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Multiemployer Defined Benefit (DB) Pension Plans: A Primer and Analysis of Policy Options

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Summary

Multiemployer defined benefit (DB) pension plans are pensions sponsored by more than one employer and maintained as part of a collective bargaining agreement. About 3.2% of all DB pension plans, covering 25% of all DB pension plan participants, are multiemployer plans. Nearly all of the remaining DB pension plans are maintained by a single employer. A few DB pension plans are maintained by more than one employer but are not maintained under a collective bargaining agreement. In DB pension plans, participants receive a monthly benefit in retirement that is based on a formula. In multiemployer DB pensions, the formula typically multiplies a dollar amount by the number of years of service the employee has worked for employers that participate in the DB plan.

DB pension plans are subject to funding rules in the Internal Revenue Code (26 U.S.C. §431) to ensure they have sufficient resources from which to pay promised benefits. Because single employer and multiemployer DB pension plans have different structures, Congress has established separate funding rules for these plans. The funding rules for multiemployer DB pension plans are set to expire at the end of 2014, and Congress has been considering proposals that would alter these rules.

Although most multiemployer DB pension plans have sufficient resources from which to pay their promised benefits, a few large plans are expected to become insolvent in the next 20 years. The Pension Benefit Guaranty Corporation (PBGC) is a U.S. government agency that insures the benefits of participants in private-sector DB pension plans. As with the funding rules, Congress established separate PBGC programs to insure single and multiemployer DB pensions. For example, PBGC becomes the trustee of terminated single employer DB pension plans. PBGC does not become the trustee of multiemployer DB pension plans; rather, it makes loans to insolvent multiemployer DB plans so the plans may continue to pay participants' guaranteed benefits.

Although PBGC has sufficient resources to make loans to smaller multiemployer DB plans, the insolvency of a large multiemployer DB pension plan would likely result in a substantial strain on PBGC's multiemployer insurance program. In the absence of increased financial resources for PBGC, participants in insolvent multiemployer DB pension plans might not receive all of the benefits guaranteed by PBGC. In a report released in June 2014, PBGC indicated that the multiemployer insurance program is highly likely to become insolvent by 2025.

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Introduction

A pension is a voluntary benefit offered by employers to assist employees in providing for their financial security in retirement. Department of Labor (DOL) data in 2013 indicated that 65% of full-time workers in the United States participated in a retirement plan sponsored by their employer.¹ The two types of pension plans are defined contribution (DC) plans (of which the 401(k) plan is the most common), in which participants have individual accounts that are the basis of income in retirement; and defined benefit (DB) plans, in which participants receive regular monthly benefit payments in retirement (which some refer to as a “traditional” type of pension).² Pension plans are also classified by whether they are sponsored by one employer (single employer plans) or by more than one employer (multiemployer and multiple employer plans). Multiemployer pension plans are sponsored by employers in the same industry and maintained as part of a collective bargaining agreement. Multiple employer plans are sponsored by more than one employer but are not maintained as part of a collective bargaining agreement. Multiple employer pension plans are not common.³

Nearly all private-sector pension plans are governed by the Employee Retirement Income Security Act of 1974 (ERISA; P.L. 93-406), which is enforced by the Department of the Treasury, the DOL, and the Pension Benefit Guaranty Corporation (PBGC).⁴ Because of differences in the structure of the plans, single and multiemployer DB pension plans have different rules under some sections of ERISA. Examples include the existence of separate funding rules for each type of plan and pension insurance program.

Multiemployer DB plans are of current concern to Congress for several reasons:

- the funding rules for these plans expire at the end of 2014, so Congress must decide whether, and in which ways, to alter the funding rules;
- some plans have insufficient plan assets from which to pay 100% of the benefits promised to plan participants;
- a few very large multiemployer DB pension plans are in such poor financial condition that they are expected to become insolvent within 10 years or 20 years; and
- because the liabilities of these large pension plans are so great, PBGC would likely be unable to continue to guarantee participants’ benefits if one or two of these plans became insolvent.

¹ See Bulletin 2776, National Compensation Survey: Employee Benefits in the United States, March 2013, available at <http://www.bls.gov/ncs/ebs/benefits/2013/ebb10052.pdf>.

² In some defined contribution (DC) plans, plan participants have the option to purchase annuities (a monthly payment for life) with some or all of their account balances. In some defined benefit (DB) plans, plan participants have the option to receive a lump-sum payment at retirement in lieu of the annuity.

³ The Government Accountability Office (GAO) indicated that about 0.7% of pension plans were multiple employer pension plans. See U.S. Government Accountability Office, *Federal Agencies Should Collect Data and Coordinate Oversight of Multiple Employer Plans*, GAO-12-665, September 13, 2012, p. 10, <http://www.gao.gov/assets/650/648285.pdf>.

⁴ The Pension Benefit Guaranty Corporation (PBGC) was created in the Employee Retirement Income Security Act of 1974 (ERISA) to insure private-sector DB pension plans. For more information on PBGC, see CRS Report 95-118, *Pension Benefit Guaranty Corporation (PBGC): A Primer*, by John J. Topoleski

Possible solutions to plan underfunding could involve some combination of increased contributions from the employers that sponsor pension plans, cuts in future benefits to plan participants who are currently working, cuts in current benefits to retired participants, or financial assistance from the U.S. government.

Background on Pensions

To protect the interests of pension plan participants and beneficiaries, Congress enacted ERISA (P.L. 93-406). ERISA is codified in the U.S. Code in Title 26 (Internal Revenue Code, or IRC) and Title 29 (Labor Code) and sets standards that pension plans must follow with regard to plan participation (who must be covered); minimum vesting requirements (how long a person must work for an employer to be covered); plan funding (how much must be set aside to pay for future benefits); and fiduciary duties, which require that a pension plan be operated in the sole interests of plan participants by plan sponsors, administrators, and others who oversee the plan. ERISA established PBGC, which is an independent federal agency that insures DB pension plans covered by ERISA. ERISA covers only private-sector pension plans and exempts pension plans established by the federal, state, and local governments and by churches.

Pension plans may be classified in a variety of ways, such as whether they receive tax preferences, whether they are sponsored by one or more than one employer, and whether the benefits are payable as a lifetime annuity at retirement or accrue in accounts for each of the participants.

Tax-Qualified Pension Plans

Sponsors of pension plans may choose for their plans to be tax qualified. Tax-qualified plans receive certain tax advantages. For example, employer contributions to qualified DB plans are tax-deductible expenses for employers in the year contributions are made. Qualified plans also meet IRC requirements with respect to vesting schedules (which determine when participants have a legal right to their benefits) and funding requirements (which determine the amounts plan sponsors must contribute to the plans they sponsor). Generally, qualified DB pension plans must pre-fund future benefits.⁵ Non-qualified pension plans are not required by the IRC to be pre-funded. Because one of the requirements to be a tax-qualified plan is to cover a broad range of employees in a company, non-qualified pension plans are designed for top-level executives and other highly compensated employees.

Single Employer, Multiple Employer, and Multiemployer Pension Plans

Pension plans are also classified by whether they are sponsored by one employer (single employer pension plans) or by more than one employer (multiple and multiemployer pension plans). Most pension plans are sponsored by one employer. DOL data indicate that 99.6% of all pension plans (covering 91.4% of all pension plan participants) are single employer pension plans.⁶

⁵ Although participants' benefits will be paid in the future, the sponsors of qualified DB pension plans are generally required to make contributions to the plan each year for benefits earned in that year.

