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The Financial Condition of the Pension Benefit Guaranty Corporation's Multiemployer Program

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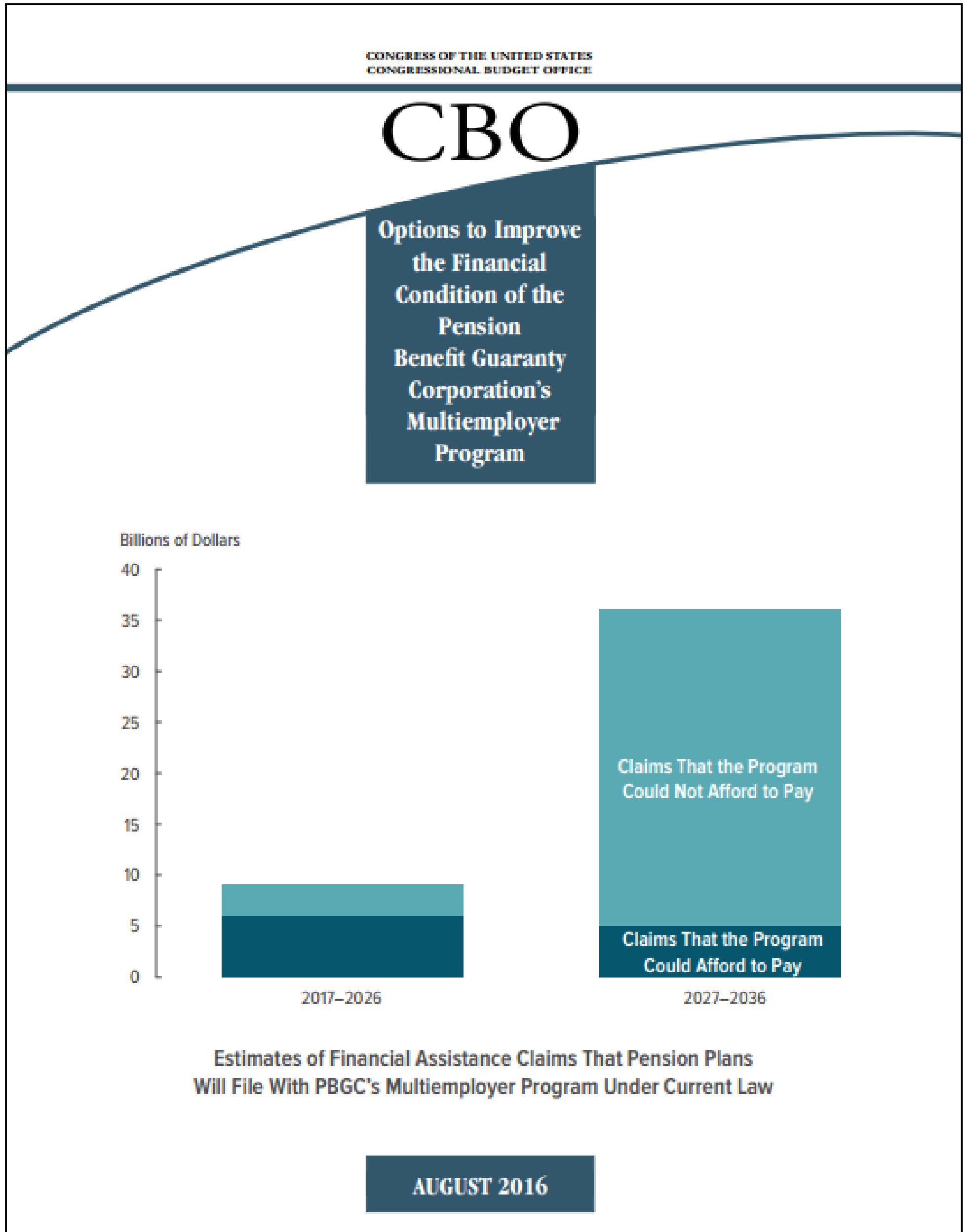

CONGRESS OF THE UNITED STATES
CONGRESSIONAL BUDGET OFFICE

CBO

Options to Improve the Financial Condition of the Pension Benefit Guaranty Corporation's Multiemployer Program

