Contingencies

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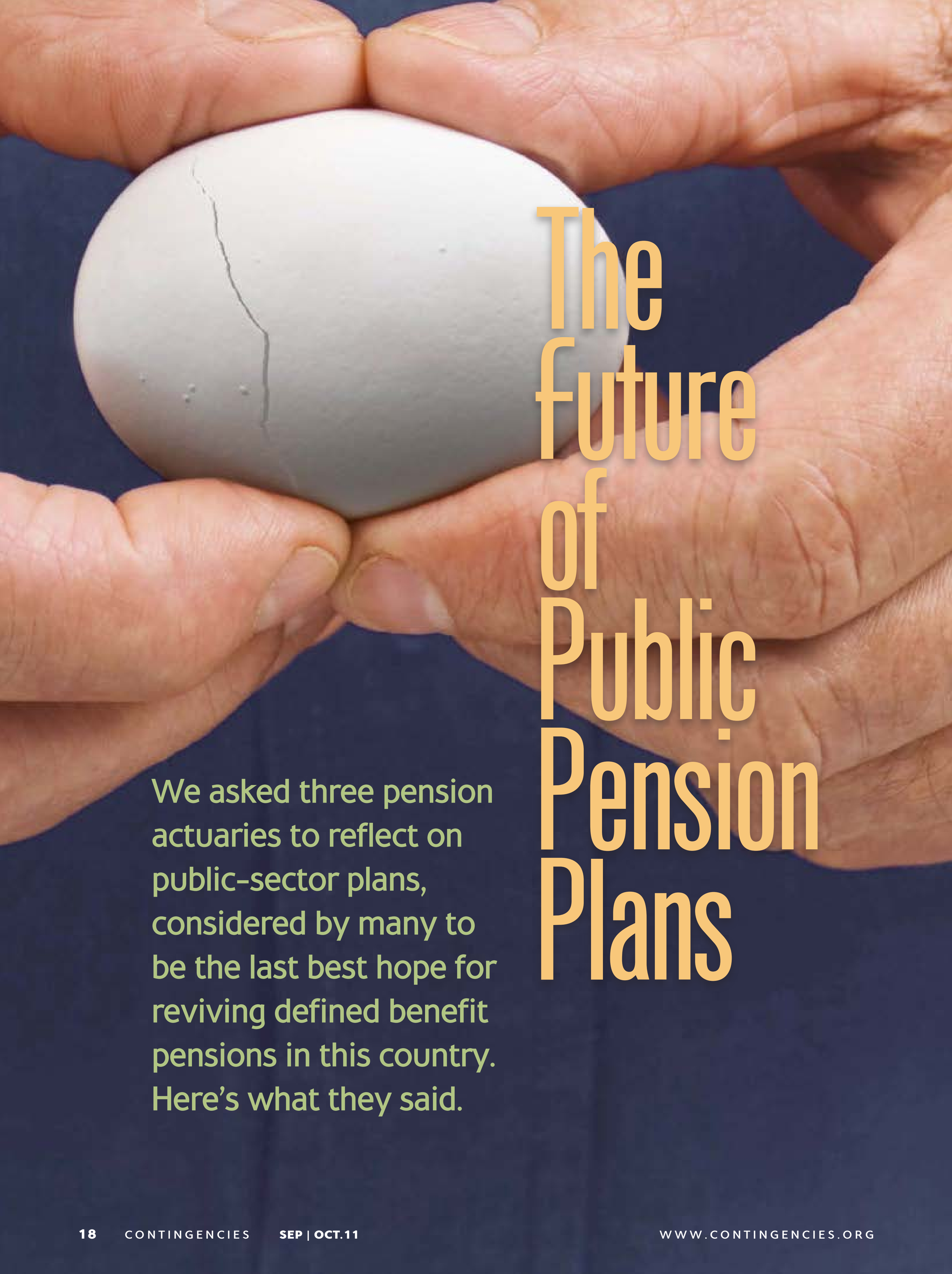
The Future of Public Pension Plans



The Future of Public Pension Plans

We asked three pension actuaries to reflect on public-sector plans, considered by many to be the last best hope for reviving defined benefit pensions in this country. Here's what they said.