⁶ See Department of Labor (DOL), Employee Benefits Security Administration, *Department of Labor, Employee* (continued...)

Single Employer Pension Plans

Single employer pension plans are sponsored by one employer and cover eligible workers employed by the plan sponsor. When an employee stops working for the employer sponsoring the plan, the worker stops accruing benefits under that plan. The sponsor may decide to cease offering its employees benefits under the plan, in which case the plan may be frozen or terminated. If a DB pension plan is frozen, participants no longer accrue benefits but employers maintain responsibility for the frozen plan (for example, employers may have to make additional contributions to make up for funding shortfalls that may result from decreases in the value of plan assets). Alternatively, employers may decide to terminate their pension plans. Employers that terminate their DB pension plans must guarantee participants' future benefits by purchasing annuities (a guaranteed monthly payment) from an insurance company for each participant's accrued benefit. If underfunded DB pension plans are terminated pursuant to company bankruptcy, PBGC becomes the trustee of the plans and pays participants their promised benefits, up to a statutory maximum benefit.⁷

Multiple Employer Pension Plans

Multiple employer pension plans are sponsored by more than one employer and are not maintained under collective bargaining agreements. They are treated as single employer pension plans for the purposes of funding rules.

Multiemployer Pension Plans

Multiemployer pension plans are sponsored by more than one employer and are maintained under collective bargaining agreements. Participants continue to accrue benefits while working for any employer that participates in the plan. Multiemployer pension plans pool risk so that the withdrawal of a few employers from the plan does not place the plan in financial jeopardy. However, in recent years, an increasing number of employers have left multiemployer pension plans (either voluntarily or through employer bankruptcy). As a result of declines in the value of plan assets (such as occurred during the 2008 financial market decline, some participants who worked for employers that withdrew from the plan may have unfunded vested benefits in the plan.

DB and DC Plans

Pension plans are either DB or DC. Over the past 30 years, employers have been offering fewer DB plans and more DC pensions. DOL data indicate that 64.2% of all pension plan participants were in DB plans in 1981, and that percentage declined to 31.5% in 2011.⁸

(...continued)

Benefits Security Administration, Private Pension Plan Bulletin Abstract of 2010 Form 5500 Annual Reports, November 2012.

⁷ The annual maximum benefit is \$57,477 for individuals who begin receiving their benefits at the age of 65 and whose plan is terminated in 2013. For more information on the termination of single employer DB pension plans, see CRS Report RS22624, *The Pension Benefit Guaranty Corporation and Single-Employer Plan Terminations*, by Jennifer A. Staman and Erika K. Lunder.

⁸ See DOL, Employee Benefits Security Administration, *Private Pension Plan Bulletin Historical Tables and Graphs*: (continued...)

DB Pension Plans

Participants in DB pension plans receive monthly payments in retirement. In multiemployer DB pension plans, the payment is typically calculated as the length of service with employers that contribute to the plan multiplied by a dollar amount.⁹ The payments are paid by the plan for the lifetime of the worker after he or she retires. Plan participants who are married may receive a joint-and-survivor annuity, which is an annuity payable for the lifetime of the participant or the participant's spouse, whichever is longer.

DB pension plans are generally funded entirely by employer contributions. DOL data in 2011 indicated that among private-sector workers who participated in DB plans, 4% were required to make an employee contribution to the plans. Among public-sector workers who participated in DB plans, 79% were required to make a contribution to their DB pension plans.¹⁰

DC Pension Plans

Workers in DC pension plans contribute a percentage of their wages to an individually established account. Employers may also contribute a match to the DC plan, which is an additional contribution equal to some or all of the worker's contribution. The account accrues investment returns and is then used as a basis for income in retirement. DC plans do not provide guarantees of lifetime income, unless participants purchase an annuity. Examples of DC plans are 401(k), 403(b), and 4057(b) plans and the Thrift Savings Plan (TSP).¹¹

Data on Pension Plans and Participants

Table 1 provides information on the number of single and multiemployer DC and DB pension plans in 2011 (the most recent year for which data is available) and the number of active and retired participants by plan type. In 2011, there were 1,442 multiemployer DB pension plans that covered 10.4 million participants, of which 40.1% were active participants, meaning that 59.9% were retired (thus receiving benefits). DB pension plans that have high percentages of active workers are better able to rely on future contributions from plan sponsors to make up for plan underfunding. This is because, *on a per participant basis*, employers' contributions toward the underfunding will be lower in plans with higher percentages of active workers.

(...continued)

1975-2011, June 2013, <http://www.dol.gov/ebsa/pdf/historicaltables.pdf>.

⁹ In single employer plans, participants receive a monthly payment in retirement that is based on a formula that typically uses a combination of length of service, accrual rate, and average of final years' salary. For example, a plan might specify that retirees receive an amount equal to 1.5% of their proscribed pay for each year of service, where the proscribed pay is the average of a worker's highest five pay years. A worker with 20 years of service in a DB plan that has an accrual rate of 1.5% that is based on an average of the worker's highest five years of salary of \$50,000 would receive a pension benefit of $\$50,000 \times 20 \times 0.015 = \$15,000$ per year.

¹⁰ See National Compensation Survey: Employee Benefits in the United States, March 2011 National Compensation Survey, March 2011, available at <http://www.bls.gov/ncs/ebs/benefits/2011/ebbl0048.pdf>.

¹¹ The plans, apart from the TSP, are named for the section of the tax code that authorized them. Private-sector employers establish 401(k) plans, public school systems and nonprofits establish 403(b) plans, and state and local governments and nonprofits establish 457(b) plans.

Table I. Single and Multiemployer Pension Plans in 2011

	Single Employer Pension Plans		Multiemployer Pension Plans	
	Defined Contribution	Defined Benefit	Defined Contribution	Defined Benefit
Number of Plans	637,086	43,813	1,299	1,442
Number of Active Participants (millions)	70.3	12.3	3.4	4.2
Number of Retired Participants (millions)	14.0	18.1	1.1	6.3
Total Participants (millions)	84.3	30.4	4.4	10.4
Active as a Percentage of Total Participants	83.4%	40.5%	76.3%	40.1%
Plan Assets (billions)	\$3,657.7	\$2,050.6	\$171.8	\$465.5

Source: Department of Labor (DOL), Employee Benefits Security Administration, Private Pension Plan Bulletin Abstract of 2011 Form 5500 Annual Reports.

Notes: Multiple employer pension plans are categorized as single employer pension plans on Form 5500. Active participants include any workers currently in employment covered by a plan and who are earning or retaining credited service under a plan. This category includes any non-vested former employees who have not yet incurred a break in service. Active participants also include individuals who are eligible to elect to have the employer make payments to a 401(k) plan.

Funding Levels in Multiemployer DB Pension Plans

The funding levels of multiemployer DB pension plans are varied: some plans are well funded and have adequate funds from which to pay all of their promised benefits, and a few plans are poorly funded and may become insolvent within 10 years to 20 years. An insolvent multiemployer DB pension plan has depleted all of its assets and is unable to pay all of its current benefit obligations. Insolvent DB pension plans are eligible to receive financial assistance from PBGC. The Pension Protection Act of 2006 (PPA; P.L. 109-280) requires a plan that has a funding shortfall below specified levels to notify DOL of the plan’s funding status and establish a plan to improve funding levels over time.

