

# Developments

RECENT DEVELOPMENTS IN EMPLOYEE BENEFITS

## Can Government Pension Plans Be Fixed?

by Michael Guyton, FSA, EA, MAAA and Kenneth Hohman, FSA, EA, FCA, MAAA

We've all seen the headlines:

***State Pension Plan is Less Than 50% Funded  
Pension Contribution Could Bankrupt City  
Government Workers' Retirement Benefits May be Slashed***

How did we get here? Reading these headlines, one can rightfully conclude that government pension plans are not sustainable. The reality, however, is that while there are some systems that have severe problems, many other systems are in good shape or have a plan in place to improve their financial condition. So perhaps the better question is, why have some governmental pension plans become financially distressed, while other plans have remained strong?

### Some history and context . . .

To answer this question, we must turn back the clock to the implementation of these programs to understand their **sustainability**—the term currently in vogue for assessing the ability of an entity to be maintained over the long term.

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First, when most government pension plans were established, times were different. States, cities, and counties were experiencing economic and population growth, the baby boom generation was young, the benefit obligations of these plans could be sustained based on the economic outlook of the times, and those obligations were deferred until well into the future. As our economy and our population have matured, so have the obligations of many pension plans. We now know that government entities' revenue and tax bases are finite and subject to general economic conditions while

the services required generally do not change.

Government pension plan liabilities have grown large because these plans have been in existence for decades. The risks to government entities imposed by their pension plans are now far greater simply because the liabilities are now larger in proportion to government entity budgets.

Second, recent events have not helped. In the first decade of the new millennium, we've experienced two deep recessions and negative stock market investment returns (as measured by the S&P 500). Make no mistake, the environment has been extremely challenging for government entities and the management of their pension plans, which in part explains why the National Council on Public Employee Retirement Systems reports in its 2013 survey that the average funding ratio among their surveyed plans is 71.5%.

Third, another gradual but significant force at work has been longevity. People are living longer, which should be a good thing, but for a pension plan, participants living longer means the plan will cost more. Looking back, we all knew mortality rates were declining, but the magnitude of longevity improvement was a hazard unforeseen by even the most astute experts. Government pension plans' liability measurements in the past were only updated after the experience had emerged, thus causing the funding to be delayed. As a result, those funding costs are higher.

Finally, state laws are unique forces at work in governmental retirement plans. Many are written in a manner that once a retirement benefit is provided to a participant, the government entity cannot change the benefit for that participant—not even prospectively; ergo,

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government benefits are asymmetric; benefits can be increased, but never decreased for future accruals. Just imagine that any business decision, no matter how well-informed at the time, can never be modified as times change. That is the plan design environment that exists in many states for government entity pension plan sponsors. This severely limits the tools that government entities can use to rein in retirement costs. Furthermore, this inability to change a plan provision, which at implementation seemed insignificant, has become—over time—a catalyst to encourage selected employees to exploit the retirement system to the detriment of the retirement system as a whole. In the last few years, the interpretation of the pension laws has been challenged in the court system with varied results. Where those challenges are successful, the courts may decide the fate of future benefits.

As the landscape has evolved, the risks have grown and challenges have emerged. Government plan sponsors, their stakeholders, and their advisors now recognize certain realities: the governance processes of these plans must be tightened, and the financial management of these plans must be stronger, all in order to balance budgets, meet benefit promises, and ensure that these plans can be sustained.

### Experience is the best teacher . . .

The difficult experience gained from the distress of certain plans is an important learning opportunity in **sustainability** for all government entity plan sponsors and their stakeholders. At the outset of each of these plans, the **stakeholders** made certain demands and assumptions in developing the retirement plan provisions and weighing the future cost of the program. But over the years, each of the stakeholders has been subject to an evolving array of decisions that academics and other thought leaders call **moral hazards**. How the stakeholders have managed these hazards has directly determined the current viability of each of these plans. Therefore, to understand the how and why of our current situation, we must understand not only these bolded terms, but also the interactions and relationships that affect them.

