Bryan, Pendleton, Swats & McAllister, LLC *July/August 2016*

Developments

RECENT DEVELOPMENTS IN EMPLOYEE BENEFITS

Communicating Plan Changes

By Whitney Coppinger, CEBS & Katherine Tange-duPré, CEBS

How many times do you communicate daily? If you really think about it, there's verbally, physically (to quote a favorite Disney villain, "never underestimate the power of body language"), through emails, social media, reading this sentence, but I digress. Communication is an integral part of everyone's life. Given the amount of time we spend communicating, you would think it would be easy to convey change information to employees, but miscommunication (or in some cases *missed* communication) tends to be a recurring theme. Communicating change to employees can be difficult, especially if the change is negative. In this article, we will examine change communication, pitfalls and how to avoid them, and, finally, a case study involving a major benefit plan change of introducing an ESOP.

What is change communication?

At its largest picture, change communication simply informs one of change. At a company level, change communication deals with explaining changes that will negatively or positively affect employees. At a benefits level, change communication tells employees something they are either going to like or something about which they are going to be upset. Therefore, it is essential to have and communicate the following four parts in any change communication campaign.

> At a benefits level, change communication tells employees something they are either going to like or something about which they are going to be upset.

A shared purpose – When beginning a change communication campaign, it is important to explain to employees the "shared purpose." As a company, why are we taking this action. Avoid using phrases such as "management has decided, corporate thinks it's best if, or (my personal *favorite*) the higher-ups feel like;" instead focus on how we (the company not the royal we) are doing this together because it is in everyone's best interest or it is necessary for the financial wellness of the company.

The big picture – The future can be a scary thing to think about; therefore, telling employees what the change will look and feel like when completed is very important. What is the end goal? How will this affect everyone? Once we reach the goal, where will we be? Be open, honest, and direct — especially with negative changes.

The game plan – Keeping with the big picture, tell employees how we will reach the end goal. How are we going from today to tomorrow, from A to B?

Participant involvement – Explaining what employees need to do to help make the change a reality and a success is not enough; every level of management needs to be onboard, ready to answer questions and alleviate concerns.

Combining these four parts into a campaign isn't the hard part. If you have a purpose it naturally leads to an end goal, which leads to a plan. The hard part comes in getting employees to accept the end goal.

Avoiding the pitfalls

Communicating change is a delicate thing, walking a fine line between success and failure. There are three categories of pitfalls: campaign pitfalls, employee pitfalls, and manager pitfalls.

Also in this issue:

Campaign pitfalls

Campaign pitfalls are those committed by the communication/implementation team. Mistakes range from simple things like not communicating a timeline for the change to more in-depth mistakes, such as relying only on print communications or not facilitating a dialogue with employees. Plan sponsors should be open, honest, and thorough. If the change is negative, do not sugarcoat it.

> Communicating change is a delicate thing, walking a fine line between success and failure.

Avoiding a communication breakdown is easy if each campaign piece explains the logic behind the change, how it supports the company, how it will be accomplished, and how to voice concerns over the change. Plan sponsors should also ask employees what method of communication is best for them (i.e., emails, print, group meetings, face-to-face, etc.). Depending on the magnitude of the change, plan sponsors should consider the extent and depth of the campaign when deciding on appropriate mediums.

Employee pitfalls

Employees should feel as if they are a part of this campaign and not just being told what is happening. Plan sponsors will face opposition if employees feel they are not being listened to, responded to, or even acknowledged. Plan sponsors should give employees a platform to voice their concerns. This isn't a debate but a place to hold a dialogue. Along the same lines is getting employees to let go of the past. Sometimes it's hard to move on, and plan sponsors should not expect their employees to just forget how things were and agree to the change immediately. Employees need time to process and accept the change. Plan sponsors who engage employees at the start will have more success. Communicating the purpose, big picture, and game plan will help employees become involved and accepting of the new change.

Management pitfalls

If managers and supervisors are not on board and equipped with ready responses, the campaign will fail. The organization's leadership should be the first to support the change. If employees see managers saying one thing but doing another, they will not support the change. Body language is extremely important in this phase, if the managers are verbally supporting it but physically conveying annoyance or rejection, employees will not be receptive. Prepping managers ahead of letting the entire company know is a great way to prepare them for the questions with which they may be inundated. Also, allowing managers to know ahead of everyone else will give them time to process and accept, and, therefore, be fully on board once the announcement is made.