Estimates of Financial Assistance Claims That Pension Plans Will File With PBGC's Multiemployer Program Under Current Law

AUGUST 2016

Outline

- Public and Private Defined Benefit Pensions
- Multiemployer Plans
- Pension Benefit Guaranty Corporation (PBGC)
- Deterioration in Multiemployer Funding
- CBO’s Projections for PBGC and Beneficiaries
- CBO’s Analysis of Alternative Policies

Multiemployer and Other Defined Benefit Pension Plans

- Multiemployer plans have approximately $1 trillion in defined benefit (DB) pension liabilities covering 10 million private-sector employees in unionized industries
- They account for 7 percent of the $15 trillion in private, state, local, and federal DB pension liabilities in the United States, and most systems have significant underfunding

Pension System Challenges

- Unfunded pension liabilities
  - Burden public and private employers and their current employees
  - Create uncertainty about benefits for beneficiaries
  - Expose the federal government to losses from PBGC's insurance of private pensions
- Underfunding has been exacerbated by
  - Structural problems with the funding of pension plans, including the use of risky investments to fund what are supposed to be safe benefits
  - Employers' switching from defined benefit to defined contribution plans
  - A weak economy

Defined Benefit Pensions in 2014

	Private		State and Local		Federal		
	Multi-Employer	Single-Employer	State	Local	Military	Non-Military	All Plans
Participants (Millions of people)	10.1	27.6	26.5	3.7	4.7	5.3	77.9
Liabilities[1] (Billions of dollars)	1,000	2,900	5,900	1,100	1,400	1,700	14,000
Assets (Billions of dollars)	400	2,100	3,100	600	500[2]	900[2]	7,600
Assets as a Share of Liabilities (Percent)	40	75	50	50	35	55	55

[1] When possible, a current liability definition is of pension liabilities used, which is calculated by discounting projected accrued benefits using the yields on low-risk securities.

[2] Balances in nonbudgetary accounts that provide budget authorization for benefit outlays of up to that balance.

Source: CBO calculations from various public sources (see slide 24).

Defined Benefit Pension Payments in 2014

	Private		State and Local		Federal		
	Multi-Employer	Single-Employer	State	Local	Military	Non-Military	All Plans
Benefits Paid (Billions of dollars)	40	180	210	50	60	80	620
Beneficiaries (Millions of people)	3.1	8.8	8.2	1.4	2.3	2.6	26.4
Average Benefit (Dollars)	13,000	20,000	25,000	32,000	26,000	31,000	23,000

Source: CBO calculations from various public sources (see slide 24).

Multiemployer Plans…

- Are offered by groups of employers as part of a collective bargaining process
- Provide fixed, formula-based benefits tied to tenure
- Receive favorable tax treatment; in exchange, employers must provide adequate benefits and are jointly liable for funding
- Allow employers to withdraw
  - New benefit accruals for the employers' workers cease
  - Financial obligations for departing and remaining employers

