

Article from:

The Pension Forum

January 2003 – Volume 14 – Issue 2

Authors' Response

1. Introduction

We thank our commentators for enriching a debate that we believe is vital to the future of the pension actuarial profession. Before responding to their specific comments, we briefly remark on the scope of our article and our response.

The authors have forty years of combined experience in "traditional" pension consulting and are well aware of the virtues of defined benefit plans. We believe, however, that radical change is now necessary in how actuaries measure liabilities and develop plan costs. Such change must be accompanied by difficulties and dangers and compromises. As Mr. Lowman implies, there may be areas where proposed changes will be worse than the disease. To choose between alternatives actuaries must thoroughly understand the disease and any proposed changes.

To this end, we seek to enhance actuaries' understanding of finance by focusing initially on its principles rather than on the practical effects of integrating finance into the actuarial process. We have taken on the deliberately narrow issue of liability measurement not because we do not understand investments and not because we do not understand and appreciate the complexity and elegance of the pension actuarial model. We have done so because we believe that pension actuaries who want to integrate the lessons of finance and pension actuarial practice need to begin with just such a narrow focus.

Our commentators have remarked well beyond the scope of our paper. They take some implications into the areas of accounting, funding, investment, and benefit design. For the most part, in our response, we continue our narrower focus with the expectation and intent that these expanded topics will be the subject of future research and writing.

2. Issues raised by Mr. Thomas Lowman

We are pleased that Mr. Lowman has provided a wide-ranging and thoughtful discussion. It is likely that he speaks for the perspective of many practicing pension actuaries today.

2.1 Rates: Mr. Lowman uses various rates of return for stocks, bonds and annuities as examples of what might be available in markets today. Our paper uses a 5% Treasury return to measure liabilities underwritten by a pension sponsor with no default risk. We begin there in order to contrast riskless liabilities and the often risky asset mixes that fund them. Other than the U.S. government, no plan sponsor may be properly described as entirely free of default risk. For the more realistic case of a well-funded ERISA plan sponsored by a strong sponsor, we advocate a "near riskless" discount rate.

We discuss the determination of discount rate curves in Principle 4. To respond to Mr. Lowman, we assume here that rate curves are flat and that 4.5% represents the Treasury curve. Consistent with this floor, the strongest corporate sponsors of well-funded DB plans might properly use a triple-A discount of about 5% while weaker sponsors of funded ERISA plans might use double- or single-A rates of 5.5% to 6%. Unfunded plans (e.g., OPEBs or SERPs) of weaker sponsors would be discounted at much higher rates related to the sponsors' unsecured borrowing costs (e.g., debentures).

Mr. Lowman hypothesizes a 6.5% rate for a closeout annuity purchase. With interest rates at the levels suggested above, we doubt that such a rate would be available in the market. If the insurance company basis were adjusted to match typical FAS 87 demographic assumptions and to remove expense loads, we believe that the discount rate required to reproduce the annuity purchase cost would fall well within the range we suggest above.

2.2 Principals and Agents:

Mr. Lowman takes issue with our Principle 5, that risks are borne and rewards earned by individuals rather than institutions. He describes what he tells his client, the plan sponsor, who "takes the long term view of what is best for the company (or government sponsor) and not what might be best for current shareholders/taxpayers. The idea that a shifting group/generation of shareholders/taxpayers exists is often a secondary issue." Here he confuses the roles of principal and agent. The managers, regardless of tenure, are the "hired hands," the agents, of the shareholders (principals) who own the enterprise. Modern finance recognizes that companies and similar institutions "are simply legal fictions which serve as a nexus for a set of contracting relationships among individuals." (Jensen and Meckling, 1976, p.310). Jensen and Meckling go on to observe that shareholders are that special group of contractors who own the residual claims on the assets and who have the right to sell these claims without the permission of other contracting individuals.

To the extent that it is possible to say "what is best for the company," today's shareholders are "the company." Managers must of course accommodate themselves to the rules and mores of society but, as managers, they have no higher duty than to act as loyal agents seeking to protect and grow shareholder value.

