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Re: Invitation to Comment: Pension Accounting and Financial Reporting

Thank you for developing and issuing the Invitation to Comment (ITC): Pension Accounting and Financial Reporting, and for undertaking the project of which it is a part. It is an excellent document and I am pleased to have the opportunity to offer my views.

I request the opportunity to participate in the public hearing in Norwalk on August 26.

I have attached two papers that are referenced in my comments (see last page). These papers are also available on the internet.

Jeremy Gold

# Response to Invitation to Comment Pension Accounting and Financial Reporting

by

Jeremy Gold, FSA, CERA, MAAA, FCA, PhD

Thank you for developing and issuing the Invitation to Comment (ITC): Pension Accounting and Financial Reporting, and for undertaking the project of which it is a part. It is an excellent document and I am pleased to have the opportunity to offer my views.

I am a pension actuary (FSA, CERA, FCA, MAAA, formerly EA) and economist (PhD). Although I am or have been a member of volunteer leadership at the Society of Actuaries, the Academy of Actuaries, and the Conference of Consulting Actuaries, I do not represent them in this effort in any way. I speak for myself alone.

The ITC raises questions that have been carefully crafted to help the GASB analyze and resolve important financial reporting issues in respect to public employee defined benefit pension plans. In what follows I have answered most of the questions posed in the fashion requested by the ITC. I would also like to offer initial comments at the broadest level with respect to the issues at hand.

Current accounting standards for public defined benefit pension plans and OPEBs have relied heavily on actuarial methods and assumptions that were developed decades ago for purposes that are notably different from those associated with financial reporting.

Actuarial approaches were designed to manage cash flows from an employer into a reservoir where they would be accumulated, invested, and eventually paid out to employees long after services were rendered by those employees. For both actuarial and financial reporting purposes, it is necessary to identify resources today that are not delivered to employees contemporaneously. Because this deferral feature is common to both practices, it seems, at first blush, that one might use the actuarial technology to serve an accounting purpose. But doing so ignores the important differences between keeping score (financial reporting) and managing cash flow (actuarial).

Actuarial principles are based on a view of an employer as one who sets aside funds with the intention of using the funds in the future to meet promises that the employer makes to its employees today. The idea is to develop a schedule of smooth savings behavior that may be expected, on average, to underpin a schedule of benefit payments at much later dates. The value today of promises made today, an important part of the total compensation earned by employees, is not a focus of the actuarial model. Only under rare circumstances would an actuarial “liability” meet the definition of a liability found in Concepts Statement 4 (CS 4). And only under rare circumstances would contributions recommended by an actuary equal the value earned contemporaneously by employees.

Decades ago pension plans were sold and managed by insurance companies who offered deferred annuity contracts to employers. These contracts were irrevocable promises made to pay employees in the future amounts determined and paid for by the employer today. The employee received total compensation each year that included his salary and his interest in the deferred annuity. The employer paid each year the employee’s salary and

the premium for the deferred annuity. The accounting was simple. The employer sacrificed resources today exactly equal to the annuity premium. Under these rare circumstances actuarial and accounting approaches were synchronized.

But since then, first insurance companies and then independent actuaries devised methods designed to meet goals very different from the accurate measurement of the value of a promised benefit. Actuarial methods were designed, at first, to overcharge systematically for benefits earned early in an employee's career and to undercharge later on. Conservatism and stability of premiums were the goals and this was acceptable to the employer because, once separate from the insurance industry, overpaying early did not matter because the resources were conserved.

With increasing investment in equities, in the 1960's for many private sector plans and later for those in the public sector, actuaries made further modifications designed to meet employer goals. Using expected rates of return that anticipated rewards for risks not yet taken, the actuarial process swung from overpricing benefits to potential underpricing. Once again, there were few complaints because the employer was responsible for making good on the promised benefits. The actuary and the investment managers did not replace the insurance company as guarantors of the benefits nor as guarantors with respect to the adequacy of contributions.