EDITOR'S NOTE:

On March 30, 2011, at the Academy's invitation, Ken Kent, a former Academy vice president for pension issues and a pension actuary with Cheiron in McLean, Va., Robert North, chief actuary for the New York City Retirement System, and James Rizzo, a consulting actuary with Gabriel Roeder Smith & Co. in Fort Lauderdale, Fla., participated in a spirited round-table discussion on funding public pension plans. That conversation, moderated by Bill Connor, a freelance journalist who conducts media training for the Academy, ran for several hours. What follows is an edited transcript of their exchange. A video of the entire discussion is available on the Academy's website, www.actuary.org.

SHUTTERSTOCK

North, Rizzo, Kent, and Connor

The State of Public Pension Systems in 2011

JAMES RIZZO: The economy is the largest substantive issue that's facing the systems—not only the markets recovering from '08 and '09 but also government revenue sources that have been affected. Governments are being pressed from both sides on this.

ROBERT NORTH: Public plans in recent years have been subject to a lot of misunderstanding, demagoguery, and generally bad press. And a lot of that really is misdirected. Contributory defined benefit (DB) plans, which most public plans provide, are one of the best designs possible for meeting the needs of long-service workforces that are typical in the government sector.

As people look at the realities, public plans do a good job. They can do better; there can be more transparency, more disclosure. But in general, there is no better system for delivering retirement income to attract a good, effective public-sector workforce.

KEN KENT: We can't trivialize the challenge of finding money to recover market losses in these large, mature systems and also finding funds to allow for recovery in the regions that those governmental systems oversee. The retirement systems were set up to mitigate financial volatility. This latest market has caused that to be exacerbated. But there's been heightened discussion with the public plans about reducing their risks, and at the same time, costs may be barely sustainable at these elevated levels. All with the goal of reducing the probability of costs going further up. I think that risk reduction is going to be a continuing trend.

NORTH: There are studies being done to show where things stand. I disagree with many of those studies and the way they emphasize the current status of plans, which when interest rates are low and the stock market is down, does look quite bad. The bigger question to me is what are people doing about it? Most public plans and their officials are responsibly trying to address the issues before them and meet the challenges created by the economic conditions.

RIZZO: I think some plans have benefits that are too generous. Rolling back some of the benefits to previous levels for future years of service is something a lot of governments are looking at. At the same time, some governments are not contributing a sound actuarial level of contributions to maintain viability. If they were to set a level of actuarial contributions at least as high a priority as servicing the debt, I think they would go a long way toward financing pension promises in an adequate way. Finally, governments and plans could do a better job of risk management.

A lot of it has to do with how the unfunded accrued liability in these pension plans is paid off. If we keep kicking the can down the road to a future generation, we're not doing either generation a service. If the unfunded accrued liabilities are financed over a shorter period of time than they are now, I think we would go a long way to securing the benefits—although it takes more money to do that.

Transparency and Public Information

KENT: There are lots of reports and papers that provide varied benchmarks of the outstanding obligations of public retirement systems across the country. But the costs being determined by actuaries for these systems—taking into account investment returns—are what the taxpayer should be focused on rather than the different ways to measure this liability. It is the actuarially determined cost that defines the resources that are currently needed to fund the plans.

RIZZO: Don't believe everything that appears in the news. Any taxpayer can go to the local government website and pull up the annual financial statement. It contains a wealth of information. The whole budget process is transparent. Taxpayers ought to be paying attention to where their money is being spent, and they've got access to that.

NORTH: It doesn't hurt to start with your city's budget and look and see where pensions fit in. But pensions are just part of a larger set of information. Sanitation members, policemen, firemen, teachers all receive base pay, pensions, medical, and other fringe benefits. If you look at the budget in almost any city, you can see where pensions are as a percentage of compensation. I think it's important to understand that many public workers entered government service because it offered them a chance to contribute to society and a pension that would be secure.