Mr. Lowman assumes that a long-term view by management conflicts with the interests of current shareholders. The value of a stock, however, is the value of all its future earnings. When management makes an investment that market participants expect will deliver long-term benefits, it delivers value to *current* shareholders.

2.3 Pension Obligation Bonds:

Mr. Lowman comments that we state that Pension Obligation Bonds have a net economic value of zero, but he believes that the intergenerational inequity is limited as long as the unfunded liability change is amortized. Although we begin our comments regarding POBs with a hypothetically neutral economic example (where the sponsor is able to borrow at Treasury rates), we quickly observe that any borrowing at rates above Treasuries leads to

negative value. POBs are issued because they lower the actuarial cost of Gen 1. Because their total economic value is negative, Gen 1's lower cost must raise the risk-adjusted cost of subsequent generations.

2.4 Actuarial Standards of Practice: Mr.

Lowman refers to our criticism of incrementalism in actuarial standards and then points to our own incremental approach to the proposed ASOP in re actuarial asset valuation methods (see "Selection of Asset Valuation Methods" in this Pension Forum). We are concerned that the standard-setting process admits only incremental improvements, even when the times may require radical revision. We point to the accounting profession, which is now considering a radical revision of its core "historic cost" paradigm. Nonetheless, we must make do with what is available. Today that means that recommendations we make to the ASB may be incremental. Note, however, that our preferred standard for the profession would eschew all asset values other than market. When compromise is necessary, we prefer to aim at the best possible future standard, compromising only on the timing of its adoption.

2.5 Immunization/Annuitization - Back to the Future?: Mr. Lowman labels as a "back to the future" concept our suggestion that sponsors wishing to reduce or eliminate pension volatility do so via immunization or annuity purchase. To the extent that our pension actuarial roots (e.g., Trowbridge, 1952) precede the massive 1960s shift to equities, he's right. To the extent that annuities and immunized bonds may better serve participants, shareholders, and interested institutions (e.g., the PBGC), should we and those sponsors not analyze the issues afresh rather than dismiss them as backward? The "modern" actuarial answer, using smoothing to conceal the volatility of mismatched pension assets and liabilities, does not appear to us to carry much forward viability.

2.6 Accounting: Mr. Lowman makes several inferences beyond the content of our paper in the area of accounting. We agree with his inferences that a finance-based accounting model would: i) employ the traditional unit credit method without salary scale; ii) define liabilities that resemble the ABO; iii) use actual

rather than expected returns; and iv) immediately recognize gains and losses (McConnell and Reese, 2000).

Financial economics, and the "fair value" accounting standards under consideration by the IASB and FASB, try to measure liabilities based on the market value of similar promises. 18 Promises related to employment may vary with respect to their contractual certainty, and no rule may be applied blindly to all situa-To the extent that automatic post-retirement COLA's are contractually defined (by, e.g., a pension plan document or statute), Mr. Lowman correctly appraises the proper financial treatment. While contractually determined future salaries might also be included in current liability measures, we believe that the "implicit contract" to offer regular salary increases does not rise to the level necessary for advance recognition. Economics teaches us that, in a free economy, future salaries will depend on competitive market forces.

2.7 Funding: Inferring further beyond our scope, Mr. Lowman says "I have interpreted the paper as stating that the authors want cash cost to be based on 4.5% interest and market values of assets just as expense would be based on these factors. I expect that the authors would like more conservative funding yet would not require immediate funding of any gains and losses."

Our paper does not support this interpretation. Unlike measurement, where capital markets data and economic principles may be sufficient to reach conclusions, prescriptions for funding must include social judgments. We have not offered such judgments, although we have noted a symptom of funding failure in our Violation 6. The ways in which actuaries have addressed these issues (SOA, 1996 and CIA, 1998) in recent years illustrates the role that judgment must play. As a matter of economics, we note that before ERISA this was a matter to be decided by the promise maker and the beneficiary. With the passage of ERISA, Congress dealt itself into the equation arguing that the protection of the beneficiaries was a societal issue.