Each of the accommodations in actuarial technology separated the process from ideal accounting and from transactional marketplaces. It seemed unimportant for the actuary to reflect the exchange of services for promises at current prices or on market terms. While this might have been all right in some practical way, it meant that accounting and financial reporting were being driven further and further away from the principles that have since been laid down in the Concepts Statements. Whether the accounting profession intended to or not, it had become entirely dependent on actuarial technology that, upon review, may be seen to be highly subjective and overly accommodative to the desires of the employer.

Actuarial separation from market values has been enormous and has varied over time from gross overstatement of the value of benefits (in the early 1980's) to gross understatement in recent years. Benefit promises are more valuable and costly in periods where interest rates are low and more of total compensation has to be set aside in those times. But actuarial approaches have kept discount rates in a range between 7% and 9% for most of the last twenty years as interest rates in the capital markets have declined steadily over the same period. More than twenty years ago, when actuarial rates were typically in the 5% to 6% range, market interest rates were in double digits. Actuaries often argue that they take the long view and have been proven right over decades. But the truth is that actuaries grossly overpriced benefits for more than two decades and have subsequently been underpricing them for fifteen years or more.

Recent developments have exposed weaknesses in the actuarial approach that many actuaries seem unwilling or unable to acknowledge and accept. The question for accounting standard setters must be: shall accounting continue to follow an approach that has separated itself from accounting concepts and from transactional markets or shall financial reporting follow accounting principles and concepts from the ground up?

## **Chapter 2: Question 1**

The inclusion of information based on the incurral of pension obligations to employees in financial reports best fits the GASB objectives of accountability, decision usefulness, and the assessment of interperiod equity. Further, when contributions to defined benefit plans are based on a different process, the same GASB objectives require that contribution and funding information be made available.

Benefits promised to employees become liabilities when they are earned consistent with Concepts Statement 4 (CS 4) which defines liabilities as “present obligations to sacrifice resources that the government has little or no discretion to avoid.” The services performed by public employees give rise to two types of liabilities:

- Salaries and currently consumed employee benefits, until paid, are liabilities that arise from the employment compensation exchange transaction. When paychecks are issued frequently, the liabilities for unpaid salaries arise and are settled in short order.
- Pensions and other postemployment benefits are deferred compensation which, until paid, are liabilities that arise from the employment compensation exchange transaction. These liabilities persist until settled many years after they are earned.

There can be little doubt that pensions are liabilities incurred by a government at the time employment service is rendered. This is not to say that measurement is easy or that the amount allocated to each period of employment is obvious. It is to say, however, that the liabilities arise directly from an exchange transaction and not from the financing arrangements adopted to acquit the government of its obligation.

The principle of accountability derives from the taxpayers’ “right to know” how good a steward government has been with respect to public resources. “[G]overnments focus on providing services and goods to constituents in an efficient, effective, economical and sustainable manner.”<sup>1</sup> Citizens’ taxes provide the resources that support those services and goods. The largest single expenditure is labor cost which includes salaries and deferred compensation (primarily pensions and OPEBs).

When total compensation has been properly measured and allocated to a period of employee service, a basis is created for assessing accountability and interperiod equity. Citizens will be able “to receive openly declared facts that may lead to public debate by the citizens and their elected representatives” (CS 1). A critical element of good stewardship of public resources is the accurate measurement of total compensation so that citizens can make judgments about the appropriateness of that compensation (in comparison to labor markets generally) and can judge whether such compensation was commensurate with the services produced by compensated employees.

Interperiod equity is measured by answering “whether current-year revenues are sufficient to pay for current-year services or whether future taxpayers will be required to assume burdens for services previously provided.” (CS 1) This question can be directly

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<sup>1</sup> GASB (2006) White Paper “Why Government Accounting and Financial Reporting is – and should be – different. Page 7.

answered in a pension context by comparing contributions made to the pension fund (however those contributions may be determined) to the value of deferred benefits earned in the same period.

