Collective DC

IAPF Hybrid Forum

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Collective DC: Why

- Mark-to-market pension liabilities

  Example: DB-pension fund 50% (100%) in risky assets
  - Standard deviation Δ funded ratio: 10% (21%).
  - ≈2.5% probability that funded ratio in 1 year falls 20% (42%)
  - 2.5% 1-year SaR: 32% (50%)

- Maturity of DB-plans
  - 1980: 20% pension liabilities : 5% GDP
  - 2007: 20% : 20% GDP
  - 2030: 20% : 40% GDP

<u>Corporates are not able (nor willing) to bear that risk</u>

Risk reduction crucial

- Less risky risky assets

  1% less return➔ 30% higher contributions

- Individual DC
  - Individuals are inferior investors
    - S&P 1983-2003: 13% return per year
    - Individual investors: 6%
  - Ambachtsheer: 3% “haircut” per year (≈equity risk premium)

- Collective DC under IFRS
  - Fixed contribution for at least 5 years
  - No “constructive obligation”: “backservice component”
  - Collective investment pool

Definitions and Choices

- Two fundamentally different versions:
  1. DC, but collective
     - Collective investment pool
     - No buffer requirement
  2. DB with fixed contribution rate
     - DC to corporate, conditional DB to participants
     - Buffers necessary to cover the risks
     - Dowry and/or surcharge on actuarial cost to pay off contribution risk
- In practice:
  - ②, so buffers necessary
  - Fair employer's dowry: surcharge 20% to 30%

Issues

- Lynn Dudley (Retirement Policy American Benefits Council (2006))
  "*We know DB pension plans are good for workers and we know that many employers want to keep DB to attract and retain a strong workforce*"

- Communication aspects about CDC

- Companies should pay fair dowry price to get rid of contribution risk:
  - Practical experience 30% of actuarial cost
  - Efficient for the companies
  - In expectation 30% higher pensions

Hybrid DB - CDC

- DB untenable: maturity of funds, ageing
- Collective DC has disadvantages too
- Theoretical background

	Utility (perc. of salaries)	Probability of poverty	Expected number of years of poverty
Conditional D-B	**90.3%**	**11.9%**	**6.9**
Mandatory D-C	**85.4%**	**4.9%**	**4.6**
Collective C-D-C	**85.2%**	**1.1%**	**2.0**
50% Conditional D-B; 50% Collective C-D-C	**90.0%**	**0.6%**	**1.7**

- Results for participant aged 25
- Poverty defined as real income less then 50% of (final) salary

➔ **Hybrid DB-CDC**

Collective DC in practice

- Analysis and determination of:
  - maximum pension risk for the sponsor, also in relation to:
    - fair dowry price
    - reward for risk in the business
  - maximum risk for the participants

- Choices with respect to:
  - “DB” with fixed contribution rate or CDC
  - Determination fair dowry and/or contribution surcharge
  - Solidarity by creating reserves
  - Optimal integral strategic asset allocation

Collective DC in practice: Example

- Starting point:
  - Total market value of company: 2.5 billion
  - Asset value pension fund: 6 billion
  - Nominal funding ratio 140%

➔ 2 billion on balance sheet

Pension assets on balance sheet → Collective DC

Collective DC in practice: Example

- Required contribution: 7%
- Agreed with union:
  1. contribution 22%
  2. If very high funding ratio: premium discount of 100 million to company

- Because of ② no collective DC
- When funding ratio drops dramatically → leave ② → Collective DC

Thanks for your attention!