Background on Multiemployer DB Plan Funding

DB pension benefits are accrued by eligible employees while working. The benefit is paid, typically as a monthly annuity, during the worker’s retirement. The benefits in DB plans subject to ERISA are required to be pre-funded, which means that in the current year the plan sponsor sets aside adequate funds, taking into account expected future investment returns, for pension benefits earned in that year.¹² Plan sponsors may also be required to make additional contributions for investment losses that occurred in previous years and increases in the present value of future plan obligations. Plan participants receive their monthly benefit in retirement from these funds that have been set aside.

¹² The funding rules for multiemployer DB pension plans are found at 26 U.S.C. §431.

The required contributions for employers in multiemployer DB pension plans are fixed for several years as established in collective bargaining agreements. Various situations have led to many pension plans having a smaller amount of funds than the amount of benefits that have been promised by the plan. These situations include declines in the values of plan assets (such as occurred during the stock market decline in 2008) and increases in the current value of future benefits (such as occurred when interest rates declined as a result of the Federal Reserve's efforts to strengthen the economy). The **Appendix** provides background for understanding pension plan funding issues.

Funding Standard Accounts and Funding Deficiencies

Multiemployer DB plans maintain funding standard accounts, which facilitate the administration of funding requirements. Charges (debits) to the account reduce the account balance and include the cost of benefits earned by participants during the year and investment losses.¹³ Credits increase the funding standard account and include employer contributions to the plan and investment gains.¹⁴

When the total credits to a multiemployer DB pension plan exceed the total charges, the plan has a “credit balance” and no contributions are required until future charges eliminate the credit balance. When the total charges exceed the total credits, a funding deficiency results and additional contributions to the plan may be required. According to the PBGC, 90 plans (out of 1,471 plans) reported funding deficiencies in 2010.¹⁵

Of these 90 plans,

- three plans, each with more than 10,000 participants, had individual funding deficiencies of between \$35 million and \$99 million;
- one plan with between 5,000 and 10,000 participants had a funding deficiency more than \$100 million; and
- two plans, each with more than 10,000 participants, had individual funding deficiencies of more than \$100 million.

Withdrawal Liability

When a company wishes to exit a multiemployer DB plan, the company is responsible for its withdrawal liability, defined as its share of unfunded vested benefits (benefits to which

¹³ Investment losses and investment gains are also called experience losses and experience gains, respectively.

¹⁴ Pension plans are able to amortize experience gains and losses and changes in benefits as a result of changes to actuarial assumptions. Amortization means that plans can spread out the effect of these events over a specified number of years. For example, funding shortfalls as a result of investment losses are generally required to make up over a period of 15 years, although a provision in the Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010 (P.L. 111-192) allowed investment losses from 2008 or 2009 to be amortized over a period of 30 years. For more information on this amortization of experience gains and losses, see U.S. Congress, Joint Committee on Taxation, *General Explanation Of Tax Legislation Enacted In The 111th Congress*, committee print, 111th Cong., 2nd sess., March 2011, JCS-1-11 (Washington: GPO, 2011).

¹⁵ See PBGC, *Multiemployer Pension Plans: Report to Congress Required by the Pension Protection Act of 2006*, January 22, 2013, p. 7, <http://www.pbpc.gov/documents/pbpc-report-multiemployer-pension-plans.pdf>.

participants have a contractual right but which the plan has insufficient assets to pay).¹⁶ In instances in which an employer withdraws from a multiemployer DB pension plan because of the employer's bankruptcy, it may not be possible to recover the employer's withdrawal liability. As a result, there may be plan participants with vested benefits who worked for an employer that no longer participates in the plan. These participants are sometimes called *orphan participants* because they do not have an employer that will make additional contributions to the plan for their unfunded benefits. The existence of orphan plan participants can result in a worsening funding situation for the multiemployer plan, because DB plan assets are comingled in a trust and are not assigned to a particular employer's contributions or participant's benefit. Thus, benefit payments for all participants draw down general plan assets.¹⁷

Reporting of Plan Funded Status

PPA requires that the actuary of a multiemployer DB pension plan annually certify the plan's status in one of three categories based on, among other factors, the funded status of the plan.¹⁸ A plan can be in critical status, endangered status, or neither category. A plan in critical or endangered status must take measures to improve its financial conditions.

Critical (Red Zone) Status

A plan is in *critical status* if any of the following conditions apply: (1) the plan's funding ratio is less than 65% and in the next six years the value of the plan's assets and contributions will be less than the value of benefits; (2) in the current year, the plan is not expected to receive 100% of the contributions required by the plan sponsor, or the plan is not expected to receive 100% of the required contributions for any of the next three years (four years if the plan's funding percentage is 65% or less); (3) the plan is expected to be insolvent within five years (within seven years if the plan's funding percentage is 65% or less); or (4) the cost of the current year's benefits and the interest on unfunded liabilities are greater than the contributions for the current year, the present value of benefits for inactive participants is greater than the present value of benefits for active participants, and there is expected to be a funding deficiency within five years.

Plans in critical status must adopt a rehabilitation plan. The rehabilitation plan is a range of options (such as increased employer contributions and reductions in future benefits accruals) that, when adopted, will allow the plan to emerge from critical status during a 10-year *rehabilitation period*. If a plan cannot emerge from critical status by the end of the rehabilitation period using reasonable measures, it must either install measures to emerge from critical status at a later time

¹⁶ For more information, see *Withdrawal Liability*, PBGC, available at <http://www.pbgc.gov/prac/multiemployer/withdrawal-liability.html> or Keith R. McMurdy, Esq., *Multiemployer Withdrawal Liability: Understanding the Basics*, Fox Rothschild LLP, http://www.foxrothschild.com/uploadedfiles/attorneys/deskReference_mcmurdy_multiemployerWithdrawalLiability2.pdf.

¹⁷ As of the date of this report, there is no proposal in the 113th Congress to deal with orphan participants. In the 111th Congress, Senator Bob Casey introduced S. 3157, the Create Jobs and Save Benefits Act of 2010, which, among other provisions, would have transferred the liabilities for orphan participants to PBGC. Plans would have been required to transfer to PBGC sufficient assets from which to pay for five years of benefit payments. For more information, see Senator Bob Casey, "Casey Pension Bill Would Protect Benefits and Remove Burden on Companies Contributing to Multi-Employer Plans," press release, March 22, 2010, <http://www.casey.senate.gov/newsroom/releases/casey-pension-bill-would-protect-benefits-and-remove-burden-on-companies-contributing-to-multi-employer-plans>.

¹⁸ Each pension plan has an actuary that makes estimates of a variety of factors that affect the plan, such as the number of current and future plan participants, current and future plan funding, and future contributions.

(after the end of the rehabilitation period) or forestall insolvency. Plans in critical status may not increase benefits during the rehabilitation period.

Plans in critical status must provide notice to plan participants, beneficiaries, the collective bargaining parties, PBGC, and DOL.¹⁹

Endangered (Yellow Zone) Status

A plan is in *endangered status* if (1) the plan's funding ratio is less than 80% funded or (2) the plan has a funding deficiency in the current year or is projected to have one in the next six years. A plan is seriously endangered if it meets both of these criteria.

