## Revisiting Pension Actuarial Science: A Five-Part Series

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## Authors' Response to Comments by Ryan Labs Asset Management

Regarding Discussant's first comment – The current version of the market value of the pension liability is an inadequate attempt at a true fair value measurement attribute. The Introduction and four of the five parts in this series were all about the technical improvements to the current model; hardly a mere distraction. All of Part 3 of the series specifically addresses why a fair value model of the public sector pension liability should utilize a discount rate higher than risk-free (or default-free) rates. Part 4 presents the Residual Benefit Obligation (RBO) as the residual portion of the Contractual Benefit Obligation (CBO) which falls back upon the employer to pay directly to remaining plan members if the plan were to default on its obligation to pay the CBO. This approach models the employer's *current liability* owed to plan members better than the improved version presented in Parts 1 through 3 and far better than the current market value model. It is the most faithful representation of the underlying economic exchanges at play in the three-party pension transaction because it appeals to first principles. As Part 5 explains, the employer's current liability owed to the plan is the original debt restructured, resulting from the employer-plan exchange, and is best measured by something like the Entry Age Normal (EAN) cost method's Unfunded Actuarial Accrued Liability (UAAL). Bottom line: The employer's current liability should be measured by the EAN's UAAL, not less than the RBO.

Regarding Discussant's second comment – If an asset or liability has virtually no possibility of settlement, even over a long horizon, a market or fair value for financial reporting purposes carries virtually no practical decision-utility and no accountability (two important objectives of government financial statements, according to GASB Concepts Statement No. 1). Certainly, if settlement becomes a near term possibility, a market or fair value becomes useful as a note disclosure. Until then, that measurement is not relevant. Until then, the sole or agent employer's statement of net assets should reflect the EAN's UAAL, not less than the RBO, as the most relevant and most useful long term liability. Furthermore, the current delinquencies (such as a Net Pension Obligation) should appear as a subset thereof.

One problem giving rise to the dispute between advocates of MVL and conventional approaches is partly one of worldview communications. Discussant and his fellow MVL advocates have a worldview that sees pension obligations in terms of "pricing". They want a market or settlement price on a given date to be the balance sheet liability. Conventional advocates have a worldview that sees pension obligations in terms of "cost (to taxpayers) of services". The volatile year-to-year hypothetical settlement price (never to occur) is not a measure of the taxpayer cost -- if the liability is never expected to settle in a single sum market price on a given date but settled gradually over 75 years or more. In accounting theory, the EAN's UAAL, not less than the RBO, is the more appropriate balance sheet liability. A second and more general problem giving rise to the dispute lies in the disagreement about the role of the

public sector pension fund in the exchange transactions. The arguments posited for a passthrough treatment of the pension fund are unconvincing in the public sector environment.

Regarding Discussant's third comment – Much of the justification for the market value of liabilities (MVL) has been wrapped in loose terminology. Some have suggested that all assets and liabilities on an entity's balance sheet should reflect the market prices. Discussant's observation about Tier III is on point. As with assets, when there is no market for a liability, its imputed settlement price must be modeled under fair value principles. Discussant states, "Non-experts in financial accounting could easily see "fair value" and "market value" as synonymous." However, we actuaries are the experts in pension valuation. Surely, we should be careful to utilize accurate terminology. There is no baiting going on here; but we experts should switch our terminology. When we discuss financial reporting, we must align our terminology with the accounting profession if we ever expect to have two-way communication. If MVL advocates do not like where that leads them, they should reconsider their hard-line position rather than quibble over the terms.

Regarding Discussant's fourth comment – Discussant illustrates the communication gap. Market discount rates represent economic reality only if the liability were one that is commonly traded or if there were any reasonable possibility of a punctuated near term settlement. Without those conditions, pegging balance sheet value on volatile year-to-year bond market prices is economic unreality. A mere curiosity at its best, an opaque and misleading measure of the cost of services to taxpayers at its worst.

At least we do agree that understanding the risk, ruin and return associated with plan solvency is imperative. However, reporting a market or fair value of the liability on the balance sheet or in note disclosures fails to give users the information they need. Other information is far more useful to stakeholders and other decision-makers. Indeed, Discussant's comments on the extent of inverse correlation of pension funding requirements with sources of revenue are appropriate. Such analysis would be a worthy objective. However, reporting a market or fair value of the liability on the balance sheet or in note disclosures fails that objective. There are much better metrics for such analyses. Finally, investing all or most of a public sector pension fund in fixed income instruments by professional money managers, while benefiting certain financial sectors of the economy, was not the topic of this series of papers. Investment policy is a related but different topic from measurement of the liability which we sought to address in this series of papers.