At any given time, benefits accumulated to date (assuming that allocation to periods has been dealt with) can be remeasured in a fashion consistent with a focus on exchange transactions to date. A comparison of these liabilities with the market value of plan assets can tell citizens, elected officials, and other decision makers about the aggregate performance of the plan. More detailed analysis should be able to explain how differences between plan assets and liabilities may be attributed to contribution policies to date, asset and liability performance including the effect of risk measurement and management, and actuarial gains and losses. Each of the elements analyzed (including many not listed here) has decision-making significance. If, for example, assets have performed very differently from liabilities, it may be appropriate to reconsider investment and risk management policies. If actuarial gains and losses (other than those attributable to events in the capital markets) are seen, analysis may help decide whether employment policies need to be changed (for example, is excessive overtime being credited at late ages in final average plans?) or whether actuarial assumptions need be changed (if, for example, people are retiring much earlier or later than has been assumed).

When funded assets do not equal liabilities, decisions need to be made about how different periods in the future can be credited with surplus assets or charged for unfunded liabilities.

In contrast to the objective, market-measured, transaction-based approach consistent with Concepts Statements, actuarial methods derive from a different root with a different set of goals and objectives.

None of the above (accountability, assessment of interperiod equity, criteria for decisions) can be done with any accuracy by taxpayers, employers, and other decision makers when an actuarial process is inserted in between the objective facts (benefits earned to date, assets accumulated to date, market measures of future values) and the users of the information. An actuarial process can be very helpful in connecting volatile realities of pension finance to governments' need to manage a budget that is reasonably predictable from year to year. It is, however, the very existence of objective market-measurable exchange-based values that allows interested parties to assess the effectiveness of an otherwise opaque actuarial system that combines subjective judgments by actuaries, operating objectives of plan and government administrators, extended periods of deferral for poor past performance, and a host of other moving parts into a hodgepodge that cannot be unbundled.

In short, the process by which an employer finances its projected future cash outflows is important primarily because it results in recommended contributions. All of the accounting and financial reporting goals espoused by the GASB make necessary a set of measures and periodic allocations that is substantially removed from and independent of the actuarial stew.

### **Chapter 3: Question 2**

The definition of a liability in CS 4 compels recognition of the accrued benefit obligation (however determined) as a liability. To the extent that GASB chooses to net plan assets against this liability, an employer net liability for the unfunded accrued benefit obligation is justified. This liability is generated by the employment exchange and it represents a portion of total compensation awarded to employees for services already performed. It follows naturally from definitions contained in the Concepts Statements and it serves accounting and financial reporting goals as follows:

- **Accountability** – the government must account to its constituents for its handling of resources under its control. Awarding pension benefits for services performed to the reporting date results in a commitment for future payments that is entirely commensurate with the cash payment of salaries for services performed. Salaries and deferred compensation are each current expenditures of resources. The first is settled in cash contemporaneously, the other at a later date. The employment exchange makes clear that both are current expenditures.
- **Decision usefulness** – correctly identifying the total compensation earned by employees is vital to continuing decisions about how and how much to compensate employees in return for their services. Recognizing the incremental pension value earned in each service period is essential to the identification of total compensation.
- **Interperiod equity** – correctly assigning benefits earned in a period to that period is a necessary element when assessing interperiod equity.

Additionally I find myself in agreement with all of the arguments attributed to supporters of Alternative 2 outlined in Chapter 3.

### **Chapter 3: Question 3**

Recognition of the effects of transactions and other events that affect the unfunded accrued benefit obligation as they occur each year is consistent with CS 4, Paragraph 27. Deferral of recognition is not faithful to the underlying economics of the events that affect the unfunded accrued benefit obligation. Failure to account for the economic impact of these events as they occur amounts to shifting of costs between periods even though the timing of the events is plainly evident.

Cash funding approaches that defer and amortize the economic effects of transactions and events may help governments manage their expenditures within a budgetary context. But unless that management is disciplined by financial reporting that reflects the underlying economic realities, violations of interperiod equity can be concealed.

With respect to the types of events that might be considered for deferral and amortization:

- Benefit increases for past service– in light of the accountability principle, it is essential that the values of these actions be recognized in the unfunded accrued benefit obligation at the time that benefit promises are changed. Taxpayers need to know that benefits have been awarded for services already performed so that they may ask their elected officials: “why have you decided to do this now?”

