2020 The Multiemployer Program Quinquennial Report

PBGC Pension Benefit Guaranty Corporation

September 2021

PBGC
Protecting America's Pensions
Pension Benefit Guaranty Corporation
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Office of the Director

September 20, 2021

U.S. House of Representatives Committee on Education and Labor
U.S. House of Representatives Committee on Ways and Means
U.S. Senate Committee on Health, Education, Labor, and Pensions
U.S. Senate Committee on Finance

Every five years, PBGC is required under §4022A(f)(1) of ERISA to review its Multiemployer Insurance Program to determine the PBGC premiums needed to maintain the current benefit guarantee levels and whether the benefit guarantee levels may be increased without increasing PBGC premiums.

This report is issued pursuant to §4022A(f)(1) and reflects the multiemployer provisions enacted as part of the American Rescue Plan (ARP) Act of 2021, including PBGC's expected payments of special financial assistance (SFA) under ERISA §4262 and new PBGC premium rates effective for plan years beginning after December 31, 2030. The analysis in this report also reflects the provisions of PBGC's SFA interim final rule made public on July 9, 2021, and published in the Federal Register on July 12, 2021. ARP is expected to extend the solvency of PBGC's Multiemployer Program for a period of more than 20 years, with half of projected scenarios resulting in insolvency by the end of FY 2055 and half of projected scenarios resulting in either indefinite solvency or insolvency after FY 2055.

We look forward to continuing to work with Congress to ensure the long-term solvency of multiemployer plans and a strong, sustainable insurance program that is capable of delivering guaranteed benefits to workers and retirees in multiemployer plans that fail.

Sincerely,

Gordon A. Hartogensis

Gordon Hartogensis

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FREQUENTLY USED ABBREVIATIONS

ARP	American Rescue Plan Act of 2021
ERISA	Employee Retirement Income Security Act of 1974, as amended
FY	Fiscal Year
MAP-21	Moving Ahead for Progress in the 21st Century Act
ME	Multiemployer
MPPAA	Multiemployer Pension Plan Amendments Act of 1980
MPRA	Multiemployer Pension Reform Act of 2014
PBGC	Pension Benefit Guaranty Corporation
PIMS	Pension Insurance Modeling System
SFA	Special Financial Assistance

SUMMARY

PBGC insures multiemployer defined benefit pension plans. When a multiemployer plan becomes insolvent, PBGC provides financial assistance to the plan to cover the cost of PBGC-guaranteed benefits to participants and the plan's administrative expenses.

The statutory benefit guarantee limit for participants in multiemployer plans has two tiers and varies by years of service. For a participant with 30 years of service, PBGC guarantees 100 percent of benefits up to an annual benefit of $3,960; benefits in excess of this level are 75 percent guaranteed subject to a cap. In total, PBGC's guaranteed annual payment for an individual with 30 years of service will not exceed $12,870 and that level is attained only by reducing the original plan benefit by at least 18 percent. Participants with more/less service are subject to proportionately larger/smaller benefit guarantees. The multiemployer benefit guarantee is less than the actual benefits many multiemployer plans provide and less than the PBGC benefit guarantee for single-employer plans.[1]

Multiemployer plans annually pay PBGC premiums for this insurance – $31 per participant in 2021 and indexed thereafter.[2] Every five years, PBGC is required to conduct a study to determine the premiums needed to maintain the statutory basic-benefit guarantee levels for multiemployer plans and whether such benefit guarantee levels may be increased without also increasing basic-benefit premiums for multiemployer plans.[3]

Most multiemployer pension plans are not at risk of insolvency, but nearly all such plans are underfunded. A minority of plans, some very large, are severely underfunded and have reported they expect to run out of money and turn to PBGC for financial assistance. As a result, before enactment of the American Rescue Plan (ARP) on March 11, 2021, PBGC projected that its Multiemployer Program would itself become insolvent by the end of FY 2026 and be unable to deliver the financial assistance needed by failed plans to pay benefits at the statutory guarantee level.

Under §4262 of ERISA, newly added by ARP, PBGC will provide Special Financial Assistance (SFA) to financially troubled multiemployer plans that meet the eligibility requirements under ARP. SFA is paid to each approved plan by PBGC in a single, lump-sum payment, calculated as the amount required for the plan to pay all benefits due from the payment date of the SFA through the end of the last plan year ending in 2051, taking into account all plan resources and obligations.[4]

There is a high degree of uncertainty related to the solvency of financially troubled plans, which in turn creates a high degree of uncertainty on the solvency of PBGC's Multiemployer Program. Due to the enactment of ARP, PBGC now projects that current premiums will provide adequate resources to pay benefit guarantee levels to insolvent plans until at least the mid-2030s and likely more than 30 years out. The actual solvency period will depend on the actual experience of the plans, including the plans that receive SFA and other plans.

[1] For more information on the structure and coverage of PBGC's multiemployer guarantee, see the 2015 PBGC Multiemployer Guarantee Study at https://www.pbgc.gov/documents/2015-ME-Guarantee-Study-Final.pdf.

[2] Under ARP, the premium rate will increase to $52 per participant for plan years beginning after December 31, 2030, and be indexed thereafter.

[3] ERISA §4022A(f)(1) requires PBGC to report the findings of the study to PBGC's committees of jurisdiction in the House of Representatives and the Senate.

[4] The SFA amount is calculated based on a deterministic projection subject to prescribed assumptions. Plan experience can, and is expected to, differ from the assumptions used in the projection. As a result, plans' actual solvency experience may differ significantly from the 2051 target year.

Given the significant uncertainty related to the impact of SFA on the projected solvency of plans, as well as the risk of insolvency of plans not eligible to receive SFA, it is difficult to determine at this time what corresponding changes in PBGC's Multiemployer Program will be necessary to maintain long-term solvency. At this time, PBGC is not requesting Congressional action under §4022A(f). This report, however, does provide information on the risks of insolvency over time and the principal sources of uncertainty.

