

Choice of Pension Fund Assets and their Valuation on a basis consistent with the Value placed on the Liabilities

Friday 18th June (early morning)

Chairman: Max Lander (UK)

Opener: Joop Arts (Netherlands)

Closer: Bill Dreher (USA)

Papers for discussion:

T. P. Bleakney (USA):

"Imputed valuation of pension plan assets."

J. L. Clare (Canada):

"The valuation of pension fund assets on a basis consistent with the value placed on the liabilities."

E. Innes (USA):

"The actuary and his assumptions. The measurement of investment performance."

J. Van Rooijen (Netherlands):

"An actuarial view on the valuation problem."

P. N. Thornton (UK):

"Valuation of pension funds in the UK."

C. J. White (Australia):

"Choice of pension fund assets and their valuation on a basis consistent with the value placed on the liabilities."

K. G. Whitehead (UK):

"The treatment of assets in pension fund valuations."

After laying the ground rules for the discussion, the Chairman, M. Lander (UK), introduced the opener, Joop Arts (Netherlands), who identified the eight papers on this topic and offered a framework for the discussions.

Discussion:

(US)

commented on US pension valuation practices and the impact of ERISA, the Employee Retirement Income Security Act of 1974. He emphasized the merits of periodically reviewing a pension plan's actual experience and using this historic data to adjust the funding rate. He also noted that changes in actuarial assumptions should be derived from an analysis of reserves released, not the raw experience rates for salary, turnover and other actuarial elements.

(South Africa)

rose to discuss the Innes paper on measurement of investment performance. He endorsed the thrust of the Jolliffe paper, which emphasized the importance of identifying and measuring both the nominal and the real rates of return on pension fund portfolios. He stressed the importance of regularly measuring an investment manager's results and observed that the question was not whether to use a system of measurement, but to identify which system would be most appropriate. He believes that measurement systems should enable the analyst to evaluate investment performance in the light of the objectives of the investment program. They should seek not only to measure performance, but to identify the reasons underlying those results. He concluded by suggesting that the analysis of investment performance should be a separate topic at the 1984 IACA meeting.

(UK)

discussed the Thornton paper, suggesting that the actuary should modify the dividend growth rate assumption if the valuation does not include a forecast of future pension increases. In such situations, a dividend growth assumption of 1.5 to 2 percent would, in his judgment, be appropriate for UK pension funds. He noted that the actuary could assist his client in understanding the interaction among actuarial assumptions and the reasonableness

of the actuary's recommendations by producing valuations on alternative bases that produce comparable results. He cited as an example that a valuation based upon an investment return of 12 percent, salary forecast of 11 percent and a dividend growth assumption of 7 percent, which might appear to the client to be a better reflection of future experience, could produce a funding rate comparable to a valuation based upon an investment return of 9 percent, the salary increases of 8 percent and dividend growth of 4 percent, assumptions that might be considered representative of those being used currently by UK actuaries.

(US)

rose again to express his view that the key issue in an actuarial valuation was not the consistency of individual elements in the actuarial basis, but whether or not the aggregate of those assumptions produced a reasonable funding level. He noted also that regulations issued under ERISA restrained the application of actuarial asset valuation methods by requiring that the actuarial value not differ from the market value of assets by more than 20 percent. He endorsed the principle of constraining the differential between actuarial and market value, particularly when the actuarial value exceeds the market value. He concluded by emphasizing the merits of selecting asset valuation methods that reduce the amplitude in the pattern of experience gains and losses and are simple to explain to clients. In his view the present value techniques for valuing assets are a good smoothing device, but may give an unrealistic value and suffer from lack of credibility in the eyes of the client.

(US)

commented on the Thornton paper. He considers the assumptions in Appendix II of that paper to be reasonable and not dissimilar from those used by US actuaries. He observed that a "typical" US pension fund assumes a real investment return of 2 percent or more above the long term expected inflation rate and uses a salary forecast that exceeds that inflation rate by about 1 percent. He cited his experience in the application of present value techniques for valuing pension fund assets, which he has used in the last two valuations of a large pension plan. He has encountered difficulty in explaining these concepts to the client's satisfaction.

