

## Chapter 28

# Funding the Pension Promise: An Actuarial Perspective

*Cary Franklin*

Ultimately, the cost of any benefit plan is simply:

- The sum of all the benefits paid, plus
- The expenses to operate the plan, less
- Any investment income earned on plan assets.

Health and welfare plans are generally funded one year at a time. Contributions are deposited into the fund, benefits are paid and trustees evaluate the fund's finances at the end of each year. This type of funding arrangement is referred to as *pay-as-you-go* funding. The pay-as-you-go funding approach also describes the financing of Social Security benefits.

The funding of a defined benefit (DB) pension plan is a much longer term endeavor, with contributions *prefunding* the benefits: Contributions are made on behalf of employees during their working careers; these contributions grow with investment income, and the resulting assets are used to pay benefits when the workers retire.

This chapter discusses the funding of DB pension plans, the actuary's role in determining how these plans are funded and the various federal laws that provide the legal framework for pension funding. The legislation examined includes the Employee Retirement Income Security Act of 1974 (ERISA), the Pension Protection Act of 2006 (PPA) and the Multiemployer Pension Reform Act of 2014 (MPRA).

### What Is the Pension Promise?

A DB pension plan makes a unique, long-term promise. Despite the fact that a plan has very specific rules for determining the amount of benefits payable to participants, the plan promises to pay:

- An **unknown** amount of benefit—No one knows how much benefit each plan participant will earn between now and retirement,
- To an **unknown** number of people—No one knows how many of today's participants will actually reach retirement and collect a benefit,
- Beginning at an **unknown** time in the distant future—No one knows when participants will actually retire,
- For an **unknown** number of years—No one knows how long people will live or whether a beneficiary will outlive the participant.

For a participant who is aged 25, this promise might reach 70 or more years into the future. The long-term nature of the pension obligation makes it difficult to determine how to pay for it. Trustees need answers to several basic questions:

- What is the value today of the long-term pension benefit promise?
- How do plan assets compare with this value?
- How should the plan budget for the value of the promise not yet covered by the plan's assets?
- Finally, is the plan on the right path to fulfill the promise?

Trustees hire an actuary to help answer these questions. To measure the value of the promise and determine how to fund it, actuaries prepare *actuarial valuations* and *valuation forecasts*.

Trustees do not need to know all of the details of the actuarial calculations. Nevertheless, trustees should understand some basic concepts and understand the implications of the valuation and forecast results in order to make informed decisions about the operation of their plans.

## Why Pre-Fund?

Theoretically, a plan could use the pay-as-you-go approach to funding: wait until a benefit is due (at retirement) and pay it then, using the money contributed for current employees to pay for retirees' benefits, similar to how Social Security is funded. So why prefund the pension promise? There are several reasons:

- **Tax advantages.** Most (if not all) multiemployer plans are *qualified*—The plans are given favorable tax treatment by the federal government because they meet certain requirements in their benefit design and operation. This favorable treatment means (1) employer contributions to plans on behalf of participants are tax-deductible business expenses, (2) investment earnings on the plan's invested assets are not taxed and (3) participants do not pay taxes on contributions made on their behalf until they receive these dollars (including investment earnings) as benefits.
- **Benefit security.** Benefits are paid for as they are earned by the participant. By the time a participant retires, these benefits should be fully funded. Think about what this means for a participant. All the money needed to pay the participant's benefit for the rest of his or her life should be in the pension fund at the point the participant retires.
- **Budgeting.** With the pay-as-you-go approach, contributions in the early years of a plan would be small because there would be relatively few retirees. Over time, the amount of contributions needed to pay benefits would grow significantly—possibly making the promised benefits unaffordable. Prefunding is an opportunity to develop a more stable contribution stream and allows for investment income to play a significant part in funding the promised benefits. This is especially important for multiemployer plans, where contributions are typically fixed under multiyear collective bargaining agreements.
- **Legal requirements.** Finally, ERISA and the laws that followed it require plans to prefund at specified minimum levels (discussed more below).

Prefunding also means the pension benefit is not dependent on the future health or willingness of an employer to make payments after a worker retires. In addition, today's participants do not pass the cost of their benefits on to a future generation of workers (i.e., their children and grandchildren).

## What Is the Pension Promise Worth?

In other words, how much money does a plan need right now to keep the benefit promises made to participants? To answer, let's look at a simple example. Assume a plan promises a single payment of \$1,000 to each participant who is still working and alive at the age of 65 and that all of the plan's participants are now aged 50. To estimate the amount of money required, think about the following:

- Some participants will leave employment or die before the age of 65. The plan will not have to pay these participants. If 20% of a plan's current participants do not make it to age 65, the plan will have to pay only the remaining 80%. This means the plan needs only \$800 for each *current* participant, not \$1,000.
- Some of the promised benefit will be paid using income earned by investing plan assets. The more income earned, the less money needed today. Let's assume the plan's investments will earn a 7% return each year. The actuary calculates that \$290 invested today will grow to \$800 in 15 years. Calculating how much money is needed today so that it will grow to \$800 when the participant reaches the age of 65 is called *discounting*.