UNDERSTANDING AND USING THIS REPORT

This report is an actuarial evaluation containing estimates and projections for PBGC's Multiemployer Program over the next decade and beyond, based on current economic conditions and our understanding of current law. The standard for such evaluations is that the estimates are reasonable and are based on the use of reasonable methods and assumptions. In the professional opinion of the signers, this report meets that standard.

The values shown are estimates, not predictions, and reflect a range of values that might result based on the assumptions and behavioral relationships that underlie PBGC's projection model. The projections are made using a stochastic modeling system: the Multiemployer Pension Insurance Modeling System (ME-PIMS). ME-PIMS runs many simulations of highly variable factors, such as future interest rates, equity returns, and plan decisions, to derive a range of outcomes. No single projection represents the expected results under PBGC's Multiemployer Program – actual results that occur in future years can and likely will vary materially from the projections in this report.

This Multiemployer Five-Year Report, or Quinquennial Report, is based on the version of ME-PIMS described in PBGC's 2020 Projections Report.[5] The Projections Report contains detailed descriptions of the assumptions, methodology, and results of the modeling underlying the numerical results contained in this report. The ME-PIMS model is continually revised in light of changing law, plan sponsor behavior, and PBGC's understanding of that behavior.

Expected claims under PBGC's Multiemployer Program depend on (1) the likelihood that a plan will fail, or become insolvent, either in the course of ongoing operations or following a mass withdrawal of employers, (2) the value of the benefits promised by the plan, and (3) the percentage of benefits that will be guaranteed.

The current model reflects the enactment of ARP on March 11, 2021, which provides significant monetary relief to the most financially distressed multiemployer plans, thereby extending the projected solvency of these plans. The financial status of PBGC's Multiemployer Program is improved significantly by ARP since these distressed plans are now unlikely to require PBGC financial assistance under ERISA §4261 for at least the next few years.

Uses of This Report Under the Statute

The Multiemployer Pension Plan Amendments Act of 1980 (MPPAA) amended ERISA to add §4022A(f). Paragraph (1) of subsection (f) requires that PBGC conduct a study no later than the fifth year following enactment and at least every fifth year thereafter to determine the premiums needed to maintain the multiemployer basic benefit guarantee levels and whether those levels may be increased without increasing PBGC premiums. It also requires that the results of this study be reported to the Congressional Committees that have jurisdiction over PBGC's affairs.[6] This year's report is issued in accordance with the five-year schedule, representing the 40th year following enactment of MPPAA.

Paragraphs (2) and (3) of subsection (f) call for additional information to be provided by March 31 of a year in which Congressional action is requested under subsection (f). This information would include proposed revised schedules of guarantees and premiums. Since PBGC is not requesting Congressional action under subsection (f), this report does not include the additional schedules of information that

[5] PBGC's 2020 Projections Report is available on the Projections Report web page at https://www.pbgc.gov/about/projections-report.
[6] Public Law 96-364 §102.

would be required under paragraphs (2) or (3). Instead, this report is issued in compliance with the five-year reporting requirements of paragraph (1) of subsection 4022A(f).[7]

ANALYSIS OF PREMIUMS

Current and Historical Premium Rates

The PBGC premium rate for multiemployer plans is a flat rate of $31 per participant for plan years beginning in 2021 and is indexed for inflation in subsequent years. Multiemployer pension plans pay the flat-rate per-participant premium for each participant in the plan. Under ARP, the premium level will increase to $52 per participant for plan years beginning after December 31, 2030, and be indexed for inflation thereafter. PBGC's total multiemployer premium income during the fiscal year ended September 30, 2020, was $322 million.[8]

Legislative Update	Per-Participant Premium Rates
Multiemployer Pension Plan Amendments Act (MPPAA)	$0.50 in 1979 to $2.60 in 2005
Deficit Reduction Act of 2005 (DRA)	$8 in 2006 to $9 in 2008
Moving Ahead for Progress in the 21st Century Act (MAP-21)	$12 in 2013 and $12 in 2014
Multiemployer Pension Reform Act (MPRA)	$26 in 2015 to $31 in 2021 (indexed through 2030)
American Rescue Plan (ARP)	$52 in 2031 (indexed thereafter)

ARP does not change premium rates until plan years beginning after December 31, 2030, when the premium rate is increased to $52 per participant. Note that the $31 per participant premium in 2021 will be indexed until 2031, so the amount of the change in 2031 will reflect only the difference between the indexed amount and the $52 per participant premium in 2031.[9]

As a comparison, the flat per-participant premium rate for single-employer plans increased to $86 for plan years beginning in 2021 (up from $83 in 2020) and is indexed thereafter. In addition, underfunded single-employer plans pay variable-rate premiums, and sponsors of certain terminated single-employer plans pay termination premiums, but there are no variable-rate or termination premiums for underfunded multiemployer plans.

Current Statutory Guarantee Level

By statute, PBGC's maximum benefit guarantee for participants in multiemployer plans varies with a participant's years of service. The amount of the benefit guarantee has two tiers and is based on the participant's monthly benefit accrual rate.

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[7] For instance, under §4022A(f)(2) of ERISA, if the five-year report under §4022A(f)(1) indicates that a premium increase is necessary, PBGC is required to transmit to its committees of jurisdiction by March 31 of any calendar year in which congressional action is requested (i) a revised schedule of basic-benefit guarantees which would be necessary in the absence of an increase in premiums, (ii) a revised schedule of basic-benefit premiums which is necessary to support the existing benefit guarantees, and (iii) a revised schedule of basic-benefit guarantees for which the schedule of premiums necessary is higher than existing premium schedule but lower than the revised schedule of premiums in clause (ii).