In addition, governing is all about choosing and having priorities, and I'm not aware of anyone running on a platform of increased contributions to the pension funds. There are a lot of other worthy causes, and most public plan sponsors would ideally like to see how they can provide a secure retirement at the lowest reasonable cost.

There's always a challenge in the governance process, in which you have people elected for relatively short periods of time making decisions on very long-term issues. And sometimes in the past, it hasn't been uncommon for commitments—that would be paid for later—to be undertaken in the near term.

KENT: It's important for both the public and other actuaries to understand that the actuarial profession has been doing a good job—a great job, actually—in educating and assisting the boards of trustees and public employers through this crisis. I think it's important for actuaries who don't serve in the area to know that the job is being done well.

The Actuary's Role

KENT: One of the challenges that we have—whether we're dealing with public systems, each of which has its own rules, or with private systems that have a single set of rules—is to talk to our clients about the nature of the risks in the system and determine whether they can afford those risks.

For the large public systems that have significant underfunding, taxpayers are bearing a risk that they may not be able to afford. They may choose where they live subject to the taxes they may be called upon to pay. Just as many corporations no longer feel they're in a position to bear that risk, many public systems are looking at ways to restructure their programs to share more of that risk with the participants of those systems and to mitigate, to some degree, how much gets borne by taxpayers.

RIZZO: The actuary advises, and the elected officials and the other fiduciaries are the ones who make the decisions. Sometimes we don't get to advise them on matters that they need to hear. Or when we advise them, they don't take our advice. The boards should turn to actuaries for advice on risk management—not only of investments but also of the governance process. Risk is one of the areas in which we work best: measuring risk, mitigating risk, and managing risk.

Another area in which actuaries can contribute is who should share investment risk. I think there are some interesting plan designs that share the risk of a DB plan between the employee and the employer. In the traditional defined contribution (DC) plan the employee bears all the investment risk, and in the traditional DB plan the employer bears all the investment risk. But there are hybrid and other models that have variable benefit formulas that share the risk. That's an area that needs more research.

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NORTH: I think Jim is dead-on in terms of what actuaries can do. We have a great controversy underway in the actuarial profession over how to measure things—discounting the obligations using expected returns on assets or discounting obligations based on the characteristics of the obligations themselves, often called market value liabilities.

Most retirement boards explicitly take a mismatch risk between assets and liabilities. It's because one of the highest goals of most funds is to deliver benefits at the lowest expected cost. But the lowest expected cost comes with higher risk. That sometimes gets lost in traditional actuarial practice because we show the expected number. But if you provide some of these alternative measures and you talk about their implications, some of that information jumps out.

There's controversy at the moment over what information to report to public plan sponsors. Economists will usually say that if you have a series of payments that are guaranteed, that the value of that stream of payments should be discounted at a Treasury yield rate because that's a similar guaranteed asset. Actuarial work generally takes that stream of payment and discounts it by the expected return on the related assets. You get different numbers and benefit values if the interest rates for Treasuries are different than the expected return on assets.

Some say providing this information would cause more harm than good by causing confusion and giving the impression that plans are not as well-off as they really are. I believe this information is valuable, and it indicates that we understand completely what is going on with our systems. We understand how much liability there is and that a point-in-time measurement when interest rates are low and the stock market is low isn't the whole story.

KENT: I agree that actuaries should take into account not only actuarial science but the science of economics. This measurement of market value of liability is an important concept to benchmark in a discussion around the amount of risks within these systems. The confusion arises when those numbers are then purported to represent the amount that needs to be budgeted and funded. These are large systems that have the ability to invest in a diversified portfolio of assets generating higher returns than individuals typically can get. They pool various individual risks—most significantly, longevity. By taking on some risk and through pooling of risk, public retirement systems can offer an efficient means of providing financial security.

