Case Studies:

Collective Defined Contribution Plans *

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"Case Studies" presents a case pertinent to contemporary issues and events in investment management. Insightful and provocative questions are posed at the end of each case to challenge the reader. Each case is an invitation to the critical thinking and pragmatic problem solving that are so fundamental to the practice of investment management.

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Mike and Janet, who work for a public policy think tank, have been tasked with presenting alternative solutions going forward to various public pension systems. Traditional defined benefit (DB) pension plans have historically been popular among employees due to the perceived safety of the promised payouts. Now, with many public pension plans severely underfunded,[1] pensioners are realizing that the projected benefit "obligations" are only as certain as the ongoing creditworthiness of the sponsor.

Mike suggests simply instilling an individual defined contribution (DC) pension plan for employees going forward. After all, a DC plan opens up the black box of the DB plan in a way that is clearer to each individual as to whether his or her individual plan is "underfunded" relative to his or her retirement benchmarks. The DC plan also illuminates the reality, in a more timely manner, that if an individual's portfolio is performing poorly, then he or she will need to either: (i) accept lower projected benefits in retirement, (ii) make additional contributions, (iii) delay retirement, or (iv) shift to riskier assets with higher expected returns.

However, Janet worries about the complexities of investment and longevity risk, particularly for less sophisticated individuals. She also worries about the increased overhead of providing individual annuities at retirement, since a pension drawdown may not be the best solution for most individuals. Moreover, she knows that several unions have been adamantly opposed to the idea of a DC plan for public employees.

Instead, she proposes implementing a collective defined contribution (CDC) pension plan, an idea which has been gaining traction in parts of Europe. In a CDC plan, the projected (but not guaranteed) benefits would also ebb and flow based on the performance of total assets under management, thereby informing employees of their retirement prospects in an ongoing and timely

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[1] https://www.economist.com/finance-and-economics/2019/11/14/americas-public-sector-pension-schemes-are-trillions-of-dollars-short

manner. Furthermore, investment and longevity risk are mitigated by the pooling of investments both within and across generations, and regular drawdowns to pay out retirees leaves more money for all participants than purchasing insured annuities. Janet also suggests adding a financial buffer so as not to unduly expose plan participants to the natural ups and downs of financial markets. She adds that this feature could make the CDC plan more palatable to unions, since the buffer would make the CDC plan look more like a DB plan.

Mike points out, though, that a buffer that is too large could lead to a windfall from the unlucky generation to the other. Such a windfall is problematic since the idea behind CDC is to *share* risk, not to shift it. Furthermore, in calculating appropriate drawdowns, Mike wonders about the risk and impact of pension fund discontinuity (i.e., that the fund is discontinued). The idea of smoothing certain risks by pooling contributions across generations is less tenable if the infinite horizon assumption is not valid.

With these issues in mind, Mike and Janet begin preparing key questions to address in their upcoming presentation.

Questions

- Is a financial buffer appropriate, and if so, to what degree should projected benefits be shielded from asset volatility?
- How should drawdowns be calculated so as to maintain intergenerational fairness?
- How can changes to the appropriate drawdowns be conveyed, respectively, to older and newer participants when there is a huge financial hit to the portfolio?
- Who, and in what circumstances, stands to be most affect by pension fund discontinuity?
- If a new plan is implemented going forward, how can the existing plans be sunsetted in a way that is least disruptive to all parties?