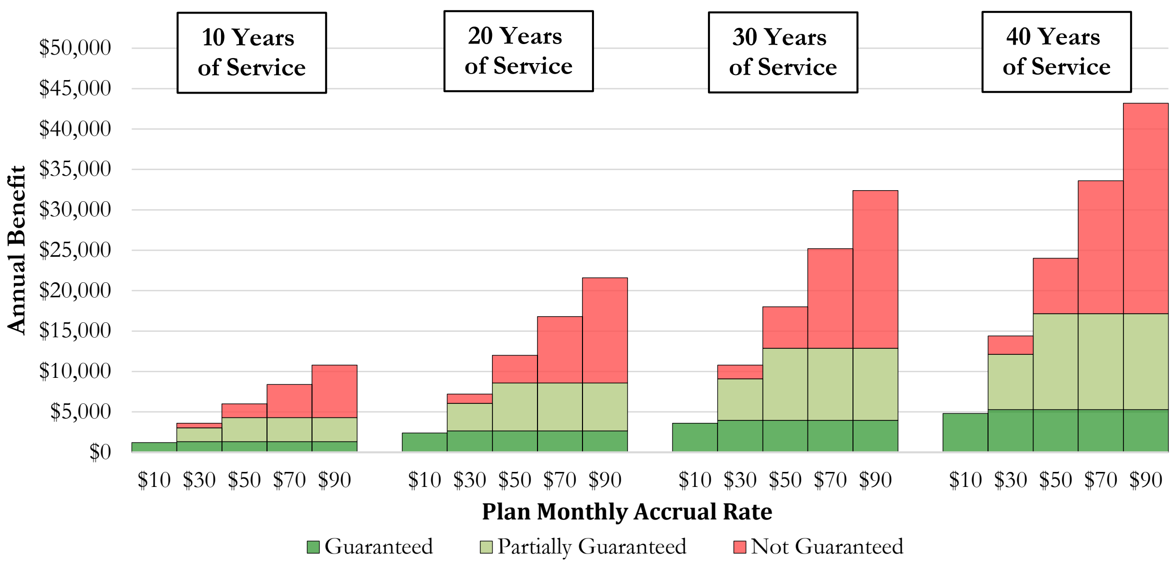
[8] Total multiemployer premium income based on approximately 10.9 million participants in 2020, mostly at the $30 rate.

[9] Applying the 3.75 percent National Average Wage Index rate increase from 2018 to 2019 to each future year, the Multiemployer premium rate would be $44 in 2030.

PBGC guarantees 100 percent of a benefit accrual rate up to $11 per month per year of service. This translates to a 100 percent guarantee of benefits up to $330 per month or $3,960 per year for a participant with 30 years of service, and up to $110 per month or $1,320 per year for a participant with 10 years of service. PBGC partially guarantees (at a 75 percent level) the next $33 of monthly benefit accrual per year of service. Thus, the maximum amount PBGC will pay a multiemployer plan participant with 30 years of service is $1,072.50 per month ($12,870 per year). For an individual with 10 years of service, the maximum guaranteed benefit is one-third of that level or $357.50 per month ($4,290 per year). The two-tier structure of the multiemployer benefit guarantee implies that individuals receiving the maximum guaranteed benefit will have a reduction of at least 18 percent in the benefit promised, and potentially a much larger reduction, for plans with benefit accrual rates more than $44 per month per year of service. Of a sample of solvent, non-terminated multiemployer plans, more than 70 percent of participants in these plans would incur an average reduction greater than 20 percent from the plan benefit level to the PBGC guaranteed benefit level, in the event of plan insolvency.[10]

Figure 1 below illustrates the operation of the guarantee limitation for participants through a range of benefit accrual rates and years of service.

Figure 1 – Annual Multiemployer Benefit Guarantee Amounts Based on Years of Service and Plan Accrual Rate



Congress last increased the benefit guarantee limit to the current amount in 2001 from the limits established in MPPAA (100 percent of the first $5 per month per year of service plus 75 percent of the next $15 per month per year of service). The Multiemployer Program guarantee is not indexed for inflation, and there are no adjustments for the age at which benefit payments begin or for the form of benefit payment.

By comparison, under the Single-Employer Program, the guaranteed benefit limit for 2021 for a retiree receiving a straight-life annuity at age 65 is $6,034.09 per month, or $72,409.08 per year. The guarantee

[10] Based on the dataset used for PBGC's "Benefit Provisions in Multiemployer Defined Benefit Pension Plans" report published in October 2020. The analysis was conducted based on 2016 plan year data, and more information is available here: https://www.pbgc.gov/sites/default/files/me-plan-provisions-study.pdf.

limit is adjusted annually for inflation and depends on both the age at which payments begin and the form of benefit paid. It is not dependent upon the participant's service once the participant is fully vested.

Multiemployer Program Financial Position

PBGC's Multiemployer and Single-Employer Insurance Programs are legally and financially separate. The two programs are separately funded and administered. Over the past decade, due to the severe underfunding and near-term insolvency of a sizeable segment of multiemployer plans, PBGC's Multiemployer Program has reported substantial contingent liabilities and increasing risk of insolvency. As of September 30, 2020 (i.e., before enactment of ARP), the Multiemployer Program had total assets of $3.1 billion, while PBGC's multiemployer liabilities totaled $66.9 billion. As a result, the Multiemployer Program reported a negative net position or "deficit"[11] of $63.8 billion, as of September 30, 2020.[12]

The enactment of ARP will significantly improve the financial status of PBGC's Multiemployer Program because many financially troubled plans will no longer be expected to require regular financial assistance, generally for at least the next 20 years and likely for longer. Of the $66.9 billion in multiemployer liabilities recorded in the financial statements as of September 30, 2020, the ME-PIMS model assumes that approximately $62.7 billion is expected to be "unbooked" in FY 2021 due to expected future SFA payments to plans classified as Probable losses.[13] The median year in which PBGC's Multiemployer Program is now projected to go insolvent has been extended from FY 2026 to FY 2055.[14]

To maintain the solvency of the Multiemployer Program without additional taxpayer funding, premiums must be sufficient to cover current and future financial assistance payment obligations to insolvent plans. Note that unlike the Single-Employer Program, PBGC does not recover and invest assets from failed multiemployer plans; thus, the Multiemployer Program's only sources of income (excluding appropriated funds used for SFA payments) are premium revenues and the modest investment income derived from them.