The Market Value of Pension Liabilities

RIZZO: The market value of liabilities is what the government would have to pay to settle its liability of what has accrued so far. But governments don't go bankrupt, seldom merge and discharge their pension liabilities. It's a curiosity number more than anything else. My problem with making its disclosure mandatory is that for the very few governments that would ever settle their liability, we would be forcing governments all across the country to publish this number that is not relevant to the operation of these pension funds.

KENT: When we advise our clients on how much they should contribute, we're asked to produce a single number at a single moment in time. That number is based on a series of expectations in the present and in the future. It's almost as if there is a cloud of rational and reasonable numbers and we're asked to pull one of the numbers out at any point in time.

This market value of liability is a moment-in-time valuation based on a very specific assumption. The reality is that these pension systems are expected to go on for a long time and nobody will know exactly how much they will cost until the last participant receives the last check.

RIZZO: The market value approach doesn't care how the pension fund is invested for the future. It doesn't care if you're 60/40 stocks/bonds or if you're entirely in 90-day Treasuries or you put all the money on Lady B in the eighth race. All it wants to know is what's the yield curve look like on the measurement date. And that's what the market would demand for that security—if the pension fund were a security.

The conventional approach is the expected fulfillment cost. This is because the pension fund fulfills its obligation or settles its obligation—not all at once, but a little at a time over a long period of time.

What is the cost to taxpayers to settle the pension fund's obligation in that fashion? Really good performance in the pension fund, or even expected performance in the pension fund,

saves the taxpayers a lot of money over a long period of time. We need to factor that into the cost to taxpayers, the efficacy, and the ability of the pension fund to earn money—because most of the pension benefits that are paid to employees over time are actually paid by the fund's earnings. Those of us who advocate the more conventional approach feel that the pension fund's ability to lower taxpayer cost should be baked into the methodology when coming up with a liability to be used for financial reporting purposes.

I believe there's value to the market value number. People who are trained economists don't believe any other number makes sense. And by providing the number, a lot of the complaints that the information is hidden are overcome.

NORTH: I believe there's value to the market value number. People who are trained economists don't believe any other number makes sense. And by providing the number, a lot of the complaints that the information is hidden are overcome. Does it require a lot of careful explanation? Yes. Does it require doing some other disclosures of other actuarial numbers so that things can be put in context? Yes.

I make it a point in the New York City Retirement System's comprehensive annual financial reports to disclose multiple measures of funded status along with commentary on exactly what the numbers mean. If you ask an actuary what's the value of a stream of payments and you tell him the fund it supports is invested 70 percent in equities, he'll give you a number. But if you said, "Oops, I made a mistake; we actually have all the money in bonds," the value of the stream of payments—as reported by the actuary—changes. For economists that just doesn't work. On a risk-adjusted basis, the value of the stream of payments is what it is. For budgeting models like the ones actuaries use, recognizing assets as part of the process is perfectly reasonable. But the underlying financial values are demonstrated by the market value of liabilities.

RIZZO: In the private sector, the Financial Accounting Standards Board (FASB) requires that a corporation's DB pension liability be measured in a manner that's similar to a market value. It's a settlement value of the liability. In the private sector, it's all about a corporation's market price of their share, so the market matters. And because corporations tend to merge and go bankrupt and terminate their plans, that makes a lot of sense for the Financial Accounting Standards Board.

The FASB and the GASB (Governmental Accounting Standards Board) have a common parent—the Financial Accounting Foundation. FASB sets GAAP (generally accepted accounting principles) standards for the corporate world, and GASB sets the GAAP standards for the government world. The rules that GASB established for GAAP financial reporting have been in need of improvement, and it has undertaken a deliberative and thorough project to change the accounting standards for government financial reporting on pensions. One of the things it is looking at is this matter of comparability and consistency. Under new proposed standards there will be a single measurement method.

Currently, governments are allowed to use any number of methods for reporting in their financial statements, and there's been a tie between the funding methods and the financial reporting methods. GASB has divorced them in its proposal. In many instances, governments will have two sets of numbers—liabilities and costs for funding purposes and liabilities and expenses for financial reporting. This will apply to pensions but also to retiree medical.

