

Discussion of:

The Intersection of Pensions and Enterprise Risk Management

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The policy recommendation

- This paper presents a thought provoking policy recommendation:
 - DB pension funds should take substantial investment by shorting equities
- Recommendation is orthogonal to common wisdom:
 - To assure solvency of DB funds investment risks should be controlled: risk-based supervision (FTK, Solvency II) or re-insurance (PBGC, PPF)
 - The pension fund should invest on behalf of the participants, i.e. be long in equities



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Motivation for standard recommendation I

- DB pension funds make promises that are to be kept
- Promises can not simply be kept by increasing future contributions
 - Discontinuity of the sponsor
 - Participants can even avoid mandatory collective contracts
- LDI strategies reduce investment risk in buffer
- Underfunding should be avoided and recovered quickly, or be insured by guarantee funds
- Note that supervisors take the promises that were made (contracts that were agreed) as given



Motivation for standard recommendation II

- A second stream of literature recommends directly that DB pension funds go long in equity.
- E.g.:
 - Equity exposure allows for risk sharing in financial markets and thereby reduces the required contribution rate
 - More equity exposure at young age if human capital is riskless
- Underlying assumption: individuals can not unwind the (equity) exposure imposed on them by the fund or will not unwind the investment decisions of the fund (see behavioral finance literature)
- The conflict of interest between the participants in the fund and the sponsor is usually not analysed (disappears if workers are concerned about net wages only)



Starting point of analysis in this paper

- This paper assumes rational participants, firms and financial markets that adjust their portfolios optimally.
- If in addition financial markets are frictionless:
 - the market value of an asset or liability is all that matters,
 - the risk characteristics will be chosen optimally by the agent
 - analogue of the Modigliani - Miller result in corporate finance (what the pass-through institution does is irrelevant, apart from redistribution; “pension funds are a zero-sum game”; agents unwind).
- Same assumptions underlie discussions on number of Dutch policy issues. Approximations at best that agents unwind in frictionless markets.



Analysis in this paper

- Assumption that sponsor carries full investment risk
- Sponsor has positive β projects and can reduce risk if pension funds requires additional funding if stock returns are good (pension fund takes short positions in equity)
- Risk reduction is not irrelevant because of market frictions
- Frictions considered as in the corporate finance literature:
 - cost of financial distress of firm or fund,
 - convex (progressive) taxation for firm
- Under these assumptions value is maximized if the risk is reduced, i.e. if pension fund is short in equity
- Additional friction:
 - taxation of bonds exceeds that of stocks in taxable (non-pension) accounts (Black / Tepper); same incentive



Extension in the paper

- If risk gets in concave zone more risk taking increases value
- Example;
 - Option written by PPF and PGBC which are not priced at market value
 - Increased risk taking increases volatility and thereby market value of the options that are held
- Recommendation here is to hold long position in equity



Frictions that have been ignored

- Effort and skill required to unwind investment decisions of the firm
- Transaction costs for individual
- Solvency constraints for individual e.g. borrowing constraint
- Transparency of factor exposure of pension fund and sponsor
- Bankruptcy risk of the sponsor
- (Avoidance of mandatory contract by participants)

- Under these assumptions fund that fund provide adequate pension contracts to their participants are welfare improving



My recommendations

- Because of market frictions and financial illiteracy pension fund are to provide adequate pension contracts that is close to optimal given the characteristics of the individual (age, risk aversion, other assets, partner pension)
- Because of heterogeneity in pool of participants and because not all relevant characteristics are easy to identify some choice options, with adequate defaults
- Under some assumptions on utility (e.g. loss aversion) or because of additional transparency the optimal pension contract might contain guarantees.
- Supervisors are to make sure that it is unlikely that guarantees will not be kept