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Comments on GASB Preliminary Views

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Issue Commenting On

Discount rates for pension liabilities: expected return on assets or a "risk-free" rate?

Summary of Position

Discounting liabilities at the expected return on assets may be a useful step in developing a funding plan; however, the resulting "present value" is not a present value in the same sense in which this term is used by economists and financial analysts. Economists and financial analysts are interested in an answer to the question, "what are the liabilities worth?" Answering this question requires that discount rates reflect the risk of the pensions being valued, i.e. nearly-risk-free pensions should be discounted at a nearly-risk-free discount rate. This does not preclude separately discounting liabilities by the expected return on assets for funding purposes, but the resulting "funding liability" should not be confused with a valuation as this term is understood by economists and financial analysts.

Furthermore, in the perspective shared by economists and financial analysts, the economic value of liabilities – the *market* value of liabilities – is a key element of the financial picture of any financial institution, including public pension funds. The market value of liabilities (and its size relative to the market value of assets) ought to frame assessments of the financial health of public pension funds and their sponsors, as well as decisions regarding both assets and liabilities. Yet use of this very important financial measure is largely unheard of among public pension funds, resulting in plan sponsors and taxpayers having a skewed picture of the financial health of their funds, and in decisions about assets and liabilities being made without full information. To help remedy this, GASB should require sponsors of public pension funds to report an estimate of the market value of their pension liabilities.

Summary of Primary Argument

Economic valuation is based on the concept of opportunity cost and the reality of scarce resources. A pension is a type of annuity. The financial capacity of governments to write annuities is a valuable asset, but not an unlimited one. Using this capacity to compensate public employees precludes using this capacity for other purposes. Even if the plan sponsor's cost of writing the annuities is below market (as may appear to be the case if liabilities are discounted at the expected return on assets), pensions should be valued at market because of the opportunity cost of not using this valuable capacity to write annuities for other purposes. For example, a state plan sponsor might offer discounted annuities to residents of the state, or sell annuities to the public at market and use the profits to defray the cost of running the government.

Providing pensions as part of a government employment package is financially equivalent to providing any other valuable benefit to public employees. Suppose, for example, that the government were to provide housing to public employees, and further suppose that the government's cost of that housing was below market. How should the right to live in government housing be valued? Despite the below-market cost, the right to live in the housing should be valued at market for two reasons: 1) the government forgoes the market rent that might have been collected; 2) the employee is relieved of the need to pay a market rent. The same principles apply to pensions. (I should be clear, however, that I don't mean to suggest that the government can indeed provide pensions at a cost below market. I am merely saying that even if one believes that the government cost of pensions is below market, the concept of opportunity cost suggests that those pensions should still be valued at market.)

A Secondary Argument

The economic approach to valuation is not only widely accepted by both economists and financial analysts, it is absolutely central to what these professions are about. Rejecting the economic approach to valuation is tantamount to claiming that public pension funds are uniquely exempt from what otherwise are general principles of economics. While it is certainly true that "the experts" sometimes get it wrong, taking a position which is contrary to the consensus of professional opinion should only be done with great caution.

For more discussion of these ideas, please see the attached paper.

Attachment to letter #73

Valuing Public Pension Liabilities

A Behavioral Perspective on Risk Management, Professional Responsibility, and Accounting Rules

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Working paper

State pension liabilities are valued at about $3 trillion by actuaries employing standards set by the Government Accounting Standards Board (GASB), and at about $5 trillion by financial economists employing the standards of their profession. To put this in terms of a "typical" fund, a plan sponsor who has committed to liabilities valued at $6 billion by current GASB standards may in fact have committed to liabilities worth $10 billion, according to economists.[2]

The difference arises because economists and actuaries answer different questions.[3] Economists answer the question, "What are the pensions worth?" GASB standards call for actuaries to answer the question: "How much funding is necessary to create a fifty-fifty chance that the amount funded plus future investment returns will turn out to be enough?" There is no *logical* conflict to these questions having different answers. Misunderstandings seem to arise, however, because actuaries and economists use the same terminology – variants of the word "value" – to describe their respective questions and answers.

The fact that GASB standards call for "valuing" our typical fund's liabilities at $6 billion seems to give plan sponsors permission to dismiss economists who attempt to inform them that their liabilities are, according to the standards of their profession, valued at $10 billion. This in turn results in public funds being managed without the benefit of professional economic analyses of their plans, decisions, and funded status.

A key question is whether or not this matters.