GASB has dictated one cost method—what's called the entry-age-normal cost method—but it also preserved this notion that the cost to taxpayers is what we're measuring and disclosing. In this way, it rejected the market value of liability as not being useful or relevant for financial reporting purposes for governments.

KENT: The concern with the disclosure of the market value of liability is how that information is used. It is a measurement based on a risk-free cash flow to participants, which is one of the reasons why it's valuable to measure. But we don't live in a risk-free world. We pool risks regularly, and in a DB system system we're pooling investment risk and we're pooling longevity risk. To identify and focus on this risk-free measurement could mislead the public to say, "That is what the funding target should be."

RIZZO: When I was an actuarial student just out of college, one of my co-workers came to me as a prank and said, "I've got this list of employees for ABC client, and what we need is for you to calculate the average Social Security number." After he left the room, I got to thinking, "That is a totally irrelevant number."

That's almost the way I feel about the market value of liability. Someone might say, "Well, you have that calculation in your computer. Why can't you give it to me? Are you hiding it?" But, almost like the average Social Security number, there is a very narrow relevance to the market value of liability number.

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KENT: When you give a series of different measurements, you risk the question, "Which is the right one?" And it's dependent on the stakeholder who is asking the question. In providing more information, you have to provide more explanation so that people don't pull the wrong number and make a decision on that basis. You also need to safeguard against some people using a particular measurement to mislead others.

Still, the market value of liability is an interesting measurement. It says, "If I take no risk, this is my obligation." From there, I can build according to the level of risk tolerance that a system might consider. For systems that have gone through the 2008 markets and don't like the level of risk, it's a benchmark to help them move to a lower risk stance or budget their risks.

There's one other downside, which is that there is no single definition of the market value of liability. Market interest rates change every day, every hour, every minute in relation to the bond market that is used as a proxy. The moment you measure it, it's history. Too much reliance on any one measurement has its own risks.

RIZZO: If a client asks us to calculate this for them, we are glad to do it. But clients generally don't want it calculated because they know it will be either used to mislead people or misunderstood.

The market value of liability has relevance in a discussion with decision makers concerning risk. It's not relevant as the official balance sheet liability of the pension fund because when researchers go out and do research on comprehensive annual financial statements of governments, they're going to pull off the balance sheet liabilities. And under the new GASB standard, the measure of the liability that recognizes the long-term rate of return is the one that's going to go on the balance sheet.

When you're asked to calculate something, it's really important to understand what the purpose of it is. In a workshop session with a client concerning risk, market value may be the starting point of that discussion. But for the purpose of funding the plan, it's not relevant; for the purpose of official financial reporting of the cost to taxpayers, it's not relevant.

NORTH: I'd like to pick up on the pricing of the value of benefits—purchasing a past service, for example. One could argue that part of the reason benefits have been improved to what some believe are unsustainable levels is that they were priced based on what the budgeted contribution amount would be rather than the real value of the benefits. In a low-interest-rate environment, the cost of a stream of benefits under a market value liabilities approach would be greater than the funding requirement.

Almost all fiscal analyses required by legislatures, including mine in New York, ask for the effect on the budget. If you use an expected rate of return, you get a certain expected change in the budget amount. But that's based on an expected return on assets that implicitly puts the risk on future generations that you will actually get above the risk-free return.

If benefits were priced on a risk-free basis, you could invest however you wish and at least the initial level of benefits provided would be something that would be less dependent on always hitting that investment return expectation.

RIZZO: I think that actuaries can bring a lot to the table in this area. If a benefit proposal or an asset allocation is being considered, we should be stress testing. What is the volatility in future contributions that you can expect by adopting this benefit or by not adopting it? When I look at risk management, I feel the metric has more to do with the funded ratio and the contribution volatility that the employer can sustain if they have a 70/30 mix versus having a portfolio of all bonds. Those are better metrics.