The Pension Benefit Guaranty Corporation

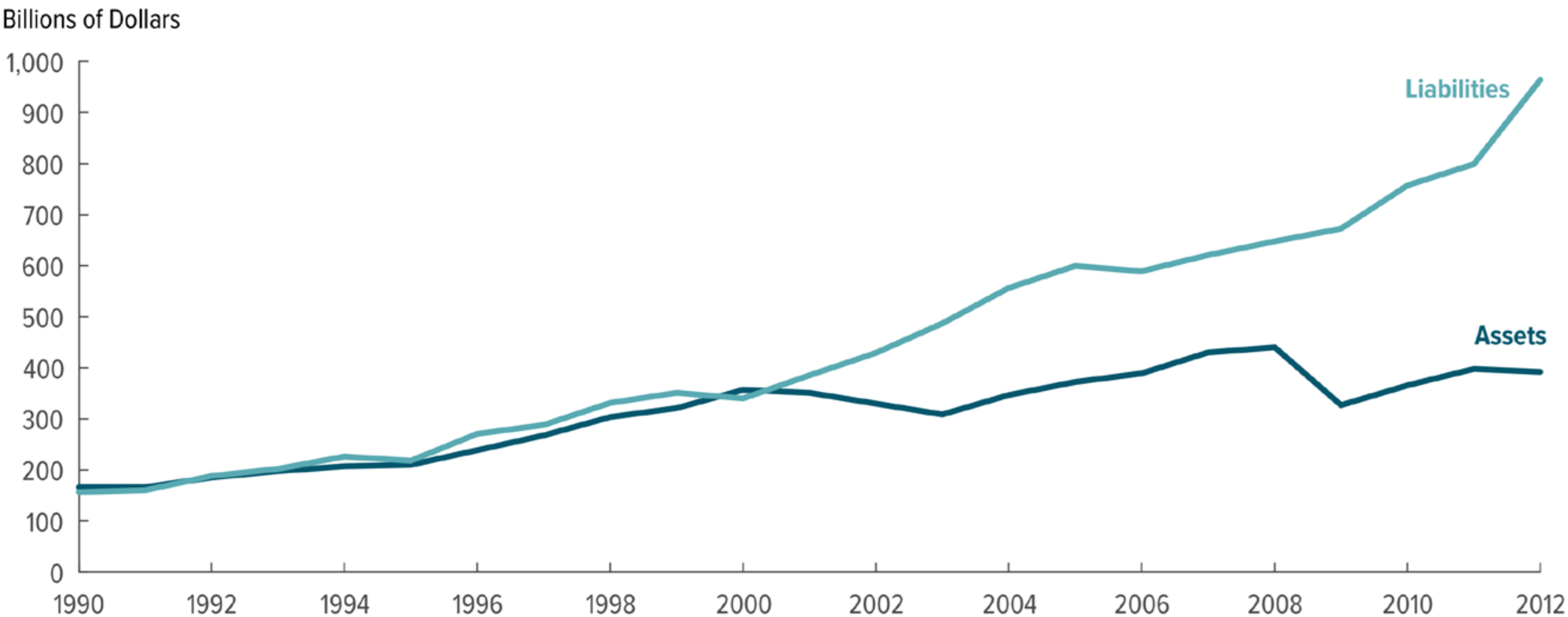
- Federal corporation operating two separate programs that insure the benefits of participants in single-employer and multiemployer plans

	Single-Employer	Multiemployer
Participant's Benefits Insured Against…	Bankruptcy of employer in underfunded plan	Plan insolvency caused by employer withdrawals or inadequate contributions
Annual Premiums	Fixed rate ($64/participant in 2016) + variable rate	Fixed rate ($27/participant in 2016)
Maximum Annual Insured Benefit Per Participant	$60,000 (approx.)	$13,000 (approx.)
PBGC's Insurance Obligation Begins When…	Plan is terminated	Plan becomes insolvent
Assets in 2015	$86 billion (premiums and assets of terminated plans)	$2 billion (premiums)
Insurance Obligations in 2015	$110 billion	$54 billion

Source: Pension Benefit Guaranty Corporation, *FY 2015 PBGC Projections Report,* www.pbgc.gov/documents/Projections-Report-2015.pdf

The Deterioration of Multiemployer Plans' Funding

Total Assets and Liabilities of Multiemployer Defined Benefit Pension Plans, 1990–2012