P. N. Thornton (UK)

offered a clarification that the assumptions in his paper are not necessarily those he would recommend to a typical client, but fell within a range of practices followed by UK actuaries. He observed that the relationship between dividend growth rates and inflation has changed in recent years. Using average data for the past 50 years, dividend growth rates had closely matched the average rate of inflation. For the past 15 years, inflation has exceeded the dividend growth rate by about 2 percent per annum. He gave the opinion that an actuarial valuation should focus on the income producing power of the plan's investments. He believed that investment measures based on market value can mislead clients because they do not give adequate weight to the income component of total investment return.

(Canada)

observed that the Ontario Pension Commission permits the use of discounted cash flow techniques for valuing fixed interest securities, but will not permit the actuary to assume future dividend increased on common stocks held within the portfolio. He agreed with Bleakney that an immunization strategy (which

seeks to match the cash flow on a plan's portfolio with its pattern of benefit payments) is only a substitute, and an unsatisfactory one at that, for using a present value method to value the plan's assets. He is personally opposed to the use of market value in a pension plan actuarial valuation and noted that market values are often artificial and may not correspond closely to the fair value of the assets, may differ significantly from the appraisal value of illiquid assets, and may not represent the realizable value from an actual transaction in the marketplace.

(Canada)

supported the merits of market value techniques, which have the advantage of "neutrality" as mentioned in the Clare paper between bond, stocks and other assets classes. He expressed concern about present value methods, noting the hazard that shifts in the portfolio's asset mix might sharply change the actuarial asset value and artificially impact the plan's current funding rate. He also noted that present value methods can create problems of credibility in the eyes of clients, but concluded that they have utility for some public pension funds, particularly those with significant holdings of low coupon bonds with market values substantially below their book value.

(US)

suggested that the difficulty in explaining the significance of present value techniques could be reduced by showing the client a year-by-year projection of future cash flows on both sides of the actuarial balance sheet.

J. Van Rooijen (Netherlands)

commenting on his paper, noted that his theoretical analysis was seeking a simple solution to the problem of cash flow forecasting, not just for pension funds but for life insurance companies and other institutions.

(UK)

cited the extreme volatility in the UK common stock markets during 1974 and 1975 as an illustration of the need for discounted income methods of valuing assets. Otherwise, asset volatility, which will be a recurring phenomenon, particularly in times of higher inflation, will place undesirable weight on short-term market events and may artificially raise or lower the pension funding rate.

(UK)

stressed the importance of choosing assumptions and asset valuation methods that are appropriate for the valuations of ongoing plans.

(UK)

expressed the view that the fundamental issue in the selection of actuarial methods is the soundness of the parameters inherent in the methods and the internal consistency of the assumptions through which they are applied.

(South Africa) and (UK)

focused on the importance of seeking a result that is reasonable and not overly scientific, noting that an actuary should feel fortunate to get within 10 percent of the "right" answer, and in fact may never know what is the "right" answer.

(Canada)

expressed his support for the discounted income asset valuation method. He believes it is an appropriate technique for establishing the trendline value of a plan's assets and smoothing the fluctuations in market values, thereby maintaining consistency with the basis used to value the plan's liabilities.

W. A. Dreher (US)

in his closing remarks offered five observations:

- When choosing actuarial methods and assumptions, we should look primarily to future expectations for plan experience. Past data are interesting but not predictive of the future outcome or the best basis upon which to develop those forecasts.
- In the US, ERISA assigns to plan sponsors a fiduciary duty to set a funding policy. It is therefore essential that clients understand and endorse the actuarial methods and assumptions through which their funding policy is implemented.
- It is not necessarily desirable that a plan's periodic actuarial valuations incorporate a provision for future benefit improvements, either directly or through modifications in the actuarial assumptions. The likelihood of future plan amendments and the judgment about funding of such plan amendments is a plan sponsor or trustee decision and should not be made by the actuary without the plan sponsor's understanding and support.
- The choice among methods and assumptions should give substantial weight to the comparative ease with which they can be communicated with and understood by clients.
- Finally, responsible judgments by plan sponsors about the suitability of their investment policies and the performance of their investment managers requires a management information system with appropriate accountability standards. The development of short interval performance data is essential, but plan sponsors should avoid the temptation to overreact to short term investment results.