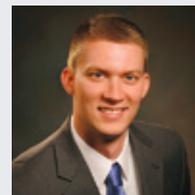
### Sustainability

Sustainability has been identified more by the negative than the positive; that is, we tend, in retrospect, to be able to recognize a system as unsustainable, rather than being able, prospectively, to classify it as sustainable. A recent American Academy of Actuaries presentation on “Retirement for the Ages” outlined four points critical to identifying the sustainability of a retirement plan; the plan must:

- *Promote intergenerational equity.* The current generation of taxpayers should pay for the retirement benefits of the current generation of governmental workers, and the cost should not vary markedly from generation to generation.
- *Allocate cost properly among stakeholders.* The financial risks of a pension plan have historically been the burden of the employer, but the economic events of this millennium have exposed the extent of the risks; it is now understood that the risks need to be shared among the primary stakeholders.
- *Withstand market shocks.* The market rollercoaster of the 21<sup>st</sup> century has clarified the need for adequate retirement reserves, but we can envisage the need for reserves for risks beyond investments, such as longevity risk.

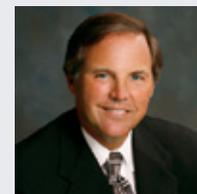
## CONSULTANTS *in the* LIMELIGHT

**Spencer Rowland** has earned the ASA designation from the Society of Actuaries. Spencer is an actuarial analyst in our Nashville, TN office.



Spencer Rowland

**Ken Homan** represented the American Academy of Actuaries and the Conference of Consulting Actuaries at the International Actuarial Association in London on September 10-13. Ken also spoke on the public policy focus of the American Academy of Actuaries at the Tri-State Actuarial Club meeting in Louisville, KY on September 22.



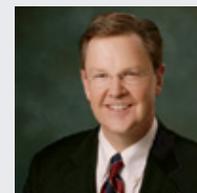
Ken Homan

**John Stone** gave presentations on “ESOP Administration” at the In Tune with ESOPs Fall Conference held in Nashville, TN, and at the New South Chapter of the ESOP Association.



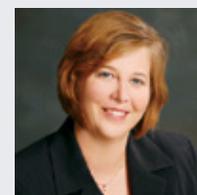
John Stone

**Tom Swain** presented “Is It Time to Transfer Risk? A Strategic Framework” at the Wells Fargo Northeast Client Forum. Tom also spoke at the CCA Annual Meeting on “Dealing with Proposals: Consultants and Clients Tell Us What They’re Looking for.”



Tom Swain

**Jeaninne Irwin and Tom Swain** co-presented at the Institutional Retirement and Trust (IRT) National Webinar. Their topic was, “Are You and Your Plan Ready for an Audit?”



Jeaninne Irwin

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...we tend, in retrospect, to be able to recognize a system as unsustainable, rather than being able, prospectively, to classify it as sustainable.

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- *Maintain balance between benefit costs and benefit adequacy.* The purpose of a pension plan is to provide adequate retirement income so employers can transition employees into retirement with dignity and security, but the cost must not inhibit the financial sustainability of the employer or the employee.

We can all agree that these four points are important topics for any enterprise, but of course, the devil is in the details. These themes can be competing and can never, in total, be satisfied perfectly.

## Stakeholders

As we have become more focused on the proper governance of retirement plans, it has become essential to identify a plan's stakeholders. Nowhere is this more important than in the governmental plan arena, where the taxpaying public is an important (but frequently overlooked) stakeholder.

In the typical governmental retirement system, we can identify the following stakeholders (and there may well be others), each with possibly competing interests:

- *Employees* want to maximize retirement benefits and retain their jobs with competitive pay.
- *Employee unions* must negotiate for the employee interests and be successful enough to retain their membership.
- *The governmental entity/employer, represented by the entity's elected officials* must maintain an adequate level of employees (both quantity and quality) to provide necessary services within budgetary constraints to satisfy their electorate.
- *System management, including system administrative offices and governing boards* provides administrative support and oversight to the system in a manner that satisfies the entity employing them.
- *Taxpayers* want governmental service with minimal taxes.
- *System advisors, such as investment managers, attorneys, and actuaries* provide professional services to the system and must satisfy the needs of the entity that pays their fees.