Plans in endangered status must adopt a funding improvement plan, which is a range of options (such as increased contributions and reductions in future benefit accruals) that, when adopted, will reduce the plan's underfunding by 33% during a 10-year *funding improvement period*. Plans in seriously endangered status must adopt a funding improvement plan that will reduce underfunding by 20% during a 15-year funding improvement period. Plans in endangered or seriously endangered status cannot increase benefits during the funding improvement period.

Plans in endangered status must provide notice to plan participants, beneficiaries, the collective bargaining parties, PBGC, and DOL.²⁰

Green Status

Plans that are neither in critical or endangered status are considered to be in *green status*. These plans most likely will be able to pay all of the participants' benefits without changes to employers' contributions or participants' benefits.

Table 2 provides the number of multiemployer DB plan certifications within each funded status category for the 1,312 plans that reported their plan certification in 2011.²¹

¹⁹ The funding statuses are available at <http://www.dol.gov/ebsa/criticalstatusnotices.html>.

²⁰ Ibid.

²¹ PBGC indicated that the total number of plan certifications is less than the total number of multiemployer DB pension plans because some plans are terminated but continue to pay benefits (*wasting trusts*) and are required to file annual Form 5500 reports but are not required to file zone certifications. See PBGC, *Multiemployer Pension Plans: Report to Congress Required by the Pension Protection Act of 2006*, January 22, 2013, p. 40, <http://www.pbgc.gov/documents/pbgc-report-multiemployer-pension-plans.pdf>.

Table 2. Defined Benefit Multiemployer Plan Certification in 2011

Status	Number of Plans
Neither Critical nor Endangered (Green Zone)	780 (59.5%)
Endangered (Yellow Zone)	196 (14.9%)
Seriously Endangered	17 (1.3%)
Critical (Red Zone)	319 (24.3%)

Source: Pension Benefit Guaranty Corporation (PBGC), *Multiemployer Pension Plans: Report to Congress Required by the Pension Protection Act of 2006*, January 22, 2013, p. 40, <http://www.pbgc.gov/documents/pbgc-report-multiemployer-pension-plans.pdf>.

PBGC Multiemployer Insurance Program

PBGC is a federal government agency created by ERISA in 1974 to protect the benefits of participants in private-sector DB pension plans. PBGC operates two insurance programs: a single employer insurance program and a multiemployer insurance program. The two programs function quite differently. In the single employer program, PBGC becomes the trustee of terminated, underfunded DB pension plans and pays benefits up to a statutory maximum amount. In the case of multiemployer plans, PBGC does not insure against termination. Rather, when a multiemployer DB pension plan becomes insolvent and is unable to pay participants their promised benefits, PBGC provides financial assistance in the form of loans (which are not expected to be repaid) made to multiemployer DB plans. As a condition for the loans, plans must reduce participants' benefits to a statutory maximum benefit.

PBGC's multiemployer insurance program receives revenues from two sources: (1) premium revenue paid by the sponsors of multiemployer pension plans and (2) interest income from holdings of U.S. Treasury debt. Premium revenue is placed in a revolving fund that, by law, is invested in U.S. Treasury debt.

In its FY2012 report on its expected financial operations in the future, PBGC indicated that there was a 36% probability the multiemployer insurance program would become insolvent by 2022 and a 91% probability that it would become insolvent by 2032.

The September 30, 2013, financial statements of PBGC indicated the following for FY2013:²²

- The multiemployer program had assets of \$1.7 billion, nearly all of which was invested in U.S. Treasury securities.²³
- Total liabilities were \$10.0 billion, nearly all of which was the present value of the financial assistance to currently insolvent and probably insolvent plans.²⁴
- Premium income in FY2013 was \$110 million.
- Investment losses in FY2013 were \$96 million.

²² See PBGC, *FY2013 Annual Report*, November 15, 2013, <http://www.pbgc.gov/res/reports/ar2013.html>.

²³ The remaining amount (\$87 million) consisted of cash holdings, receivables, and net capitalized assets.

²⁴ The remaining amount (\$46 million) consisted of payables and future benefits to trustee plans.

- Loans to insolvent plans totaled \$89 million in FY2013.
- The deficit (assets minus liabilities) in the multiemployer program was \$8.3 billion, an increase of \$3.0 billion from FY2012.

Current and Future Financial Assistance to Multiemployer Pension Plans

PBGC provides financial assistance to insolvent multiemployer pension plans. In addition to providing details about the number of plans receiving financial assistance, PBGC estimates the number of plans that might need financial assistance in the future. Potential future financial assistance is categorized as either (1) probable or (2) reasonably possible, depending on whether the PBGC expects to provide the assistance (1) within 10 years or (2) between 10 years and 20 years.

Plans Currently Receiving Financial Assistance

Forty-four multiemployer plans received financial assistance in FY2013 that totaled \$89 million. The net liability associated with these plans was \$1.4 billion.²⁵

Probable Exposure to Future Financial Assistance

Plans are classified as probable if the plan is (1) terminated and underfunded but not yet receiving financial assistance or (2) ongoing but expected to be insolvent within 10 years. In FY2013,

- 65 multiemployer plans had been terminated but had not yet started receiving financial assistance. The net liability associated with these plans was \$1.9 billion.
- 64 plans were ongoing but expected to be insolvent within 10 years. The net liability associated with these plans was \$6.7 billion.

Reasonably Possible Exposure to Future Financial Assistance

Plans are classified as reasonably possible exposure to future financial assistance if the plan is ongoing but is projected to be insolvent in 10 years to 20 years. Approximately \$26 billion of the \$36.7 billion in reasonably possible future financial assistance is a result of the potential insolvency of two large plans. One plan, classified by PBGC in the “transportation, communications, and utilities” industry, had a net liability of \$20 billion as of the end of FY2013.²⁶ A second plan, classified by PBGC in the “agriculture, mining, and construction” industry, had a net liability of \$6 billion at the end of FY2013.²⁷

²⁵ See PBGC, *FY 2012 PBGC Exposure Report*, <http://www.pbgc.gov/documents/2012-exposure-report.pdf>.

²⁶ This is reportedly the Central States Pension Fund. Among many references to this plan, see, for example, U.S. Congress, House Committee on Education and the Workforce, Subcommittee on Health, Employment, Labor, and Pensions, *Examining the Challenges Facing PBGC and Defined Benefit Pension Plans*, 112th Cong., 2nd sess., February 2, 2012, 112-50 (Washington: GPO, 2012) and Testimony of Thomas C. Nyhan, executive director and general counsel, Central States Southeast and Southwest Areas Pension Fund, in U.S. Congress, House Committee on Education and the Workforce, Subcommittee on Health, Employment, Labor, and Pensions, “*Strengthening the Multiemployer Pension System: How Will Proposed Reforms Affect Employers, Workers and Retirees?*,” 113th Cong., (continued...)

