Revisiting Defined Contribution Payouts in Multipillar Pension Systems

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Pensions Core Course

Agenda

- Payout options
- Life annuity issues
  - Advantages and disadvantages of life annuities
  - Pre-requisites for life annuity market
  - Annuity pricing considerations
- Policy issues in payout design

Payout Options

- Lump sum
- Periodic withdrawals
- Annuities
- Combinations of above

Payout Options

- Lump-sum
  - Paid by pension fund
  - All money received at one time
  - No future payments
  - Amount equal to account balance at time of retirement
- Periodic withdrawals are NOT insurance
  - Paid by pension fund
  - Funds remain invested
  - Payments are based on account balance and payout period
  - Payout period can be fixed at time payments begin or may be periodically recalculated

Payout Options

- Life annuities
  - Regular monthly payments guaranteed until death
  - Transfer longevity and/or investment risk to insurance company
  - Fixed life annuity, variable annuity, participating annuity
- Period certain annuity
  - Not life annuity
  - Regular monthly payments received over specified period, then no further payments
  - Period can be fixed number of years, or can be related to life expectancy
  - Payments may be level or vary from year to year

Payout Options

- Annuities may be paid by:
  - Life insurance company (best option)
  - First pillar administrator
  - Special annuity company
  - Pension fund (worst option)
- If pension fund provides annuities, must be regulated as a life insurance company
- Annuity only company is far riskier than company that sells both annuities and life insurance
- First pillar lacks expertise to price and manage annuity risk. Possible exception for NDC approach as in Poland

Payout Options: Risk Sharing Arrangements

Product	Interest	Longevity
Lump-sum, periodic withdrawals (not insurance)	Not transferred	Not transferred
Period-certain annuity (not a life annuity)	Transferred	Not transferred
Fixed life annuity	Transferred	Transferred
Variable life annuity	Not transferred	Transferred
Participating life annuity	Shared	Shared

Annuity Issues: Advantages of Life Annuities

- Assures lifetime income (can’t outlive assets)
- Protects against risk of living too long (opposite of life insurance)
- Guarantees rate of return on accumulated assets (fixed annuities)
- Each payment consists of:
  - Return of principal
  - Investment income
  - “Survivorship credit”

Annuity Issues: Disadvantages of Life Annuities

- Lack of liquidity
- Dependence on interest rates at time of retirement
- Possibility of “big losses” if die early
- Bad deal for those in poor health
- Unattractive pricing
- Inability to leave an inheritance
- Inflation fears
- Insurance company solvency fears
- Lack of understanding (complex product)

Annuity Issues: Pre-requisites for Annuity Market

- Reliable financial sector: Insurance company, banks, capital markets, etc.
- Strong legal and regulatory environment
- Deep and liquid capital market in medium to long-term government and corporate bonds
- Reliable mortality statistics
- Sufficient supply and demand for product (competition and information for informed decision making)
- Informed public

Annuity Pricing Issues

- Pricing parameters
  - Expected mortality: today and in future
  - Investment return
  - Marketing, asset management and administrative expenses
  - Provision for adverse experience
  - Provision for profit
- General rules
  - Lower mortality → lower annuity
  - Lower interest rates → lower annuity

Policy Issues in Second Pillar Design

- Mandatory versus voluntary annuity purchase
- Allowing choice in starting date of second pillar distributions
- Allowing choice in timing of annuity purchase
- Unisex versus sex distinct mortality
- Level versus indexed annuities
- Spousal protection
- Types of annuities that are mandated/permitted (joint annuity, price-indexed annuity, variable annuity, etc.)