3. Issues raised by Messrs. Robert McCrory and John Bartel

Messrs. McCrory and Bartel defend existing pension actuarial practice and equity investment. Their defense is statistical, based on a model that distributes returns on asset portfolios and concludes that a plan will require lower average contributions if the plan invests in assets that offer higher average returns.

The basis of our paper is financial. It draws on the lessons of financial economics to illustrate how markets value cash flows that exhibit certain properties. As McCrory and Bartel indicate, we spend much time working with examples in which defined benefit plan liabilities of debt-like properties. Our treatise is more comprehensive, however, and worthy of a more careful read. We do not, for example, assert that the proper discount for pension liabilities is the riskless rate. We encourage our commentators and readers to look carefully at our discussion of Principle 4.

3.1 Return Distributions, Statistical Visualization, and Science: McCrory and Bartel imply that we ignore the return distributions of various asset classes and the implications thereof for pension investments and thus for funding. Our paper addresses the measurement of liabilities, which is an important first step towards the development of rational funding and investment strategies. Because much of their discussion deals with funding and investment issues not raised in our article, we respond to their comments that lie within the boundaries of our article.

McCrory and Bartel assert that their statistical approach is science, while the lessons of financial economics are something else. But we would characterize their procedure of generating their own data from their own assumptions as "visualization" or "illustration," rather than

For an overview of fair value accounting see FASB (2000).

¹⁹ In this paper, we focus primarily on accrued pension liabilities. In a future paper we will explain why the present value of accrued benefits meets various definitions of liabilities that are not generally met by actuarial measures that include future salary increases and non-contractual cost-of-living increases.

science. Principles of financial economics begin, as science demands, as falsifiable hypotheses, which are then tested minute-byminute and day-by-day in the real world of financial markets. In the fifty-year history of financial economics, very few hypotheses have survived. One survivor, so far, is the hypothesis that riskier assets are priced to anticipate higher mean returns. Thus the existence of, and investor demand for, the "equity risk premium" is, we may agree with McCrory and Bartel, a scientifically supported concept.

McCrory and Bartel challenge our asserted Violation 3, biasing investment decisions. They regard this bias as an appropriate reflection of the superior long-term performance of equity. We would recognize such superiority only as it occurs, not in advance. Discussing Principle 3, we state that "In determining present value, financial economics does not recognize equity risk premiums not yet earned for risks not yet weathered." McCrory and Bartel dispute this statement: "[t]he idea that the rewards of risk should only be taken after the risks have been run is a value judgment. It is not a principle of finance, though it may be a moral or religious principle to some."

Fortunately, we can settle this dispute by observing a transaction that illustrates precisely how the market values future risk premiums. Our discussion of Principle 1 describes a swap in which one party will receive the return on a \$1-million equity portfolio and pay the return on a \$1-million Treasury portfolio – in other words, that party has acquired the stream of risk premiums. We show how, under arbitrage pricing, that equity risk premium stream must have a present value of zero. If McCrory and Bartel wish to test their rejection of this principle scientifically, they may offer this risk premium stream to investors. They will find that no investor, of any moral or religious persuasion, will pay a positive up-front price for it. But if McCrory and Bartel offer to buy this stream for any positive price, they will find many happy sellers.

Of course, actuaries who anticipate risk premiums in pension valuations do not literally value a \$1-million equity portfolio more highly than a \$1-million Treasury portfolio. They achieve the same result indirectly, however, when they value liabilities financed by equity more cheaply than the same liabilities financed by bonds. In discussing Principle 4, we have shown why the higher expected return of equity is irrelevant to the valuation of equity-financed liabilities.

3.2 Risk Transfer: Elsewhere, McCrory and Bartel simply dismiss our arguments as wrong, rather than engaging and challenging them on their own terms. They state that "The transfer of risk to future generations that so concerns Messrs. Gold and Bader is very small." Financial economics teaches that the value of risk is measured by the market price necessary to dispose of it. McCrory and Bartel wish to substitute the probability of shortfall ("in less than one out of five cases") as a risk measure. Statisticians will recognize that shortfall probability is an "insufficient statistic" that fails to account for the severity of the dollar shortfall and for its disutility (as gauged by a consensus of investors – the very same consensus that demands and necessitates the equity risk premium in the first place).

