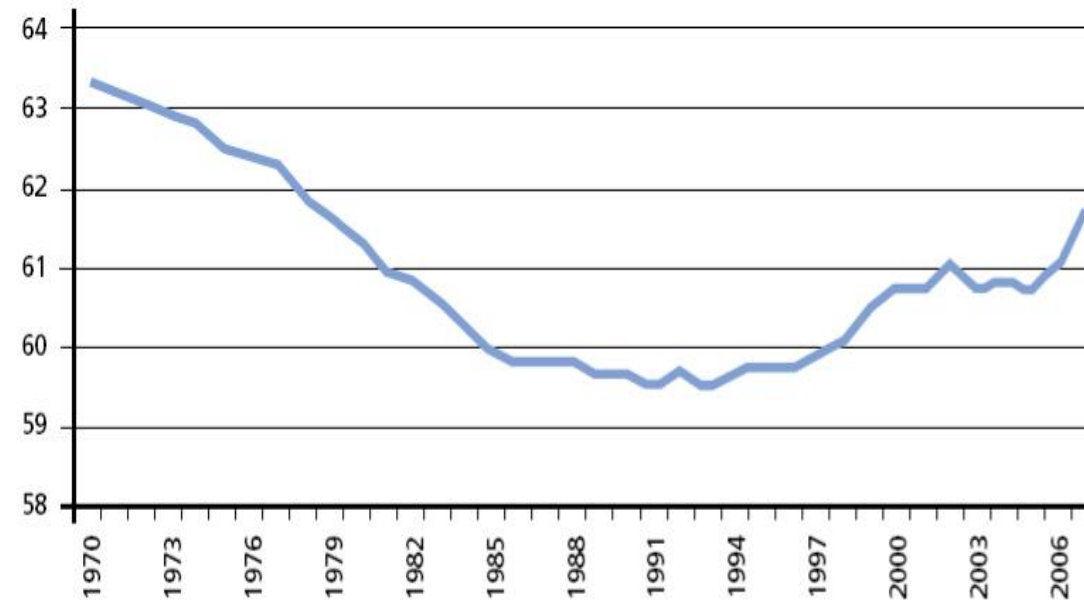
Linking retirement age to longevity

- Longevity: return on human capital increases but funded/PAYG pensions more expensive
 - Ø Working longer natural way to insure longevity risk
 - § Macro longevity risk borne by retiring cohort
 - Ø Human capital and labor market in focus
 - § Higher effective retirement age and better maintainance (and accumulation) of human capital are mutually dependent
 - § Key role flexible, transitional labor market for elderly
 - ü Learning through job mobility
 - Ø Make macro longevity risk (tail risk) tradable
 - § Government can issue longevity bonds
 - ü If retirement age in public pension linked to longevity

Labor-force participation of elderly



Average retirement age elderly, 55-64 years

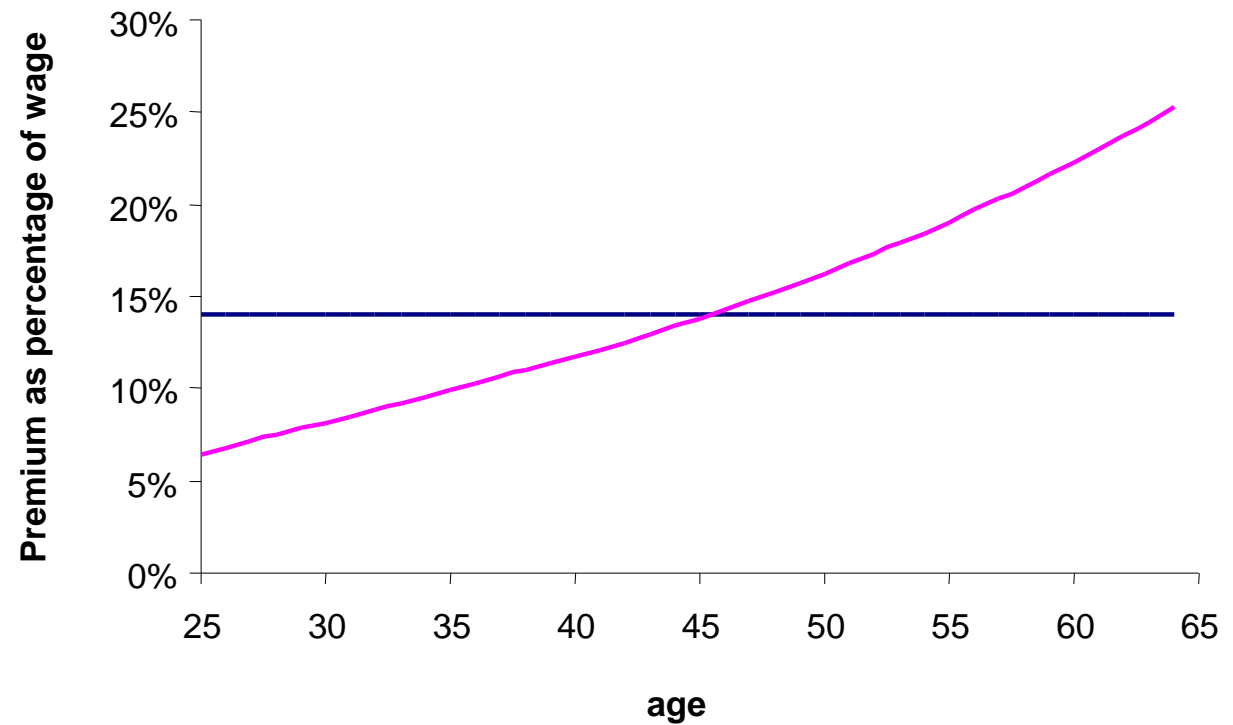


Source: Ministry of Social Affairs on the basis of data provided by Statistics Netherlands