In this example, the actuary determines \$290 is needed for each participant today in order to pay \$1,000 to every participant who is still working at age 65. Since this amount is measured in today's dollars, it is the *present value* of the benefit that will be paid in the future. It is also called the plan's *benefit liability*. Note that the lower the assumed investment return (*discount rate*), the higher the present value (benefit liability) will be—This is because the lower the assumed return, the more money must be invested now to reach the targeted benefit amount.

The actuary does this calculation for every single payment the plan is expected to pay to every single participant. This includes normal retirement benefits, early retirement benefits, benefits to survivors, benefits paid to disabled participants, benefits for death before and after retirement, etc. The actuary considers all the factors that can influence the amount of the benefit, the likelihood it will be paid and the income that will be earned on plan assets. Together, these calculations estimate what the pension promise is worth today.

## What Is an Actuarial Valuation?

The work of the actuary is complicated by the fact that:

- The experience of a plan (e.g., investment return, mortality and retirement ages) will never be exactly what the actuary assumes.

- Trustees (or bargaining parties) periodically change plan benefits. This can create an immediate change in the plan's benefit liability.

As a result, plan liabilities rarely equal plan assets. A plan's cost in any one year must take into consideration:

- The value of the benefits earned by participants during the year (or assigned to the year under the actuarial cost method, which is called the *normal cost*)
- An amount to make up for any differences between what the actuary assumed and what actually happened—called *actuarial gains* or *losses*
- An amount to pay for any increases in past benefits awarded by trustees. Such increases are usually funded over several years, similar to a home mortgage.

The *actuarial valuation* is the tool used by the actuary to recommend the timing and amount of contributions to the plan for a given level of promised benefits. The valuation considers all of the participants as of a specific date each year, called the *valuation date*. Typically, though not always, the valuation date is the first day of the plan year.

## What Are the Steps in the Actuarial Valuation Process?

Completing an actuarial valuation involves answering a set of questions:

- What is the benefit promise?
- To whom is this promise made?
- How much of the promise is already funded?
- How will contributions be spread over future years to fully fund the promise?

The process to answer these questions follows.

### Gather Information

- **The benefits promised.** The actuary calculates the benefits participants expect as specified in the plan document.
- **Participant information.** To determine the amount of the potential benefits, information on each participant is needed including his or her birthdate, hire date (or date of first hour worked), date of entry into the plan, annual service history, contribution rates, pay (if benefits are pay related) and benefits in pay status. This information is required for participants who are active and earning benefits, inactive participants with a right to future benefits, those who are retired and receiving benefits, survivors of participants with a right to benefits and divorced spouses of participants who will get some benefits under a divorce agreement.

- **Assets.** The actuary also looks at the value of current plan assets, how asset values have changed over time and the plan's investment policy (i.e., its target asset allocation).

### Make Assumptions About the Future

The present value of a plan's promises depends on many things that happen in the future. The actuary must make *assumptions* about what is likely to happen. These assumptions generally fall into two categories—demographic and economic:

#### Demographic

- **Turnover.** What is the chance participants will leave before becoming vested?
- **Retirement.** When are participants likely to retire?
- **Mortality.** What is the chance participants will survive to receive benefits, and for how long are they expected to receive these benefits?
- **Disability.** What is the chance participants will become disabled before retirement?
- **Work levels.** How many hours is each active participant expected to work each year?
- **Spouse/beneficiary.** What is the likelihood a participant will have a spouse or beneficiary entitled to receive benefits?

#### Economic

- **Interest.** What is the expected annual investment return, given the plan's target asset allocation?
- **Pay.** If benefits and/or contributions are pay related, how will pay increase in the future?
- **Inflation.** What rates of inflation are likely in the future?
- **Expenses.** What are the expected annual operating expenses?

Actuaries are not fortune-tellers—They make assumptions considered reasonable based on (1) what has happened in the past and (2) predictions of how the future might be different. Consider rates of *mortality*—the likelihood participants will die each year in the future. Rates of mortality have been declining, and life expectancy has been increasing for many years. These trends may continue, though the rate of increasing life expectancy is difficult to accurately predict. Actuaries know when people have retired in the past but also realize a change in plan or government retirement benefits (e.g., Social Security) may influence the age at which people will retire in the future. Actuaries examine how plan investments have performed in the past but also consider future economic conditions.

Initially under ERISA, the assumptions for a multiemployer plan had to be reasonable “in the aggregate.” This means an individual assumption could be less than reasonable if it was offset by another assumption. The PPA changed this to require that each assumption be reasonable on its own. It is not acceptable for one questionable assumption to be offset by another.