I will not argue *why* economics matters to public pension fund management in this paper.[4] Rather, I will simply point out that there isn't any question among economists

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[1] The first draft of this paper was written while the author was at NEPC, LLC. The paper does not express any official opinions of either NEPC or MIT Sloan.
[2] The numbers come from Novy-Marx and Rauh (2009). Ennis (2007), Gold and Latter (2008), British North American Committee (2009), and Waring (2010) come up with similar numbers.
[3] Mechanically, the difference arises primarily from the use of different discount rates. GASB calls for liabilities to be discounted at the expected return of the assets that have been or will be set aside to fund the liabilities, usually about 8%. Economists discount at a market interest rate commensurate with the risk of cash flows being valued; since pensions are intended to be low risk, a low risk discount rate is called for, closer to 4% than 8% in the current environment.
[4] This argument has been made numerous times. See, for example, Bader and Gold (2003), Waring (2004, 2010), Ennis (2007), Gold and Latter (2008), or Minahan (2010).

that the economic value of liabilities is a key element of the financial condition of a pension fund, an element that ought to frame every strategic decision of the fund. To illustrate this, suppose our typical fund has $6 billion in assets. GASB standards suggest this fund is 100% funded because assets equal the funding target of $6 billion. An economist would say that the plan is 60% funded and that the plan sponsor is betting it can make up the difference through successful investing in risky assets. These are two very different interpretations of the same facts. The GASB standards communicate the message "All is well since funding targets are met." The economists communicate, "Yes, it is good that funding targets are met, but the funding targets themselves contain a huge bet; this bet is a key element of the enterprise strategy and financial condition for the fund, and ought to frame every other decision the plan sponsor and fund trustees make. To ignore this and act as if the fund is actually 100% funded just because GASB standards say so is irresponsible."

Since the economic value of liabilities is such a critical number for the management of pension funds, one would think there would be a movement afoot to (1) make key pension decision makers aware of the concept and (2) develop reporting systems so an estimate of the number is available to decision makers and analysts. And indeed there is such an effort.[5] However, this effort has encountered fierce resistance from public plan sponsors and their actuaries,[6] and consequently, public pension funds continue to be managed without reference to their economics.

With this backdrop, this paper will argue the following:

- Good risk management calls for plan sponsors to fully consider the economic perspective – even if they disagree with it, and even if GASB fails to recognize it.
- Investment advisors to public pension funds have a professional responsibility to foster their clients' understanding of the economic perspective.
- GASB should incorporate the concepts of economics into its thinking about public pension liability valuation and should require public pension funds to disclose an estimate of the economic value of their liabilities.

What Does Good Risk Management Call For?

Good risk management welcomes multiple perspectives on important problems. It is especially valuable for pension professionals and decision makers to consider the perspective of other professionals who have given a lot of thought to the issue at hand, particularly if that thought has been vetted and refined over years of debate and research and has unfolded on an independent track from the primary frame of reference of the decision maker. Economists offer such a perspective to plan sponsors and actuaries.

So why don't actuaries and plan sponsors take advantage of the economics point of view as an independent frame of reference? One possible explanation is the tendency of groups

[5] Expressions of this effort include Bader and Gold (2003), Waring (2004, 2010), Pension Actuaries' Guide (2006), Ennis (2007), Gold and Latter (2008), and British North American Committee (2009).
[6] Many statements by the defenders of tradition can be found on www.nasra.org. See, especially, Findlay (2008) and Joint Letter (2008).

and organizations, when faced with information or a point of view that challenges their narrative about themselves, to suppress that information or perspective.[7] Such behavior is well documented by social psychologists, as is the tendency of such behavior to result in excessive risk taking. This was recently illustrated extensively by Marc Gerstein in *Flirting with Disaster* (2008).

Gerstein analyzed numerous and seeming disparate disasters[8] and found a common pattern: Someone saw the disaster coming but was ignored by those who might have done something to avert the disaster. He offers four risk management recommendations based on his analysis of these disasters:

- *Understand the risks you face.* Think through what can go wrong with any course of action under consideration.
- *Avoid being in denial.* Be aware of the tendency of groups to suppress "deviant" points of view, and balance this tendency by encouraging the expression of alternative points of view.
- *Pay attention to weak signals and early warnings.* When a mistake would be disastrous, it is important to pay attention to all risks that can be identified, even those that seem remote.
- *Do not subordinate the chance to avoid disaster to other considerations.*

Let's discuss the relevance of Gerstein's recommendations to public pension funds and the extent to which they are followed:

1. Understand the risks you face. I'm sure some plan sponsors know only too well the risks faced by the pension funds for which they are responsible. Yet it also appears that many plan sponsors accept actuarial assessments of their funded status at face value, seemingly without awareness that economists believe that these assessments are overly optimistic. The actuarial (or GASB) model, like any model, is a *representation* of reality, and is therefore subject to "model risk" – the possibility that reality is different from the model in some important way. A good risk management process recognizes this possibility, and welcomes out-of-model thinking as a reality check, even when (perhaps *especially* when?) that thinking comes from outsiders such as economists. Yet, plan sponsors seem to reject economic thinking out of hand.