PBGC Guarantees

PBGC guarantees benefits in pension plans up to a statutory maximum level. When an insolvent multiemployer DB pension plan becomes insolvent, the plan must reduce participants' benefit to the PBGC maximum amount before the plan receives the assistance. The statutory annual maximum benefit in multiemployer plans that receive financial assistance from PBGC is the product of a participant's years of service multiplied by the sum of (1) 100% of the first \$11 of the monthly benefit accrual rate and (2) 75% of the next \$33 of the accrual rate. For a participant with 30 years of service, the statutory annual maximum benefit is \$12,870 in 2014.²⁸

PBGC Premium and Investment Income in FY2013

PBGC reported \$110 million in premium income from multiemployer plans in FY2013. PBGC also reported \$96 million in investment losses from holdings of U.S. Treasury debt. Premiums are placed in a revolving fund, which, by law, must be invested in Treasury securities.

PBGC Premium Levels

The PBGC multiemployer insurance program is funded by a per participant premium paid by each pension plan. In 2014, the sponsors of multiemployer DB pension plans pay an annual premium of \$12 for each participant in the plan. Section 40222 of the Moving Ahead for Progress in the 21st Century Act (MAP-21; P.L. 112-141) increased the premium from \$9 per participant to \$12 per participant. MAP-21 also required that the premium be indexed to inflation beginning in 2014.

Inadequacy of PBGC Premiums

Unlike the single employer insurance program, PBGC does not become trustee of insolvent multiemployer pension plans. For this reason, the only sources of funding for the financial assistance to insolvent multiemployer pension plans are (1) the collection of premiums that multiemployer plan sponsors pay to PBGC and (2) interest income from the investment of past premium income in U.S. Treasury bonds. If the amount of financial assistance were to exceed the amount of premium revenue, then the revolving fund containing the investments in U.S. Treasuries could become depleted.

(...continued)

1st sess., October 29, 2013.

²⁷ This is reportedly the United Mineworkers of America 1974 Pension Plan. See U.S. Congress, House Committee on Natural Resources, *The CARE Act*, report to accompany H.R. 5479, 111th Cong., H.Rept. 111-651.

²⁸ This is calculated as follows: $12 \times [(\$11 \times 30) + (.75 \times \$33 \times 30)]$. For reference, the maximum benefit payable to participants in single employer DB pension plans that are trustee by PBGC is higher than the multiemployer program maximum benefit. It depends on the year of plan termination, the age at which the participant begins to receive the benefit, and the form of the benefit. For example, the single employer maximum benefit is \$57,500 for an individual who is in a plan that is terminated in 2013, begins to receive the benefit at the age of 65, and receives the benefit in the form of a single life annuity. The maximum benefit is \$23,278 for an individual who is in a plan that is terminated in 2013, begins to receive the benefit at the age of 55, and receives a joint-and-survivor annuity.

As mentioned above, PBGC estimated its *probable exposure* to future financial assistance to be \$8.6 billion²⁹ over the next 10 years and its *reasonably possible exposure* to future financial assistance to be \$36.7 billion. The premium income in PBGC's multiemployer program was \$110 million in FY2012. PBGC has indicated that the multiemployer insurance program is likely to become insolvent in 10 years to 15 years, even before any new financial obligations are added.³⁰

Premium levels are likely inadequate to provide continued financial assistance to insolvent multiemployer plans and could exhaust PBGC's ability to guarantee participants' benefits. PBGC has indicated that once resources are exhausted in its multiemployer program, insolvent plans would be required to reduce benefits to levels that could be sustained through premium collections only. PBGC premiums are set by law. Many stakeholders, such as Members of Congress and plan sponsors, might be reluctant to raise premiums to the levels necessary to fund promised benefits if the scenario in the *reasonably possible exposure* developed.

Multiemployer DB Pension Plan Policy Issues

Policy makers have been giving increased attention to issues concerning multiemployer DB pension plans and PBGC's multiemployer insurance program.³¹ One reason is that because the funding rules for multiemployer DB pension plans sunset on December 31, 2014, some Members of Congress have expressed a desire to address the challenges faced by the sponsors of multiemployer DB pension plans and by PBGC's multiemployer insurance program.³²

Likely Insolvency of a Few Large Multiemployer Pension Plans and PBGC Insurance Program

Although many multiemployer DB pension plans are underfunded, most can expect their funding position to improve with modest changes to the plan, such as increased employer contributions. However, a few large multiemployer plans are in very poor financial condition and are likely to become insolvent.

Insolvent DB multiemployer pension plans are eligible for financial assistance from PBGC. PBGC has sufficient assets from which to provide financial assistance to currently insolvent plans and to smaller multiemployer plans that may become insolvent in the future. However, if one or

²⁹ This is calculated as \$1.9 billion from plans that had been terminated but had not yet started receiving assistance and \$6.7 billion from plans that are ongoing but expected to become insolvent within 10 years.

³⁰ Testimony of Hon. Joshua Gotbaum, PBGC Director, in U.S. Congress, House Committee on Education and the Workforce, Subcommittee on Health, Employment, Labor and Pensions, March 5, 2013, http://edworkforce.house.gov/uploadedfiles/gotbaum_testimony.pdf.

³¹ For example, the Subcommittee on Health, Employment, Labor, and Pensions in the House Education and Workforce Committee has held six hearings since January 2012 on the subject of multiemployer DB pension plans.

³² For example, Phil Roe, chairman of the Subcommittee on Health, Employment, Labor, and Pensions in the House Education and Workforce Committee said that "[m]aintaining the status quo is no longer possible. Provisions in the law governing multiemployer pensions will expire in two years, which means Congress has an important opportunity to study the system, assess its strengths and weaknesses, and pursue solutions that support workers without discouraging participation in the voluntary pension system." See U.S. Congress, House Committee on Education and the Workforce, Subcommittee on Health, Employment, Labor, and Pensions, *Challenges Facing Multiemployer Pension Plans: Evaluating PBGC's Insurance Program and Financial Outlook*, 112th Cong., 2nd sess., December 19, 2012.

more large multiemployer plans become insolvent, PBGC would likely have insufficient resources from which to pay 100% of the benefits owed to plan participants.

PBGC has indicated that once it has exhausted the assets in the multiemployer insurance program revolving funds, it would be able to pay total benefits equal to total premium income. This would likely mean that participants' benefits would be cut to levels below the current maximum benefit.³³ In this scenario, if Congress wished to pay 100% of the participants' benefits, then premiums would have to rise to levels that many plan sponsors, plan participants, and policy makers would find unreasonable.³⁴

In its *FY2013 Projections Report* released on June 30, 2014, PBGC indicated that the multiemployer program is more likely than not to become insolvent within 8 years, highly likely to become insolvent within 11 years, and facing a 99% likelihood of insolvency within 20 years.³⁵

The estimates presented in the projections report suggest that PBGC's multiemployer insurance program will face significant financial challenges over the next 10 years. The value of assets in the multiemployer program at the end of FY2013 was \$1.7 billion, and PBGC estimated the present value of the next 10 years of insurance premiums to be \$1.2 billion. These two sources of funds total \$2.9 billion and represent the amount of resources available to PBGC from which to provide future financial assistance over the next 10 years. PBGC estimated the present value of future financial assistance to multiemployer plans from FY2014 to FY2023 to be \$6.1 billion. This deficit of \$3.2 billion is the amount by which PBGC will be unable to provide sufficient financial assistance for plans to pay the PBGC guaranteed maximum benefit (\$12,970 per year per participant) over this period. The projections report noted that plans will likely require significant amounts of financial assistance even after FY2024 because the present value of PBGC's financial position in 2023 was estimated to be a deficit of \$50 billion.³⁶

Proposals for Multiemployer DB Pension Reform

The National Coordinating Committee for Multiemployer Plans (NCCMP) is an organization that represents a number of multiemployer pension plans.³⁷ NCCMP created a Retirement Security Review Commission to gather input from a coalition of employers and labor groups for multiemployer DB pension reform proposals. In February 2013, the commission issued a report to advance a proposal that it indicated would reform and strengthen the multiemployer pension system.³⁸ The commission proposed the following: (1) reforms to existing funding rules for

³³ See GAO, *Multiemployer Plans and PBGC Face Urgent Challenges*, GAO-13-428T, March 5, 2013, <http://www.gao.gov/assets/660/652687.pdf>.

