

27th International Congress of Actuaries

THE BASICS OF PENSION FINANCE

JAN B. KUNÉ

(ABP; Public Employees' Pension Fund of the Netherlands)



FOUR PILLARS OF RETIREMENT (THE NETHERLANDS)

- 1. public basic scheme (35%)
- supplementary schemes (45%)
- *individual insurance plans (20%) continue working*



HIDDEN LIABILITIES

in the 1990's much concern in Europe about the hidden liabilities

2 to 3 times government debt

- many other liabilities
- no information on the sustainability of basis
 - pension plans



THE REAL ISSUE

future productive capacity

→ a larger pie gives bigger slices

relative changes between age groups, but

more welfare for all



THE COSTS OF A PENSION PLAN

the resources forgone

or: that part of total income used to support the retired population



FUNDING AND PAY-AS-YOU-GO

- (dis-)advantages (BOX 1)
- does funding make a real difference ?



MICRO - - MACRO-LEVEL

- no redistribution over time
- fallacy of composition
- more investment —> larger resource base



FALLACY OF COMPOSITION

".... To assume that because something is true for an individual, it is (necessarily) true on aggregate."



DOES FUNDING MATTER?

- the optimal level of savings and investments
 - $^{\circ}$ overcapitalization \longrightarrow payg more emphasis
 - $^{\circ}$ undercapitalization \longrightarrow funding more emphasis



CONDITIONS TO BE FILFILLED (1)

- pension savings higher total national savings (no crowding-out)
- savings —> investments
- savings below their optimal value
- pension savings most efficient



CONDITIONS TO BE FULFILLED (2)

- how pensions affect personal and total savings (BOX 2)
- need for more investment worldwide
- no serious doubt on efficiency



MACRO-CONSIDERATIONS IN PENSION FINANCE

funding as an instrument to

- save and invest more today
- produce and consume more tomorrow



MICRO-CONSIDERATIONS IN PENSION FINANCE

funding as a instrument

- to save today and to dissave or consume tomorrow
- for securing accrued pension rights



NO CONTROVERSY BETWEEN PENSIONERS AND WORKERS

- economic
- production function, $Y_t = K_t^{\alpha} \cdot L_t^{1-\alpha} \cdot e^{mt}$
- psychological / political



NOTE THAT

- accrued pension rights = claim on future output
- ownership of pension capital = resource base of the retired
- payg = the willingness and ability of the current labour force



SUMMARIZING, FUNDING IS

- a mechanism of
- pension finance
- increasing savings
- solving the distributional problem



PENSION AS A CLAIM ON FUTURE PRODUCT

- funding : an economic claim; adequate returns on pension capital are guarantee
- payg : strength of the socal contract between generations



NONETHELESS RISKS REMAIN

if total demand > total output,

then, 1) price inflation of goods and services,2) prices of securities may go down



CONCLUDING

capital income arising from the (property of

the) capital stock generally provides a better

guarantee than promises made under a

payg-system.