Some governmental retirement plans are the result of negotiations between the employee union(s) and the

governmental entity. Retirement benefits are negotiated in lieu of pay and are clearly deferred compensation on the part of the employee. It is also common that governmental employees are not eligible for Social Security benefits, so the governmental plan must substitute for Social Security as well as being an employer-provided plan. In addition, employees typically contribute 4% to 8% of pay towards their retirement benefit. All this implies an added need to assure the security of these benefits.

## Moral hazards

All stakeholders have an underlying interest in the retirement system providing adequate benefits that are affordable to the taxing district and sustainable in the long run. However, other competing or conflicting interests can lead to moral hazards, where a stakeholder is willing to accept a larger risk for the retirement system because it benefits that stakeholder. Let's take a look at the types of moral hazards that might apply to each of the above stakeholders:

- *Employees.* A significant governmental plan moral hazard is *salary spiking*, where, in an employee's final years before retirement, pay used to calculate retirement benefits is inflated through excessive overtime or other incentives. This is a combination of poor plan design and a one-time decision to reward a valued employee that grew into an entitlement. In some extreme examples, pay has been increased by tens of thousands of dollars.

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## moral hazard | 'môrəl 'hazərd |

noun

A term used by economists and insurance companies to describe the undue risks that individuals may take when they don't bear the consequences of their actions, and, therefore, have little or no incentive to temper their risky behavior.

The concept of moral hazard does not imply immoral behavior or fraud, and it is not a description of the ethics or morals of the parties involved in a particular transaction.

For an interesting explanation of moral hazard, visit <http://education-portal.com/academy/lesson/moral-hazard-in-economics-definition-examples.html>

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- *Employee unions.* Unions generally give limited consideration to the affordability of the benefits they are negotiating, and clearly this should be a concern of the group on the other side of the bargaining table. Recent government bankruptcies have made it clear that negotiating excessive benefits that result in bankruptcy may well lead to lost benefits for a union's members.

- *The governmental entity/employer.* Elected officials operate in a maze of moral hazards. Government employees frequently provide important election campaign support, and their unions control powerful political action committees (PACs) necessary for incumbents to be re-elected; therefore, the elected official may vote in favor of increasing benefits. On the other side, the politician must determine how to allocate limited financial resources, and appropriate pension funding has frequently been deferred in favor of financing competing needs as a means to reaching a political end (i.e., garnering votes and being reelected). And, of course, moral hazards exist when the elected official is making decisions regarding the retirement system that covers his or her own retirement benefit.
- *System management.* System administrators and boards are often directly or indirectly paid by the governmental entity, thus creating potential conflicts of interest. Additionally, members of the governing board frequently include plan participants and representatives of the governmental entity with the expected competing interests.
- *Taxpayers.* The typical taxpayer wants more services with less tax, and few understand pension funding requirements or consider the long-term consequences of failing to adequately fund the pension. Therefore, the taxpayer is not going to complain when the government defers pension funding in lieu of increasing taxes and/or spending the money on services that more directly affect the taxpayer.

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## ...plans should have strong governance structures that eliminate the opportunities for moral hazards.

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- *System advisors.* Governments are high-profile clients for investment managers, attorneys, and actuaries. Like system management, these advisors are typically directly or indirectly paid by the governmental entity, and they may feel pressure to bow to the wishes of the government against their better judgment. This may be an investment manager over-estimating investment return potential, an attorney suggesting the possibility of a pro-government position, or an actuary agreeing to highly optimistic funding assumptions.

### Lessons learned = best practices going forward

So what have we learned about retirement plan sustainability from both the poorly funded and well-

funded plans? First and foremost, plans should have strong governance structures that eliminate—or at least severely restrict—the opportunities for moral hazards. In particular, the adequate funding of plans cannot be deferred. Governments should contribute actuarially determined funding levels, not just to keep their plans well-funded, but to accumulate reserves against unanticipated hazards. Without these reserves, benefits should not be increased. All of this should assure intergenerational equity with the benefits of a generation of government workers paid by the same generation of taxpayers. This may not guarantee sustainability—governments like Detroit can still fail due to a loss of tax base—but it will keep the retirement plan from being the government’s defining issue.