³⁴ An analysis of the amount by which premiums would rise is beyond the scope of this paper. PBGC's *reasonably possible* scenario shows an increase in the liability of PBGC of \$36.7 billion (which would not be due in one year but would be spread out over the lifetimes of plan participants). There were approximately 10.6 million participants in multiemployer DB pensions in 2011. Each participant's share of the \$27 billion liability would be approximately \$2,600. For reference, in 2014, plan sponsors pay \$12 per participant in PBGC multiemployer insurance premiums.

³⁵ See PBGC, *FY2013 Projections Report*, <http://www.pbgc.gov/documents/Projections-report-2013.pdf>.

³⁶ The estimate of new claims was much larger than the estimate of financial assistance because net claims include benefits that will be paid after FY2024, but the value of financial assistance includes only assistance provided within the next 10 years.

³⁷ The website of the NCCMP is <http://www.nccmp.org>.

³⁸ The proposal, *Solutions Not Bailouts*, is available at <http://www.solutionsnotbailouts.com>.

multiemployer pension plans; (2) solutions to address deeply troubled multiemployer DB pension plans (plans that are expected to become insolvent in the next 10 years); and (3) new plan designs to encourage the creation of new multiemployer plans.³⁹

Recommendations for Changes to Existing Funding Rules

The commission's 13 recommendations for changes to the funding rules for multiemployer DB pensions would

- permit plans to enter critical status if they anticipate being in that status in the next five years. Under current law, multiemployer plans are required to make changes to the plan structure when they enter critical status. However, plans cannot make changes even if they anticipate entering that status (they must wait until they enter that status);
- allow plans that emerge from critical status to not reenter critical status for at least one year following their emergence. Under current law, because different criteria exist in the funding status tests for plans emerging from critical status, some plans emerge from and then immediately reenter critical status;
- authorize plans that meet the criteria for endangered status but have funding improvement plans that do not require additional contributions or benefit changes to not be certified as in endangered status. Some plans that enter endangered status do not have to make any changes to contributions or benefit levels to emerge from that status. Under current law, these plans continue to be classified as being in endangered status;
- permit plan actuaries for plans in endangered status, when developing funding improvement plans, to use the funding status as of the date of certification of the status rather than having to calculate the plan's funding status as of the beginning of the funding improvement plan. Under current law, plan actuaries must calculate the funding status at date of certification of endangered status and make a projection of the funding status at the beginning of the funding improvement period;
- allow plans in endangered status to adopt some of the rules currently available only to plans in critical status, including contribution decreases and the waiver of excise taxes. Some plans that are in endangered status actively seek to be placed in critical status because a number of the restrictions placed on plans in endangered status are more onerous than those for plans in critical status;
- provide for automatic triggers for funding relief when dramatic decline occur in financial markets. Under current law, Congress must authorize changes in funding rules, which can result in a delay between the onset of financial difficulties for pension plans and the implementation of funding relief;
- enable funding improvement plans and rehabilitation plans to specify the course of action if the collective bargaining agreement expires and the parties cannot agree on a schedule. Current law provides no guidance as to the course of action

³⁹ As of the date of this report, the Congressional Research Service (CRS) is aware of only NCCMP's proposal for multiemployer DB pension reform. Additional proposals will be discussed as warranted in future updates to this report.

- a plan must take if a collective bargaining agreement expires when a plan is in endangered or critical status;
- allow rules for plans in critical status to take priority over rules for plans in reorganization when both occur simultaneously. The Multiemployer Pension Plan Amendments Act of 1980 (P.L. 96-364) required plans in weak financial condition to undergo reorganization and established rules for plans in reorganization to improve funding. There may be conflicts between some of the rules for plans that are both in reorganization and in endangered or critical status;
 - permit contribution increases as part of a funding improvement plan or a rehabilitation plan to be disregarded in determining withdrawal liability. Plans that are in critical or endangered status could inadvertently make changes that could increase plans' withdrawal liability;
 - provide pre-retirement survivor annuities to plan participants who die after the date of plan insolvency or termination. Plan participants in multiemployer plans that are insolvent or that have been terminated are currently ineligible for pre-retirement survivor annuities. This is in contrast to participants in single employer plans, who remain eligible for survivor annuities after plan termination;
 - allow plans to pay certain additional benefits (a 13th check) that would not be considered a part of a participant's accrued benefit. Plans that experience favorable investment returns sometimes provide participants an additional benefit. If the 13th check is offered on a regular basis, then the benefit is considered a regular benefit, which cannot be reduced or eliminated;
 - eliminate the potential exposure to an IRS excise tax for plans that were granted amortization extensions under PPA. Prior to PPA, in exchange for a schedule of funding improvements, the IRS allowed some plans to extend the length of time to make up for investment losses. As a result of the 2008 market downturn, many plans failed to meet the requirements for the schedule of funding improvements and are potentially subject to an IRS excise tax. PPA provided for amortization extensions that made the pre-PPA extensions unnecessary.
 - permit plan participants to convert DC accounts into annuities payable from their DB pension plans. This would allow participants who have DC accounts to receive lifetime income from their DC plans.

In addition, the commission recommended changes to existing law that would ease multiemployer plan mergers and alliances and allow plans to harmonize the normal retirement age under the plan (generally age 65) to the age with the Social Security Retirement Age (age 67 for individuals born in 1960 and later).

Recommendations for Deeply Troubled Plans

Some multiemployer DB pension plans are in very poor financial condition and are likely to become insolvent. If one or two of the largest plans become insolvent, PBGC would likely have insufficient resources from which to guarantee participants' benefits. If PBGC is unable to pay participants' guaranteed benefits, it is unclear whether PBGC would receive financial assistance

from the federal government. PBGC was established to be self-financing, and ERISA states that the “United States is not liable for any obligation or liability incurred by the corporation.”⁴⁰ Some Members of Congress have expressed a reluctance to consider providing financial assistance to PBGC.⁴¹

Deeply troubled multiemployer DB plans have limited options to avoid insolvency. Increased contributions and cuts to adjustable benefits to active plan participants are likely to be insufficient to return these plans to solvency. Participants’ benefits in insolvent plans would be reduced to the PBGC guaranteed levels, or possibly lower, if PBGC has insufficient resources from which to pay 100% of the benefits guaranteed to participants. The commission has proposed allowing plans that are projected to become insolvent within 20 years the ability to suspend benefit payments for both active participants and retirees. The commission proposes that the suspension of benefits would be equitable across active and retired participants and protect the most vulnerable segments of the population. Benefits would not be reduced to below 110% of the level guaranteed by PBGC.

