The allocation of financial risk during the life cycle in individual and collective DC pension contracts

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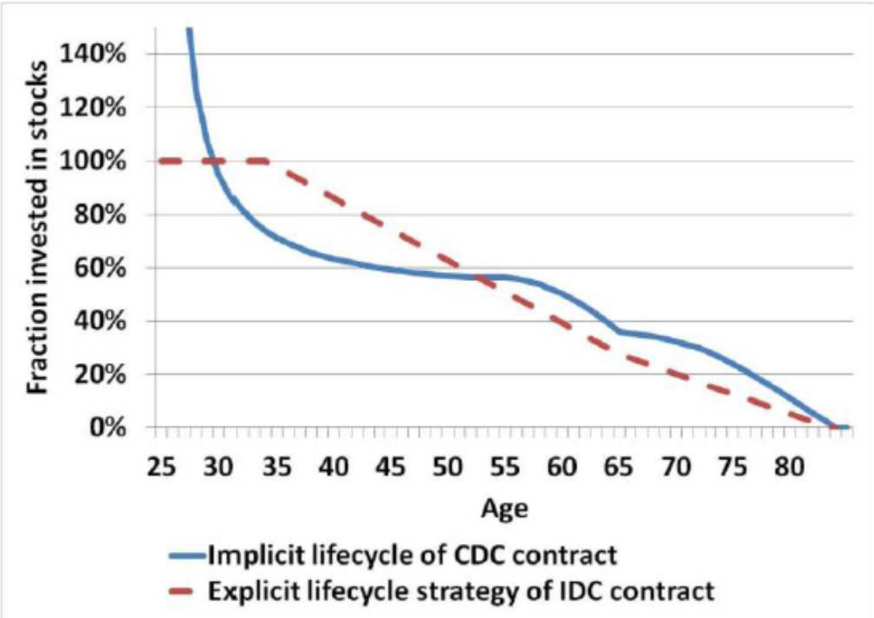
SUMMARY OF THE PAPER

- Impulse-response analysis of equity, interest rate and inflation shocks in real-world IDC and CDC contracts
- Incomplete market setting: traded and non-traded risks
- In current institutional setting the shift of traded risks from current to future generations is limited
- CDC schemes can better protect young generations to interest rate risk than IDC schemes
- CDC schemes are able to transfer inflation risk from the elderly to the young

NOVELTY OF THE PAPER

- Collective and individual pension contracts are more similar than often thought
- Equity exposure in collective contract closer to “optimal” exposure