Case study: You're an owner! Transitioning to an ESOP

When companies introduce an employee stock ownership plan (ESOP), they face a double challenge: our natural resistance to change coupled with a general lack of familiarity with ESOPs.

Overcoming the challenges

Founded in the first half of the 20th Century, the XYZ Company has over 500 employees in multiple locations. XYZ was a family owned business, struggling to find the next generation of owners. After looking at various options, the owners decided that an ESOP would be the best way to maintain the company's culture, protect its workers, and maintain the family's legacy. Once the decision to form an ESOP was made, 10 employees from different areas of the company with different levels of skills and responsibilities were enlisted to serve on an ESOP committee.

An early ESOP committee discussion centered on how best to get employees more involved and engaged in the success of the Company (**a shared purpose**). The committee recognized that the most effective way to instill a sense of ownership was through open, clear, and frequent communication. The committee knew they needed to tell the ESOP story (**the big picture**) through the Company's voice.

The ESOP committee and BPS&M's communications group worked together to develop the communications strategy (**the game plan**) and craft the story. A communication calendar and materials for employees were developed. To ensure that employees received a consistent and accurate message, BPS&M prepared training materials and held training sessions for members of the ESOP committee and Human Resources. Creating the ESOP brand was also an early step in the development process. All communications relating to the ESOP would use this common brand as a way to build plan recognition among employees.

The rollout

The rollout began with company-wide meetings. Because the organization ran two shifts a day, paid mandatory meetings—with refreshments of course—were scheduled for the last hour of the day shift and the first hour of the evening shift at each location. As anyone who has ever worked a booth at a trade show or conference knows, people love swag, and attendees were greeted with ESOP-branded ball caps. The meetings began with a three-minute video of the CEO announcing the ESOP and setting the stage for a half-hour presentation by a BPS&M ESOP expert to introduce the plan, followed by a Q&A session. Questions were recorded during each session, and answers were compiled and posted in multiple locations at all facilities. At the end of each meeting, employees were given a packet of materials with more information about ESOPs in general and the Company's new ESOP specifically. Materials included a brochure containing information about the history of ESOPs; a list of other ESOPs in the same geographic region, along with when they were established and the number of participants; examples of growth experienced by other ESOPs; and a series of frequently asked questions.

Ongoing communications

George Bernard Shaw said, "The single biggest problem in communication is the illusion that it has taken place." The ESOP committee knew that one meeting and a ball cap were only early steps in the lengthy journey employees would need to make before they were thinking like customers but acting like owners (**participant involvement**). To build employee knowledge and understanding, a section of the Company's internal newsletter is devoted to keeping employees up-to-date on industry trends and factors that affect Company performance. Employees are also encouraged to attend quarterly meetings (three meetings are held each quarter to accommodate employees' schedules) where the Company shares financial results. In addition to sharing company financials, XYZ also offers informal sessions where employees can learn more about personal financial management, from balancing a checkbook to setting up (and sticking to) a household budget.

Results

It's been several years since the ESOP was introduced to employees, and while the ESOP can't be credited with all the positive news from XYZ, financial performance is strong, employee engagement is high, and employees continue to look forward to their branded employee-owner swag.

Whitney Coppinger, CEBS

Since joining the firm in 2013, Whitney has effectively designed, written, and edited employee benefit communications. She also writes and edits marketing materials for BPS&M. She is a member of the Editorial Board. Whitney received a B.A. in Public Relations, cum laude, from the Austin Peay State University. She also received her Master's in Corporate Communications from Austin Peay State University. Whitney works in our Nashville, TN office.

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 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. She also taught professional practices and graphic design courses at Watkins College of Art, Design & Film. Kathie earned a B.A. in Finance from Sam Houston State University, a B.F.A. in graphic design from Watkins College of Art, Design & Film, 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 graphic design. Kathie is a consultant in our Nashville, TN office.