Reducing retirees’ benefits is likely to be a contentious issue.⁴² For example, retirees may be asked to shoulder a burden that could otherwise be fixed by increased employer contributions. Another concern is that retirees, particularly the most vulnerable, might not have adequate representation in discussions of changes to deeply troubled multiemployer DB pensions.⁴³

Proposals for New Plan Structures

The commission proposed two new structures for multiemployer DB pension plans: variable annuity plans and target benefit plans.

⁴⁰ See ERISA 4002 §1302(g)(2) and 29 U.S.C. 1302 §(g)(2).

⁴¹ For example, Chairman Phil Roe and Ranking Member Robert Andrews of the Subcommittee on Health, Employment, Labor, and Pensions in the House Education and Workforce Committee have both expressed reservations about providing government financial assistance for PBGC. See U.S. Congress, House Committee on Education and the Workforce, Subcommittee on Health, Employment, Labor, and Pensions, *Examining the Challenges Facing PBGC and Defined Benefit Pension Plans*, 112th Cong., 2nd sess., February 2, 2012, 112-50 (Washington: GPO, 2012) and U.S. Congress, House Committee on Education and the Workforce, Subcommittee on Health, Employment, Labor, and Pensions, *Strengthening the Multiemployer Pension System: What Reforms Should Policymakers Consider?*, 113th Cong., 1st sess., June 12, 2013.

⁴² See, for example, the following: testimony of Teresa Ghilarducci before the U.S. Congress, House Education and Workforce, Subcommittee on Health, Employment, Labor, and Pensions, *Strengthening the Multiemployer Pension System: What Reforms Should Policymakers Consider?*, 113th Cong., 1st sess., June 12, 2013; statement by the Pension Rights Center, “Statement of the Pension Rights Center the Subcommittee on Health, Education, Labor and Pensions Committee on Education and Workforce U.S. House of Representatives For [sic] a hearing on ‘Strengthening the Multiemployer Pension System: What Reforms Should Policymakers Consider?’,” press release, June 12, 2013, <http://www.pensionrights.org/publications/fact-sheet/benefit-cutbacks-multiemployer-plans>; statement by the National Electrical Contractors Association, “Statement of the National Electrical Contractors Association to the Subcommittee on Health, Education, Labor and Pensions Committee on Education and Workforce U.S. House of Representatives For [sic] a hearing on ‘Strengthening the Multiemployer Pension System: What Reforms Should Policymakers Consider?’,” press release, June 12, 2013, http://www.necanet.org/docs/default-source/attachments/20130612_neca-statement-pension-hearing.pdf?sfvrsn=2; and the testimony of David Certner, legislative policy director for the American Association of Retired Persons (AARP), before the U.S. Congress, House Education and Workforce, Subcommittee on Health, Employment, Labor, and Pensions, “*Strengthening the Multiemployer Pension System: How Will Proposed Reforms Affect Employers, Workers, and Retirees?*” 113th Cong., 1st sess., October 29, 2013.

⁴³ For example, typically a multiemployer pension plan’s board of trustees has equal representation from labor and management, which may or may not adequately represent retirees’ concerns.

In the commission's proposal, a variable annuity pension plan would provide participants with a minimum benefit and would possibly provide additional benefits based on the investment performance of the plan's assets. Such a plan structure would mitigate, to some extent, employers' concerns about large and unexpected increases in contributions as a result of poor investment performance.

In the target benefit plan structure, employers would not have any withdrawal liability. Participants would bear the risk that the value of the plan's assets could decline, which could result in reduced benefits. To lessen the possibility of decline in the value of plan assets, the assets of target benefit plans would be invested in a conservative manner.⁴⁴

⁴⁴ DB pension plan assets are generally invested in stocks and bonds and might include other assets such as private equity and real estate. Pension plan assets that are invested in a conservative manner would likely hold more bonds and less stock and other assets than pension plans invested in a more aggressive manner.

Appendix. Defined Benefit Plan Funding

This appendix provides background on basic concepts related to the funding of DB pension plans.

DB Plan Balance Sheet

Figure A-1 depicts a typical DB pension plan’s balance sheet. It consists of plan assets, which are the value of the investments made with accrued employer (and employee, if any) contributions to the plan, and plan liabilities, which are the value of participants’ benefits earned under the terms of the plan. Plan assets are invested in equities (such as publicly traded stock), debt (such as U.S. Treasury and corporate bonds), private equity, hedge funds, and real estate.

Figure A-1. Typical Balance Sheet of a Defined Benefit Pension Plan

Assets	Liabilities
Investments (from contributions by plan sponsors)	Discounted Value of Future Benefit Payments

Source: Congressional Research Service (CRS).

DB Plan Funding Ratio

The funding ratio measures the adequacy of a DB pension plan’s ability to pay for promised benefits. The funding ratio is calculated as

$$\frac{\text{Value of Plan Assets}}{\text{Present Value of Plan Liabilities}}$$

A funding ratio of 100% indicates that the DB plan has set aside enough funds, if the invested funds grow at the expected rate of return or better, to pay all of the plan’s benefit obligations. Funding ratios that are less than 100% indicate that the DB plan will not be able to meet all of its future benefit obligations. Because benefit obligations are paid out over a period of 20 years to 30 years, participants in an underfunded plan will likely receive their promised benefits in the near term. However, if the underfunding persists without additional contributions, plan participants might not receive 100% of their promised benefits in the future.

In response to strong investment returns in the 1990s, many multiemployer DB pension plans increased benefits to participants. Many of these plans then became underfunded during the early 2000s as financial markets weakened. Their financial position worsened as a result of (1) stricter funding rules put in place in the Pension Protection Act of 2006 (P.L. 109-280), (2) the decline in equity markets in 2008, (3) low interest rates as a result of weak economic conditions, and (4) the bankruptcy of some of the firms participating in the plans.

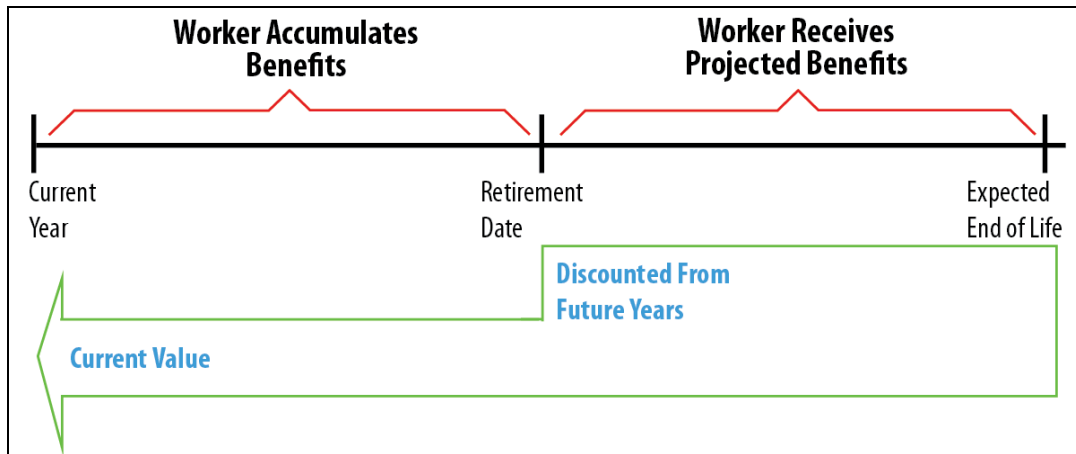
The Value of Plan Assets

Pension plans report the value of plan assets using two methods: market values (the value at which each asset can be sold on a particular date) or smoothed values (the average of the past, and sometimes expected future, market values of each asset). The smoothing of asset values prevents large swings in asset values and creates a more predictable funding environment for plan sponsors. One of the drawbacks of smoothing is that smoothed asset values may be substantially different from market values. Some advocates of reporting market values note that smoothed values are often higher than market values (particularly during periods of market declines), which could overstate the financial health of some pension plans. Some advocates of smoothing argue that market values are useful only if a plan needs to know its liquidated value (e.g., if the plan had to pay all of its benefit obligations at one point in time), which is unlikely to be the case as most pension plans are likely to be ongoing concerns.