Sometimes the answer given is that such past service increases are necessary to persuade currently active employees that their continued service is recognized and rewarded by the employer. Thus, it is argued, the rewards are really for future service by today's employees and that is why deferral and amortization is appropriate. But, if this is true, why not amortize the benefit entitlement over that future service? Instead of awarding past service benefits all at once while amortizing the cost, why not amortize the benefit over time and recognize the costs as earned. This latter approach, discouraged by deferral and amortization, is better labor management. It rewards future service by those employees who are persuaded to continue their service. Immediate benefit increases, accompanied by deferral and amortization, reward those who leave as well as those who are persuaded to stay.

- Gains and losses attributable to the relative performance of plan assets and liabilities – these are mostly attributable to the decision to mismatch plan assets and liabilities in pursuit of expected market rewards from such risk taking. Deferring and amortizing makes it hard for constituents to hold their agents responsible for the taking of risk. Transparency in this area is necessary to make good risk management possible. Smoothing over the results of risk taking may appear to be a cheap alternative to genuine risk management, but it lulls those responsible into complacency in the face of risks. Witness our recent, and ongoing, financial crisis.
- Gains and losses attributable to plan experience that differs from demographic actuarial assumptions (e.g., rates of mortality, ages at retirement, etc.) – it is argued that these are just instances where the random sample (the actual events) is not perfectly in synch with the true probability distribution assumed by the actuary. This may be a worthy argument but only when the impact is small and the gains and losses offset quickly. But when the impact is small, there is little reason not to reflect the actual events as they happen. When gains and losses do not quickly offset, deferral of recognition serves to conceal a persistent bias that should be made evident sooner rather than later.

I am not making a funding argument here. If cash funding is managed using some of these smoothing devices, the importance of non-smoothed accounting becomes manifest as a control measure that makes accountability possible.

## **Chapter 4: Question 4**

### **Question 4a**

Automatic COLAs should be included because they are part of the benefit promise based on service already performed by the employee.

### **Question 4b**

A pattern of ad hoc COLAs is a necessary but not sufficient condition for inclusion. In general ad hoc COLAs are discretionary because the employer retains the right to determine the timing and amount. Inclusion before COLAs are awarded does not properly respect the right retained by the employer.

The retained right may, however, vary in strength and so it may be appropriate to anticipate COLAs in whole or in part as justified by facts and circumstances. Note, however, that FAS 87 contains a requirement to recognize benefit increases implied by a pattern of such increases, but this has not worked very well in practice.

The observation in the ITC that the inclusion of projected COLAs may lead to granting them because they “have already been accounted for ...” is a very important issue with respect to decision usefulness.

### **Question 4c**

The impact of projected future salary increases applied to past service should not be included in current benefit liabilities nor in current period resource flows. The definition of liabilities in CS 4, paragraph 17, makes it impossible to recognize the impact of future salary increases when there is no recognition of the future salary increases themselves.

Even though future salary increases will entail a sacrifice of resources, there is no (and there should be no) liability recognized for such increases in financial statements for the current period. This implies that there is no present obligation to sacrifice resources for such increases or, at least, the government has more than a little discretion to avoid granting them. It defies logic to argue that benefits based on those salary increases are liabilities before salaries are increased.

As with ad hoc COLAs, decision usefulness is injured if salary increases are anticipated in financial statements. If it appears that the pension costs associated with salary increases have “already been paid for,” it becomes easier to grant the increases while failing to account for the impact that every pay increase has on benefits already accumulated. Decisions with respect to salary increases in the presence of a defined benefit plan should be made with contemporaneous input on the benefit cost implications of salary increases.

Anticipation of accrued benefit increases recognizes liabilities in the wrong reporting period thus doing injury to the principle of interperiod equity.

The argument that anticipating salary increases allows costs to be equitably spread across periods may be challenged on several grounds:

- Smoothing may accommodate the wishes of the budget planner who prefers to work with predictable cash flows but it often is unnecessary and distorting when it

is applied in financial reporting. As a rule, accounting should treat the desire to smooth financial reports skeptically.