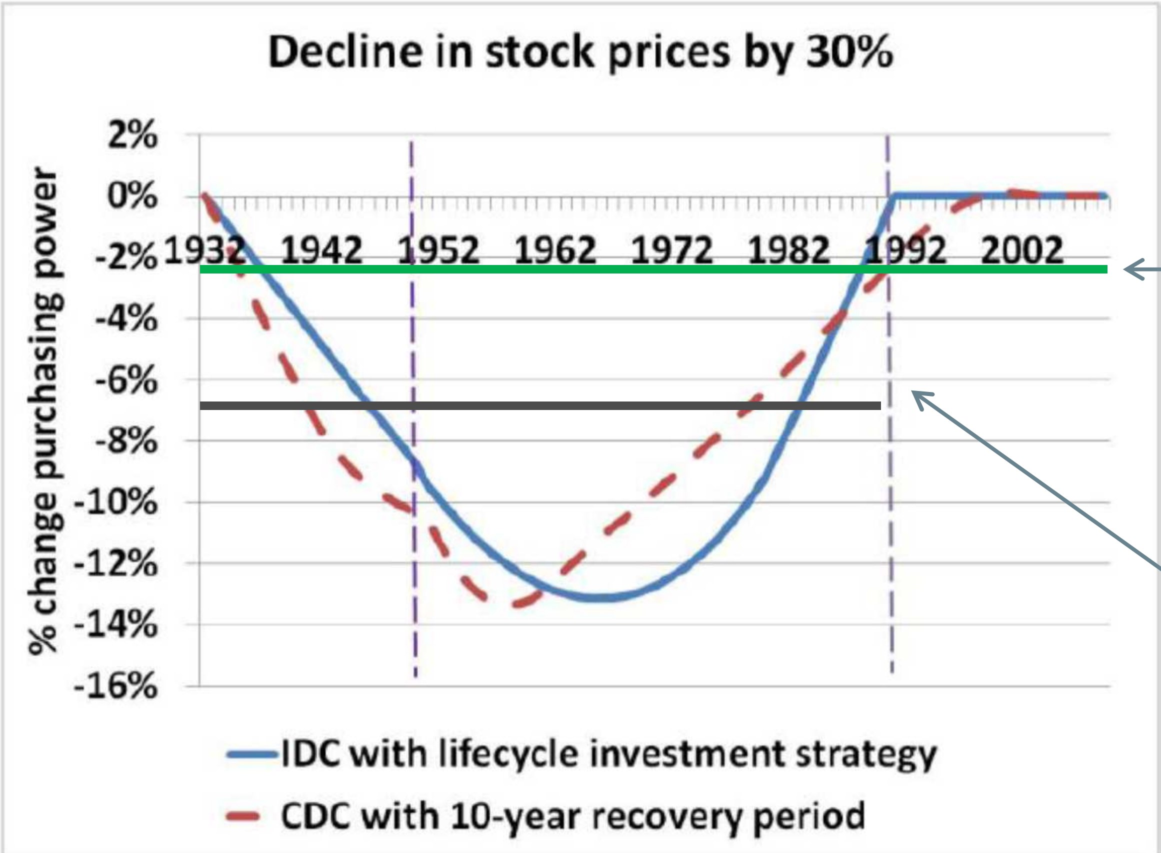


THEORETICAL BENCHMARK

- What is the optimal risk allocation?
- Paper tends to promote shifting risks from pensioners to young/future workers, with reference to Merton and Samuelson model

- However, a comparison between M&S and the current contracts would imply:
  - *Without IRS*: transfer risk from (older) workers to pensioners and young generations
  - *With IRS*: transfer risk from current to future generations

THEORETICAL BENCHMARK



M&S with full IRS

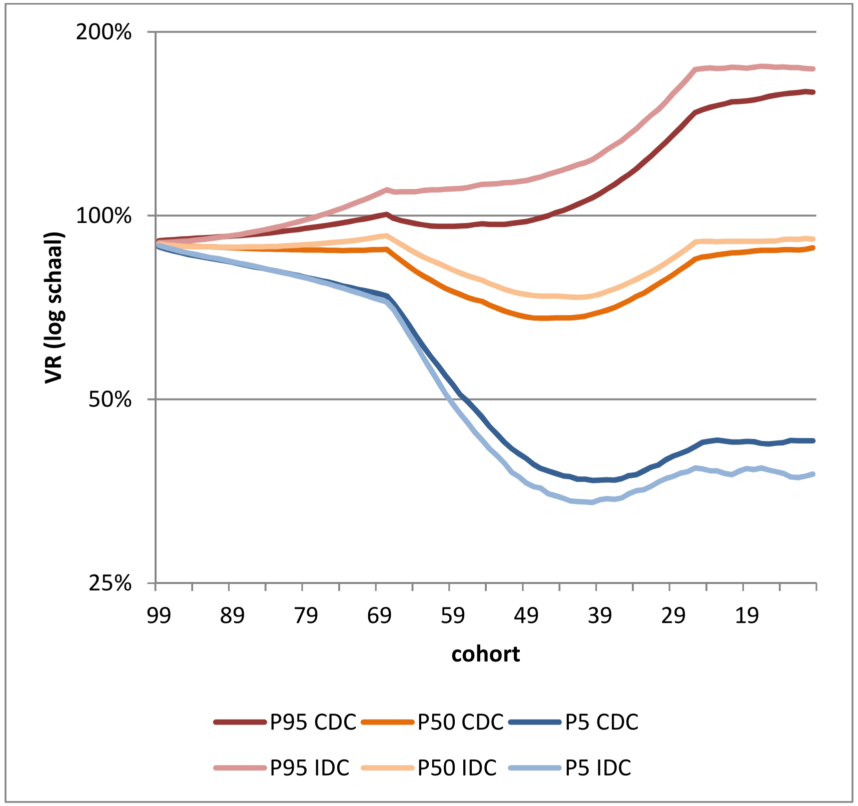
M&S without full IRS

INTERGENERATIONAL RISK SHARING (IRS)