To repeat in highly simplified form our argument concerning Violation 1, would you prefer to be taxpayer Gen 1 paying a certain \$1million pension cost, or Gen 2 paying an expected \$1-million cost, but more if equity performance is worse than expected and less if it is better? Our article refers to Gold (2002). which shows how the fundamental tool of finance, arbitrage pricing, quantifies the value of the risk borne by Gen 2. To assert that Gen 1 and Gen 2 are equally burdened is to dismiss the overwhelming empirical findings of financial economics that people attach a negative value to risk. To dismiss the risk as "small" because it happens "in less than one out of five cases" is an unacceptable position for those who aspire to be "the leading professionals in the modeling and management of financial risk."

Actuaries are frequently troubled by the implications of equity investments combined with liability discount rates that do not include the equity risk premium. McCrory and Bartel voice this concern:

"This approach would force the actuary to compute and the plan sponsor to contribute according to a funding pattern that will probably decrease over time as actuarial gains emerge. If anything, the current generation of stakeholders pays more than it should so that future generations can benefit. This is contrary to the ideal of generational equity the authors espouse."

Traditional actuarial practice and education emphasize the virtue of level *expected* costs over time. When multiple generations invest in risky assets, and use the expected returns thereon to discount liabilities, the allocation of expected costs is level but the allocation of risks – and therefore of risk-adjusted costs – is not (Gold, 2000, p. 31). Finance teaches that we cannot combine risky investments, level expected costs, and equal risk burdens across generations. Now that we know that risk and reward are inextricably tied, we may ask the professionally important question: "what is fair?"

3.3 Principals and Agents Redux: McCrory and Bartel observe that "the plan sponsor [by which they mean the agent of the plan sponsor] cares about ... costs, not liabilities. Any actuary who has presented an actuarial valuation is aware of this." Even if we understand this as an effort to define the profession's responsibility to plan constituents, it is a parochial view which ignores the interests of the plan's principal owners. Although the agents of the sponsor (the CFO or the City Comptroller) may care about costs, the informed principal should care about the value of the promises made to employees in exchange for services delivered today. The value transferred is the cost of the promise and is not amenable to traditional actuarial manipulation.

3.4 Which Model to Choose: In their section "Which Model to Choose," McCrory and Bartel observe that "pension plans aren't debt" and that "pension plans are, well, pension plans." Here they make a genuinely important contribution to our dialogue by properly limiting the applicability of debt analogies. Pension contracts constitute securities that are not perfectly replicated in the capital markets. For

most pension promises that have attained the status of liabilities, however, the debt model provides an excellent approximation. Fortunately, the debt market reflects a wide variety of contingencies similar to those found in pension payments – credit risk, calls, adjustments in amount (floating rates, inflation-indexed Treasury notes), or prepayment risk (mortgages). Thus portfolios of debt-like instruments may accurately measure much of the financial effect that pension obligations have upon their sponsors.

3.5 What the Profession Should Do: McCrory and Bartel advise the actuarial profession not to "follow ... the principles of another profession." We advise actuaries not to dismiss finance as "the principles of another profession" any more than physicists should dismiss mathematics. Financial economics offers actuaries invaluable tools that describe how markets work, how securities are valued, and how corporations finance their activities. Actuaries possess, in abundance, the capacity to understand finance, indeed to advance it, and to apply its principles to our practices.

4. Issues raised by Messrs. Zvi Bodie, John Ralfe, and Robert North

We endorse Mr. Bodie's recommendation of the Bulow article, which is two decades old but well worth the attention of readers interested in a financial economist's view of pension liabilities. We thank Mr. Bodie for his own work in the area of pension finance and for his own article citations.

