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# Financial Economics and Actuarial Practice: Current U.S. Pension Practice

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# Preliminary Remarks:

- I am a member of the Pension Committee of the Actuarial Standards Board (ASB), which writes Actuarial Standards of Practice (ASOPs) for U.S. actuaries specializing in pension work.
- Current pension practice seems to have been more extensively criticized by adherents of the financial economics (FE) approach than other areas of actuarial practice.
- As a member of the Pension Committee, I see a fair amount of correspondence from advocates of FE commenting on current or proposed standards.
- My remarks represent my point of view only (not necessarily those of other members of the Pension Committee of the ASB or of my employer).

# Sources of Guidance for U.S. Pension Actuaries:

- ERISA (as expressed in the Internal Revenue Code and associated regulations)
  - Requirements applicable to the calculation of (among other things) minimum required and maximum deductible contributions.
  - Largely inapplicable outside the private sector.
- PBGC rules and regulations (private sector only)
- Accounting standards
  - FASB Standards 87, 88 and 132 (private sector).
  - GASB Standards 25 and 27 (public sector).
- ASOPs – particularly nos. 4, 27 and 35, plus one under development concerning the measurement of assets in pension valuations.

# Financial Economics Critique of Current U.S. Pension Practice: Selection of Interest Rates

- FE: interest rates used to calculate actuarial liabilities should reflect returns on assets whose durations and probabilities of payment match those of the benefits.
- An example from the literature: benefit liabilities for a public employee retirement system should be calculated using yields on U.S. Treasury securities.
- In practice, most pension plans hold substantial proportions of their assets in equities, and assumed interest rates used in pension funding reflect the expected return on these underlying assets (as guidance presently requires).

# Financial Economics Critique of Current U.S. Pension Practice: Selection of Interest Rates (Cont'd)

- Present U.S. accounting standards also make use of expected rates of return on plan assets:
  - FASB standards: discount rate is established without regard to rate of return on plan assets, but pension expense is directly affected by anticipated returns on plan assets.
  - GASB standards: use interest rates selected in accordance with applicable ASOPs (i.e., expected rates of return on underlying assets).
- ERISA (via IRC section 412): actuarial assumptions must be “reasonable” (i.e., “. . . reflect actuary’s best estimate of anticipated experience under the plan.”).

# Financial Economics Critique of Current U.S. Pension Practice: Anticipated Salary Increases

- FE: Pension liabilities used for financial reporting or solvency measurement should not be calculated using anticipated future salary increases.
- Accounting standards: FASB requires, and GASB permits, use of funding methods that take anticipated future salary increases into account.
- ASOPs applicable to pension actuarial work do not explicitly require or rule out the reflection of anticipated future salary increases in measuring pension liabilities.

# Financial Economics Critique of Current U.S. Pension Practice: Use of “Smoothed” Asset Values

- FE: Asset value used in a pension valuation should always be the current market value as of the valuation date.
- ERISA permits the use for funding purposes of an “actuarial value of assets” that is based on market value but defers recognition of some movement in market value.
- ASOP under development regarding measurement of asset values in performing pension valuations also permits use of smoothed values.
- Accounting standards of the FASB and GASB also allow use of smoothed values.

# Financial Economics Critique of Current U.S. Pension Practice: Amortization of Changes in Liabilities

- FE: Recognize changes in liabilities resulting from actuarial gains/losses and plan amendments immediately.
- ERISA: Gains/losses and plan amendments are amortized over multi-year periods in developing minimum required contributions.
- Accounting standards: FASB standards require deferred recognition of gains/losses and the impact of plan amendments.
- ASOPs: Deferred recognition neither mandated or prohibited.

# Future Impact of Financial Economics on U.S. Pension Practice

- To date, the FE movement has not been embraced by large numbers of practitioners.
- However, it has attracted a number of vocal advocates.
- Changes now under consideration for minimum funding standards, accounting standards and ASOPs reflect the influence of FE.

# Future Impact of Financial Economics on U.S. Pension Practice: Funding Standards

- As of April 22, several pension funding reform proposals were under consideration by the U.S. Congress.
- Some elements of these proposals reflect the influence of the FE viewpoint:
  - Measurement of pension liabilities for funding purposes using a yield curve.
  - Accelerated recognition of changes in liabilities.
  - Lesser permitted degree of smoothing in calculation of asset values.

# Future Impact of Financial Economics on U.S. Pension Practice: Accounting Standards

- On March 31, FASB released an exposure draft of a substantial amendment of Standards 87, 88 and 132.
- Some aspects of the proposed amendments are consistent with the FE viewpoint:
  - Elimination of deferred recognition of actuarial gains and losses and amendments in the sponsor's balance sheet.
  - Requirement that assets and liabilities be measured as of the financial statement date (has been possible to differ by up to three months).
- Use of PBO (which includes salary projection) as liability is inconsistent with FE.

# Future Impact of Financial Economics on U.S. Pension Practice: ASOPs

- ASOP 4 is now under revision; an ASOP covering the measurement of asset values in pension valuations is under development; a revision of ASOP 27 is planned.
- Some advocates of FE are prolific commentators on exposure drafts of new and revised ASOPs.
- Fundamental issue: ASOPs are supposed to codify *generally accepted actuarial practice*.
- It is not possible to say at present that FE represents generally accepted actuarial practice.
- Suggestion has been made to revise ASOPs to accommodate (but not require) use of the FE approach.