

Milliman analysis shows asset gains and special financial assistance in 2023 spurred improvement in aggregate funding levels.

Tim Connor, FSA, EA, MAAA
Rex Barker, FSA, EA, MAAA
Timothy J. Herman, FSA, EA, MAAA
Nina Lantz, FSA, EA, MAAA



Milliman's December 2023 Multiemployer Pension Funding Study reports on the estimated funded status of all U.S. multiemployer defined benefit (DB) plans as of December 31, 2023.

Key findings

- The aggregate funded percentage for all multiemployer plans was 89% as of December 31, 2023, up from 79% at the end of 2022.
- Our assumed asset portfolio earned approximately 11% for 2023.¹
- As of December 31, 2023, 69 plans have received nearly \$54 billion in special financial assistance (SFA) under the American Rescue Plan Act of 2021 (ARP), which has added 6% to the aggregate funded percentage since the SFA program's inception.
- The latest Pension Benefit Guaranty Corporation (PBGC) median estimate is that the SFA program will pay a total of about \$80 billion to 211 plans.

¹ Individual plans' returns may have been higher or lower based on their asset allocations, asset classes, and management styles. For more information about the asset portfolio used for this study, see the section "About this study" below.

Current multiemployer pension funded percentage

Figure 1 shows that the overall funding shortfall for all plans improved by about \$79 billion during 2023 to a total shortfall of approximately \$87 billion. The aggregate funded percentage increased from 79% to 89%.

FIGURE 1: AGGREGATE FUNDED PERCENTAGE (IN \$ BILLIONS)

	12/31/2022	12/31/2023	CHANGE
Accrued benefit liability	\$784	\$807	\$23
Market value of assets	(618)	(720)	102
Shortfall	\$166	\$87	\$(79)
Funded percentage	79%	89%	10%

Based on plans with complete IRS Form 5500 filings. Includes 1,211 plans as of December 31, 2022, and 1,207 plans as of December 31, 2023.

The amounts in Figure 1 reflect the \$54 billion in SFA granted to 69 plans that received the funds by December 31, 2023, including \$45 billion paid during 2023. Without the SFA program, the aggregate funded percentage would be approximately 83%.

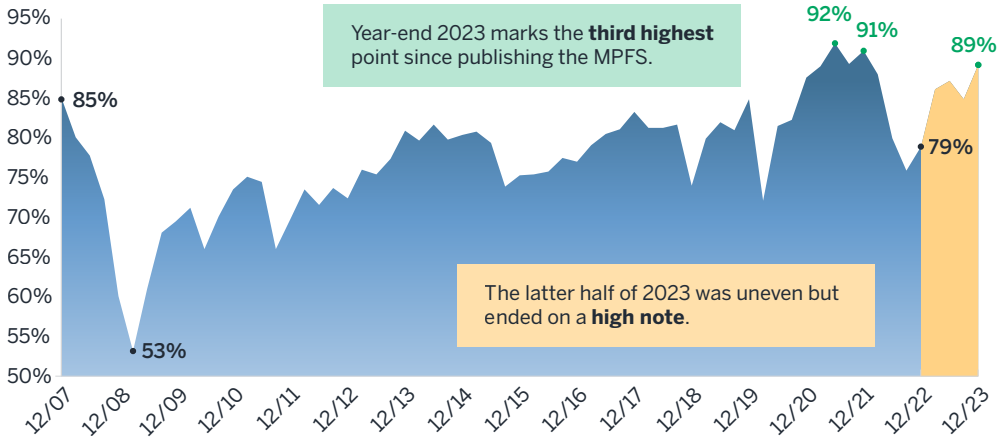
The liabilities in Figure 1 are projected using discount rates equal to each plan's actuarial assumed return on assets. Assumed returns generally fall between 6.0% and 8.0%, with a weighted average interest rate assumption for all plans of about 6.6%, a decline from 6.7% a year ago.