Plan Liabilities

A pension plan's benefits are a plan liability spread out over many years in the future. These future benefits are calculated and reported as current dollar values (also called present value). **Figure A-2** shows the process by which future benefits are discounted. Using a formula, benefits that are expected to be paid in a particular year in the future are calculated so they can be expressed as a current value. The process is called *discounting*, and it is the reverse of the process of *compounding*, which projects how much a dollar amount will be worth at a point in the future.

Figure A-2. How Future Pension Benefits Are Discounted



Source: CRS.

The formula by which future values are calculated as current values is in **Figure A-3**.

Figure A-3. Present Value Formula

$$\text{Current Value} = \frac{\text{Dollar Value of Future Benefit}}{\text{Number of Years in the Future (Discount Rate)}}$$

Source: CRS.

For example, assuming a discount rate of 10%, \$121 in two years' time is worth $\frac{\$121}{(1.1)^2} = \100

today. The present value of a dollar amount is inversely related to both the discount rate and the number of years in the future. As the discount rate or number of years in the future increases, present value decreases; as the discount rate or number of years decreases, present value increases. In the above example, if the discount rate is 15%, then \$121 in two years' time is worth

$$\frac{\$121}{(1.15)^2} = \$91.49 \quad \text{today, and } \$121 \text{ in three years' time is worth } \frac{\$121}{(1.15)^3} = \$79.56.$$

Discount Rate Used to Value Future Benefits

In the context of DB pension plans, plan actuaries calculate the present value of future benefit obligations by estimating (1) the dollar amount of the benefits accrued by plan participants and (2) the years in the future in which the benefits are expected to be paid. The Internal Revenue Code does not require multiemployer pension plans to use a specific discount rate to value their future benefit obligation. The assumptions a plan uses must be reasonable and offer the best estimate of the plan's expected experience.⁴⁵ In practice, multiemployer plans generally discount plan liabilities using the expected rate of return on the plan's assets. Since the economic downturn that began in 2008, the policy of the Federal Reserve has been to maintain low interest rates in an effort to stimulate the U.S. economy.⁴⁶ This sustained period of low interest rates is one of the factors that has contributed to worsening pension plan underfunding because low interest rates can lower the returns on stock, bonds, and other investments.⁴⁷

Pension policy experts have several viewpoints on the appropriate discount rate that pension plans should use to value plan liabilities.⁴⁸ Broadly speaking, some actuaries recommend that

⁴⁵ See 26 U.S.C. §431.

⁴⁶ See, for example, monetary policy statements issued by the Federal Open Market Committee, available at <http://www.federalreserve.gov/monetarypolicy/fomccalendars.htm>.

⁴⁷ The discount rate used by multiemployer DB pension plans to value plan liabilities is generally the expected rate of return on plan assets, whereas the discount rate used by single employer DB pension plans is an average of corporate bond interest rates. For more information, see CRS Report 95-118, *Pension Benefit Guaranty Corporation (PBGC): A Primer*, by John J. Topoleski

⁴⁸ The context for much of the recent policy discussions on the appropriate rate for discounting pensions has been in the area of pension plans for state and local government employees. Although there are many differences between state and local government pension plans and multiemployer DB pension plans (for example, state and local government plans are much less likely to become insolvent), many aspects of the discount rate discussion apply to all DB pension plans, (continued...)

pension plans discount future benefits using the expected rate of return on plan investments (the current practice for multiemployer DB pension plans). Some financial economists, by contrast, recommend that plans discount the liabilities using a discount rate that reflects the likelihood that the benefit obligation will be paid.

The rationale for the actuaries approach is as follows: because funds are to be set aside to pay an obligation in the future, the amount that has to be set aside should consider the rate of the return on the investment. For example, given an expected return of 10%, a \$100 obligation payable in one year would be valued at \$90.91 in today's dollars ($\$100 \div 1.1 = \90.91), and \$90.91 could be set aside today to pay the \$100 future obligation.

The rationale for the approach favored by financial economists is that pension obligations should be discounted based on the likelihood that they will be received by plan participants. Because participants are very likely to receive most of their pension benefits (for example, because of vesting provisions in ERISA and PBGC guaranties), their pension benefits should be discounted using a discount rate close to the risk-free rate. Financial economists say that the actuaries' approach may make an inappropriate connection between the value of liabilities and the rate of return on assets. For example, the value of the obligation can be increased or decreased by changing the assumption on the rate of return, which suggests that a pension plan could eliminate some of its underfunding by investing the plan's assets in riskier investments.⁴⁹

The approach suggested by some actuaries results in discount rates that are generally higher than the rates that result by using the approach suggested by some financial economists. One effect of this divergence of opinion is that the value of pension plan benefit obligations is higher (and funding ratios are lower) using the approach favored by some financial economists. For example, in March 2012, one study estimated the underfunding of multiemployer DB pension plans at \$101 billion under the actuaries' approach and \$428 billion under the financial economists' approach.⁵⁰

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(...continued)

including multiemployer plans. For more information, see Milliman, *Setting the Discount Rate for Pension Liabilities*, July 2012, <http://publications.milliman.com/periodicals/peri/pdfs/PERi-07-17-2012.pdf>; Douglas Elliott, *State and Local Pension Funding Deficits: A Primer*, Brookings Institution, December 2010, http://www.brookings.edu/~media/research/files/reports/2010/12/06%20state%20local%20funding%20elliott/1206_state_local_funding_elliott.pdf; The American Academy of Actuaries and the Society of Actuaries, *Pension Actuary's Guide to Financial Economics*, 2006, <http://www.soa.org/Files/Sections/actuary-journal-final.pdf>; and Congressional Budget Office, *The Underfunding of State and Local Pension Plans*, May 2011, <http://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/120xx/doc12084/05-04-pensions.pdf>.

⁴⁹ However, CRS is not aware of any reports of pension plans using this hypothetical strategy to lower the plan's underfunding.

⁵⁰ See David Zion, Amit Varshney, and Nichole Burnap, *Crawling Out of the Shadows: Shining a Light on Multiemployer Pension Plans*, Credit Suisse - Equity Research, March 25, 2012, https://doc.research-and-analytics.csfb.com/docView?language=ENG&source=ulg&format=PDF&document_id=957405261&serialid=e7HNjCiguHelKc%2FL2JnKohP%2FMTt9zyVVnhUWwxM%2FGlk%3D.