The net position reported in PBGC's financial statements does not include future premiums or the cost of future plan insolvencies that are not yet sufficiently certain to occur. The following sections of this report include expected future premiums and insolvencies for all multiemployer plans over the next 40 years.

Estimating Future Claims and Premiums

The 2020 Projections Report looks beyond the FY 2020 Annual Report to estimate changes in future insolvencies and premiums. To estimate future multiemployer claims and premium revenues, PBGC uses a stochastic model that estimates 500 future scenarios, ME-PIMS, which is described in the Appendices to the 2020 Projections Report, along with the model's assumptions, methodology, and sample statistics. These Appendices are integral to understanding the information presented in this Quinquennial Report.

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[11] "Deficit" in this report means the amount by which total booked liabilities exceed total assets in the Multiemployer Program as of a certain date.

[12] Pension Benefit Guaranty Corporation Annual Report Fiscal Year 2019, page 24. The annual report is available at https://www.pbgc.gov/sites/default/files/pbgc-fy-2019-annual-report.pdf. Figures cited are for the 2019 fiscal year, which is the starting position for measurement in this report. Subsequently, on December 10, 2020, PBGC reported a deficit of $63.7 billion in the Multiemployer Program as of September 30, 2020. The FY 2020 Annual Report is available at https://www.pbgc.gov/about/annual-reports/pbgc-annual-report-2020.

[13] For this purpose, all "unbookings" of Probable losses for SFA-eligible plans are estimated and assumed to occur as of September 30, 2021. Actual "unbookings" and SFA cash flow "pass-throughs" may be conducted differently in future PBGC financial statements.

[14] The previous median insolvency year of FY 2026 is based on PBGC's 2019 Projections Report. The updated median insolvency year of 2055 is based on PBGC's 2020 Projection Report. Both reports are available on the Projections Report web page at https://www.pbgc.gov/about/projections-report.

The projection of future multiemployer claims was impacted substantially by the enactment of ARP. Additional background information about the provisions of ARP and the impact that it has on PBGC's Multiemployer Program are summarized in the following section.

American Rescue Plan (ARP) Act

ARP established §4262 of ERISA under which PBGC will provide SFA to eligible multiemployer plans. Eligibility for SFA is restricted to financially troubled plans that meet criteria defined by statute and PBGC regulation. Eligible plans may apply to PBGC for SFA sufficient to pay all benefits due through the end of the last plan year ending in 2051, based on a deterministic projection made with certain prescribed assumptions and methods. SFA is provided as a one-time payment to a plan following PBGC approval of its application and is not required to be repaid. PBGC's SFA payments are funded by uncapped appropriations of general taxpayer money, i.e., there is no overall ceiling on the aggregate amount of SFA that can be paid out to plans.[15]

Figure 2 shows the stochastic range of results for the projected number of plans and the aggregate amount of SFA to be provided under ARP.[16]

Figure 2 – Stochastic Range of Projected SFA Distributions

	Estimated Number of Plans	Estimated Total SFA ($ billions)
99th Percentile	482	$147.4
85th Percentile	315	$115.9
Mean (Average)	268	$97.2*
50th Percentile (Median)	268	$95.7
15th Percentile	197	$77.5
1st Percentile	158	$66.1

* The mean SFA amount of $97.2 billion differs from the estimated $94 billion total shown in the Regulatory Impact Analysis in PBGC's interim final rule. The estimates in this report use an updated version of ME-PIMS that reflects more up-to-date data, assumptions, and modeling improvements. The updated SFA estimate includes more current Form 5500 plan data. The SFA amounts include approximately $200 million in financial assistance loan repayments and approximately $700 million in make-up payments for previously suspended benefits.

The range of estimates above is due to the substantial level of uncertainty related to total SFA that will be distributed under ARP. At this early stage of program implementation, the uncertainty is driven by several factors, especially the asset returns plans will realize prior to their SFA application dates. The pre-application plan asset experience has a dollar-for-dollar impact on projected SFA amounts, and relatively small changes in asset levels and plan demographics may have a significant effect on the number of SFA-eligible plans. Other uncertainties that are not stochastically modeled include updates to plan data and changes in certain non-prescribed assumptions used by plans to determine the amount of SFA. However,

[15] More detailed information about the provisions of ARP can be found at https://www.pbgc.gov/american-rescue-plan-act-of-2021.

[16] The report is based on provisions effective in PBGC's interim final rule made public on July 9, 2021, and published in the Federal Register on July 12, 2021. PBGC received over 100 comments on the interim final rule. Those comments are currently being reviewed, and the rule is subject to future change. The interim final rule can be found here: https://www.govinfo.gov/content/pkg/FR-2021-07-12/pdf/2021-14696.pdf.

notwithstanding the uncertainty about the level of SFA payments overall, ARP substantially improves the financial outlook for the solvency of PBGC's Multiemployer Program. Prior to the enactment of ARP, PBGC's Multiemployer Program was projected to become insolvent during FY 2026.

Figure 3 illustrates PBGC's projection of multiemployer fund assets under the pre-ARP scenario shown in the 2019 Projections Report. It compares the assets as of the beginning of each fiscal year to the projected premiums and projected average financial assistance payments for each fiscal year.[17]

Figure 3 – PBGC Multiemployer Fund Assets, Regular Assistance Payments and Premiums by Fiscal Year *(Pre-ARP)*