The assets in Figure 1 are based on the most recently reported market value of assets for each plan, projected forward assuming asset returns observed for a diversified portfolio typical for a U.S. multiemployer pension plan. Our simplified portfolio earned about 11% in 2023.

Historical multiemployer pension funded percentage

Figure 2 provides a historical perspective on the aggregate market value funded percentage of all multiemployer plans since the end of 2007.

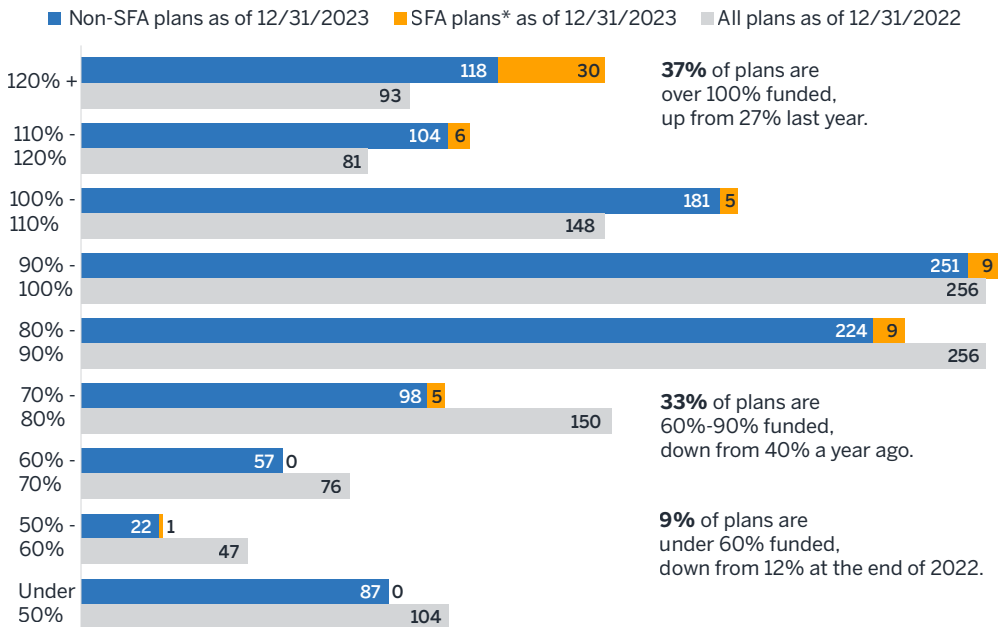
FIGURE 2: AGGREGATE HISTORICAL FUNDED PERCENTAGE - MARKET VALUE BASIS



Investment gains during 2023 were somewhat offset by higher liabilities due to lower assumed discount rates. The aggregate funded percentage largely recovered from the market declines in 2022, suffering only a slight setback in Q3 of 2023. At the close of the year, the aggregate funded percentage once again eclipsed the level from before the 2008 global financial crisis, and now stands at its third-highest point over the study period.

Figure 3 shows the distribution of funded percentages for all plans in the study as of December 31, 2023.

FIGURE 3: MARKET VALUE FUNDED PERCENTAGE AS OF 12/31/2023



* Four of the 69 SFA plans are of immaterial size and are not included in the study.

Examining the funding of all plans more closely, 37% (444 of 1,207) are 100% funded or more, and 78% (937) are 80% funded or better. As required by ARP, plans that received SFA will remain in the red zone through the plan year ending in 2051 regardless of their funded percentage. The remaining plans that are at least 80% funded are likely in the green zone under the Pension Protection Act of 2006 (PPA). However, these plans still face significant risks, such as those related to economic volatility and growing plan maturity. Trustees must remain vigilant in managing these and other plan risks to keep their plans in the green zone.

On the other end, 9% of plans (110) are below 60% funded and may be headed toward insolvency. Many of these plans are likely eligible and expected to apply for SFA in 2024 or 2025.

