Tendencies in Pension Funds Regulation and Supervision

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Mr. Paquius Proculus and his wife

Financial statements

They lived in Pompeii by 79 DC… and then there were banks!

First idea: Old and New Industries

- Banking industry is very old
- Insurance sector is old as well: even in Rome there were guilds who provided some sort of insurance. Insurance companies appeared later in the UK mainly to insure transoceanic trade.
- Compared to all that, Pension Funds are much younger: Lord Beveridge

Second Idea:
PFs, an Heterogeneous Industry

- Banks and Insurance Cies. are less dissimilar than Pension Funds
- PFs range from:
  - Open to close (occupational)
  - DC to DB
  - Profit making to non-profit organizations
- To some extent, a closed DB PF looks closer to an life insurance company than a open DC

Third Idea: Regulation and Supervision is more mature there

- Basle criteria for Banking Supervision exists and is

  accepted by all major [illegible] world
- IOSCO sets sta[illegible]ecurities regulatio[illegible]

  [illegible]ich is accepted by all major…
- IAI[illegible]sets standards for Insurance regulation

  …which is accepted by all major…

THERE IS NOT SUCH A THING IN THE PENSION FUND INDUSTRY

But we are working on it…

- AIOS (www.aiosfp.org) has its “Pri… de Regulación y Superv… Pensiones”
- … the OECD … Private Pensions and … orld Bank)

Therefore, the harmonization of private pensions regulation across the world is a process on the making…

… specially in the DC!!

Main risks of the DC pension system

- Operational risk
  - Loss to the member due to a failure in an internal or external process of the manager/provider: failure of an internal process, poor valuations, counterparty failure, fraud, unresolved conflicts of interest within the conglomerate, etc…

- Investment risk
  - Risk of obtaining an <u>“insufficient” source of income</u> due to an inappropriate investment strategy.
  - A “sufficient” source of income is the one that allows the member to receive a real benefit which is in line with the contributions made: <u>replacement rate adjusted by contributions</u> (not actual replacement rate)

State of the art 1: Valuation of assets and liabilities

Valuation	Method	Country
Assets	Market Value	Australia, Denmark, Mexico, Netherlands, UK
Liabilities (DB)	Subjective, depends on each fund	Australia
	Market value discounted by a fixed interest rate which reflects financial risk	Denmark
	Realistic value = expected present value + market value margin for inevitable risks	Netherlands
	- FRS17/IAS19: expected value discounted at corporate bond rate - Benchmark: buy-out value, discounted at around gilt rate	UK

Source: SAFP on the basis of each countries public information

State of the art 2:
Risk mitigation and corrective actions

Country	Situation	Measure	Possible Strategies	Time Period	Responsible Part
Netherlands	Underfunding	Recuperation Plan proposed by PF	Premiums and Indexation Policy, Changes in investment strategy and in pensions scheme	1 year	Pension Funds
	Shortfall of buffers	Recuperation Plan proposed by PF	Premiums and Indexation Policy, Changes in investment strategy and in pensions scheme	15 years	Pension Funds
	Free capital		Contribution holidays		Pension Funds
UK	Technical Insolvent	Recuperation plan agreed by employer and trustee	Employers' additional contributions, adjustments on contributions, retirement age and benefit plans	10 years	Employer-sponsor*

* In case of insolvency of both the pension fund and the employer, the State guarantees a minimum pension benefit through the Pension Protection Fund.

State of the art 2:
Risk mitigation and corrective actions

Country	Situation	Measure	Possible Strategies	Time Period	Responsible Part
Australia	Technical Insolvent	Recuperation Plan proposed by PF	Trustees must not make payments from the fund	5 years	Employer-sponsor
Denmark	Black light (under funding)	Recuperation Plan proposed by PF	Increase base capital, member contribution and/or attract extra capital shareholders	1 to 3 years	Companies
	Red light	FSA may order that a company takes the necessary measures	Monthly reports and more frequently on-site inspections	Time limit specified by the FSA	Companies
	Yellow light	Intensified supervision	Quarterly reports and more frequently on-site inspections	Time limit specified by the FSA	Companies
	Green light	Ordinary supervision	Biannual report and random	Not applicable	Companies

Source: SAFP on the basis of each countries public information

State of the art 3:
Financial risk measures

Country	Applied to	Risk Measure	Target	Based on
Australia (PAIRS)	DC	Qualitative	Diversification and Volatility	Assets Portfolio
	DB, Insurance Companies	Qualitative and Quantitative	Asset liability matching (Means and durations), and Solvency Ratio	Assets Portfolio and Valuation of liabilities
Denmark (Traffic-light System)	DB: Insurance Companies and Industry-wide pension funds	Qualitative and Scenarios	Risk Adjusted Solvency Ratio and Base Capital Requirement	Sensibility Test of assets and liabilities
Mexico	DC	Quantitative	Daily VAR of 0.6%	Assets Portfolio
Netherlands (FTK)	DB	Base Scenario	Solvency Ratio and Capital Requirement	Sensibility Test of assets and liabilities
UK (Comparison with full buy-out valuation)	DB	Qualitative	Technical Provisions within 70-80% of the full buy-out value	Valuation of liabilities

Source: SAFP on the basis of each countries public information

These approaches look incomplete

- Operational financial risk is fine but what about financial risk…
- VAR: Is it reasonable for the average pensioneer to minimise the risk of a short run loss? What if the shock is transitory? [Yesterday: DJIA -1.88% / CAC40 -3.18%]
- Don´t most shocks seem transitory from the perspective of athe average affiliate?
- Which is the appropriate approach? Difficult to say, but Chile is now in the process of defining that (FIRST/WB after FSAP)

Investment risk

- In a DC pension system the affiliate bears almost exclusively the investment risk
- If there are fiscal guarantees, the State bears some of the risks but the relevance of them depends on how those guarantees are stated
- Since the delegation of the portfolio management generates a principal-agent problem, there is a chance for an inappropriate investment strategy to be chosen by the fund manager.

Relevant risks in a DC world

- Which is the risk we ought to mitigate?
  - Receiving less than the “sufficient” source of income
  - Should we consider a “notional liability” for the system? Or a target replacement ratio (on actual contributions)?

- How can those risks be measured?
  - The likelihood of its occurrence.
  - The monetary loss of its occurrence.
  - How do we treat ageing? A given monetary loss or likelihood of occurrence, does it weight the same for young person than for an older one?

- If we are able to identify and measure relevant risks in a DC world, we must then provide incentives for the fund manager to act in accordance with some pre-specified “risk limits.”

Alternative possible risk management strategies in a DC world

1. To define and measure the "portfolio risk" of the pension fund, and make it public (Mexico style)

2. To delimit the set of "appropriate portfolio strategies" periodically (could be selfregulation, but accountable and transparent)

3. To measure the "portfolio risk" of the pension fund, and subsequently adjust the investment strategy (mix of latest two options)

4. To impose reserve requirements based on the mismatch between the assets and the "notional" liabilities of the system.

5. To introduce a "real" liability (related to the "notional" one) and impose risk adjusted capital requirement to back up those liabilities.

Final thoughts

- The Pension Fund industry is an infant industry… it has a long way yet to become mature. Tasks for the managers (corporate governance, accountability, transparency…), tasks for governments (finding the appropriate regulatory and supervisory frameworks)
- Current strategy to quantify and mitigate financial risks is not sufficient…

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