Mr. Ralfe offers a lucid explanation of the Boots PLC pension fund restructuring. His comment shows how far actuaries will have to raise their game to advise executives interested in how pension plans affect shareholder value. Mr. Ralfe understands perfectly well that the Boots reallocation from equity to bonds raises the expected contributions to the pension plan. Pension actuaries must understand equally well why it also raises shareholder value.

Mr. North asks us to address the implications raised by our paper in the areas of pension plan funding, investment, benefit design, and accounting. We have extended our remarks in these directions in the preceding portion of our response, and we will refer back to those remarks in our response.

Concerning funding, we address Mr. North's concern about intergenerational equity in the concluding portion of Section 3.2.

Concerning investment policy, Mr. North asks, "If a plan sponsor can handle the risk of equities in its pension fund, why not?" As we explain in Principle 5 and Section 2.2 above, the "plan sponsor" must not be regarded as an independent financial entity with financial interests that are different from (and superior to) the shareholders or taxpayers who bear the burdens of plan sponsorship.

Concerning benefit policy, Mr. North asks, "Do the parties involved in negotiating benefit improvements really want to value benefit changes without getting the benefit of advance recognition for risk?" See Section 3.3: the *agents* (managers, elected officials) involved in negotiations might want to anticipate risk premiums and thus understate the value of benefit increases, but the *principals* who bear the cost and the risk do not.

Concerning accounting, we address only Mr. North's broad question, emphasized in his conclusion: "... for accounting/expense policies, it is not clear how more proper measurement can effectively assist policy makers ... could such proper measurement, if demanded by accounting rules, result in those rules becoming drivers, rather than measurers, of pension funding, investment and/or benefit policies?" As we discuss in our paper, measurement under current accounting and actuarial principles clearly influences pension policies now, in ways that can be destructive to shareholders or taxpayers. Until we are shown plausible counter-examples, we will continue to believe that better information would produce better policies.

5. Conclusion

We have taken on the deliberately narrow issue of liability measurement because we believe that pension actuaries who want to integrate the lessons of finance and pension actuarial practice need to begin with just such a narrow focus. The existing pension actuarial model (including its somewhat stochastic sister models that are referred to by McCrory and Bartel) began as a budgeting system for smooth employer contributions at a time roughly coincident with the dawn of modern finance. This budgeting system has been extended to serve many purposes other than budgeting and, in doing so, it has come into conflict with other disciplines that address these same purposes including, at least, finance and accounting. The issue of liability measurement is an ideal base to study this conflict. This is particularly true now that the accounting profession has taken more than a few steps in the direction of agreeing with finance.

The comments on our paper suggest to us three critical insights that we hope readers will take from this work:

- 1. It is erroneous to attribute to "the plan sponsor" financial interests such as the ability to bear risks or the entitlement to rewards. These attributes belong only to those who actually bear the burdens of plan sponsorship taxpayers/shareholders.
- 2. Liabilities are measured without regard to the expected return on risky assets that may be used to fund these liabilities.
- 3. Outside the actuarial profession, the vast majority of thought leaders in the financial community agree with 1. and 2.

Recent events in the capital markets and corporate world make it increasingly difficult for actuaries to maintain that pension plans are so different from all other financial entities that they must be measured and governed by a long-term self-correcting process that obscures the information to which the ultimate "plan sponsors" are entitled. As Mr. Lowman concludes, the profession must seriously engage the teachings of financial economics and either refute their logical and empirical bases or – as we believe – realign pension practice to accord with these teachings.

References

- Canadian Institute of Actuaries, "Pension Plan Funding: A Fresh Approach," Task Force on Pension Plan Funding, October, 1998.
- FASB, "Using Cash Flow Information and Present Value in Accounting Measurements," *Statement of Financial Accounting Concepts No. 7*, Financial Accounting Standards Board, February, 2000.
- Gold, J., "Risk Transfers in Public Pension Plans," *Pension Research Council*, 2002.
- Gold, J., "Assumed Rates of Discount for Valuations of Publicly Sponsored Defined Benefit Pension Plans," Pension Research Council Working Paper 2001-6, September, 2000.
- Jensen, M. C. and Meckling, W. H., "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure," *Journal* of Financial Economics 3, 1976, pp. 305-360
- McConnell, P. and Reese, A., "When Pension Cost Becomes Pension Income," Proceedings of the Conference of Consulting Actuaries L, 2000, pp. 152-162.
- Society of Actuaries, *Pension Forum 9, No. 1*, September, 1996.
- Trowbridge, C.L., "Fundamentals of Pension Funding," *TSA 4*, 1952, pp. 17-43.