Plans that have received SFA are not exactly 100% funded. This could be attributable to several factors.

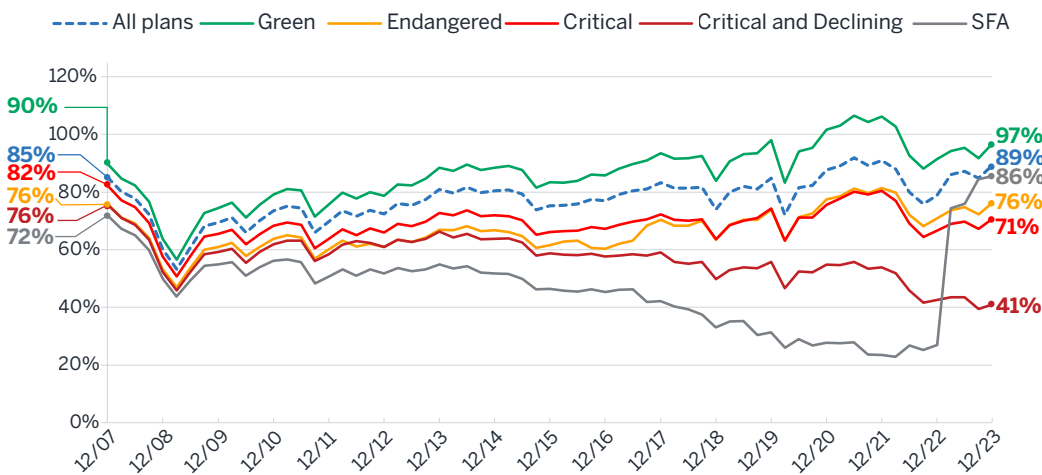
- Our study is based on the accrued liabilities and discount rate reported by each plan on its latest Form 5500 filing, which were determined by the plan’s actuary at least two years ago. Plans may have used different assumptions about expected returns, future benefits, administrative expenses, and contributions when applying for SFA based on PBGC guidance. The differences in methodology, assumptions, and timing could produce SFA amounts that are higher or lower than the corresponding liability we reflect in our study. We did not make any adjustments for these differences.
- Additionally, SFA applications could include restored benefits and loan repayments to the PBGC for insolvent plans. Until a plan reports any liability adjustments subsequent to receiving SFA on its Form 5500, our study will not reflect them. These factors may result in SFA amounts that are higher than their reported liabilities, leading to funded percentages for some plans appearing over 100%.

Future studies will reflect these differences when adjusted assets and liabilities are reported on future Form 5500 filings.

Historical funded percentage by zone status

Figure 4 shows the historical funded percentage of all multiemployer plans since the end of 2007 by the zone status reported on the latest Form 5500 used for the study. For example, the green line shows the historical funded percentages of plans reported in the green zone without regard to their previous zone statuses. In addition, we separately categorized plans that have received SFA by December 31, 2023. These plans are identified by the grey line. The blue dotted line represents all plans combined.

FIGURE 4: AGGREGATE HISTORICAL FUNDED PERCENTAGE BY ZONE STATUS AND SFA



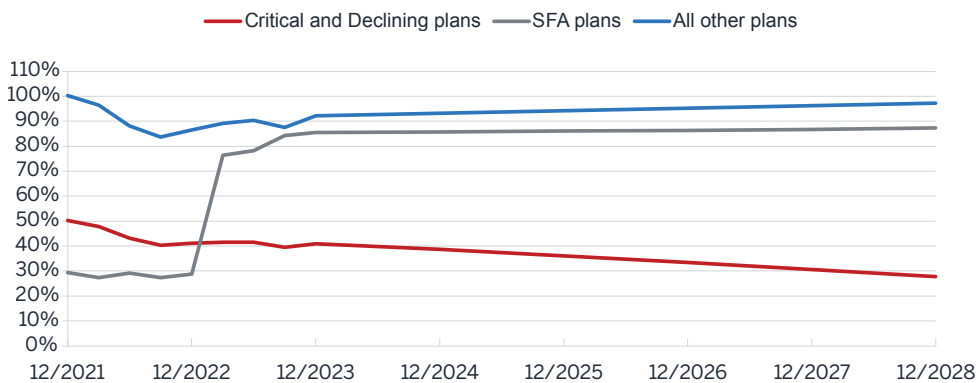
Through December 2023, about \$54 billion in SFA has been paid to 69 plans. Most of these plans were going insolvent in the near future and were in worse financial condition than other plans eligible for SFA. As expected, their funded status improved substantially after receiving SFA.