Note, however, that there is no single reasonable assumption for each assumption; rather, there is a *range* of reasonable assumptions. It is important for trustees to understand where the actuary’s assumptions fall along a conservative-to-aggressive range. Assumptions that are too conservative may mean current contributions are greater than they need to be or benefits may be lower than they could be; conversely, overly aggressive assumptions may understate the contributions needed to adequately fund the benefits or may lead to benefit improvements that may become unaffordable over time.

### Calculate Liabilities and Costs

Using the information gathered and the assumptions selected, the actuary calculates these present values of plan benefits:<sup>1</sup>

- Benefits earned by participants through the valuation date—the *liability for accrued benefits* (or *present value of accrued benefits*)
- Benefits that participants are expected to earn in the coming plan year—the *normal cost*
- Benefits that participants are expected to earn through their expected retirement date—the *liability for projected benefits* (or *present value of future benefits*).

Liability measurements are the “building blocks” for determining the contributions needed to adequately fund promised benefits. From these building blocks, the actuary develops the *actuarial cost*, which is generally the sum of these three components:

1. **Normal cost.** The present value of the benefits expected to be earned in the coming year
2. **Assumed operating expenses.** The non-investment related expenses such as administrative and professional service provider fees.
3. **Amortization of the unfunded liability.** The *unfunded liability* is the difference between the accrued benefit liability and the value of assets. The *amortization payment* is the amount calculated to pay off the unfunded liability over a specified period.

There are different types of actuarial costs for different uses in plan funding, as described in the following sections.

### Minimum Required Contribution

To ensure the long-term security of promised benefits, ERISA specifies minimum annual funding requirements for multiemployer pension plans. The details of how this amount is calculated are found in ERISA Section 304 and Internal Revenue Code Section 431. In simple terms, the *minimum required contribution* is the net result of the following charges and credits:

#### Charges

- The normal cost (including assumed operating expenses)
- Amortization payments to fund
  - The initial unfunded liability
  - Increases in liability due to benefit improvements
  - Actuarial losses such as investment losses
  - Increases in liability due to changes in actuarial assumptions or methods.

#### Credits

- Amortization payments to fund
  - Actuarial gains
  - Reductions in liability due to changes in actuarial assumptions, methods or plan provisions
- Any credit balance.

The *credit balance* is the accumulated excess of actual contributions to the plan since the ERISA rules took effect (1976 for most plans) over the minimum contributions that would otherwise be required. If contributions paid over the years are larger than the required contributions, the plan has a credit balance and is in compliance with the minimum funding requirements for the year. On the other hand, if contributions are less than the required amount, the plan has a *funding deficiency* that could trigger federal excise taxes.

Prior years’ excess contributions are tracked by something called the *Funding Standard Account (FSA)*. Let’s say a plan has a credit balance of \$100,000 from previous years’ excess contributions. The plan’s minimum funding requirement for the current year is \$1 million. Contributions for this year need to be only \$900,000—the \$1 million less the \$100,000 credit balance. After the end of each plan year, the actuary must certify whether the plan has met the minimum contribution requirements by completing Schedule MB of Form 5500.

The FSA operates much like a bank account with dollars added or subtracted at the end of each year. A positive FSA credit balance at the end of a year can be used to offset future minimum contribution requirements.

The amortization charges and credits of the FSA are determined in a manner similar to mortgage payments, where a specific dollar amount is paid over a certain number of years with annual principal and interest payments at the interest rate assumed for the actuarial valuation. The specific periods for amortization are as follows for multi-employer plans:

- **Initial unfunded or overfunded actuarial accrued liability**—40 years for plans in existence before 2008, 15 years for plans coming into existence in 2008 or later
- **Actuarial gains and losses**—20 years for amounts arising prior to 1980, 15 years for amounts arising during 1980 and later
- **Changes in actuarial funding methods**—30 years if the change results in a credit, 40 years minus the number of years the FSA is in effect if the change resulted in a charge prior to 1995, 10 years for changes during 1995 and later that result in charges or credits
- **Changes in plan provisions**—30 years for amendments adopted prior to 2008, 15 years for amendments adopted in 2008 or later (except that amendments resulting in additional payouts that are expected to last less than 15 years are amortized over the expected payout period)
- **Changes in actuarial assumptions**—30 years for changes made prior to 2008, 15 years for changes made in 2008 or later.

Under certain circumstances, a plan may qualify for an extension of specific amortization charges to lower a plan's minimum contribution requirements.

### **Funding Policy Contribution**

In addition to the minimum required contribution under ERISA, the actuary typically calculates a *funding policy contribution* (sometimes referred to as an *actuarial cost* or *scheduled cost*), which is a theoretical annual contribution in accordance with a funding policy, established by plan trustees or simply a benchmark for determining the appropriate level of annual contributions.