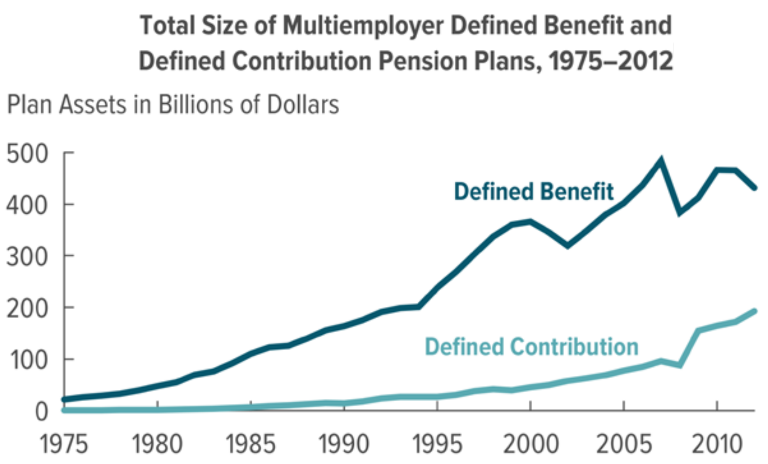


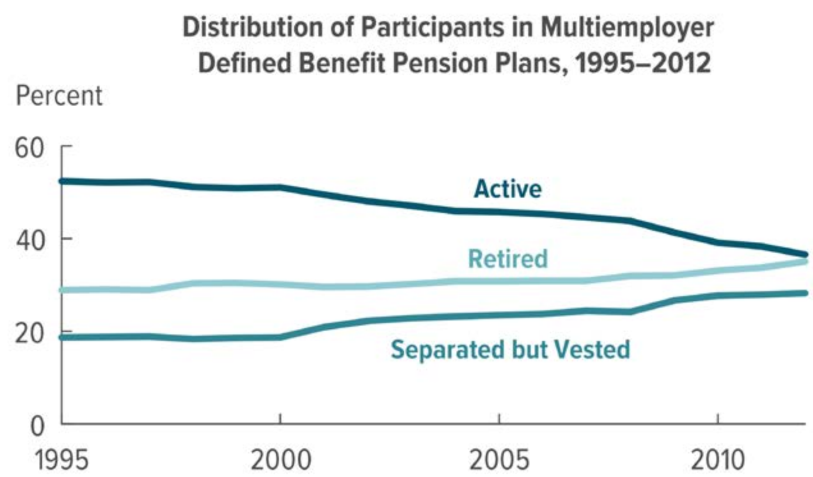
Source: Congressional Budget Office, using information from the 2013 Pension Benefit Guaranty Corporation Data Book (www.pbgc.gov/documents/2013-data-book-final.pdf).

Proximate Causes of Multiemployer Plans' Underfunding

- Losses on risky investments (2000 and 2008)
- Increases in benefits in the late '90s, when plans were overfunded (based on actuarial valuations)
- Declines in number of active participants because of withdrawing employers (many switching to defined contribution plans) and shrinking union workforces

Proximate Causes of Multiemployer Plan Underfunding (Continued)





Source: Congressional Budget Office, using data from the Bureau of Labor Statistics (www.bls.gov/emp/ep_table_201.htm), the Union Membership
and Coverage Database (www.unionstats.com), the Department of Labor (www.dol.gov/ebsa/pdf/historicaltables.pdf), and the 2013 Pension Benefit Guaranty Corporation Data Book (www.pbgc.gov/documents/2013-data-book-final.pdf).

Structural Causes of Multiemployer Plans' Underfunding

- Plans have an incentive to hold risky investments because of two features of actuarial valuation rules that are used to determine plan contributions
  - Discounting: Plans allowed to value their benefit liability by discounting the projected benefit cash flows using the expected return on risky plan assets
  - Smoothing: Plans can spread out over time the changes in the values of assets and liabilities
- Other weaknesses in minimum contribution rules
  - Long amortization periods
  - Exemptions for the worst-funded plans (Pension Protection Act of 2008)
- Optimistic actuarial projections (rates of return, life expectancy)

Actuarial Versus Market Valuation

The 1,200 largest multiemployer plans for the 2012 plan year had:

	Actuarial	Market
Assets (Billions of dollars)	436	405
Liabilities (Billions of dollars)	569	853
Assets as a share of Liabilities (Percent)	77	48

Source: CBO calculations from Form 5500 data compiled by the Department of Labor.

The biggest difference between actuarial and market-based estimates is the discount rate used to value liabilities. Actuarial values are frequently used to determine the minimum contributions for normal cost and funding deficiencies.

Funding Rules Example—Normal Cost

Suppose a plan provides an annual retirement benefit of $500 per year of service. The plan's investment policy affects the minimum contribution towards its normal cost (the present value of the benefits accrued by each participant in each year).

	Investment Policy	
	Low Risk—Bonds	High Risk—Stock/Bond Mix
Newly Accrued Benefit per Year (Paid from age 65 until death)	$500	$500
Projected Return (Per year)	3%	7%
Years Until Employee Retires	20	20
Minimum Required Normal Cost Contribution	$4,100	$1,400
Likelihood of Significant Overfunding or Underfunding	Lower	Higher

Funding Rules Example—Shortfall Contribution

The investment rate of return can also affect the required size of catch-up contributions. (All amounts shown are in dollars.)