Rate Hikes and Pension Plans

How the Federal Reserve Affects Pensions

By Adam Gray, FSA, EA, CERA, MAAA

It was big news on December 16, 2015, when the Federal Open Market Committee (FOMC), a branch of the Federal Reserve, announced that they would be raising interest rates by 25 basis points. Actuaries and plan sponsors were anxious to find out what impacts the announcement would have in regard to their defined benefit plans' funded status, but to fully appreciate how the FOMC's December 16 decision (and future decisions) could affect pension plans, we first need to have an understanding of the relationship among the FOMC's decisions, financial markets, and pension plans.

From the FOMC to financial markets

Let's start with the FOMC's ability to set the target federal funds rate. When the FOMC is announcing a rate hike, it's influencing the supply of money in the US economy to set target rates at which banks can borrow money overnight from each other in order to meet their reserve requirements. The higher the target interest rate, the less willing banks are to borrow money because of the higher cost. Markets try to anticipate when the FOMC will change interest rates and prices will adjust accordingly. We can discuss the outcomes in two distinct markets, bonds and stocks.

If the bond market senses that prevailing interest rates are rising, bond prices will be adjusted downward to account for the investors' expectation of a higher return on a particular bond. Said another way, a bond's interest and principal payments are fixed from issue, and the only way to make it more attractive to investors is to lower the purchase price. If prevailing rates are rising but bonds are not adjusted appropriately, investors will seek out other investments for a better return.

Due to the number of factors that affect stocks, it is harder to predict what will happen to the stock market in the event of a rate hike. Unlike the bond market, interest rates don't have a clear correlation with investors' expectations of stock prices. However, rate hikes may increase the rates banks charge on loans, credit cards, mortgages, and other consumer lending. This can indirectly affect revenues because consumers have less money to spend on businesses. Direct borrowing costs for businesses may go up, so expansion and growth can be limited, reducing the stock price. A company's use of debt to finance projects can affect investors' expectations when interest rates are rising. A highly leveraged company could see a decrease in its stock price when rates rise because it's more expensive to borrow money, and the increased cost of borrowing will directly affect the company's bottom line.

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To get a sense of the absence of correlation between the stock market and rate hikes, we can look at the two-year period beginning June 30, 2004 to June 29, 2006, when the Fed raised the interest rate seventeen times in a row, from 1.25% to 5.25%.

Date	Fed Fund Target	S&P 500 Return for Month
06/30/2004	1.25%	1.80%
08/10/2004	1.50%	0.23%
09/21/2004	1.75%	0.94%
11/10/2004	2.00%	3.86%
12/14/2004	2.25%	3.25%
02/02/2005	2.50%	1.89%
03/22/2005	2.75%	-1.91%
05/03/2005	3.00%	3.00%
06/30/2005	3.25%	-0.01%
08/09/2005	3.50%	-1.12%
09/20/2005	3.75%	0.69%
11/01/2005	4.00%	3.52%
12/13/2005	4.25%	-0.10%
01/31/2006	4.50%	2.55%
03/28/2006	4.75%	1.11%
05/10/2006	5.00%	-3.09%
06/29/2006	5.25%	0.01%

During this period, the federal funds rate increased 4%, while the average return for the S&P 500 was roughly 1%. And while interest rates climbed steadily, market returns were mixed, with the S&P 500 experiencing five months with negative returns during this period.

From the financial markets to pension plans

The asset allocation of the plan will determine the magnitude of the change in the portfolio. Changes in bond and/or stock prices will have a direct effect on the assets held in a pension plan, while the liabilities of a pension plan are only affected by the changes in bond price.

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A lower bond price and higher prevailing interest rates correspond to a higher yield to maturity on a particular bond. Yield to maturity is the single rate that, when used to discount a bond's cash flows, produces the bond's market price. If you take the yield to maturity for corporate bonds within a certain credit rating range, a yield curve can be constructed. The rates that make up a yield curve are used to discount expected pension benefit payments to calculate the pension plan's accounting liability. Generally, the higher the rates in the yield curve, the lower the plan liability will be.