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#### **Michael G. Guyton, FSA, EA, MAAA, Pension Consultant**

*Michael began his career in employee benefit consulting in 1977 at an international consulting firm. He specializes in advising employers on funding and accounting issues for qualified retirement plans, nonqualified retirement plans, and postretirement medical plans. His clients include publicly traded companies, private companies, defense contractors, and government entities. He currently leads the BPS&M Government Plan Practice Group. Michael received his B.B.A. in Actuarial Science from Georgia State University. He is a Fellow of the Society of Actuaries and an Enrolled Actuary and is a Member of the American Academy of Actuaries. Michael is a consulting actuary in our Nashville, TN office.*




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#### **Kenneth F. Hohman, FSA, EA, FCA, MAAA**

*Ken has spent 38 years in the retirement industry, 36 as an actuarial consultant with BPS&M. His primary area of expertise is in the design, funding, administration, and regulatory compliance of qualified and nonqualified retirement plans. His clients comprise a variety of employers, including Native American tribes, governmental entities, not-for-profit, and for-profit private employers. He heads the firm’s ESOP Practice Group and has extensive experience in assessing the feasibility of establishing ESOPs, including repurchase liability studies. He has presented at the annual Enrolled Actuaries Meeting on various employee benefits issues, has written articles on retirement plan topics, and has spoken at various venues, including IRS internal training seminars. Ken is the managing principal in our Louisville, KY office.*



# Outsourcing 401(k) Plan Fiduciary Functions

## What may a plan sponsor delegate?

by John Lucas, CPA, CPC

Fiduciary outsourcing is a popular trend in the 401(k) market. An increasing number of plan sponsors are trying to minimize their fiduciary responsibility by hiring third-party service providers to serve as plan fiduciaries, and in response, more and more vendors are marketing their services with claims that they will take on a fiduciary role. In this brief article, we explore the marketing of 401(k) fiduciary outsourcing and the level of protection that fiduciary outsourcing provides for a plan sponsor.

Fiduciary outsourcing is often marketed using the fiduciary definitions provided under Sections 3(16), 3(21) and 3(38) of ERISA.

### 3(16) fiduciary

A 3(16) fiduciary is the plan's *administrator*. The administrator must be named in the plan's governing document and is, therefore, often referred to as the *named* fiduciary. If no one else is named, then the plan sponsor is the administrator. The plan administrator has broad oversight responsibilities for plan administration. There can be more than one named fiduciary in a plan document, and responsibilities may be allocated amongst them.

Hiring an advisor to function as a 3(16) fiduciary is a fairly new trend. It involves a third-party vendor who takes on tasks such as hiring service providers, filing 5500s, handling required participant communications and disclosure notices, and keeping plan documents up to date. In truth, the complexities of running a 401(k) plan have long made it necessary for a plan sponsor to outsource most 401(k) administrative tasks to third-party vendors. One could certainly argue that the only real trend here is the concept that these vendors would be named in the plan document, take on fiduciary responsibility for their work, and have more authority to carry out these tasks. In many ways, this allocation of responsibility and authority to qualified vendors makes sense; after all 401(k)s are their business.

The incentives of outsourcing 3(16) fiduciary functions are illustrated by entities such as Associated Multiple Employer Plans (MEPs) that are sponsored by trade

associations or by Chambers of Commerce. These arrangements are typically operated by a third-party 3(16) fiduciary and offer turn-key plan administration to associated member employers that sign on to the plan. Another type of MEP, called an open-ended MEP, is often sponsored by a third-party vendor operating as a 3(16) fiduciary and offers the same type of turn-key arrangement to otherwise unrelated employers. Open-ended MEPs were widely marketed and appeared on the

verge of becoming a driving force in the market until a 2012 Department of Labor Advisory Opinion (2012-04A) concluded that these arrangements were not a single plan under ERISA but a group of single plans.

It is critically important that any plan sponsor that is considering hiring a third-party vendor to be a 3(16) fiduciary understands that although a third-party 3(16) fiduciary may take a lot of

responsibility off the plan sponsor's plate, it cannot completely separate the plan sponsor from fiduciary liability. The act of initially hiring the 3(16) third-party fiduciary is, in and of itself, a fiduciary action, which comes with the responsibility to continually monitor the third-party vendor's ongoing performance. This aspect of being a plan fiduciary simply cannot be eliminated.