The funding policy contribution consists of the normal cost (with assumed operating expenses) plus an amortization of the unfunded liability over a set period of time (e.g., 10 or 15 years) measured from each year's valuation date. The *excess* (or *shortfall*) of anticipated contributions over the funding policy contribution under the applicable collective bargaining agreement is called the *contribution margin* (or *deficit*). The contribution margin is not a statutory funding measurement but an indication of whether or not expected

contributions will support the promised benefits. A contribution margin that is positive and projected to remain positive in future years generally indicates a plan's funding is expected to improve over time.

### **Maximum Deductible Contribution**

To encourage retirement saving, federal tax law allows employers to deduct their contributions to qualified employee benefit plans on their tax returns. The IRS, however, does not want this tax break used unfairly to avoid taxes. There is a maximum limit to how much employers can contribute to plans and deduct from their taxes. Any contributions in excess of this maximum cannot be deducted. In addition, excess contributions are subject to a 10% excise tax.

Prior to 2002, the maximum deductible limit was relatively low, and a number of plans were impacted by it, especially at the end of the bull market of the late 1990s. A common solution at that time was to increase plan benefits—Trustees often felt they had little choice but to do this given that contributions were set by collective bargaining agreements and, thus, not easily changed. In 2002, the rules were changed to allow employer contributions to be fully deductible, as long as they did not exceed the unfunded current liability of the plan.

*Current liability* is calculated using a current interest rate and a mortality table specified by the IRS. In 2006, the deductible limit was raised to 140% of current liability. In recent years, current liability has been much larger than the liability used for funding, because the prescribed range of current liability interest rates is generally much lower than the interest assumptions otherwise used for plan funding. Using a larger liability gives employers more room to claim a tax deduction. The rule changes, in combination with recent low interest rates, have meant contributions to multi-employer plans are virtually always fully deductible and are expected to remain so absent changes in the law or an unexpected rise in the current liability interest rates.

### **What Federal Laws Govern Pension Plans?**

After a series of pension disasters in the 1970s, the federal government stepped in and established benefit plan design and funding requirements. Over the years, these rules have become increasingly complex. Here is a brief overview of the history of these funding rules.

#### ***Employee Retirement Income Security Act of 1974***

ERISA introduced minimum standards to help ensure plan participants receive the benefits they have been promised.

In general, this federal law:

- Established minimum funding requirements for pension plans (as described previously). These funding requirements are determined by the funding method, the method for valuing plan assets and assumptions about the future.
- Approved the use of several different *funding methods*—the mathematical means of spreading the cost of a pension over a participant’s working life. Some methods try to pay for benefits as they are earned, while others try to prefund benefits in preparation for the benefit cost increases as participants get older.
- Allowed plans to use an actuarial value of assets that differs from the market value for calculating funding requirements. The *market value* of an asset is what a buyer is willing to pay for the asset. This value tends to fluctuate from day to day and year to year. Accordingly, annual funding costs based on market value will also fluctuate from year to year. In contrast, the *actuarial value* smooths out the fluctuations by averaging asset values over several years—reducing the volatility.

### ***Pension Protection Act of 2006***

From 2000 to 2002, investment markets tumbled and many pension plans suffered losses. Asset values declined, causing unfunded liabilities to rise sharply. The federal government passed the PPA of 2006 to strengthen funding requirements (and pension security). In general, this law:

- Established new standards to measure the financial health of multiemployer pension plans
- Requires actuaries to prepare and file an annual certification of a plan’s funding status:
  - A plan is certified as *critical (red zone)* if it is projected to have a funding deficiency (i.e., a negative credit balance) within four years (or five years for certain less funded or mature plans).
  - A plan is certified as *endangered (yellow zone)* if it is not in critical status but the value of plan assets is less than 80% of the accrued benefit liability and/or a funding deficiency is projected within seven years. A plan is certified as *seriously endangered (orange zone)* if both conditions are met. NOTE: See the discussion pertaining to MPRA that follows on how the endangered status rules were revised in 2014.
  - A plan that is not in critical or endangered status is considered to be reasonably healthy (*green zone*).

- Requires trustees of plans in critical or endangered status to develop a program to return to healthy status within approximately ten years. A plan in critical status must adopt a *Rehabilitation Plan*. A plan in endangered status must adopt a *Funding Improvement Plan* (see Exhibit 1).<sup>2</sup>

The PPA requires an actuarial certification be filed with the IRS by the 90th day of each plan year. Participants and other parties must be notified if the plan is certified in a non-green zone status. The actuarial certification uses the same assumptions used for the annual actuarial valuation with one important exception—the *projected industry activity assumption*. When performing an actuarial valuation, a plan actuary is not required to make an assumption as to whether the annual number of contribution base units (e.g., hours worked) will go up, down or remain the same beyond the valuation year. The credit balance projection for the PPA certification, however, does require this projected industry activity assumption, which is based on information provided by the trustees, who are expected to “act reasonably and in good faith.”