Plans that are not critical and declining (C&D) in the aggregate have largely recovered from the 2008 global financial crisis and continue to navigate the ups and downs of the market, while C&D plans continue to struggle. Many of the C&D plans are expected to apply for SFA.

What lies ahead?

Figure 5 illustrates the projected funded status of plans over the next five years. Plans that are in C&D status but have not received SFA are shown in red, those that have received SFA through December 31, 2023, are shown in gray, and all other plans are shown in blue.

FIGURE 5: PROJECTED FUNDED PERCENTAGE THROUGH 2028 FOR PLANS THAT RECEIVED SFA THROUGH DECEMBER 31, 2023, VS. OTHER PLANS



As noted previously, the plans that have received SFA were in more dire financial condition compared to other C&D plans. Figure 5 shows how SFA has significantly improved their funded status. While SFA is intended to sustain these plans through the 2051 plan year, the road ahead is still uncertain. These plans still tend to be very mature with large negative cash flows that can exacerbate the effect of investment risk. Some of these plans may have options that were not available to them before receiving SFA, such as [merging](#) with a better funded plan, or exploring a [variable plan design](#) to help ensure they remain sustainable beyond 2051.

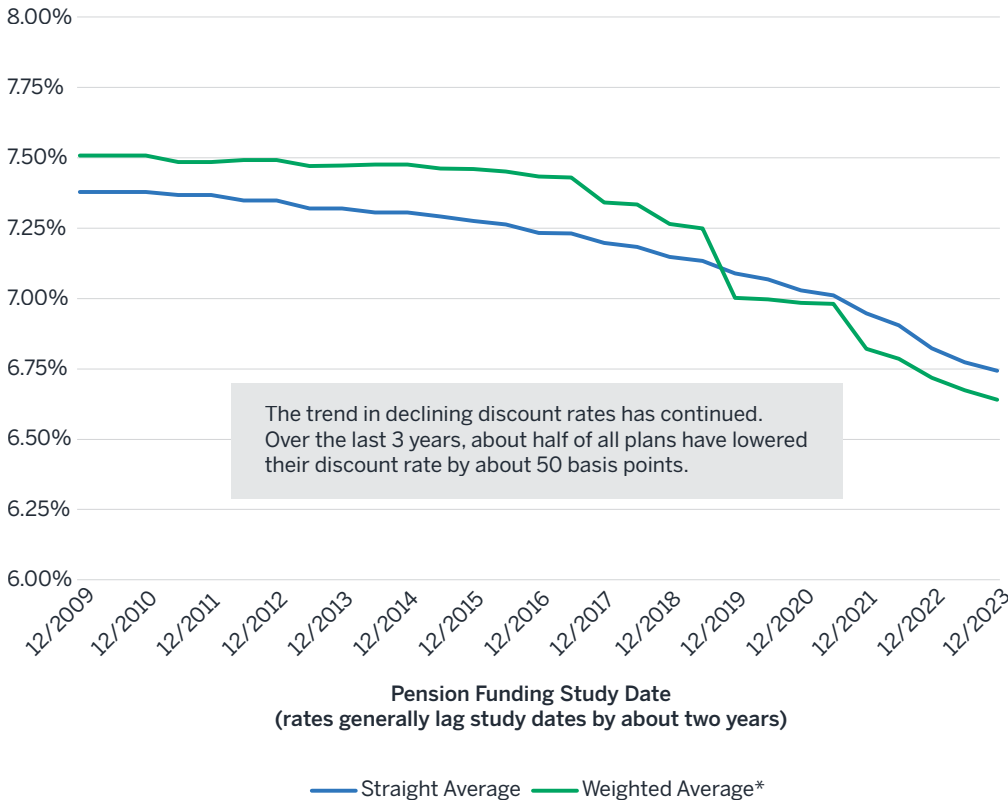
The aggregate funded status of the remaining C&D plans continues to trend downward. The projections do not reflect anticipated SFA for these plans. The full impact of the SFA will emerge over time and will be reflected in the study as those funds are received. The PBGC's median estimate is that the SFA program will ultimately pay about \$80 billion to 211 plans.