A designated third-party 3(16) fiduciary is more likely to be used by smaller 401(k) plan sponsors. Larger employers are more likely to have internal human resource, finance, and legal resources officers, who can serve on the plan sponsor's benefit committee and take responsibility for the requisite plan oversight. Also, it is unclear whether the pool of third-party vendors offering to be 3(16) fiduciaries has sufficiently "deep pockets" to provide an acceptable comfort level to large 401(k) plan sponsors.

### 3(21) fiduciary

This section of ERISA provides the general definition of a fiduciary. From a marketing standpoint, a 3(21) fiduciary is most commonly used in reference to an investment consultant who renders advice to the plan for a fee but is not ultimately responsible for making the final investment



CONTRACT OUT?

decisions. However, a 3(21) fiduciary would refer to anyone functioning in the role of a fiduciary “to the extent” such person exercises discretionary authority or control over plan assets or plan administration. This type of arrangement has often been referred to as the *functional fiduciary*, and it is the most common form of fiduciary outsourcing.

In simple terms, whereas a 3(16) fiduciary is a named fiduciary in the plan document, the 3(21) fiduciary is someone who has been delegated a fiduciary duty by a named fiduciary. A 3(21) fiduciary is often referred to, and marketed as, a *co-fiduciary*. The term *co-fiduciary* is not defined by ERISA, but it is not entirely without meaning. What the vendors that are marketing their fiduciary status are trying to say is that they will be responsible and correspondingly take away the liability of the plan sponsor. ERISA section 405(c) provides some legal support for the claims that plan sponsors can protect themselves from some potential fiduciary liability by hiring a functional fiduciary.

ERISA Section 405(c) provides that a named fiduciary can avoid liability relative to an action or omission to act by a functional fiduciary, but this protection is only available under the following circumstances:

- The plan document must permit the delegation of fiduciary responsibility and the delegation cannot be broader than the document permits.
- The named fiduciary must follow ERISA’s standards such as prudence and the exclusive benefit rule when the named fiduciary acts to:
  - initiate delegation (or select a functional fiduciary),
  - establish or implement the plan’s delegation procedures, or
  - continue the delegation or allocation of fiduciary responsibility (ongoing monitoring).

If the named fiduciary knows, or it is determined that he should have known, about a transaction or fiduciary breach, then the named fiduciary will not escape fiduciary responsibility for that transaction or breach.

### 3(38) fiduciary

A 3(38) fiduciary is an investment manager “who has the power to manage, acquire, or dispose of any asset of a plan.” A 3(38) fiduciary must be a registered investment adviser, a bank, or an insurance company. Unlike the 3(21) fiduciary, who is an investment consultant, the 3(38) fiduciary has the last call on plan investments. While a 3(38) fiduciary will clearly provide the plan sponsor a great deal of protection from fiduciary risk, there are still some limits. As with the selection of the 3(16) fiduciary, the plan sponsor remains a fiduciary in regards to the initial

selection of the investment manager and for ongoing monitoring of the manager’s performance. A 3(38) fiduciary arrangement may be used in conjunction with a 3(16) arrangement, and this is common for Association or Open-Ended MEPs.

### In perspective

In recent years, more and more plan sponsors are looking for ways to manage the multiple risks that are part of being a plan fiduciary by outsourcing their fiduciary obligations. The motivation for this trend toward fiduciary outsourcing is easy to see. In the 30-plus years since their inception, 401(k) plans have become extremely complicated. The accumulation of the Internal Revenue Code, ERISA, 5500 filings, discrimination testing, fees, and all those acronyms and initialisms that relate to 401(k) plans have become too much for the typical plan sponsor.

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The plan sponsor always has the last call on hiring, monitoring, and firing its vendors, and that’s a fiduciary obligation that cannot be transferred.