### ***Worker, Retiree, and Employer Recovery Act of 2008 Pension Relief Act of 2010***

When the investment markets collapsed in 2008, complying with the new PPA rules became so challenging that special legislative relief was passed twice. The Worker, Retiree, and Employer Recovery Act (WRERA) was passed in late 2008, followed by the Pension Relief Act of 2010 (PRA). Both laws attempted to ease the funding burden of underfunded multiemployer DB plans by providing more time to deal with the losses suffered in the 2008 market downturn. Without this relief, many plans would have found themselves unable to comply with the requirements of PPA.

### ***Multiemployer Pension Reform Act of 2014***

MPRA was signed into law in December 2014. This law:

- Enacted several technical corrections to the PPA. Key among these provisions is a rule that a plan that would otherwise be certified in the yellow zone will be deemed certified in the green zone if the plan is projected to return to the green zone within ten years without any corrective action (i.e., contribution increases or benefit reductions).
- Created a new certification status, *critical and declining*, for critical status plans that are projected to become insolvent and unable to pay any benefits within the next 20 years (or within 15 years in certain situ-

## Plan Financial Health

### Critical Status (Red Zone)

A plan is certified as *critical* (or in the *red zone*) if it fails any one of four tests, generally related to whether it is projected to have a funding deficiency (negative credit balance) or cash flow problems within the next four years (or five years for certain less-well-funded or mature plans).

Trustees of a plan in the red zone are required to develop a *Rehabilitation Plan* (RP)—a schedule or schedules of revised contribution and/or benefit structures that address the plan’s funding problems. The changes may include reductions or elimination of some accrued benefits. If the bargaining parties do not adopt a schedule for the next contract, a plan’s board of trustees is required by law to impose a “default schedule” that reduces benefits to the maximum extent permitted by law before increasing contributions. Prior to adopting one of the RP schedules, employers may be required to contribute a surcharge to the plan.

The RP must be reasonably expected to bring the plan out of the red zone within ten years and keep the credit balance positive for at least ten more years.

A critical-status plan that is projected to become insolvent within 20 years (or 15 years in certain rare circumstances) is in *critical and declining status*. Plans in critical and declining status may submit an application to the Treasury Department under the MPRA rules to reduce (suspend) certain benefits if doing so will allow the plan to remain solvent.

ations). A plan in critical and declining status may file an application with the Treasury Department to reduce (*suspend*) certain benefits if doing so makes it possible for the plan to remain solvent.

- Expanded the authority of the Pension Benefit Guaranty Corporation (PBGC) to facilitate mergers for critical and declining plans. See “What Happens When an Employer Withdraws From a Plan” on page \_\_\_ for more information about the PBGC.

### Endangered Status (Yellow and Orange Zones)

A benefit plan is certified as *endangered* (in the *yellow zone*) if it is not critical (in the red zone) and either (1) its funded ratio is less than 80% or (2) it is projected to have a funding deficiency within seven years. A plan is *seriously endangered* (in the *orange zone*) if both of these conditions are true. A plan that would otherwise be certified in the yellow zone but is projected to return to the green zone within ten years without corrective action is deemed to be in the green zone.

Trustees of plans in the yellow or orange zone must develop a *Funding Improvement Plan* (FIP)—a schedule or schedules showing revised contribution and/or benefit structures that address their plan’s funding problems. The schedule(s) must be adopted by the plan’s bargaining parties for the next contract. If the parties do not do so, the law requires the board of trustees to impose a default schedule.

For a plan in the yellow zone, the FIP must be designed to improve the funded ratio by one-third of the underfunding and eliminate any funding deficiencies projected to occur within ten years. For example, if a plan was 73% funded when it was certified as yellow, the schedule must increase the funded ratio to at least 82% by the end of the improvement period (one-third of 100% less 73%, or 27%, is 9%. 73% plus 9% is 82%).

For a plan in the orange zone, the FIP must be designed to improve the funded percentage by 20% of the underfunded amount in 15 years. For example, if a plan was 75% funded when it was certified as orange, the FIP must be designed to increase the funded percentage of the plan to no less than 80% at the end of 15 years (20% of 100% less 75%, or 25%, is 5%. 75% plus 5% is 80%).

- Increased Pension Benefit Guaranty Corporation (PBGC) premiums. With more plans expected to become insolvent in the wake of the 2008 economic crisis, the PBGC’s multiemployer plan program is itself facing the risk of insolvency. Premiums were increased to help mitigate the PBGC’s risk of insolvency, though the increases under MPRA are likely not sufficient to solve the PBGC’s projected funding shortfalls.