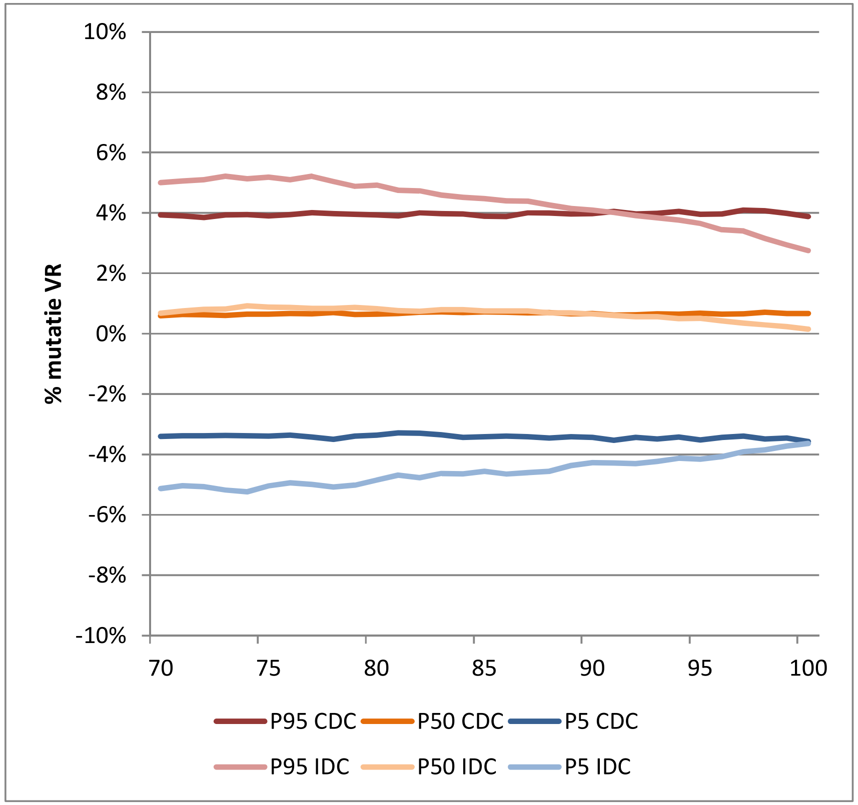
- CDC contract only allocates 4% of equity shock to future generations
  - CPB (2004): 16%
  - Optimal amount: 50% (Gollier, 2008)
- Impact IRS has been decreased due to short(er) recovery periods and fixed contributions
- How does this “4%” relate to current nFTK contract?
  - nFTK contract more asymmetric than CDC contract of paper
- What does IRS (still) imply for stability of pension benefits?

INTERGENERATIONAL RISK SHARING (IRS)

RR per cohort



Volatility RR pension period



INTEREST RATE RISK

- CDC contract can better protect young generations to interest rate risk than IDC contract
  - In IDC contract young people only invest in equity
  - Young people cannot take short positions
- The downside of this is that young generations in CDC contracts may be more exposed to inflation risk

- What is most relevant for the Dutch economy?
  - Are shocks in nominal interest rates driven by shocks in real interest rates or inflation?

OTHER POINTS

- "*The collective contract intends to compensate for higher prices*"
  - How does this work and relate to the nFTK contract?
- Interesting result: *nominal* discounting provides pensioners more protection against inflation than *real* discounting
  - Information about the value of the discount rates should be provided
- P14: "*CDC contract allocates equity risk from the oldest generations to the youngest and future generations*"
  - Conclusion does not follow from Figure 6

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