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If I am a small manufacturer that sponsors a 401(k) plan, the idea that I can shift some fiduciary responsibility for my plan is appealing. Plan sponsors need to understand, however, that while third-party vendors may be offering good and valuable services (and possibly even be offering good value for the price), they cannot eliminate all of the plan sponsor’s fiduciary obligations or risk. The plan sponsor always has the last call on hiring, monitoring, and firing its vendors, and that’s a fiduciary obligation that cannot be transferred.

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#### John Lucas, CPA, CPC

*John Lucas has been working with employee benefit programs since 1988. He has been instrumental in bringing new BPS&M clients into compliance with ERISA and the Internal Revenue Code and keeping clients up to date with changes in laws and regulations. He is a frequent public speaker on matters relating to employee benefit programs. John received his B.A. from Marshall University and his J.D. from the University of Akron. John is an attorney licensed to practice in Ohio. He is also a Certified Public Accountant and a Certified Pension Consultant. He is a member of the American Bar Association, the American Institute of Certified Public Accountants, and the American Society of Pension Actuaries.*



# S Corporations and ESOPs

by Katherine Tange-duPré, CEBS

**Employee Stock Ownership Plans (ESOPs) merge the tax benefits of a qualified retirement plan with corporate finance and align employees' retirement benefits with corporate goals.<sup>1</sup>**

While many of the beneficial provisions of sponsoring an ESOP don't apply to S corporations, the tax benefits to an S corporation that adopts an ESOP can be huge. Unlike C corporations, where profits are taxed at the corporate level and taxed a second time when distributed to shareholders, S corporation earnings pass untaxed directly to individual shareholders; therefore, profits aren't taxed until the shareholders file their annual tax returns.

"So what?" you may ask.

So this: imagine a company avoiding (not evading) paying taxes on corporate profits and the beneficial shareholders deferring taxes on the profits to age 70½ or later. An S corporation with an ESOP does exactly that, because the ESOP trust is tax-exempt under IRC Section 501(a). The more shares of the company the ESOP holds, the more income allocated to the ESOP; the more income allocated to the ESOP, the less taxable income distributed to shareholders outside the ESOP. If the ESOP holds 100% of the shares of the S corporation, all profits are allocated to the ESOP, and federal and (usually) state income taxes are deferred until benefits are distributed from the ESOP, which a participant can defer to age 70½.



## The catch

We know Congress and the IRS would never offer the generous tax savings opportunity available through an S corporation ESOP without attaching some strings. For starters, not every for-profit organization can qualify as an S corporation.<sup>2</sup> Privately held ESOP companies must obtain annual business appraisals to comply with ESOP requirements. An S corporation ESOP cannot use the relaxed deductions and maximum addition limits that are available to C corporation ESOPs. But the biggest catch is the so-called S corporation ESOP *anti-abuse* rule. This rule is intended to ensure that stock ownership of the S corporation is not limited to a few individuals or a few family groups. The anti-abuse rule is complex and failures result in egregious penalties that can potentially bankrupt a company.

## Converting from C corporation to S corporation

It is relatively common for an eligible C corporation to convert to an S corporation as a way of eliminating double taxation. If you're the CEO or CFO of a C corporation, and you think that converting to an S corporation and establishing an ESOP is the perfect solution to all your tax woes, there are a few things that you need to consider. First, a C corporation that converts to an S corporation may run into some unfavorable tax issues. Other considerations include the impact of conversion on employee compensation and benefits—especially on employees who are 2% (or more) owners.

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**Unlike C corporations, S corporation earnings pass untaxed directly to individual shareholders...**

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This unique tax treatment offers an additional financial advantage to S corporations that sponsor ESOPs. Typically, an S corporation will make distributions to its shareholders to help them pay the federal and state income taxes on their portions of the S corporation's profits. Such distributions must be provided pro rata based on the number of shares held. If an S corporation

## In perspective

For S corporations, the tax benefits of an ESOP go one step further than those associated with the typical qualified plan. Since the ESOP is a tax-exempt trust, the more shares held by the ESOP, the lower the tax bill. If you're already operating as an S corporation, then an ESOP may be an ideal way to lower taxes paid by shareholders and provide a qualified retirement plan to all employees.