## How Is Plan Financial Health Measured?

The following considerations (among others) are used to assess a plan's financial health:

- **How do employer contributions compare to the minimum funding requirements?** If contributions exceeded the minimum requirements in past years, the credit balance created by the prior excess contributions can help cover the current year's minimum cost.
- **Is there enough money to pay the benefits promised?** The *funded ratio* (or *funded percent*) is the value of a plan's assets divided by a plan's liability for accrued benefits. If this ratio is more than 100%, there are enough assets to pay all of the promised benefits, and the plan is financially healthy. If the ratio is less than 100%, trustees may need to take steps to address the shortfall. If the ratio is less than 80%, the plan is potentially endangered under the PPA, and trustees may be required to take steps to fix this.
- **Will the plan be able to make future benefit payments as they come due?** Projecting plan assets will answer this question. If the plan is projected to run out of money, it will not be able to pay benefits and will become insolvent or may need to apply for benefit suspensions under MPRA to achieve long term solvency.

### Actuarial Valuation Forecasts

Perhaps the most important tool for assessing a plan's funding health is the *actuarial valuation forecast* (also called a *projection*). This forecast is a series of multiyear valuations, projecting what a plan's funding might look like in the future. Forecasts are important because a single year's "snapshot" valuation results may be misleading—One plan that is currently 100% funded might have a declining funded percentage in the future because contributions are inadequate to maintain the current full funding, while another plan that is only 80% funded now may be projected to reach 100% funding within a few years. In this case, the current year's valuation would imply that the first plan is healthier than the second plan, but the forecast shows that the second plan is actually in a better financial position than the first plan.<sup>3</sup>

Forecasts typically project these funding results:

- Minimum required contribution and credit balance
- Funded percentage
- Funding policy contribution and contribution margin.

Other results may also be included in the forecast, such as the plan's unfunded vested benefits for withdrawal

liability (discussed later) or the plan's cash flow. Forecast models can be set up so that factors such as contribution rates, work levels, benefits and investment returns can be varied to assess the sensitivity of funding results to changes in these variables.

As noted previously, the annual PPA funding status certification requires a projection of the plan's credit balance; however, a projection of the funded percentage will generally provide more insight into the plan's long-term funding health.

### The Valuation Report

After completing the valuation, the actuary prepares a formal report documenting the valuation results. The report includes the funding information described above as well as the key information on which the calculations are based, such as a summary of the plan's benefit provisions and the actuarial assumptions and methods used in the valuation.

Even though the valuation report may appear imposing, trustees should take the time to go through it. It is an essential document that provides the trustees with important information about a plan's funding health. It has a summary of plan benefits, offers an overview of participant characteristics, summarizes plan assets and states the assumptions the actuary is making about the future. It also includes details of the actuary's calculations. Trustees do not need to fully understand all the details of the actuary's calculations, but they should understand the basic concepts. With this information, trustees can answer important financial questions:

- Has the plan put aside enough money to fulfill the promises made so far?
- If not, what steps are needed to make up the shortfall?
- Are plan contributions sufficient to meet IRS funding requirements?
- What is the outlook for the future—Is the plan heading in the right direction?
- Can the plan afford to improve benefits?

Actuaries often prepare a supplemental "valuation highlights" presentation for discussion with trustees. The highlights presentation summarizes the key results of the valuation and provides valuation forecast results to give trustees a clearer picture of where plan funding may be headed.

### How Should We Talk to our Actuary?

Actuarial matters can get technical, but trustees must understand enough to make important plan decisions. Here

are a few suggestions to help improve communication with a plan actuary:

- **Ask questions.** Actuaries usually arrive in a business suit, with a computer and a bunch of initials after their names. This can make them a little imposing. “I don’t want to look stupid, so I don’t ask questions.” That is the wrong approach. Actuaries work for plan trustees, not the other way around. Trustees have hired and pay for the actuary’s services and should get their money’s worth. **ASK QUESTIONS.** It is a lot worse to make a bad decision for a plan than to ask a silly question.
- **Insist on plain English.** Actuaries use a lot of jargon, and not everyone understands all of the buzzwords. Ask actuaries to speak in plain English. If trustees do not understand a word or concept, they should ask for an understandable explanation. They should keep asking questions until they understand what the actuary is saying.
- **Understand the assumptions.** Ask the plan actuary about the assumptions used in the valuation. These are the actuary’s best estimates about what is going to happen in the future. Consider whether the assumptions are reasonable. Are investment decisions made to meet the actuary’s assumptions, or do the assumptions reflect how trustees have chosen to invest plan assets?
- **Share special knowledge.** Trustees know their industry and things that are happening that may affect the future. Trustees know plan participants, how participants think and what motivates them. Trustees may know about a big new project, a new collective bargaining agreement, pending layoffs or a plant shutdown. The actuary needs this information to provide trustees with the best possible service.
- **Let the actuary know plan objectives.** Some trustees include the actuary as a trusted advisor. The actuary attends full trustee meetings and gets to know trustee concerns and challenges. Other trustees view the actuary as a numbers geek—the actuary is invited to attend one meeting a year to present a report, and then he or she is dismissed until the following year. An actuary that is seen once a year cannot know much about the plan’s needs and challenges. The actuary who knows plan issues can do a better job helping trustees find solutions.
- **Allow enough time.** Trustees often need to make important decisions based on the information presented by the actuary. A 15-minute presentation is not enough time to fully understand the implications

of results presented by the actuary. Actuaries understand trustees need to manage meetings efficiently and accomplish many things in a limited amount of time, but it is important to schedule sufficient time for the actuary to explain his or her work.