KENT: On the other hand, when you are talking about the cost of benefits in lieu of compensation increases and if you are trading current compensation for deferred compensation, then there may be value in looking at the market value for comparison.

If you're trading current compensation for deferred compensation that is discounted at a presumed investment return, you could be overdiscounting the value of that deferred compensation. For public systems looking at mitigating some of the risks they've taken in the past, it's important to consider

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whether the assumptions and costs for determining future benefit increases should be discussed on a different basis than those assumptions that are used for budgeting.

RIZZO: I think you're right, Ken, as one purpose in which the market value of liabilities might be useful would be collective bargaining. But for funding and financial reporting, I don't think so.

DB Versus DC

NORTH: I think that the public-sector defined benefit environment has a lot of things going for it. It doesn't have the regulatory burdens created in the private sector, such as solvency laws that require companies to have enough money to cover their obligations at all times.

It was also a mistake to divorce ownership and executive management from participation in private-sector plans, which is what happened when they put caps on the benefits that could be paid from plans as part of allowing pension plan regulation to be driven by tax policy rather than labor and benefits policy.

Then there is the question: Who bears the risk? Employers bearing the risk of DB plans in a risky investment environment was more than most CFOs could handle. The same problem exists with public plans, but since public plans should have a longer life, solvency is not their primary objective—it's intergenerational equity.

I believe public plans can hold out. The contributory DB plan is actually the most cost-effective delivery system to provide the best benefits at the least cost to taxpayers. The challenge is to keep the plans well managed and governed.

RIZZO: I agree that public-sector plans may be the last best hope for preserving DB pensions in the U.S. I'd like actuaries and everyone involved in the pension industry to work together to ensure that public plans are sustainable. And rather than take positions that could have unintended and irretrievable consequences leading to the total demise of all DB plans in the country, we need to work together to preserve them.

There are many factors that influenced businesses to terminate their DB plans: the arcane and complex regulations the federal government imposes on private-sector plans, funding standards from Congress, accounting standards from the Financial Accounting Standards Board, and just the whole mentality of business managers who are measured by what their last quarterly earnings were.

KENT: The typical employee in the private sector doesn't have a full understanding of how much savings you need to support yourself. Even those who have saved for most of their working lives face the challenge of a DC plan that has been affected by the markets. When they come to retire, they have really two choices: to live below their standard of living so they don't eat through their account balances or to live at their standard of living and risk living beyond those balances.

RIZZO: Studies have shown that one of the big concerns of retirees is outliving their savings. They spend a lot less than they could because they've got this deadline—the dollar amount of their account balance. And it's sad to see the 401(k) plans becoming 301(k) and 201(k) with market declines. It's particularly harmful for those who are at or in retirement because they don't have the horizon to recover the investment [losses].

NORTH: The original concept of retirement income was a three-legged stool—Social Security, a DB plan, and your savings. Today the opportunities on the savings side have expanded in the employer arena, but one of the three legs in the private sector (the DB plan) is largely going away. The 401(k) plans are not retirement plans. They are savings plans.

RIZZO: A poorly designed DB plan may well be worse for the employer than a well-designed DC plan. But a well-designed DB plan seems a more efficient use of dollars than a well-designed DC plan. Maybe we need to roll back some of the benefits, but a well-designed DB plan pays the right amount to the right persons beginning at the right time, for the right length of time with the right survivor options. And it does all this at the right expense level.

KENT: Annuities are expensive for an individual to buy today. The DB plan creates financial efficiencies through the pooling of longevity risk. And there are efficiencies of investing. While those workers in the private sector who do not have a DB plan should be looking at annuities, they lose a great deal by having to go and buy them themselves.

RIZZO: I'm concerned that there might be a knee-jerk reaction that 2008, 2009 were very bad, and yet it's only two years out of a 100-year life of a lot of DB plans. It wouldn't be a good thing to start terminating DB plans, replacing them with DC plans. The right response is to pare them back. If you can't afford them now and you cannot afford the forecasted cost in the future, then let's roll the benefits back some for years of service in the future.

