The Actuarial Profession
making financial sense of the future

Pensions, benefits and social security colloquium 2011

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Managing the Decumulation Phase

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From accumulation to decumulation

- Is decumulation = f(accumulation)?
- Or accumulation = f(decumulation)?

- Pension systems always try to provide old age security!

History: from DB (or nil) to DC

- Employers' choices (DB plans too risky for the employer) and cutbacks from social security have lead to an increasing amount of DC schemes
- In developing countries and transitional economies the natural choice has been to start with DC

- DC plans are now maturing and there is need to discuss decumulation

Interested parties

- OECD
- IOPS
- World Bank

- IAA through the Pensions and Employee Benefits Committee

Some aspects of the need to regulate

- Myopic consumers
- Long commitments
- Expenses (portability)
- To what extent the beneficiary is dependent on just this cover (attitude to risk)

Can/should payout be regulated?

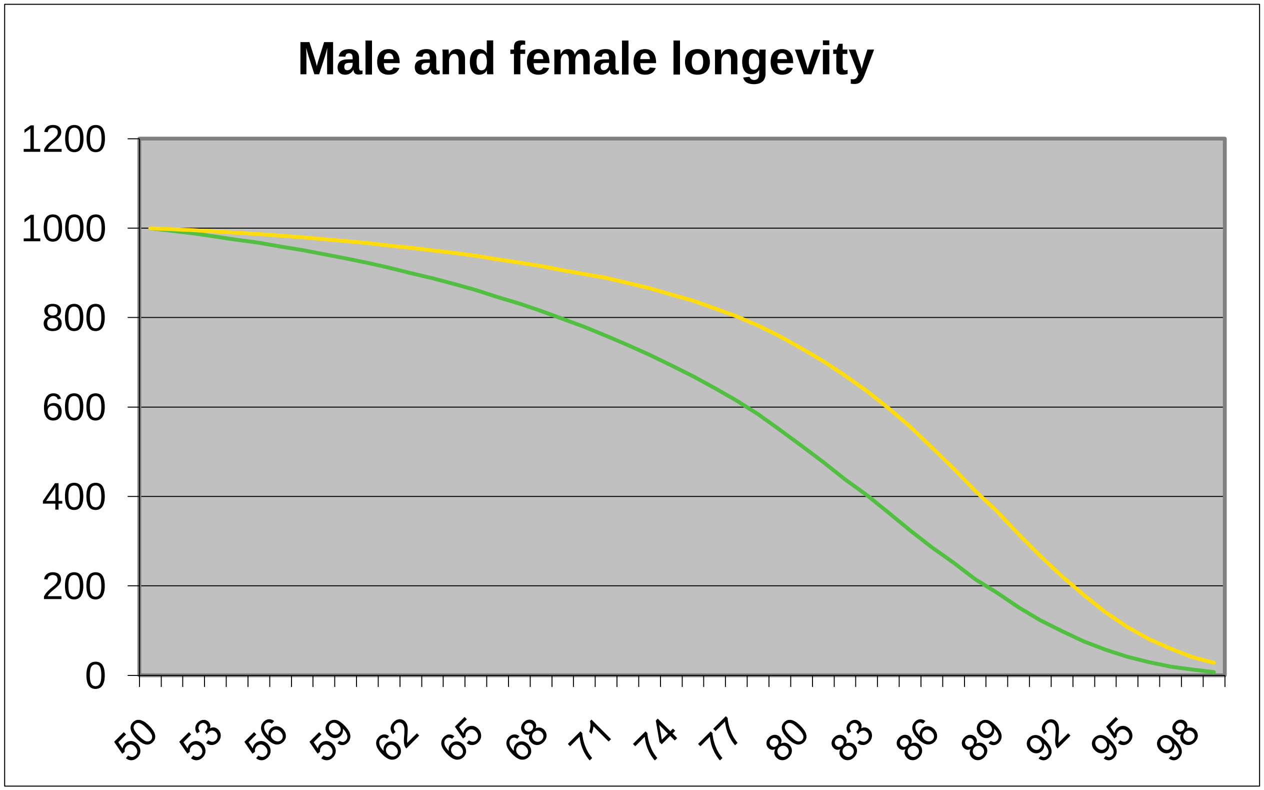
- Purely voluntary savings
- With tax benefits
- Compulsory

- Is there any other need to regulate in addition to consumer protection?
- Some need/possibility to regulate if tax benefits are not just meant to make people save
- Regulation possible and usually necessary

Strongly infuence by culture, values etc.