- **Be fair.** Sometimes labor and management trustees do not get along very well. They disagree on what is best for plan participants. Labor wants larger benefits. Management wants better funding. Sometimes one side will try to use the actuary to support its position in negotiations with the other side. The actuary doesn’t represent labor or management. The actuary is responsible to the plan. Trustees should use the actuary to get objective information so they can make informed decisions, not try to get the actuary to take sides.

## What Happens When an Employer Withdraws From a Plan?

ERISA requires the sponsors of single employer pension plans to keep the promises they make to their employees. This means that, even if the employer decides to terminate a pension plan, the employer is still required to pay for any unfunded benefits. Employers cannot just walk away from their promises. If the employer goes bankrupt—then and only then—a government insurance program (the PBGC) steps in to pay unfunded benefits.

Multiemployer plans posed a unique problem when ERISA was drafted, because these plans have many participating employers. The departure of one employer does not cause the plan to terminate. It took Congress six years after the passage of ERISA to develop a way to deal with the departure of employers from multiemployer plans, with the Multiemployer Pension Plan Amendments Act (MPPAA) of 1980. The philosophy is the same—a pension promise made must be kept—but the mechanics are different. An employer that chooses to withdraw from a multiemployer plan must pay its share of any unfunded vested benefits.

Trustees have several responsibilities when a withdrawal occurs:

- Identify employers when they withdraw
- Calculate the amount of the employer’s withdrawal liability
- Assess and collect the liability.

### Identify Withdrawn Employers

MPPAA defines what it means to withdraw. A *complete withdrawal* occurs when an employer:

- Permanently ceases to have an obligation to contribute under the plan, or
- Permanently ceases all covered operations under the plan.

While this may seem relatively straightforward, there are many complications and a number of exceptions. There are special rules for building and construction plans, the entertainment industry and the trucking industry. There are special rules to deal with the sale of a company. There are even special rules dealing with a *partial withdrawal*—a situation in which an employer has a sharp decline in contributions or only partially meets its contribution obligation.

Trustees must work with their plan administrator and legal counsel to determine if an employer has withdrawn. Partial withdrawals can be particularly hard to identify as it can take three years before the legal definition is met. It is important that a plan administrator have procedures to track and identify withdrawals.

### *Calculate the Amount of Withdrawal Liability*

Determining an employer's withdrawal liability starts by calculating the value of vested benefits of the plan. Note that this is not the liability for all accrued benefits—It is only the value of the accrued benefits that are vested. This value is calculated at the end of the plan year prior to withdrawal. The liability on December 31 may not be the same as the liability the next day—January 1—if, for example, actuarial assumptions or plan benefits have been changed effective January 1.

The selection of assumptions for withdrawal liability is an important issue. There is no requirement that the assumptions used for plan funding must also be used for withdrawal liability—Many plans use a lower interest assumption for withdrawal liability. The use of a lower interest assumption can be justified on grounds that the withdrawing employer's liability is fixed at the time of withdrawal and the employer is not responsible for the risk associated with future performance of plan investments. The use of a lower interest assumption produces larger values for vested benefits and, correspondingly, larger withdrawal liability than if the funding interest assumption were used. While this may serve as a deterrent to withdrawal, it may also make it more difficult to attract new employers to a plan.

The value of plan assets is subtracted from the value of vested benefits to get the *unfunded vested benefits (UVB)*. MPPAA does not specify how to value the assets. Many plans use the market value but, as noted previously, this tends to bounce around from year to year. Other plans use

the actuarial (or smoothed) value of assets. This value tends to be more stable from year to year but may provide an opportunity for employers to time their withdrawal from the plan in a way that minimizes their withdrawal liability.

The UVB is allocated among all participating employers. A withdrawing employer's withdrawal liability is then its share of the UVB. The law describes an automatic (or *presumptive*) method for allocating the UVB among plan employers, but it also provides other optional methods. Without going into the technical details of the presumptive method of UVB allocation, the concept is that each employer's share of the UVB is based on its share of total contributions to the plan—For example, if an employer accounts for 2% of total plan contributions, its withdrawal liability will be about 2% of the UVB.<sup>4</sup> The law also allows a plan to apply to the PBGC to use a method not specifically described in the law. The different allocation methods provide an attempt to find a balance between what is fair and what is practical. The “fairest” methods tend to be very complex, requiring extensive records and complex calculations. The “simpler” methods tend to sacrifice some of the “fairness.”

Plans in certain industries, like construction, are required to use the presumptive method. If plan trustees do not formally select one of the options, the presumptive method automatically applies. Trustees should discuss withdrawal liability assumptions and methods with the plan actuary to be sure the assumptions and methods are reasonable and appropriate and to understand the implication of any changes.