2. Avoid being in denial. Good risk management calls for plan sponsors to explore and evaluate economists' claims that (1) their plans are much less funded than official statistics show, and (2) the official processes for valuing liabilities are seriously flawed. These are big issues. Summarily dismissing them feeds at least a perception of denial, as does the near-unanimity of the plan sponsor views found on the website of the National Association of State Retirement Administrators (www.nasra.org.)

3. Pay attention to weak signals and early warnings. If you believe what economists say, then their viewpoint is a *strong* signal that public pension fund liabilities are being

[7] As Herb Blank quipped in the Hartford QWAFAFEW discussion of this paper, "When you challenge the status quo, the status quo fights back."
[8] Chernobyl, Hurricane Katrina, Vioxx, Enron, Arthur Andersen, wars, space shuttles, and others.

undervalued. But many plan sponsors don't yet seem to be convinced of the economics perspective, so to them, economists' warnings are *weak* signals. Weak signals are easy to ignore, especially if they have gone unheeded in the past without apparent consequences. However, the stakes are too big here not to take Gerstein's advice and seriously consider the *possibility* that economists are on to something. Yet, economists continue to be dismissed by plan sponsors.

4. Do not subordinate the chance to avoid disaster to other considerations. To take a page from Jeremy Grantham's playbook,[9] is it possible that some plan sponsors, actuaries, and investment advisors are so influenced by career risk that they can't even acknowledge, never mind act upon, a point of view that challenges the status quo? Moreover, could there be a tendency for plan sponsors and actuaries to close professional ranks in the face of what appears to be an invasion of their turf by economists? In short, is the chance to avoid disaster being subordinated to agency problems and professional territoriality? While not wishing to denigrate any individual, I do think these questions warrant more discussion. Don't our obligations to our ultimate clients – participants in pension funds – require it?

In sum, good risk management calls for plan sponsors and actuaries to *listen* to economists, and to be open to learning from what they hear.

What Is the Professional Responsibility of an Investment Advisor?

In one sense, investment advisors[10] are bystanders with respect to the debate about liability valuation, since they don't "own" the issue of measuring liabilities or funded status. Despite this, I believe there are two reasons investment advisors to pension funds have a professional responsibility to promote the measurement of an economic value of liabilities:

1. In their role as total fund asset allocation advisor, investment advisors need to know a client's funded status in order to execute faithfully their duties as investment advisors. A client's funded status is an important component of their overall financial picture. To give total portfolio advice without knowing a client's funded status would be, under ordinary circumstances, professionally irresponsible. Yet, that is what investment advisors are forced to do when they do not have access to economically meaningful measures of the liabilities, and the standard adjustments advisors would make to render the actuaries' numbers economically meaningful are considered taboo to talk about, never mind act upon. Breaking this impasse requires that advisors articulate to their clients and their clients' actuaries why the financial economics

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[9] Jeremy Grantham, one of the founders of investment management firm GMO, is well known for interpreting behaviors in the investment management industry in terms of career risk.
[10] By "investment advisor" I mean one who counsels a plan sponsor on overall investment strategy and management. I mostly have in mind asset-side pension consultants when I use this term, but it can also include internal investment staff of the plan sponsor, especially chief investment officers.

perspective is useful so that advisors become free to give advice that is fully informed of clients' circumstances.

2. In their role as investment counselors, investment advisors have a responsibility to foster the client's overall financial health. Financial health involves both numbers and behavior. On the numbers side, financial health is about whether a client has adequate assets and income to meet liabilities and possibly other objectives. On the behavior side, financial health is about a client's decision-making processes: is the client decision-making body a well-functioning group or does it engage in dysfunctional behaviors that sacrifice the quality of its financial decisions? An investment counselor's responsibilities include making assessments of the client's behavioral health and attempting to foster improved decision-making processes if appropriate. This may include drawing to a client's attention circumstances that the counselor finds detrimental to the client's financial health and helping the client deal with such issues in a more constructive way. If clients are in denial about the value of their liabilities and about the ability of financial economics to shed light on those liabilities, investment advisors have a responsibility to foster improved client functioning with respect to this issue.