The recent rate hike

Now that we have a basic understanding of how the FOMC's decisions can affect pension plans, let's examine what happened with the December 16 rate hike, which took the federal funds target rate from 0.00% – 0.25% to 0.25% – 0.50%, a 25 basis point increase in the target range. Some say that the rate hike was already reflected in bond and stock prices before it was announced; in fact, the CME Group website[1] predicts the likelihood of the federal funds rate increasing at the next FOMC meeting. Taking a quote directly from the CME Group, "Based on CME Group 30-Day Fed Fund futures prices, which have long been used to express the market's views on the likelihood of changes in U.S. monetary policy, the CME Group FedWatch tool allows you to view the probability of FOMC rate moves for upcoming meetings."[2]

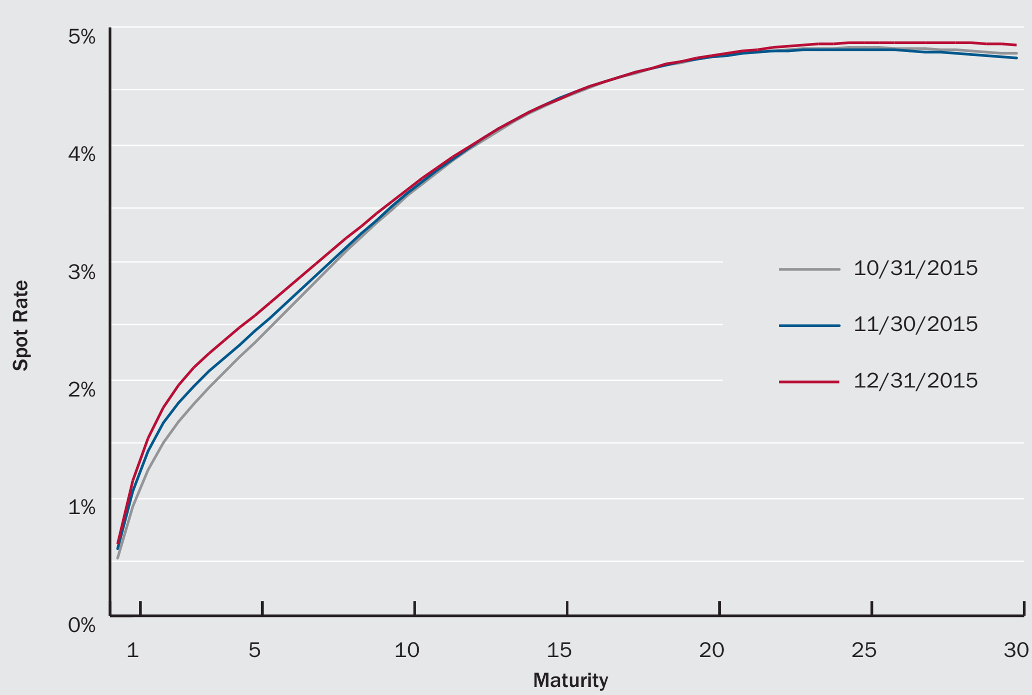
There are others that would argue that rate changes don't immediately become reflected in the market after an announcement and could have some degree of lag. So how can we get a sense of how much a Fed rate hike will affect bond and stock prices when we aren't sure when the information is reflected in the markets?

Examining the liabilities

Using the December 16 rate hike, we can examine a series of month-end curves (versus trying to compare bond prices on December 16 and December 17).

The graph of the Wells Fargo Pension Discount Curve below illustrates the movement in the discount curve for the last three months of 2015, with the red line reflecting the effect of the December 16 rate hike. Looking at the three to five year maturity range, there is roughly a 15 basis point increase between each month. It's possible that the increase from October to November could be because the market anticipated the upcoming announcement, and bond prices adjusted accordingly.

Wells Fargo Pension Discount Curve 4th Quarter 2015



We can take this one step further and look not only at the effect on the yield curve, but also look at what happens to a pension plan's liabilities. The BPS&M Pension Liability Index tracks the percentage change in liabilities for a typical defined benefit plan. The discount rates for the typical plan using the Wells Fargo Pension Discount Curve were 4.47%, 4.47%, and 4.53% at the end of October, November, and December, 2015 respectively. At a liability duration of 16.5 years, the six basis point increase in discount rate is approximately a 1% decrease in the pension plan liability. If we assume that the rate hike is the only variable affecting the yield curve from November to December, then the 25 basis point increase in the federal funds target rate had little *accounting* impact on pension plans.