While establishing and maintaining an ESOP isn't easy or cheap, as it requires the expertise of legal, tax, and ESOP professionals, many S corporations find the tax benefits available through the ESOPs well worth the effort and cost. If you're a C corporation considering conversion to an S corporation as a way to reduce taxes and add a valuable employee benefit, consider all aspects before making the leap. For C corporations considering conversion, there may be tax liabilities derived from the prior C corporation's operations; however, there could be significant tax benefits to C corporation shareholders who sell stock to an ESOP prior to the conversion to an S corporation.

<sup>1</sup> *A Look at the Good, the Bad, and the Ugly of Employee Stock Ownership Plans*, 2013, <https://www08.wellsfargomedia.com/downloads/pdf/com/retirement-employee-benefits/insights/good-bad-ugly-esop.pdf>, accessed September 26, 2014.

<sup>2</sup> *S corporations can have no more than 100 individual shareholders; shareholders must be U.S. citizens or resident aliens; only one class of stock is permitted, although, the stock can have voting and nonvoting shares; and the business must run on a calendar year basis.*

## Katherine Tange-duPré, CEBS

*Kathie has more than 25 years of experience in the writing, design, and production of effective employee communications. She has won gold, silver, and bronze awards for BPS&M from the International Association of Business Communicators. She serves as editor-in-chief of BPS&M's Developments newsletter. The author of the BPS&M employee benefits survey analysis from 2003 – 2011, she is heavily involved in the survey's creation and analysis. She has published articles in the "Journal of Commerce and Industry," Healthline, "American Society of Healthcare Risk Management," and has worked with organizations in the United States and abroad in England, Australia, South Africa, and Singapore. Kathie earned a B.A. in Finance, a B.F.A. in graphic design, and an MBA. She is a Fellow of the International Society of Certified Employee Benefit Specialists and a member of the International Association of Business Communicators, the Middle Tennessee Employee Benefits Council, and AIGA, the professional association for design. Kathie is a consultant in our Nashville, TN office.*



# The BPS&M Pension Liability Index

*Updated as of September 30, 2014*

by Jeffrey Thornton, ASA, EA, MAAA

Interest rates are arguably the primary driver of the volatility in pension plan liabilities. BPS&M has established a set of liabilities and applied the yield curves to those liabilities in order to create the indices used to demonstrate the effect of interest rates on plan liabilities. The BPS&M Pension Liability Index tracks the percentage change in liabilities for a typical defined benefit plan under the following four interest rate standards, which are in general use:

1. The Full Yield Curve published by the IRS for minimum funding purposes under IRS Code §430.
2. The 24-month Averaged Yield Curve published by the IRS for minimum funding purposes under IRS Code §430.
3. The Adjusted Average Yield Curve reflects the impact of the [Moving Ahead for Progress in the 21st Century Act \(MAP-21\)](#) and the [Highway and Transportation Funding Act of 2014 \(HATFA\)](#). HATFA extended the funding relief, which was introduced by MAP-21 in 2012. In the graph below, the Pension Liability Index for the Adjusted Average Yield Curve is shown under the MAP-21 rates before the application of HATFA as well as the rates under HATFA. Originally, under MAP-21, the funding relief began to diminish in 2013. HATFA extends the funding relief, such that it does not begin to diminish until 2018.
4. A Corporate Financial Yield Curve used for financial statement pension liability determinations. Prior to