- Smoothing salaries across careers, like other smoothing actions, does not faithfully represent an underlying economic reality. The term PBO is often used to describe the accrual pattern wherein future salary increases are anticipated and smoothed; ABO describes the pattern where future salary increases are not taken into account until they have occurred in fact. When comparing ABO and PBO approaches, it is important to note that no pensioner has ever received a PBO when his or her employment ended and every vested pensioner has always received an ABO upon exit from active employment.
- Anticipation of future salary increases appears to have a reassuring conservatism built into it because the PBO is always equal to or greater than the ABO and this is conservative with respect to a point in time statement of financial position. But, while the one-period increment using the PBO pattern is greater than the one-period increment using the ABO pattern for young employees, it is the ABO accrual pattern which properly recognizes higher cost for older employees. Thus, although for a young workforce, PBO accruals are higher than ABO accruals, for an older workforce the opposite is true, ABO accruals are higher. As America's workforce ages, PBO accounting appears to lower the one-period expenditures relative to the more faithful ABO pattern. This is not helpful when an important accounting goal is to enable assessment of interperiod equity.
- Decisions made on the basis of the PBO pattern are also frequently distorted. When PBO recognition makes pension plans appear more immediately expensive than they are for young workers, employers may offer less than competitive total compensation to its newer younger workers, causing them to choose other employment. When PBO recognition understates costs for older workers, employers are likely to overpay older employees who, in turn, remain in the workforce largely because they are being paid so well.
- Because ABO accounting reflects the true high cost of benefits earned in the current period for older employees, its use in resource flow statements allows constituents to hold officials accountable for potentially generous total compensation paid to older workers.

#### **Question 4d**

The question does not distinguish future service credits for computation of benefits from future service credits for benefit eligibility. There is no justification for including future service credits for benefit computations in liabilities measured currently.

Future service credit for benefit eligibility (e.g., for subsidized early retirement benefits) may be included (this is typically true of liabilities designated as ABO) or not (typically true when liabilities are designated as the Vested Benefit Obligation (VBO)). If benefit eligibility credit is included (ABO approach), it should reflect the probabilities associated with each employee's attaining such service in the future.

A decision to use the VBO approach might most strictly meet the definition of liabilities described in CS 4. A decision to use the ABO approach would be consistent with the view that the government has little power to terminate continuing employment by employees who meet minimum performance standards.

## **Chapter 4: Question 5**

### **Question 5a**

The estimated long-term investment yield (aka expected return on assets, EROA) for the plan is entirely inappropriate for accounting purposes. Finance teaches that future cash flows (in this case plan benefit payouts) need to be discounted at rates for similar cash flows in traded markets in order to estimate a present value. Historically, actuaries developed the EROA as a way to solve a problem that is very different from accounting. The actuarial problem was “what amount of contributions over time, together with returns expected on invested assets, *may be expected* to equal the amounts paid out in the future as benefits?” This is an attempt to equate expected future values. As a computational convenience, actuaries used the EROA to discount future cash flows. As an intermediate step in their process, actuaries labeled those discounted values “actuarial liabilities” and asserted that they were the present value of benefits to be paid. In no way do these present values represent “liabilities” as this term is understood by accountants, economists, and capital market participants.

For a discussion of how the use of EROA violates interperiod equity and leads to poor decisions see Risk Transfer in Public Pension Plans.

### **Question 5b**

If a risk free rate is to be used, a yield curve is the preferred approach. A risk free approach is appropriate for funding measures and for solvency tests of a plan. Calculation and disclosure of plan benefit payouts discounted at risk free rates is a useful and informative number. It may or may not be the best approach for accounting. The term “risk free” almost always refers to the rates available on securities that might better be described as “default free.” Using default free securities to develop liabilities for accounting statements may be appropriate for plans where the probability of default on benefit payments is effectively zero. This has, to date, been the case for large public pension plans of states and major localities. In NYC, for example, where bond redemptions were delayed for three years beginning in 1975, all pension promises were met on time.

But recent events, e.g., bankruptcy filing by Vallejo, CA., suggest that some public pension promises may not be met in the future.