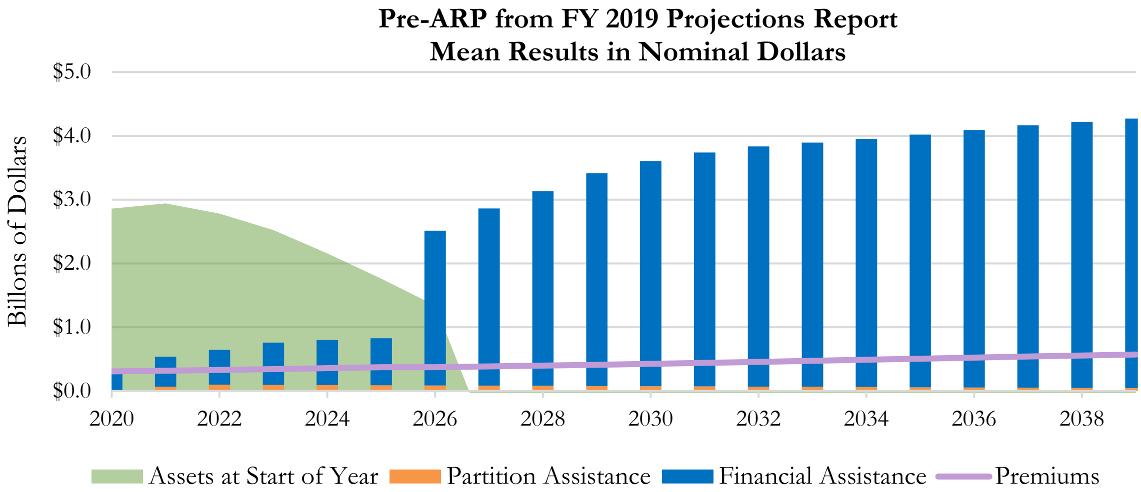


Figure 3 shows that, before enactment of ARP, average regular financial assistance payments were projected to rise dramatically over the next 10 years due to the increasing needs of plans that become insolvent in the 2020s. PBGC's Multiemployer Program had been projected to become insolvent by the end of FY 2026. After the exhaustion of fund assets, the Multiemployer Program's payment of guaranteed benefits would have been limited to the levels provided by annual premium receipts. As a result, many participants would have received a small fraction of the benefits guaranteed by PBGC.

The SFA provided under ARP extends the solvency of the most financially troubled plans, which significantly reduces the projected need for regular financial assistance (payable upon plan insolvency) for the next 20 years. **Figure 4** illustrates the same projection information shown in **Figure 3,** but includes the impact of the SFA provided under ARP. Note that the estimated SFA amounts are not illustrated in **Figure 4**. The projected financial assistance amounts shown are only the regular financial assistance payments provided to insolvent plans to pay guaranteed benefits under ERISA §4261.

[17] Assets are shown as of a point in time – the beginning of the fiscal year – and compared with the cash flow generated due to premiums and financial assistance for that following year. Items of lesser significance, including investment income and administrative expenses, are not shown. **Figure 3** does not include SFA.

Figure 4 – PBGC Multiemployer Fund Assets, Regular Financial Assistance Payments and Premiums by Fiscal Year (*Post-ARP*)