Investment advisors face a dilemma, however, that may give them pause about acknowledging the legitimacy of the economics perspective to clients. Most plan sponsors want to minimize near-term contributions, and this makes them predisposed to points of view that justify higher discount rates. Furthermore, investment committees and staffs consider their mandate to be to earn, at least, the discount rate assumed by actuaries. The social pressure to embrace overly optimistic return expectations can be enormous. Given this context, plan sponsors don't want to hear the news that they are less well funded than previously believed and may blame the messenger.

Nonetheless, an investment advisor has a professional responsibility to help plan sponsors understand these issues. This may require telling plan sponsors things they don't want to hear. If investment advisors don't do this, they become enablers of their clients' denial and of the poor decisions that may result from that denial.

What Should GASB Do?

GASB recently issued an Invitation to Comment on a number of topics, including valuation of pension liabilities.[11] After public hearings and review of written comments, GASB issued Preliminary Views[12] that, in effect, call for *funded* liabilities to continue to be discounted at the expected return on assets, but for *unfunded* liabilities to be valued using a market discount rate.

GASB is to be lauded for considering the issue of whether market information should be used to estimate the value of public pension liabilities. However, the Preliminary View itself does not clearly reflect economic thinking. For example, the Preliminary View

[11] Government Accounting Standards Board (2009).
[12] Government Accounting Standards Board (2010).

would value funded liabilities lower than unfunded liabilities, whereas economics would call for the opposite. [13]

I believe GASB would benefit from incorporating more economics into their thinking, especially regarding the question of whether public pension liabilities should be "marked to market."

Mark-to-market accounting is an emotionally and politically charged topic. Most reasoned opposition to mark-to-market accounting focuses on perceived drawbacks of updating market values over time; especially at issue is the question of whether changing prices indeed represent relevant economic information, or might at times represent circumstances specific to given transactions or a given time period, and therefore paint a misleading picture if already existing assets or liabilities are marked to the prices of recent transactions.

I believe there are legitimate perspectives on both sides of these issues. Nonetheless, there are two compelling reasons for marking public pension liabilities to market that GASB should consider:

1. Even if one is opposed to ongoing marks to market, the initial mark should be at market. Public pension funds commit themselves to new liabilities every year and these commitments are being undervalued. Whatever one's view on the question of ongoing revaluation of already existing liabilities, it is hard to imagine a reason new commitments should not be valued at market.

2. Requiring accounting to reflect economics may be the only way to get decision makers to pay attention to economics. As discussed, the economic value of liabilities is a critical piece of information for assessing a fund's financial condition and should be part of the framing of all strategic decisions of a fund. Whether it should be required reporting is a separate issue, however. Dimitry Mindlin (2007) has argued – in a delightful article titled *Windmill Fighters in Potemkin Villages* – that there is nothing currently preventing the users of actuarial valuations from making the adjustments that will turn actuarial values into estimates of economic value. Economists who get all worked up about reforming pension accounting are like Don Quixote attacking windmills mistakenly perceived to be giant monsters, Mindlin suggests.

   There is a sense in which Mindlin is correct: if accounting introduces known distortions of financial measures, those distortions can be corrected by users of the measures. Bad accounting, so long as the rules are transparent, does not force bad analysis or bad decisions. However, I have found that in actual decision-making settings, many decision-makers and analysts – including plan sponsors, actuaries, and investment advisors – act as if they are unaware that they need not take accounting

[13] The preliminary view opinion does have a certain logic from a funding perspective: because unfunded liabilities are valued higher than funded liabilities, an incentive may be created to make contributions when a fund is under-funded. The legitimacy of this funding-related thinking should be recognized by economists; at the same time, it underscores the need to think of funding and valuation as separate issues.

numbers at face value. They suffer, as economists put it, from "accounting illusion."

Accounting illusion can be impenetrable if most members of a group share the illusion, and this speaks to the importance of using accounting measures that don't reinforce illusions. In other words, accounting matters because in group settings, official accounting measures have a presumed legitimacy that focuses a group's attention on these measures – even when better measures are known to exist by some members of the group. So, while it is technically correct that accounting rules don't have to matter because individual analysts can always compensate for bad rules, to get actual organizations to see through accounting illusion may be an even bigger task than reforming accounting.

A Call for Dialogue

This is a big issue, big enough that the various professions that touch the issue should be in more dialogue with each other – dialogue that involves listening and learning as well as debate.

Those of you who believe economic analysis is relevant for assessing the financial condition of public pension funds should speak up. Take responsibility for ensuring that your clients understand the issues and be open to further honing of your views if clients raise issues you don't anticipate.

And those of you who think the economics perspective is irrelevant or misguided should think again. Are you really prepared to say that public pension funds are exempt from the principles of economics? It appears to economists that that is indeed the position you are taking; if this is not your position, please convince us otherwise. Our mutual clients are depending on us.

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