There are other reasons, including liquidity of Treasury securities and special tax treatments, that may make rates on Treasury securities just a little too low for the best reporting of accounting liabilities by all public sector pension plans. For most jurisdictions and plans, however, rates not much higher than the Treasury yield curve (e.g., Treasuries plus 50 basis points) might be a practical upper limit.

**The public should be shown the present value of accrued benefits using default free rates. If any other basis is chosen as most appropriate for recognition in financial statements, disclosure of this value should be mandated as required supplemental information.** The paper “The Case for Marking Public Pension Plan Liabilities to Market,” written by Gordon Latter and me explains why this disclosure is so vital.

### **Question 5c**

It is important to distinguish taxable municipal debt from tax exempt municipal debt. Generally the IRS will not permit federal tax exemption for bonds issued by states and localities to fund their pension plans. Public pension plans themselves pay benefits that are taxable income to beneficiaries and invest in taxable securities. This suggests that, if the employer’s borrowing cost is to be used to discount plan liabilities, it should be a yield curve of taxable employer securities that provides the benchmark discount rates.

### **Question 5d**

For the reasons in 5c, if it were desirable to use a rate composed of many high-credit-quality employers, that rate should be based on taxable debt issued by those employers.

### **Question 5e**

As a practical matter, the use of the Treasury yield curve (potentially augmented to reflect liquidity and tax issues) is the best of the above choices. If a more theoretically correct rate were desired, the taxable rate of the employer might be a basis. But this taxable rate (presumably derived from issues with the credit standing of general obligations) would be too high because, as shown by the NYC example in 5b, the credit standing of a funded public pension plan (with respect to the payment of pension benefits) is better than that of the employer who sponsors the plan. Thus the best theoretical rate would be lower than the rate on taxable debt of the employer and more than the rate on Treasury securities. Where in that range the best rate should fall would depend, in part, on how well funded (collateralized) the plan itself was.

## **Chapter 5: Question 6**

Financial reporting is a form of scorekeeping. Actuarial methods and assumptions are strategic devices used by those playing the game. Although sports analogies have their limitations, occasionally one may be particularly apt. In this case, actuarial methods may be compared to football formations: the I-formation, the Pro Set, the Wishbone, etc. The scorekeeper's job is to record points scored; sometimes to record supplemental information such as yards gained or lost. Although reporting the formation used can also be considered supplemental information, the points scored or the yardage gained cannot be reported differently depending on the actuarial formation employed.

### **Question 6a**

The unit credit method recognizes the accumulation of benefits exactly as these benefits are accrued by plan members. Use of the unit credit method is justified *prima facie*. The burden of proof for using other methods must fall upon those who advocate other methods. That burden should not be met by arguments like “we have always done it this way” or “different approaches for funding and financial reporting will confuse users.” If the latter concern is paramount, let the funding follow good accounting principles that defend interperiod equity.

Pension actuarial methods were developed by actuaries working in life insurance. Life insurance is constructed along two lines. The first, analogous to the unit credit method for pensions, is term insurance which charges each year for the mortality risk of the insured. The second, analogous to entry age and projected unit credit, is whole life insurance which smoothes out cost for the insurance buyer. Although the cost of insurance for the latter is the same as for the former, premiums are initially larger. The larger premiums include a prepayment for future mortality costs which is accumulated in an investment account. The desire of individuals to smooth and prepay is rational but it is not a good basis for financial reporting. Insurance accounting carefully separates the cost of mortality (the cost of insurance) from the investment element. Pension accounting should do the same. The cost of pension accrual is properly reflected by the unit credit method.

### **Question 6b**

Consistent with the definitions of liability and resource flows, these items should be reflected concurrently with the transactions that give rise to them. This implies that deferral of recognition should be justified on its merits. As discussed in 6c, different justifications may apply to types of transactions.

### **Question 6c**

All forms of deferral and amortization reduce accountability for the decisions that lead to changes in the unfunded accrued benefit obligation.

Benefit increases applicable to former employees should be recognized immediately. This may cause taxpayers to ask why resources are being expended when no services are forthcoming. This question goes to the heart of accountability.