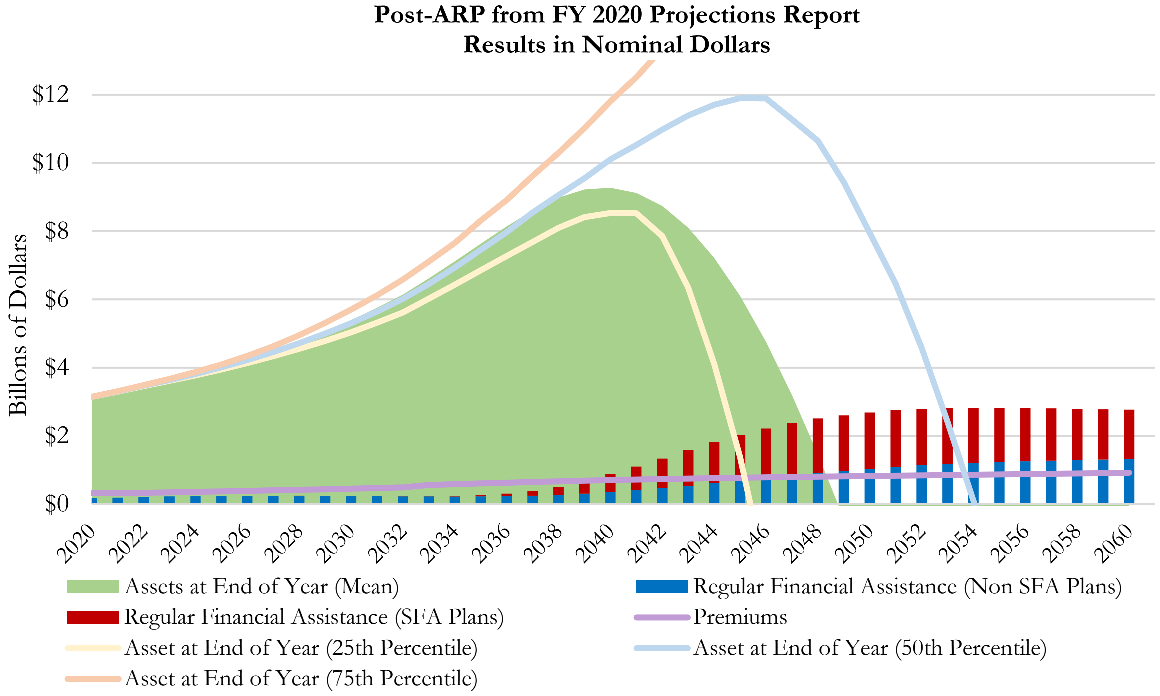


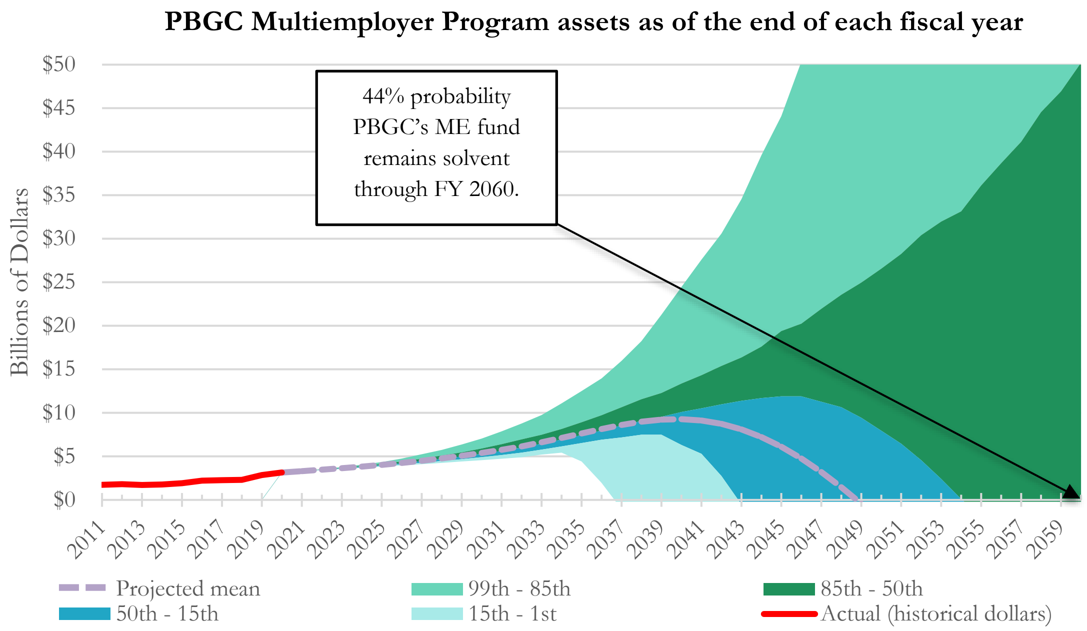
Figure 4 shows that, for mean results, the projected annual premium income exceeds projected annual regular financial assistance payments each year until FY 2040.[18] The projected regular financial assistance payments for each year are estimated separately for plans that are expected to receive SFA payments but ultimately become insolvent (red bars) and plans that are not expected to be eligible for SFA payments and ultimately become insolvent (blue bars). On average, the majority of projected aggregate annual regular financial assistance payments is expected to be made to plans that receive SFA. The projections for the decade from FY 2040 to FY 2050 show increases in regular financial assistance payments as plans increasingly become insolvent. These annual regular financial assistance payments are the average of all 500 stochastic projection scenarios produced by ME-PIMS, and therefore include the impact of the most adverse scenarios. The median outcome of the 500 scenarios shows PBGC's Multiemployer Program running out of money during FY 2055.

Adequacy of Current Premiums

The SFA provided under ARP provides significant financial relief to eligible multiemployer plans and is projected to extend the solvency of PBGC's Multiemployer Program. However, over the course of a 40-year projection horizon, the projected solvency of the Multiemployer Program is highly uncertain and subject to variable outcomes. **Figure 5** illustrates the variability of these outcomes.

[18] PBGC assets shown in **Figure 4** and **Figure 5** exclude assets in the newly created eighth fund and therefore exclude all Treasury funding for SFA.

Figure 5 – Projected Assets of PBGC Multiemployer Program (mean and percentile scenarios)



In the most favorable stochastic scenarios, PBGC's Multiemployer Program remains solvent indefinitely. Under these scenarios, financial markets experience favorable returns in the years closely following the distribution of SFA to eligible plans. Accordingly, plans outperform the statutory interest rate used in the deterministic projection to determine the amount of SFA and remain solvent well past 2051.[19]

At the 1st percentile, Multiemployer Program assets are depleted during FY 2037.[20] Under these scenarios, financial markets incur significant losses in the years closely following the distribution of SFA to eligible plans and asset returns are lower than the deterministic return included in the SFA applications. Therefore, in these adverse scenarios, plans are projected to go insolvent much earlier than 2051. Furthermore, asset performance is correlated not just among the plans that receive SFA but among all plans in the multiemployer universe. The collective impact of numerous multiemployer plans going insolvent within a short period of time causes PBGC's Multiemployer Program to become insolvent sooner.

The projection results show that current premium levels will likely be insufficient to support the current level of the guarantee, leaving PBGC's Multiemployer Program insolvent at some point in the future, most likely between the mid-2040s and the mid-2060s. At the point of insolvency, PBGC would be unable to provide the regular financial assistance needed by insolvent plans to pay benefits at the statutory guarantee level, and its premium income at that point would be only a fraction of the amount needed to provide the guarantee. Accordingly, the current premium levels, including the statutory increase under ARP beginning in 2031, would not support an increase in the multiemployer benefit guarantee level at this time.

[19] Under PBGC's SFA interim final rule, plans are generally required to invest SFA assets in high quality, fixed-income securities. For purposes of this report, the ME-PIMS model utilizes simplified methods and assumptions to project plan asset returns. The simplified methods and assumptions do not separately model the performance of SFA assets from other plan assets. The methods and assumptions used to model plan asset returns are described in the Projections Report: https://www.pbgc.gov/about/projections-report. This is an enhancement that is expected to be made in future PBGC modeling.

[20] Under the most adverse scenario out of 500 scenarios, PBGC is projected to run out of money during FY 2036.

Factors Relevant to Assessing the Adequacy of Premium Levels

Based on the projection results reflecting ARP provisions, current premium levels are expected to be sufficient to maintain the solvency of PBGC's Multiemployer Program for at least the next 20 years. However, additional premium revenue will likely be required to enable PBGC to pay the full level of guaranteed benefits into the future as plans (including those that received SFA as well as those that did not) are projected to run out of money with more frequency.

Estimating the necessary level of premiums to support the current statutory level of the guarantee is complex because of significant uncertainties about the timing and magnitude of future plan insolvencies, potential additional changes in the rules governing multiemployer plans, and the risks and efficacy of delayed action to adjust the premium structure or levels to address changing needs.

For simplicity, the figures below show the range of projected Multiemployer Program solvency outcomes under two alternatives for premium revenue.[21] **Figure 6** summarizes the impact of these alternatives on the likelihood that the Multiemployer Program remains solvent through 2060.