Case for insurance

- Individual saving leads to too much saving from the point of view of the society:



Who is rational – the one who lives longer than the average?

- Do you sleep well when you know that some day you will have received what you paid?
- Do you sleep well when you know you will get your pension even if you will live to 100
- Is there need for more financial literacy?

Does competition need regulation?

- Is the provider always too strong?
- Role of brokers/consultants?
- Are consumers fooled by choices that pay out too much too soon (and then there is not enough money for later years)?

Risks in pensions

- Adequacy (saving too little)
- Longevity (outliving savings)
- Investment
- Inflation
- Annuitization (depressed markets -> costly annuities)
- Conflict of interest
- Competition
- Cost
- Counterparty - bankruptcy
- Bequest
- Liquidity/flexibility (there is money but it is not available to meet changing needs)
- **A balanced approach needed as risks to different directions!**

Risk Characteristics of Retirement Products for Pensioners

(Table 2.1. from the World Bank publication ”Annuities and Other Retirement Products by Roberto Rocha, Dimitri Vittas and Heinz P. Rudolph)

	Protections offered			*Benefits provided*	
Retirement product	*Longevity risk*	*Investment risk*	*Inflation risk*	*Bequest*	*Liquidity*
Fixed real life annuities	Yes	Yes	Yes	Limited	No
Fixed nominal life annuities	Yes	Yes	No	Limited	No
Escalating real life annuities	Yes	Yes	Yes plus	Limited	No
Escalating nominal life annuities	Yes	Yes	Partial	Limited	No
Variable life annuities, guaranteed benefits	Yes	Yes	Possible	Limited	No
Variable life annuities, bonus payments	Shared	Shared	Shared	Limited	No
Variable life annuities, unit linked	Shared	No	No	Limited	No
Lifetime phased withdrawals	No	No	Possible	Yes	No
Term annuities	No	Possible	Possible	Yes	No
Lump sums	No	Possible	Possible	Yes	Yes
Self-annuitization	No	Possible	Possible	Yes	Yes

Source: Authors' compilation.
Note: Annuitization risk is present in all fixed and escalating annuities but does not affect variable annuities. Bankruptcy risk affects all types of retirement products but is particularly important in life annuities.

Risk Characteristics of Retirement Products for Providers

(Table 2.2. from the World Bank publication "Annuities and Other Retirement Products by Roberto Rocha, Dimitri Vittas and Heinz P. Rudolph)

Retirement product	*Exposures*		
	Longevity risk	*Investment risk*	*Inflation risk*
Fixed real life annuities	Yes	Yes	Yes
Fixed nominal life annuities	Yes	Yes	No
Escalating real life annuities	Yes	Yes	Yes plus
Escalating nominal life annuities	Yes	Yes	Partial
Variable life annuities, guaranteed benefits	Yes	Yes	Possible
Variable life annuities, bonus payments	No	No	No
Variable life annuities, unit linked	No	No	No
Lifetime phased withdrawals	No	No	Possible
Term annuities	No	Possible	Possible
Lump sums	No	Possible	Possible
Self-annuitization	No	Possible	Possible

Source: Authors' compilation.

Solvency requirements for pensions?

- Pensions/annuities are ”expensive” because providers need to have solvency capital (say, 20 % of the technical provision covering the annuity) to cover the risk
- In DC or unit-linked the individual can dream of a higher pension as there is no need for an ”unnecessary” solvency buffer
- But… should the actuarial advice be that forecasts should be based on allocating a certain amount of the pension capital to an implicit solvency buffer?

A new view on profit sharing or with profit?

- Traditionally many pension contracts were based on
  - Conservative assumptions as regards investments earnings and biometrical factors, and
  - Profit sharing (with profits) when reality usually was not as bad as assumed.
- In practice this means a risk sharing agreement between the provider and the client
- Critisism
  - Opaque, ownership not clearly defined
  - Easier in the world of mutualism, not in limited companies
- Can there be future for this concept?