May 15, 2002

Selection of Asset Valuation Methods Actuarial Standards Board 1100 Seventeenth Street, NW, 7th Floor Washington, DC 20036-4601

By e-mail: comments@actuary.org

ASB Board and Committee Members:

We are writing to comment on the Proposed Actuarial Standard of Practice – Selection of Asset Valuation Methods for Pension Valuations.

The proposed ASOP gives the ASB an opportunity to make a positive professional statement by endorsing the use of market value (or fair value, for non-traded assets) as the single best measure of pension assets.

We encourage this definition of a *best practice* standard within a range of acceptable but notably less scientific measures. We recognize that existing codifications (principally, ERISA, FASB, and GASB) and sponsor expectations and preferences demand a wider range of allowable practices. Fortunately, each of these codifications will permit our recommended best practice.

It is useful to review the origins of the actuarial asset valuation methods. The Jackson-Hamilton (1968)²⁰ paper (and its excellent discussions) is a superb starting place, not only for what it includes, but for a sense of its era implicit in its omissions and its unstated presumptions.

We learn from the Jackson-Hamilton paper that:

- The significant and growing allocation of assets to the equity markets had exposed some of the frailties of earlier book value methods:
 - Book and market values necessarily converge for bonds held to maturity, but not for equities.
 - There is no economic reason to distinguish among dividends and realized and unrealized gains. Differentiation among these may lead to manipulative trading strategies.
 - o Equities, valued at market, transmitted volatility to plan contributions. Many actuaries deemed much of this volatility to be specious. Virtually all actuaries and sponsors found such volatility unattractive.
- The prime function of pension actuaries was to create a sponsor contribution budget. Secondary objectives included compliance with accounting and tax regulations and actuarial soundness. Sponsors wanted smoothness on the one hand and sufficient recognition of expected and achieved equity returns to keep costs low. Jackson-Hamilton framed the entire process as a balance of these objectives in classical actuarial fashion: "[T]he choice [of

Jackson, Paul H. and Hamilton, James A., "The Valuation of Pension Fund Assets," Transactions of Society of Actuaries 1968, Vol. 20, Pt. 1, No. 58, pp 386-436.

THE PENSION FORUM

method] will depend on the relative weight assigned to the criterion of smoothness of contribution as compared with fit of value to market."²¹

Conflicts of interest, real or potential, among shareholders, participants, government agencies and other regulators were not yet a significant issue.

ERISA still lay in the future and APB8²² was brand new: "Current legislative proposals (e.g., Senate bills introduced by Senator Yarborough and Senator Javits) to impose stricter minimum funding standards on private pension plans and the rigidity in pension costs resulting from a strict application of the rules in Opinion No. 8 by practicing accountants may force employers to explore the possibility of changing some of the actuarial assumptions, the method of funding, and the method of valuing pension fund assets in order to minimize the impact of any required changes."²³

Modern financial and investment principles were in their infancy and beyond the scope of the day's typical pension actuary: "[A]ctuaries in America have usually disclaimed investment expertise and have been prone to leave asset valuation problems to the employer, trustee, or insurance company."²⁴

Nonetheless, Jackson-Hamilton recognized that: "From an investment standpoint at least, it appears that current market value has been fairly well accepted as **the only true measure of asset value**." [Emphasis added] This suggests that the actuarial view of specious volatility (hinted at even in today's proposed ASOP by the phrase "short-term volatility in market value" was not a dominant view.