Note that we are ignoring the effect of the rate hike on pension plan funding and are only examining the impact on accounting liability. Since the funding interest rates are still falling outside of the 25-year average corridor imposed by MAP-21 (Moving Ahead for Progress in the 21st Century Act), we would only be analyzing the effects of a 25 basis point change averaged with 24 years of historical rates.

Examining the assets

If we assume the typical pension plan has an asset allocation of 60% fixed income and 40% equities, we can calculate an approximate return for December 2015. The S&P 500 index had a roughly 2% decrease in December. As we saw above, bond yields for three- to five-year maturities increased by 15 basis points during this period, which was the largest increase observed over all maturities. If we assume that all bond yields increased by 15 basis points and the bonds in the allocation have duration of 10 years, then the bond portion of the allocation drops in price by 1.5%. This means the total value of the assets would drop only 1.7%.

The funded status of our "typical" pension plan would hardly be affected by the rate hike.

The funded status of our "typical" pension plan would hardly be affected by the rate hike. If the plan is not fully funded, the total fund status would drop by less than 1%!

Looking forward to the next announcement

Now that we have examined the effects of the most recent rate hike, we can speculate on when and by how much the typical pension plan will be affected by the next rate change. As of the most recent FOMC meeting, held July 26-27, 2016, it was stated that, "The Committee expects that economic conditions will evolve in a manner that will warrant only gradual increases in the federal funds rate . . . However, the actual path of the federal funds rate will depend on the economic outlook as informed by incoming data."[3]

This has been the generic statement the FOMC has released since the December 16 meeting. At the July meeting all but one of the ten members were in favor of maintaining the current rate. Based on the press release and vote tally, it appears that the FOMC will be slow to raise rates again.

The CME Group's FedWatch tool, however, reports a 48% chance that the federal funds target rate will be higher than 0.25% to 0.50% at the December 13–14, 2016 meeting (market data updated as of June 16th). Roughly 9% of the 48% probability is that the target rate will be raised to 0.75% to 1.00% at that meeting. If this is the case, another rate hike would have to happen prior to the December meeting. There are only three more meetings in 2016, with the next meeting taking place September 20–21. Based on FOMC commentary and the FedWatch tool, it is possible that an increase could occur before year-end.

In perspective

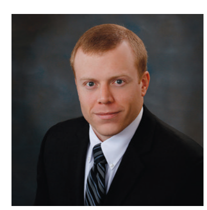
For a typical plan with a conservative asset allocation, recent rate hikes do not seem to materially affect the funded status. Plan sponsors should consult with their actuary to run sensitivity analyses to determine the funded status volatility of rate hikes for a specific pension plan.

[1] *http://www.cmegroup.com/trading/interest-rates/countdown-to-fomc.html*

[2] *http://www.cmegroup.com/trading/interest-rates/countdown-to-fomc.html, Accessed July 23, 2016.*

[3] *http://www.federalreserve.gov/monetarypolicy/files/monetary20160727a1.pdf*

Adam Gray, FSA, EA, CERA, MAAA



Adam joined BPS&M in 2009. He is experienced in the design, funding, accounting disclosure, administration, and regulatory compliance of defined benefit pension plans. Adam led the development of the Wells Fargo Pension Discount Curves. He is a Fellow of the Society of Actuaries, an Enrolled Actuary, and a Chartered Enterprise Risk Analyst. Adam is a consulting actuary in our Nashville, TN office.

Interest Rates:

The Risk That Keeps on Giving . . . or Taking

By Ken Hohman, FSA, EA, FCA, MAAA

For the last seven years, we've heard the question, "Interest rates can't go any lower, can they?" Based on a 1 – 37 basis point drop in corporate bond rates in July, 2016 (depending on where you are on the yield curve duration), the answer is, "Yes, they can!"

That's because the factors that could drive a drop in interest rates are varied and complex. In our current environment, investors are feeling insecure (financially and politically). Insecurity generally leads to a flight to quality, and bonds issued by strong US companies are considered a safe haven for quality. This increases the demand for these bonds, resulting in a decline in interest rates. Additionally, the Federal Reserve has declined to raise rates since December, 2015, and there is no clear indication from the Fed as to the timing of the next rate hike (for more information regarding the effect of Federal Reserve Board action on interest rates, see Adam Gray's article beginning on page 4).