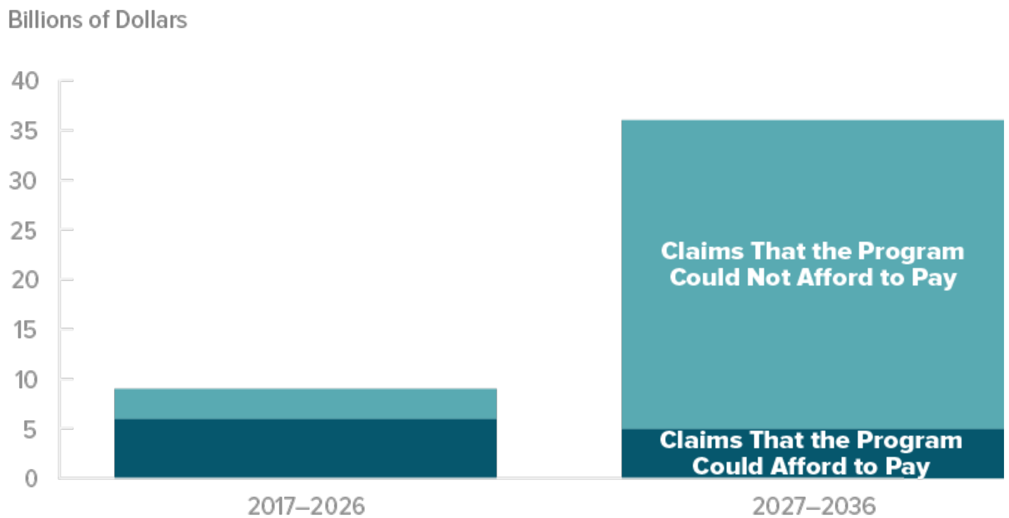
	Investment Policy	
	Low Risk—Bonds	High Risk—Stock Bond Mix
Value of Liabilities	120	100
Value of Assets	80	80
Funding Shortfall	40	20
Minimum Annual Shortfall Contribution (15-year amortization)	3.35	2.20
Likelihood of Significant Overfunding or Overfunding	Lower	Higher

CBO's Projections

- CBO developed a simulation model for use in policy analysis that is similar to PBGC's Pension Insurance Modeling System and produces similar estimates
- Plan-level simulation of assets, liabilities, benefits, contributions, terminations, withdrawals, and insolvencies, drawing on Form 5500 data and additional information provided by PBGC
- Key parameters driving estimates of PBGC claims and beneficiaries' losses
  - Within plan distribution of benefits among participants
  - Growth rate of the active workforce
  - Projected risk premium on risky assets
  - Contribution rates (equation estimated from historical data)
  - Rates of employer withdrawal and plan termination
  - Actuarial discount rate

CBO's Cash Projections for PBGC's Multiemployer Program

Estimates of Financial Assistance Claims That Pension Plans Will File With PBGC's Multiemployer Program Under Current Law

