Actuarial Methods and Public Pension Funding Objectives: An Empirical Examination

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Comments on Jones, Murphy, Zorn

By Ryan Labs Asset Management

"Actuarial Methods and Public Pension Funding Objectives: An Empirical Examination" by Jones, Murphy, Zorn empirically described many of the outcomes of liability valuation at market discount rates (Market Value Liability or MVL). While we appreciate much of the descriptive nature of their statistical analysis, we do not share the same conclusion of the aforementioned empirical results. Their main conclusion was troubling: that because market rates lead to volatile valuations, contributions and normal costs, a market-based approach should not be adopted. In our opinion, the ends do not justify the means. The main conclusion of the paper was that smoothing over time has made things smoother, and that "the serious instabilities in the MVL measures would most likely lead either to erratic demands on government resources or plan terminations". We believe that the market is the market, and the volatility described in the paper is inherent in the capital markets.

Public pension plans, like many other financial vehicles, are part of the financial system and are not absolved from following the rules and principles of finance and economics. In fact, by empirically describing the results, we believe that Jones, Murphy and Zorn made the case clear that market values should be used so that the underlying volatility of both assets and liabilities is clearly communicated to all interested parties. This includes municipal debt holders, tax-payers and other users of public financial information.

The paper discussed at length that the "MVL approach would likely result in rapid and erratic changes to a public plan's normal costs, accrued liabilities and funded levels, largely due to changes in the MVL discount rate. By contrast, conventional funding results in measures that are stable and predictable over time." However, we believe that the capital markets are not stable, nor are they predictable: investment return rarely comes without risk. By smoothing both investment and actuarial gains and losses that occur in asset and liability measurement, you cannot take away their underlying properties. Rather, things are made more difficult by a lack of public understanding of actuarial smoothing and measurement techniques. Additionally, the paper implies that MVL proponents would prefer shorter periods of allowed smoothing. In reality, financial economists would not prefer shorter periods of smoothing – they would insist on smoothing being removed entirely in market value measurements.

The paper suggests that the "primary purpose of actuarial valuations in the public sector are to measure funding progress and to establish plan contribution rates. Contribution rates are determined by adding plan normal costs together with the amortized value of unfunded (or more than fully funded) accrued liabilities." We would argue that, if a plan has a high ability (real or perceived) to withstand volatility of the surplus, these methods can be used to determine how much to contribute. However, solvency has no time horizon and it is irresponsible to confuse budgeting with measurement. In other words, if for budgeting purposes a plan makes smoother contributions, that action has no affect on the measurement process. The market is still the market.