. . . the factors that could drive a drop in interest rates are varied and complex.

Why should you care about falling interest rates? Your primary concern is probably the minimal returns you are receiving on your money market investments. But on the other hand, you are able to borrow money (or refinance your mortgage) at a much reduced interest charge.

If you are responsible for a defined benefit (DB) pension plan, however, you have become intimately aware of the impact of interest rates on plan liabilities and the volatility associated with interest rate risk.

. . . for DB plans, the liability increases as interest rates decline.

Similar to a bond, DB plan liabilities are determined as the present value of future benefit payments, discounted with interest from the date the expected benefit will be paid. The higher the interest rate, the greater the discount, resulting in a lower liability. Alternatively, for DB plans the liability increases as interest rates decline.

There are many liability measures associated with DB plans, and interest rates impact DB liabilities to different degrees, for example:

- **Plan funding liabilities.** These liabilities are generally determined based on a corridor around high-quality corporate bond interest rates smoothed over a 24-month period; although a plan sponsor may elect to use a full yield curve with no smoothing.
- **Corporate financial statement liabilities.** These liabilities are based on a yield curve, as of the measurement date, with no smoothing.
- **PBGC variable premium.** This liability is based on rates averaged over the last month of the prior plan year (i.e., one month of smoothing).
- **Lump sum benefit determinations.** This amount is based on rates averaged over a specific month that may be as much as 16 months prior to the distribution date.
- **Annuity purchase cost.** This is a premium determined by the insurance company, generally based on a yield curve related to the insurance company's bond holdings as of (or near) the annuity purchase date.

As a benchmark, the July drop in interest rates might increase the lump sum benefit or annuity purchase cost of a 65-year-old retiree by 2%. The change in rates through the first seven months of 2016 increase these amounts approximately 7.5%, and the rate change since January, 2008 results in a 27% increase.

As a benchmark, the July drop in interest rates might increase the lump sum benefit or annuity purchase cost of a 65-year-old retiree by 2%.

The BPS&M Pension Liability Index (on page 8) charts the impact of interest rate movements on DB liabilities related to plan funding and financial statement reporting for a static sample plan. That sample plan includes younger, active participants as opposed to the above example relating to a 65-year-old. The younger the age, the longer the discounting period and the greater the impact of the interest rates; therefore, the DB Index shows an even more significant effect from the drop in interest rates.

Current interest rates are at historical lows. Can they go lower? With negative interest rates in countries like Germany and Switzerland, they could, but the general expectation is that US interest rates will remain unchanged or increase slowly.

If interest rates were to increase, DB liabilities would decrease; however, increasing rates, with the commensurate higher cost of credit, could have a dampening impact on stock markets and DB plan assets, thus proving the point that there is risk when it comes to interest rates — whether they rise or fall.

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

Ken has spent 40 years in the retirement industry, 38 as an actuarial consultant with BPS&M. His areas of expertise are in the design, funding, administration, and regulatory compliance of qualified and nonqualified retirement plans. Ken currently serves as the International Secretary for the American Academy of Actuaries. Ken is the managing principal in our Louisville, KY office.

CONSULTANTS *in the* LIMELIGHT

Ken Hohman

Ken Hohman (BPS&M Louisville) spoke at the Tri-State ESOP Conference in Louisville, KY on August 4. The Topic was, "ESOP Plan Design: The Basics & More." Ken also spoke at the Kentucky Chamber of Commerce 11th Annual Business Summit on the topic of "Public Employee Pensions: Defining the Options."

Jeffrey Thornton

Jeffrey Thornton (BPS&M Louisville) has earned the FSA designation from the Society of Actuaries.

For more information about our consultants, please visit www.bpsm.com.

The BPS&M Pension Liability Index

Updated as of July 31, 2016

By Jeffrey Thornton, FSA, 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), the Highway and Transportation Funding Act of 2014 (HATFA) (see BPS&M *Alerts* dated September 16, 2014), and the Bipartisan Budget Act of 2015 (BBA 2015). HATFA and BBA 2015 extended the funding relief, which was introduced by MAP-21 in 2012. Originally, under MAP-21, the funding relief began to diminish in 2013, but has been extended under BBA 2015, such that it now does not begin to diminish until 2021.
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. As of January 1, 2014, this is 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 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.