The amount calculated above may then be reduced under a *de minimis rule*. The intent of this rule is to eliminate or reduce the amount of withdrawal liability charged to small employers. A withdrawal liability of less than \$50,000 is forgiven. If it is between \$50,000 and \$100,000, it is reduced by \$50,000.<sup>5</sup> Above \$100,000, the offset is reduced but by an amount less than \$50,000. Above \$150,000, there is no reduction.

### *Assess and Collect the Withdrawal Liability*

A plan attorney has confirmed that an employer withdrew. The plan actuary has calculated the amount of withdrawal liability. Now the plan must notify the withdrawn employer of the withdrawal liability amount and provide a schedule of withdrawal liability payments.

In general, the law requires the withdrawing employer to continue contributing to the plan at roughly the same amount (or greater) as prior to the withdrawal until the full withdrawal liability is paid. The required payment is

based on the employer's highest contribution rate in the last ten years multiplied by the average number of contribution units (hours, shifts, weeks, etc.) for the highest consecutive three years in the last ten years. Withdrawal liability payments are limited to 20 years—even if the withdrawal liability is not fully paid within that time—and interest is included in the calculation.<sup>6</sup>

Once an employer is sent notification, it must start making the payments. If payments are not made when due, a plan can demand payment in full of the outstanding balance.

An employer has the right to challenge the liability assessed, but the appeal process must begin within 90 days of the assessment. If there is no challenge within 90 days, the employer loses the right to challenge. Scheduled payments must be made during the challenge.

The challenge of a withdrawal liability starts a legal process. If an employer challenges a plan and requests additional information, the plan must respond and provide the information requested. The dispute then goes to arbitration. The law assumes the plan assessment is correct unless the employer can show the assumptions and methods used were unreasonable or the actuary made an error in the calculations.

### *Other Withdrawal Liability Issues*

PPA and MPRA made several technical changes to previous laws and regulations concerning withdrawal liability, including these:

- **Fresh start option.** Trustees are now allowed to revise the UVB allocation method to ignore the UVB for years prior to a year for which there is no UVB. Doing so can simplify the presumptive allocation method. This rule applies to withdrawals occurring on or after January 1, 2007.
- **Withdrawal liability when a plan is in the red zone.** As mentioned previously, plans that are in the red zone must adopt a Rehabilitation Plan that may include contribution surcharges for participating employers and may include contribution rate increases and benefit reductions applicable to past service. The contribution surcharges and rate increases are disregarded in determining a withdrawing employer's liability. The past service benefit reductions are not considered

in determining the UVB for the year of the benefit change (i.e., the UVB is not reduced for the benefit reduction), but the value of the benefit reduction is gradually phased in to the UVB over 15 years.

In 2010, the Financial Accounting Standards Board (FASB) issued a proposed rule that would have required employers to disclose on annual financial statements the withdrawal liability that might be assessed if they withdrew from a multiemployer pension plan. After further consideration and discussions with representatives of the multiemployer plan industry, the FASB withdrew its original proposal and replaced it with a much simpler disclosure requirement for employers who participate in multiemployer plans. Essentially, all that needs to be disclosed is the employer's contributions to the plan, the PPA zone status of the plan, and whether or not the plan has adopted a Funding Improvement Plan or Rehabilitation Plan (if the plan is in endangered or critical status). There is no requirement to disclose the potential withdrawal liability, unless the withdrawal is imminent or has already occurred.

### **Endnotes**

1. This description of liability for accrued benefits and normal cost is based on the *Unit Credit* actuarial cost method, which is the most commonly used cost method for multiemployer plans. Different cost methods use different approaches to assigning actuarial costs to time periods.
2. The PPA rules described here and in the Exhibit are intended as a simple overview of a complex set of rules. The complete rules are found in ERISA Section 305 and Internal Revenue Code Section 432.
3. The forecasts described here are deterministic forecasts, commonly referred to as "if-then forecasts." *Deterministic forecasts* determine future outcomes based on assumptions regarding future events, such as investment returns or work levels. Another type of forecast, the *stochastic* forecast, calculates the probability of achieving specified future outcomes, such as PPA zone status or funded percentage.
4. The actual application of the presumptive method is more complex than the simplified concept presented here and involves the use of five-year "contribution fractions" applied to each year's change in the UVB (*UVB pools*)—Each year's contribution fraction is the withdrawn employer's contributions for the five years ending with each year of UVB change divided by the corresponding five-year contribution totals for all employers. The complete rules are found in ERISA Section 4211.
5. A plan may be amended to increase the \$50,000 and \$100,000 thresholds to \$100,000 and \$150,000, respectively.
6. The 20-year limit on withdrawal liability payments does not apply in the event of a *mass withdrawal* where all or substantially all of a plan's employers withdraw. Other special rules apply in the event of a mass withdrawal.