NORTH: There are lots of stakeholders who have skin in the

game. Keeping what is good is a priority on the part of most of the labor organizations. Simultaneously, I think there is a recognition by all parties that if something is no longer sustainable, changes ought to be developed.

People are living longer; people are expecting to work longer. Those trends are independent of the private sector or the public sector. And the public sector cannot ignore these in designing its remuneration packages. That can create pension envy that could lead to more radical decisions, such as going to DC plans.

That said, in the end I believe that the DB versus DC debate in the public sector is not one of benefits. It's more one of governance. If you go to a DC plan, you commit to put in X dollars per year, and there's not much a politician can do to burden future taxpayers by what he does that year. With a DB plan, a benefit improvement in one year that increases past service benefits for employees is something that may not be paid for until the next administration and beyond by future taxpayers.

If people had confidence in the governance of DB plans in the public sector, with no inappropriate or excessive commitments that leave future taxpayers on the hook, I believe a lot of this debate would go away.

RIZZO: As a societal goal, I think our country needs to preserve DB plans, and public-sector DB plans are positioned well to serve that goal. If we can work together to achieve stability and sustainability of pension funds, particularly public sector, I think we would pass to our next generation a worthy security for the retirement years.

Portfolio Allocation

RIZZO: Since 2008 there's not been much movement away from domestic and international equities, unless it's a slight shift toward real estate and alternatives—hedge funds or private equity. Pension funds have stayed the course and not changed their asset allocation very much.

KENT: I've seen similar trends. Public pensions still have the same level of funds dedicated to equities, but have been diversifying within those classes. They continue to rebalance as one sector outperforms another.

NORTH: You really only have two choices when you're putting money into a pension plan, private or public, in terms of your goals and objectives. You go into equity-like securities in order to participate in the growth of the economy with growth-related and risk-related assets. Alternatively, you invest in fixed-income instruments, such as bonds, which you can use to defease your liabilities. On a matching basis, you can offset the payments you expect to make over the next few or several years.

A combination of these represents a good diversified portfolio, and many public plans, primarily because of their size, have a tremendous advantage over both individuals and many smaller private-sector and even smaller public-sector plans. The large public plans can invest in long-term projects—infrastructure, private equity, various alternative investments. They can invest in 2007 in something that won't pay off until 2013. And when the market bottoms out as it did in 2009, they're not pressured to sell at a tremendous loss.

Because of that advantage, public plans can deliver more investment income and, ultimately, lower employer contributions.

The Challenges and Rewards of Working as a Public-Sector Actuary

KENT: You're dealing with a diverse group of people. Whether they're representatives of labor, management, or concerned citizens, they're focused on the retirement system. They have diverse objectives, and there is a challenge in meeting their need for information and to help them make very difficult decisions. Often the public is in the room when you're reporting. And it teaches a very different discipline to stay objective, to provide unbiased information in a meaningful way so that this group of people can understand the risks that they're dealing with and formulate the right decisions.

RIZZO: I've done work in both sectors, and I prefer the public sector. It's a lot more open and transparent. I think it makes us better consultants because of the dynamics of all the different stakeholders and the spotlight that's on us.

We also have a measure of freedom in the public sector to ply our trade, to solve problems for our clients, without the arcane restrictions that the federal regulations require.

And public-sector pension plans are genuine retirement plans. They're not cash accumulation and severance plans like DC plans are. These really are retirement plans that serve a social good, and that has a sense of reward to it.

NORTH: I feel like they're my 700,000 participants. I try to do the best possible actuarial work to help the retirement systems and the city provide for the retirees and beneficiaries in a way that generations of taxpayers get the best allocation of costs over time that I can devise. It's a great responsibility, but the reward is equally great.

KENT: I think what's important to appreciate is that public plan sponsors and the boards that run these systems have been very responsible in addressing the financial crisis that many of the systems have gone through. And actuaries have been providing them with information to make intelligent decisions. ☐

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