Three decades later, we have acquired some greater insights and encumbrances:

- Volatility is a property of markets; it is not a disease for which actuarial methodology is the cure.
- ERISA, SFAS 87, and GASB 25 permit actuarial asset valuation methods to smooth asset values and ultimately to smooth sponsor contributions and reported expenses.
- Sponsors still desire smoothness of expenses and contributions. Although many know that
 hedging (asset-liability matching) may be used to reduce volatility, they do not wish to reduce
 expected returns. They generally prefer to take advantage of the permitted actuarial/accounting
 smoothings.

We may not be unilaterally able to move client sponsors toward a choice between lower expected returns and volatility, but we have sister professions who may be our allies in such a transition. These include MBAs, CFAs, financial engineers, securities analysts and, trailing slightly behind these others, CPAs. Our own well-trained recent Investment FSAs share the skills and disciplines of many of these professions.

36

²¹ Op. cit. p. 386.

Opinion No. 8 of the Accounting Principles Board (1966).

²³ Jackson-Hamilton, p. 389.

Op. cit. p. 387.

Op. cit. p. 388.

Paragraph 3.2.1.

THE PENSION FORUM

These professions have preceded us in accepting the teachings of financial economics. They may fully repudiate off-market asset values before we even begin. We are in no small danger of being left behind, with a concomitant loss of credibility and stature among policymakers, regulators and investors

The proposed ASOP has the potential to be a watershed. We can use it as an opportunity to define market value as our best practice and take a leadership position in encouraging legislative and regulatory reform. Alternatively, we can continue to endorse practices that have lost relevance in a financial world sensitized by episodes of opaque and misleading financial disclosure.

We will forward shortly a paper by Lawrence N. Bader and Jeremy Gold.²⁷ It outlines some greater challenges to pension actuarial technology and to the remaining pieces of ASOP 4, Measuring Pension Obligations. In doing so, it lays out some of the lessons of financial economics that the authors have learned and applies them to our science. ASB members may wish to review the article for a sense of the world from which the specifics of this commentary letter are drawn.

Finally we outline our recommendations specific to the proposed ASOP:

- Define a *best practice* using market value for liquid assets and fair value for other assets. Identify acceptable departures from this best practice. We note, however, that until the ASB also identifies as a best practice a market-type valuation of liabilities, the use of market value for assets will not necessarily improve the measurement of funding status.
- Remove references to short-term volatility of assets as a motivation for smoothing and
 acknowledge that the sole reason for non-market asset valuations is to meet sponsor desires for
 smoothing contributions and expenses. It does not serve pension actuaries well to suggest that
 a "true" value of assets lies hidden within volatile markets and that actuaries are especially well
 prepared to find it.
- Remove paragraph 3.2.2 as presently written. Acknowledge sponsor prerogatives under certain regulations and statutes. Further acknowledge the interests of other constituents, including participants, shareholders, lenders, taxpayers, the Pension Benefit Guaranty Corporation, and others who rely upon our professional representations.
- State in the preamble that we would welcome a legislative and regulatory requirement to use market value for pension assets.
- Make a more explicit statement on the use of market value restarts (for example, in paragraph 3.6). It is not uncommon, particularly in the public plan sector with plans subject to GASB, for actuaries to be whipsawed between requests to raise investment return assumptions when interest rates rise (and market value is likely to be below the actuarial asset value) and requests to restart the actuarial asset value at market when market value exceeds the actuarial value (and interest rates are likely to have fallen). Because ASOPs give both latitude and protection to practicing actuaries, we must recognize that excessive latitude may limit the actuary's ability to resist this kind of double bind.

The paper speaks for its authors and does not necessarily represent the views of the undersigned.

THE PENSION FORUM

We hope that the evolving Actuarial Standards of Practice will serve to bring about change sooner rather than later. We would very much like to see the actuarial profession lead the reformation of pension finance, rather than be towed in its wake.

SIGNED

Eleven Fellows of the Society of Actuaries

Lawrence N. Bader Jeremy Gold H.J. Brownlee Richard Daskais Arshil Jamal David Kass Syen Sinclair

Margaret M. Warner

(plus three who do not wish their names on this "public" document.)