Figure 6 – Alternative Premium Revenue Scenarios

Premium Revenue Level	Probability That ME Fund Remains Solvent Through FY 2060
Baseline - Current Law	44%
Current Law Revenue x 1.3	50%
Current Law Revenue x 4.0	75%

Figure 7 shows the full stochastic range of outcomes under a scenario in which the premium revenue level is increased such that there is a 50 percent likelihood of the multiemployer fund retaining sufficient assets to pay guaranteed benefits through FY 2060. Under this scenario, premium revenue would have to increase to a level of 1.3 times the amount projected under current law.

[21] The analysis is structured in terms of the amount of revenue provided by the premiums and does not reflect efforts by sponsors to reduce the basis on which premiums are assessed. It includes the increase in the per-participant premium level to $52 in plan years beginning after December 31, 2030. The design and level of premiums can create incentives for plans to take actions that may reduce premiums, but for this purpose, premiums are assumed to be independent of incentives.

Figure 7 – Projected Assets of PBGC Multiemployer Program – mean and percentile scenarios (*Premium revenue increased to 1.3 times the current level*)

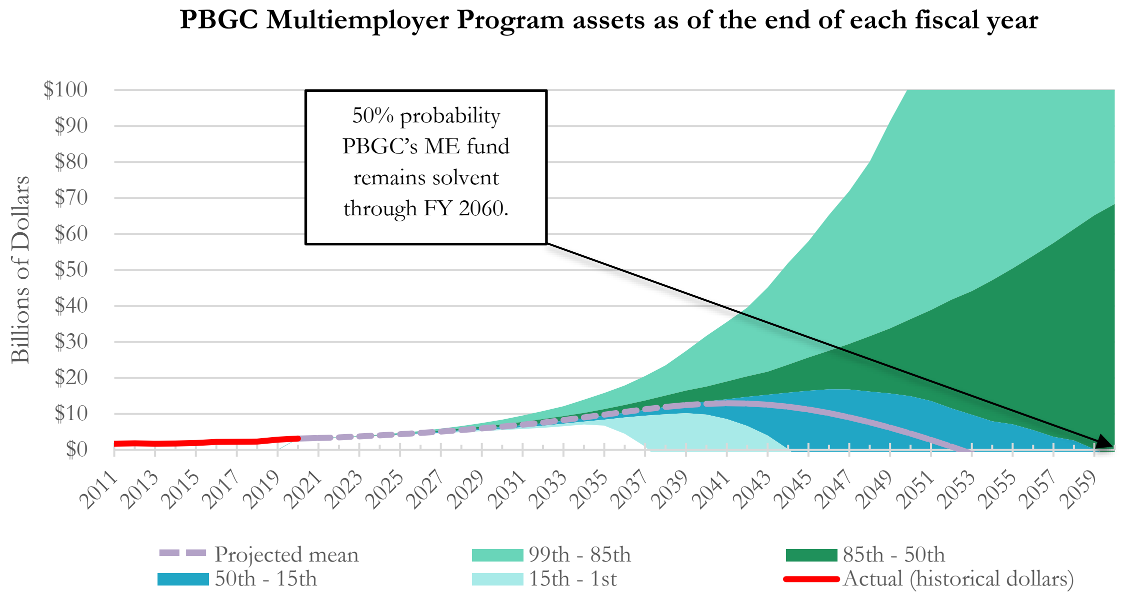
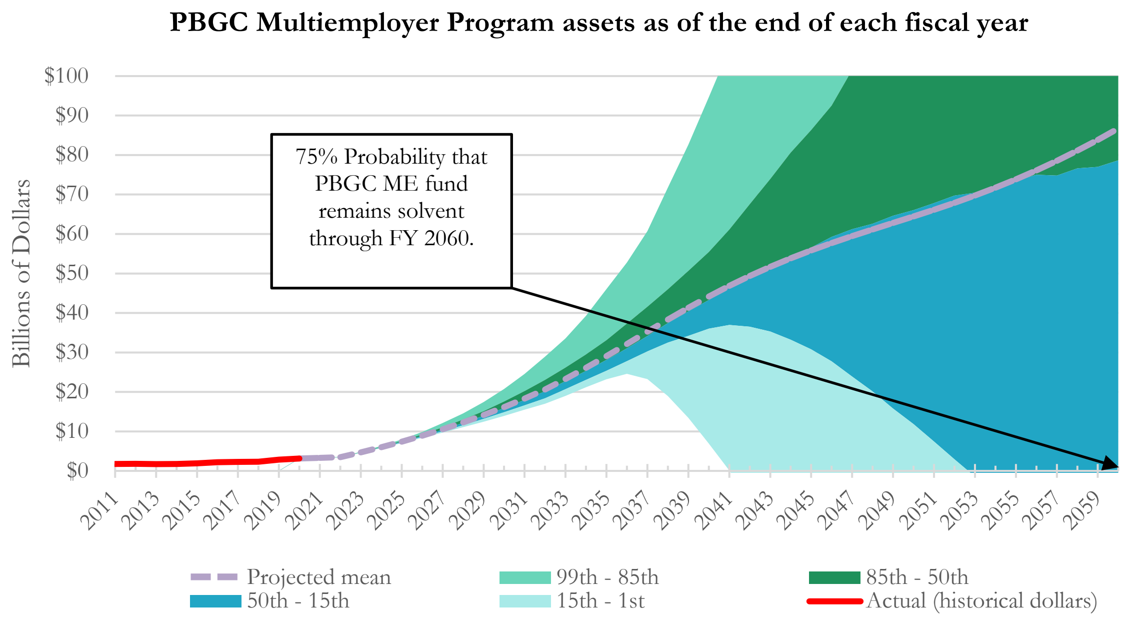


Figure 8 shows the full stochastic range of outcomes under a scenario in which the premium revenue level is increased such that there is a 75 percent likelihood of the multiemployer fund retaining sufficient assets to pay guaranteed benefits through 2060. Under this scenario, premium revenue would have to increase to a level of 4.0 times the amount projected under current law.