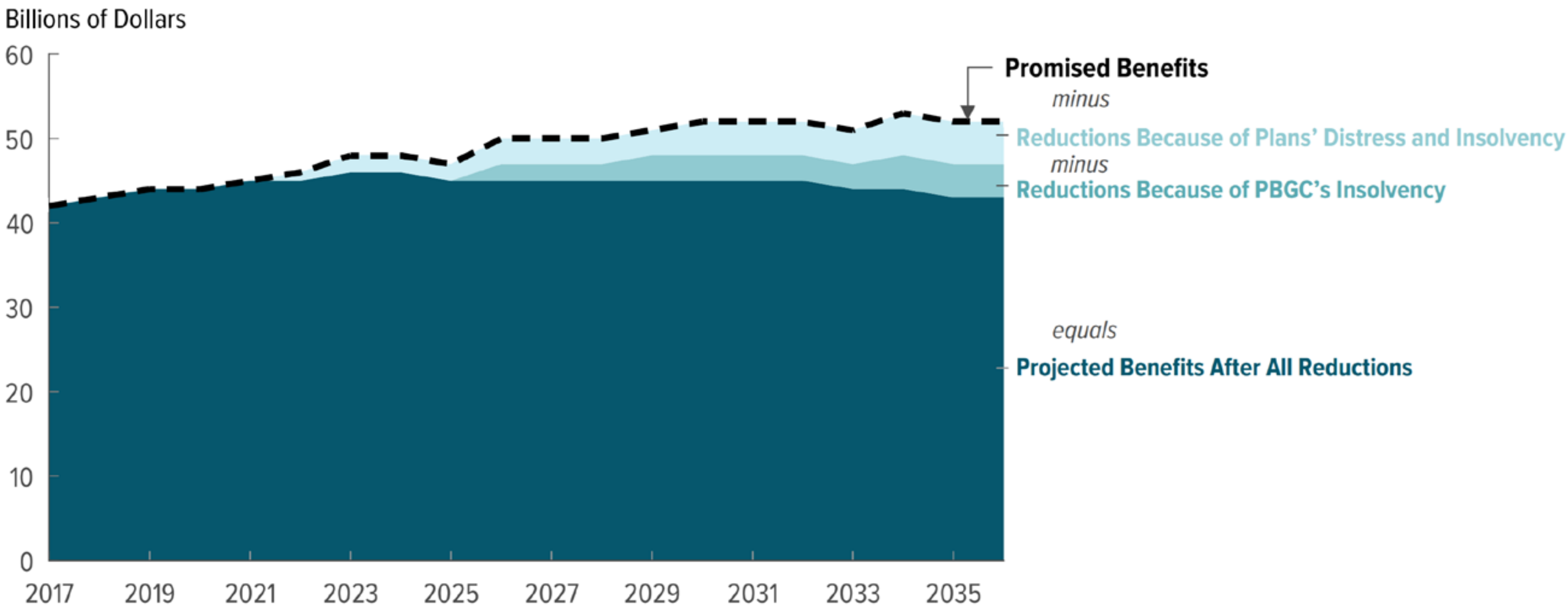


Source: Congressional Budget Office

- The insolvency of two large plans will lead to the program's insolvency by 2025
- Investment risks and weaknesses in funding rules expose PBGC to the risk of additional large claims in the future

CBO's Projections for Multiemployer Plans' Benefits

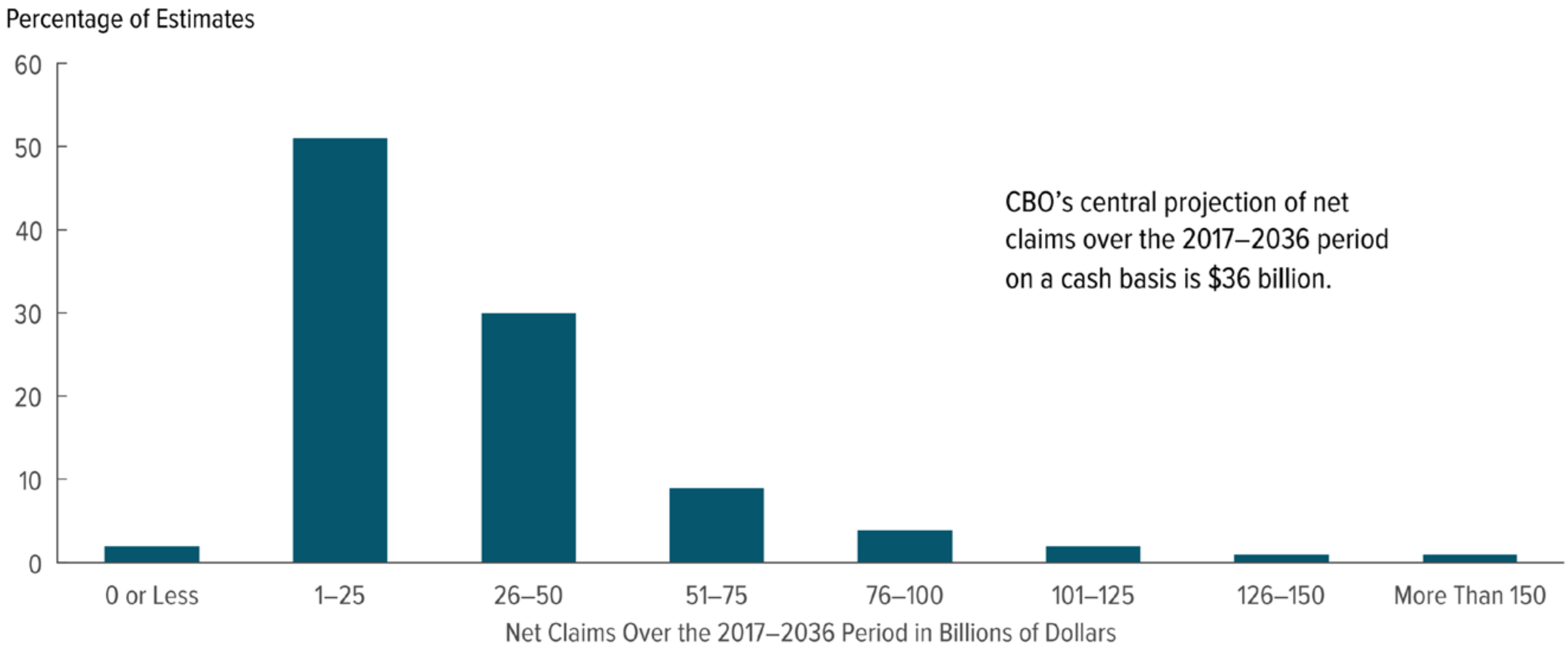
Projected Annual Benefits of Multiemployer Defined Benefit Pension Plans, 2017–2036



