

Discussion for "Optimal Design of Funded Pension Schemes under Financial Fairness, with Applications to the Dutch Pension Reform" by H. Bao, R. Molenaar, E. Ponds and J. Schumacher

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- Financial Crisis led to transforming the traditional DB scheme into a DC one: pensioners will bear a higher investment risk than before.
- The approval of nFTK in the Netherlands is the Dutch answer to regulate this transition. It provides a regulatory framework for pension funds.
- This paper systematically studies the optimal risk sharing rule, given certain assumptions. In fact the total assets, at each point in time τ , are given by:

$$A_\tau = B_\tau + F_\tau \quad (1)$$

According to the above identity, it must be computed how much money should be paid out as benefits and how much should stay in the buffer for future liabilities.

- The authors introduce the Mohopeff approach to answer the problem highlighted by equation (1): at each point in time τ , several economic conditions may vary and hence a risk sharing rule might not be optimal anymore.
- The method works as follows: there is a system, called U, that simulates a realistic economic environment, and a system, called P, under which predictions for the U-system are made. At each point in time τ , given a projection of the variables U, an optimal risk sharing rule is calculated according to certain assumptions.
- The assumptions are modified and the results for 4 different indicators are shown.

- The paper takes the point of view of a pension fund manager that has to design a risk sharing rule for the cohorts existing in the system. Given that this rule is computed iteratively, is there the risk that the paid-out benefits will be unstable?
- In the present setting, the term structure of interest rates is considered as known in every point in the future: Have you thought about introducing prediction on interest rates? Do you have an intuition about how it would affect your results?
- Could you extend the current setting to have generations with different utility functions? Also in the class of the ones you have presented?
- How would you apply this method on data?