Figure 8 – Projected Assets of PBGC Multiemployer Program – mean and percentile scenarios (*Premium revenue increased to 4.0 times the current level*)



Similar to **Figure 4** and **Figure 5**, **Figure 7** and **Figure 8** both illustrate a high degree of uncertainty regardless of the change to the premium revenue level. There are a number of factors that impact future plan experience. However, the two most critical factors are: (1) future plan investment returns; and (2) future plan contribution income. The following sections provide more insight into how these factors may cause future experience to deviate from the average projection results shown in this report.

Future Plan Investment Returns

The plans that represent PBGC's greatest exposure to future losses are plans that are expected to receive SFA under ARP and other financially troubled plans that are narrowly excluded from SFA eligibility. Generally, these plans have a projected solvency horizon of approximately 30 years.[22] As a result, asset returns during the first five to 10 years of the projection period are particularly critical to a plan's solvency. A financially troubled plan's ability to recoup investment losses is diminished because the proportion of outgoing annual cash flows is high relative to the plan's asset base. This is increasingly pertinent over time.

Compared to all other stochastic variables in the ME-PIMS projection analysis, investment returns have the largest impact on the differences in the distributions of solvency outcomes illustrated in **Figures 4, 5, 7,** and **8.**

Future Plan Contribution Income

One of the key factors underlying the multiemployer plan crisis is a protracted decline in employer contributions for many plans. This occurred for multiple reasons, including the aging of many participant populations. This decline is less detrimental for plans with high funded ratios, but for poorly funded plans, the decline leaves the workers and employers without the capacity or incentive to recover. Going forward, contribution experience will continue to be an important factor in the future solvency for many financially troubled plans, including SFA-eligible plans.

For purposes of the FY 2020 Projections Report and for the analysis summarized in this report, PBGC assumed that plans that will receive SFA will have level contribution rates for 15 years, and thereafter have annual increases in accordance with the National Average Wage Index. Additionally, Contribution Base Units (CBUs) are projected stochastically with an average annual decrease of 1.3 percent.

By law, plans that receive SFA must remain in critical status through plan year 2051, so they will be subject to a Rehabilitation Plan that may require contribution rate increases. It is uncertain how the Rehabilitation Plan requirements will affect plans that receive SFA. It is also uncertain how the receipt of SFA may impact a plan's ability to attract and retain active participants in order to increase CBUs and bolster contribution income. Actual contribution experience will differ, possibly substantially, from the assumed amounts included in these projection results. PBGC will monitor and analyze future contribution experience closely and reflect any required changes to our assumptions in future projection results.

Conclusion

The projections provided in this report are based on current law provisions pertaining to multiemployer plans, reflecting the enactment of ARP. Although ARP provides significant financial assistance to financially troubled multiemployer plans and effectively addresses the short-term solvency crisis, it was not designed to address the underlying structural weaknesses that contributed to the crisis and put at risk the security of workers' retirement income.

As noted earlier, this report satisfies the statutory requirement in ERISA §4022A(f)(1) that PBGC conduct a study every five years to determine the premiums needed to maintain the multiemployer basic benefit guarantee levels and whether those guarantee levels may be increased without increasing PBGC premiums. The adequacy of PBGC premiums to cover insurance losses is a function not only of the

[22] For eligible plans, SFA is calculated as the amount necessary for the plan to pay all benefits due from the payment of the SFA through the end of the last plan year ending in 2051, based on a deterministic projection subject to certain prescribed assumptions and methods.

guarantee levels, but also of other policy choices and economic factors that determine the risk of plan insolvency, the resulting costs of paying financial assistance to insolvent plans, and most importantly, the security of the pensions promised to participants in multiemployer plans. In recent years, Congress has been active in reviewing the rules governing multiemployer pensions that contributed to the solvency crisis. Members of Congress have introduced various proposals to make more comprehensive changes to the regulatory structure governing multiemployer plans and PBGC's insurance program with the objectives of better protecting workers' earned pensions and reducing risks for retirees, participating employers, and taxpayers.

These more comprehensive proposals have included new plan designs, changes to the minimum funding requirements, changes to employer withdrawal provisions, increases in the level of benefits guaranteed by PBGC, changes to the event triggering PBGC assistance, alternative PBGC premium structures, and other changes.

PBGC will continue to monitor ongoing risks to the Multiemployer Program and inform Congress about its findings. PBGC will also continue to provide policy makers with analytical support to preserve multiemployer plans and protect the lifetime retirement security for the more than 10 million participants they cover, and their families.

STATEMENT OF ACTUARIAL OPINION

We, the undersigned, certify that this actuarial evaluation has been prepared in accordance with generally accepted actuarial principles and practices and, subject to the disclaimers herein, to the best of our knowledge, fairly reflects the possible distribution of projected outcomes relative to the operations and status of PBGC's Multiemployer Program as of September 30, 2020, after reflecting estimated effects of ARP on multiemployer plans.

In preparing this evaluation, we have relied upon information provided to us regarding plan and participant data, historic asset yield, and other matters. We have checked this information for reasonableness, as appropriate, based on the purpose of the evaluation; the responsibility for the source information obtained from Forms 5500 and elsewhere rests with the preparers of these data.

The methods and assumptions used in this report are described in the Appendices to the 2020 Projections Report.

Subject to the disclaimers herein, in our opinion,

(1) The techniques and methodology used are generally acceptable within the actuarial profession,

(2) The assumptions used are appropriate for the purposes of this report, and

(3) The resulting evaluation represents a reasonable estimate of the possible distribution of projected outcomes relative to the operations and status of the Multiemployer Program.

The undersigned are available to discuss the material in this report.

I, Theodore A. Goldman, am the Director of PBGC's Policy, Research, and Analysis Department. I am a Member of the American Academy of Actuaries, a Fellow of the Society of Actuaries, and an Enrolled Actuary. I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

I, Darren M. French, am an actuary in PBGC's Policy, Research, and Analysis Department. I am a Member of the American Academy of Actuaries and an Enrolled Actuary. I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

I, Kevin M. Muse, am an actuary in PBGC's Policy, Research, and Analysis Department. I am a Fellow of the Society of Actuaries and an Enrolled Actuary. I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

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