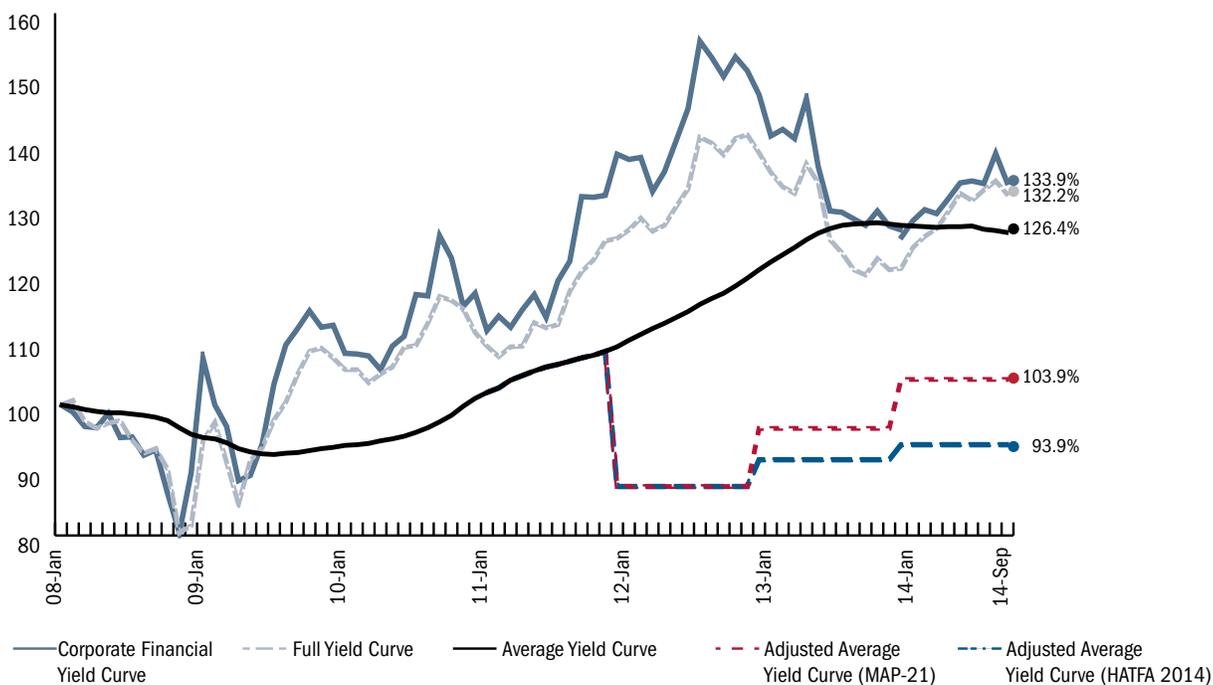
January 1, 2014, this was measured using the Citigroup Pension Discount Curve. Beginning January 1, 2014, this will be measured using the Wells Fargo Pension Discount Curve (AA-rated or higher). For more information about the Wells Fargo Pension Discount Curve, please read the article titled “Introducing the Wells Fargo Pension Discount Curves” in the Jan/Feb 2014 issue of *Developments*.

The BPS&M Pension Liability Index uses a hypothetical plan for benchmarking purposes based on “typical” pension plan features. The duration of the liabilities under this hypothetical plan is 15 years. The benchmark period for the Index starts with the effective date of the Pension Protection Act (January 2008), and the graph shows the rise and fall in liabilities due to changes in interest rates relative to that date. All other factors remain constant throughout the benchmarking period; ergo, the change in liabilities is due solely to the interest rate environment.

... the graph shows the rise and fall in liabilities due to changes in interest rates relative to January 2008 ...

The trends demonstrated in the graph will generally hold true for most pension plans, but the magnitude of the percentage changes will vary depending on a given plan’s demographics and benefit accrual patterns.

**BPS&M Pension Liability Index since inception**



The following table shows the percentage changes in the indices over various periods.

Indices Changes			
Indices	Since Inception (1/1/08)	2014 Year to Date	Last 12 months
Full Yield Curve	+32.2%	+9.3%	+10.3%
Averaged Yield Curve	+26.4%	-0.9%	-1.1%
Adjusted Average Yield Curve	-6.1%	0.0%	+2.5%
Corporate Financial Yield Curve	+33.9%	+6.6%	+5.0%

The BPS&M Pension Liability Index is updated regularly. If you have questions or comments concerning the BPS&M Pension Liability Index, please contact your BPS&M consultant or [jeffrey.p.thornton@bpsm.com](mailto:jeffrey.p.thornton@bpsm.com).

**Jeffrey Thornton, ASA, EA, MAAA**

Jeff has 10 years of actuarial experience in defined benefit plan administration. He specializes in liability studies and has provided plan-specific analyses for clients of various sizes and diverse industries. Jeff is a consulting actuary in our Louisville, KY office.





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# Developments

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