Benefit increases to current employees for future services should be recognized over future periods as services are performed and benefits are earned.

Benefit increases to current employees attributable to past service should be recognized immediately. As with past service benefits for retirees, this allows taxpayers to hold their representatives accountable for their decisions. A common justification for deferring recognition of such benefit increases is that it helps to retain employees. There is a better way to retain such employees and a natural accounting that goes along with it: amortize the benefit increase over future service. When a benefit increase is applied to past service, the increase is immediate and affected employees need not perform future service to secure their entitlements. Thus the employees who leave and those who stay are equally rewarded for past service. If the real purpose is retention, then the past service increase should be awarded over future years. Thus retained employees are rewarded and those who leave are not. Although this approach has not been common practice, it would be encouraged by immediate recognition. Immediate recognition for past service benefit increases can enhance accountability and lead to better decision making.

Actuarial gains and losses may be roughly divided into those attributable to demographic factors (mortality experience, rates of retirement by age, etc.) and those attributable to investment experience. In large plans, demographic gains and losses will generally be small; large changes suggest that actuarial assumptions should be reviewed; deferral of recognition may delay such review; short amortization periods, e.g., five years, may be consistent with the idea that demographic variations can be self-correcting and that actuarial reviews may reasonably be undertaken at five year intervals. Investment gains and losses should not be amortized because they arise from decisions with strong accountability implications. Most investment gains and losses arise from decisions to mismatch plan assets and liabilities. Although the decision to mismatch may be justified, immediate recognition enhances accountability and disciplines decision makers. Smoothing of gains and losses attributable to mismatches encourages risk taking and discourages risk management. Statement users should find it easy to monitor the risk taking and risk management performance of plan officials. Smoothing makes monitoring difficult.

Changes in actuarial assumptions, especially changes in discount rates, amount to changes in the cost of benefits to be earned in current and future periods. These changes are real and should affect compensation and benefits policies as soon as practicably possible. Deferred benefits are more expensive when interest rates are low and less expensive when interest rates are high. Those who negotiate and set compensation levels for public employees should have this information and should react to it in real time. Good pension benefits must consume a larger fraction of today's total compensation when interest rates are low and vice versa when they are high. Deferrals, except over short periods such as the length of negotiated compensation contracts, discourage good compensation negotiation and management. Immediate or nearly immediate recognition of changes in actuarial assumptions can improve accountability, decision making, and interperiod equity.

## **Question 6d**

Answered in 6c.

### **Question 6e**

Any amortization periods employed should be closed and fixed dollar. Any argument to the effect that multiple amortization bases complicate actuarial valuations should be ignored. Simple spreadsheets can, and are, used to keep track of multiple bases. The cost impact of using multiple bases is barely distinguishable from zero.

Amortization over future wages is flawed in concept and dangerous in application. The amounts to be amortized have been incurred in current dollars and should not be devalued by spreading over increasing payrolls. In practice, increasing payrolls often include amounts to be paid to employees not yet hired. Such practice necessarily burdens future generations of employees and taxpayers, diminishing accountability and making expensive decisions look cheaper than they really are.

In light of the mortgage experience in recent years in our economy generally, negative amortization should be sharply scrutinized and almost certainly forbidden in financial reporting.

### **Question 6f**

Assets should be valued at market.

Asset smoothing often amounts to double smoothing in actuarial methods that already defer and amortize actuarial gains and losses.

Smoothing assets is often justified as removing spurious volatility. In the funding (cash) arena, smoothing of contributions directly (as opposed to smoothing inputs and intermediate values) can achieve what is necessary or desired. Smoothing components tends to obfuscate the underlying processes making good decisions more difficult.