The aggregate funded status of all other plans is expected to improve over time if plan assets achieve their targeted returns. Prospects for continued improvement remain highly dependent on asset performance.

Beyond asset returns and SFA, multiemployer pension plans can also be significantly impacted by changes in the discount rate used to measure plan liabilities.

Figure 6 shows a history of the straight average discount rate (which weights each plan equally and diminishes the impact any one plan has on the overall average) as well as the average discount rate weighted by liabilities for all plans in our study.

FIGURE 6: AVERAGE DISCOUNT RATE



* The large abrupt drops in the weighted average discount rate over the past several years are primarily due to the decrease in the discount rate for one large plan (Central States, Southeast & Southwest Areas Pension Plan).

Since the study’s inception, the average discount rate has dropped 60 to 80 basis points and is below 6.70% today. Since our 12/31/2020 study, more than half of all plans, representing about two-thirds of overall plan assets and liabilities, have reduced their assumed discount rates. The average reduction was about 50 basis points.

Due to the lag in reporting (the latest information is as of the beginning of the 2021 or 2022 plan year for most plans), we will not know what actual discount rates are today for a couple of years. It is difficult to predict how the trend might change given recent movements in capital markets and SFA investments.

Trustees and plan professionals should continue to monitor these developments and understand the impact of any potential changes on their plans.

ABOUT THIS STUDY

The results in this study were derived from publicly available IRS Form 5500 data filed through December 2023 for all multiemployer plans, numbering around 1,200 plans. Data for a limited number of plans that clearly were erroneous was modified to ensure the results were reasonable and a sufficiently complete representation of the multiemployer universe. Such adjustments were associated with an immaterial number of plans.

Liability amounts were based on unit credit accrued liabilities reported on Schedule MB and were adjusted to the relevant measurement dates using standard actuarial approximation techniques. For this purpose, each plan's monthly cash flow, benefit cost, and actuarial assumptions were assumed to be constant throughout the year and in the future. Projections of asset values to the measurement date reflect the use of constant cash flows and monthly index returns for a simplified portfolio composed of 19.4% U.S. stocks, 9.1% international stocks, 10.5% global equity, 28.1% U.S. fixed income, 0.6% global or international fixed income, 0.9% cash, 10.9% private equity, 9.7% real estate equity, and 10.8% alternative investments. This asset portfolio is the average asset mix as of September 30, 2022, for the top 1,000 union-defined benefit plans, as reported in the February 13, 2023, issue of Pension & Investments.

Changes to an individual plan's data or assumptions would likely not have a significant impact on the aggregate results or the conclusions in this study.

This study reports on funded percentages and levels based on one reasonable measure of funding for these plans, where liabilities are developed using each plan's assumed return on assets as the discount rate. Other methods of measuring liabilities and funded statuses may produce different results.

Tim Connor is a principal and consulting actuary in the Little Falls, New Jersey office of Milliman.

Contact him at tim.connor@milliman.com.



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