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

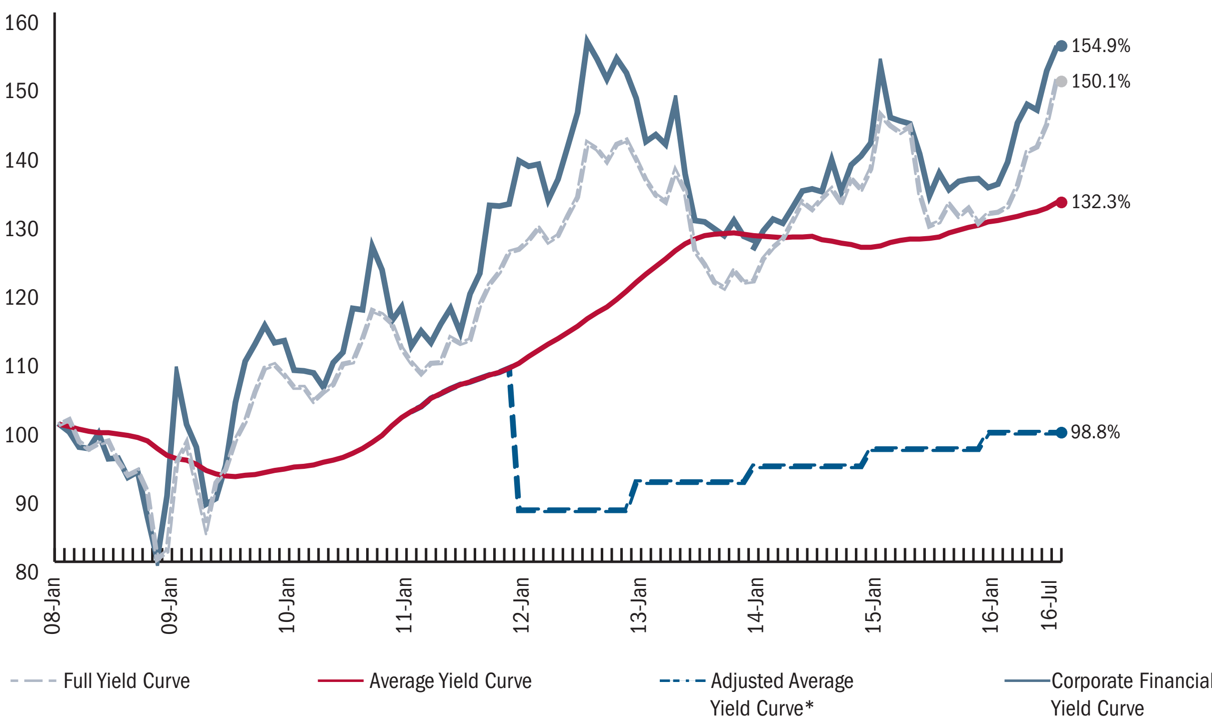
The BPS&M Pension Liability Index is updated regularly. If you have questions or comments concerning the BPS&M Pension Liability Index, please contact your BPS&M consultant or jeffrey.p.thornton@bpsm.com.

Indices Changes

Indices	*Since Inception (1/1/08)*	*2016 Year to Date*	*Last 12 months*
Full Yield Curve	+50.1%	+14.8%	+15.9%
Averaged Yield Curve	+32.3%	+2.2%	+3.9%
Adjusted Average Yield Curve	-1.2%	0.0%	+2.5%
Corporate Financial Yield Curve	+54.9%	+15.2%	+13.4%

Jeffrey Thornton, FSA, 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.

BPS&M Pension Liability Index since inception



* Reflects funding relief

The BPS&M Pension Liability Index is provided for informational purposes only by BPS&M, a Wells Fargo Company. Wells Fargo and its affiliates do not make any warranties as to the accuracy or adequacy of the BPS&M Pension Liability Index or its fitness for a particular purpose.

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About BPS&M

Bryan, Pendleton, Swats & McAllister, LLC has been providing actuarial and benefit consulting services to clients since 1971.

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