In the financial reporting arena, smoothing of assets, liabilities, and the asset liability relationship obscures risks and discourages and/or disables risk management efforts. Smoothing is often justified as eliminating spurious volatility. This view is often bolstered by lessons from behavioral finance where markets are seen (ex-post) to have overreacted both upwards and downwards. But neither actuaries nor accountants have any special insights into whether today's market is over extended in either direction. Asset smoothing implies that actuarial and accounting systems are able to make this discernment, eliminating market excesses. But there is no evidence of this. When markets make large secular moves (i.e., not cyclical ups and downs), asset smoothing retards recognition, delaying observation, recognition, and risk management actions. Let the accounting report things as they are. Cash funding policies can attempt to smooth out the effects of markets, but the scorekeeping must be objective and indifferent.

Volatility is a property of markets; it is not a disease for which accounting is the cure.

## **Chapter 7: Question 8**

The pension plan may be modeled as a financial (or insurance) subsidiary of the governmental entity that sponsors it. The trustees, whether or not they can command contributions from the employer, and whether or not they have the power to grant or veto benefit awards, are responsible for managing the plan assets in relation to plan liabilities. Thus the complete statement of plan position must include the accrued benefit obligation.

Although not contemplated by the ITC, plan assets should include the unfunded accrued benefit obligation as a receivable from the employer. This receivable should mirror the corresponding liability on the books of the employer with respect to both recognition and measurement.

With the above asset included, the report card for the plan is complete. The managers of the plans assets can be held responsible for managing the assets in relation to plan liabilities and such management can and should include managing the risks of the assets in conjunction with the risks of the liabilities, especially as these are each driven by conditions in the capital markets.

## **Chapter 7: Question 9**

Changes in the unfunded accrued benefit obligation should be a required part of general purpose financial reporting. The unfunded accrued benefit obligation (UABO) is a direct measure of the amount of interperiod equity (or lack there of) that has been accumulated over time. If the unfunded accrued liability is exactly zero, then taxpayers will be required to pay for, and only for, those benefits accrued by employees as they perform services. If the UABO is positive, then future taxpayers will have to pay for services already rendered. This does not mean that the current period has necessarily underpaid for the services it has received. It may have inherited obligations from prior periods. To determine whether this period's taxpayers have paid for services it has received, one has to measure and parse the change in the UABO over the period. A positive UABO represents an accumulated burden from the past. It and interest upon it must ultimately be paid. The amount of UABO to be paid by present versus future taxpayers is a policy matter reaching across generations. Formulation, execution, and potential modification, of that policy requires good information. A presentation of changes in the UABO is essential to measure interperiod equity, to make decisions about who is burdened by prior shortfalls, and to hold managers accountable for managing all the risks associated with defined benefit plans. The implications when the UABO is negative are similar, although more pleasant.

### **Question 9a**

Both financial reports should contain that presentation. The division of responsibilities between the plan and the sponsoring government entity varies across jurisdictions but generally the plan is responsible for investment and administration and the plan should be held accountable for managing the relationship between plan assets and liabilities and the risks that accompany the process. The employer is responsible for paying contributions to the plan and it should be held accountable for making sufficient contributions to assure that the current generation of taxpayers are paying for themselves. The responsibility for changing benefit formulas may reside either with the plan or the employer. Similarly,

actuarial assumptions and methods may be chosen by the plan or the employer. In some jurisdictions, and often in practice even if not in statute, responsibilities for determining benefits, actuarial methods and assumptions, asset strategies and other parameters are shared between the entities.

Users of statements, whether primarily focused on the plan or on the employer or both, will benefit from the presentation of changes. The presentation should identify, for the benefit of such users, where the responsibility and authority for various functions lies.

### **Question 9b**

The presentation of the changes in the UABO is an extremely important part of the financial reporting by both the plan and the employer. The location of the presentation is, however, a matter very dependent on the nuances in CS 3. These nuances are best understood by accountants experienced in the preparation of financial reports. Thus the location of the presentation is best decided by those with such experience and expertise.

## References

Risk Transfer in Public Pension Plans, Jeremy Gold, published in *The Pension Challenge: Risk Transfers and Retirement Income Security*, Oxford University Press, Edited by Olivia Mitchell and Kent Smetters, 2004.

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The Case for Marking Public Pension Plan Liabilities to Market, Jeremy Gold and Gordon Latter, to be published by Oxford University Press, Edited by Olivia Mitchell et al, 2009.

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