Back-loading of benefits

- Lack of market pricing deferred annuity
 - Ø Young workers are taxed; old workers are subsidized
- Increased by transition from final-pay to career-average system
- Why mark-to-market contributions important?
 - Ø More flexible labor market: portability
 - § Transition employee/self employed
 - Ø More robust system
 - § Focus on risk sharing rather than redistribution
 - Ø Less political risk (PAYG component)
- Transition: pay off debt implicit in PAYG

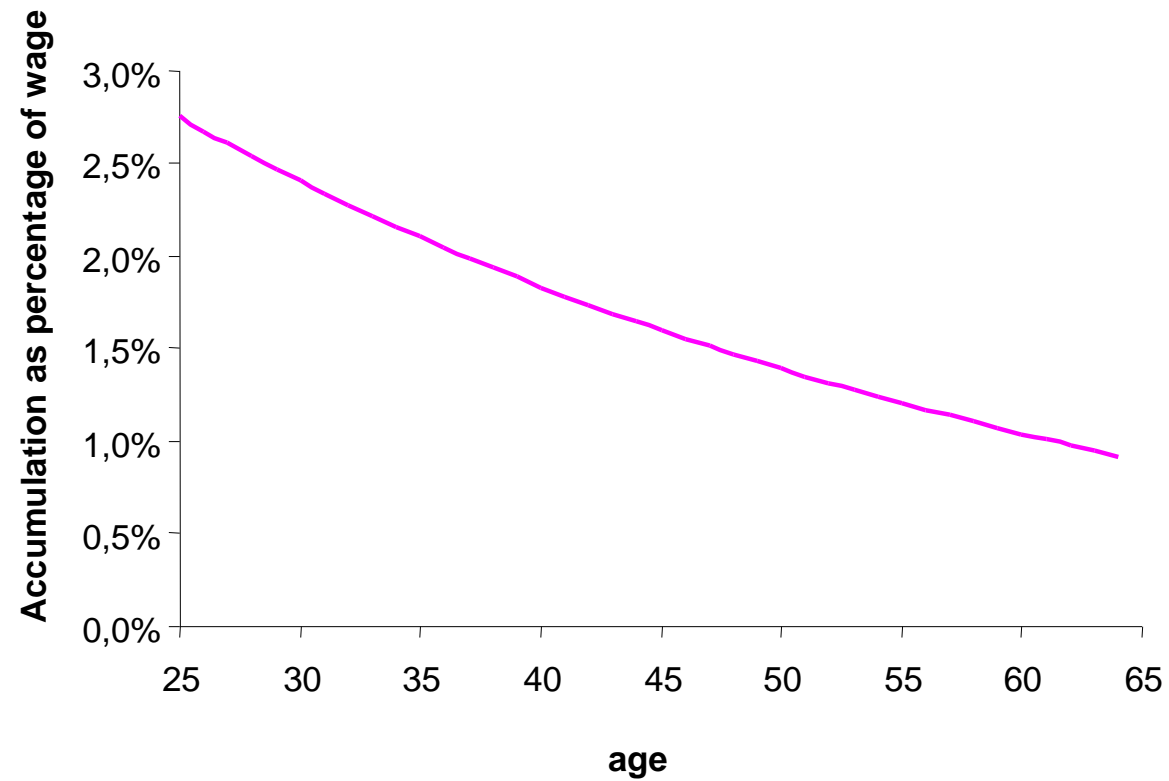
Actual versus actuarially neutral contributions



Pay-as-you-go component due to back-loading



Decreasing accrual rate: front loading



Pension governance

- Less discretionary power for employer(s) and employees
 - Ø More complete contracts *ex ante*

 - Ø Participants (with pension rights) are owners rather than employer(s) and employees
 - § Risk is absorbed in pension rights rather than collective recovery premia
 - ü *Stand-alone*: pension fund should act in the interests of participants at *arms length* of employer(s) and employees
 - ü Supervisory board appointed by meeting of participants

 - Ø Full-time professionals in executive board
 - § Supervisory board of part timers
 - ü Two-tier structure (one tier in transition)

Conclusions I

- Pension systems in crisis
 - Ø Risk sponsors withdrawing
 - Ø Institutional innovation required
- Collective, stand alone pension schemes as the third way between individual DC plans and corporate DB schemes
 - Ø No credit risk sponsor
 - Ø Delegation of complex choices to cooperatives
 - Ø Advanced risk management
 - Ø Pooling of longevity risk
 - Ø Completion of financial markets

Conclusions II

- Dutch occupational plans are developing in direction *stand-alone* pension funds
 - Ø More risk absorbed, shared and traded by members
- Further innovations
 - Ø Mark-to-market contributions
 - Ø More complete contracts
 - Ø More advanced risk sharing (also longevity)
 - Ø More flexible adjustment margins