Source: Congressional Budget Office.

CBO's Projections Are Stochastic

Distribution of Estimates of Financial Assistance Claims, Net of Premiums, for PBGC's Multiemployer Program, 2017–2036



Source: Congressional Budget Office.

Fair-Value Estimates of PBGC's Exposure

- Supplement to cash-based budgetary projections
- Unlike cash estimates
  - Incorporates all of the projected claims associated with plans that become insolvent over the next 20 years
  - Account for the time value of money and the cost of market risk using options pricing techniques
- Are interpreted as the price a private insurer would charge to take on PBGC's insurance liability for claims
- Result in significantly larger estimate of cost over 20 years
  - Cash basis: $36 billion in total financial assistance claims, net of premiums
  - Fair-value basis: $101 billion
  - Also larger than PBGC's $52 billion estimate of its net position (no market risk adjustment)

Options to Improve PBGC's Finances

- Addressing legacy costs from severely underfunded plans
  - Large broad-based premium increases
  - Taxpayer assistance mixed with benefit cuts and contribution increases (e.g., partitioning plans into a funded and an unfunded, taxpayer-assisted plan)
- Addressing potential prospective costs from better-funded plans
  - Premium increases can help PBGC sustain future large losses
  - Stricter contribution rules and less investment risk reduce the likelihood of such losses
- Challenging to balance risks to PBGC and beneficiaries against incentives for employers to continue to participate

Effects of Alternative Policies on PBGC's Finances

Option	Net Claims (Billions of dollars)		Insolvency Date
	Cash Basis	Fair-Value	
Current Policy	36	101	2025
Change From Current Policy			
4.7-fold Increase in Premiums	-36	-19	>11 years later
8.6-fold Increase in Premiums	-78	-36	>11 years later
Reduce the Maximum Benefit Guarantee	-11	-25	1 year later
Increase Required Contribution for Critically Underfunded Plans	-8	-27	No change
Restrict Risky Investments for Better-Funded Plans	-5	-28	No change
Provide Federal Funding to Partition Underfunded plans (Has a federal cost of about $10 billion)	-24	-34	5 years later

Source: Congressional Budget Office.

Takeaways

- Multiemployer plans have a small share of total pension liabilities, but the system is the most precariously funded
- Plan underfunding stems from risky investments, shrinking base of active participants, and weaknesses in plan funding rules
- Beneficiaries of insolvent plans face potentially large cuts
  - Benefits exceed maximum insured level
  - PBGC's insolvency
- Beneficiaries in currently well-funded plans remain at risk
- Different approaches are needed to address legacy costs to PBGC versus prospective risks

Data Sources for Defined Benefit Pensions Statistics

- Private Pensions
  - Department of Labor, *Private Pension Plan Bulletin: Abstract of 2014 Form 5500 Annual Reports* (September 2016), https://www.dol.gov/agencies/ebsa/researchers/statistics/retirement-bulletins.
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