Milliman analysis shows aggregate funding level declined significantly in 2022 despite first wave of financial assistance

Tim Connor, FSA, EA, MAAA
Tim Herman, FSA, EA, MAAA
Rex Barker, FSA, EA, MAAA
Nina Lantz, FSA, EA, MAAA

Milliman's latest Multiemployer Pension Funding Study reports on the estimated funded status of all U.S. multiemployer defined benefit (DB) plans as of December 31, 2022.

Key findings

- Significant investment losses during 2022 resulted in an aggregate funded percentage for all multiemployer plans of 79% as of December 31, 2022, down from 91% at the end of 2021. Our assumed asset portfolio earned approximately -12% for 2022[1].
- As of December 31, 2022, 35 plans have received $9 billion in special financial assistance (SFA) under the American Rescue Plan Act of 2022 (ARP), which added 1% to the aggregate funded percentage.
- An additional $37 billion of SFA was paid in January 2023. If those amounts had been paid by December 31, 2022, the aggregate funded percentage would have been 84%.
- The SFA application period is scheduled to open for all remaining eligible plans on March 11, 2023. Based on estimates from the Pension Benefit Guaranty Corporation (PBGC), an additional $28 billion to $45 billion in assistance is expected to be paid from the program.

Current funded percentage

Figure 1 shows that the overall funding shortfall for all plans increased by about $97 billion during 2022 to a total shortfall of approximately $166 billion. The aggregate funded percentage declined from 91% to 79%.

FIGURE 1: AGGREGATE FUNDED PERCENTAGE (IN $ BILLIONS)

	12/31/2021	12/31/2022	Change
Accrued benefit liability	$761	$784	$23
Market value of assets	(692)	(618)	(74)
Shortfall	$69	$166	$97
Funded percentage	91%	79%	(12)%

Based on plans with complete IRS Form 5500 filings. Includes 1,216 plans as of December 31, 2021, and 1,211 plans as of December 31, 2022.

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.

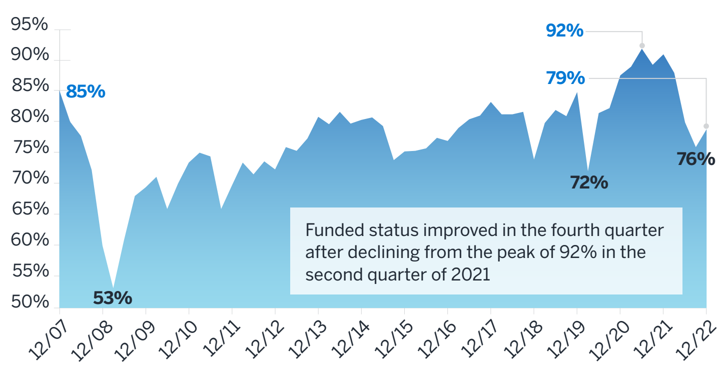
The amounts in Figure 1 reflect the $9 billion in SFA granted to 35 plans that received the funds by December 31, 2022. An additional $37 billion in SFA was paid in January 2023, the majority of which was paid to the Central States, Southeast, and Southwest Areas Pension Plan. If those amounts were included in Figure 1, then the aggregate funded percentage increases from 79% to 84%. 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 6.7%, a decline from 6.8% 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 -12% in 2022.

Historical funded percentage

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

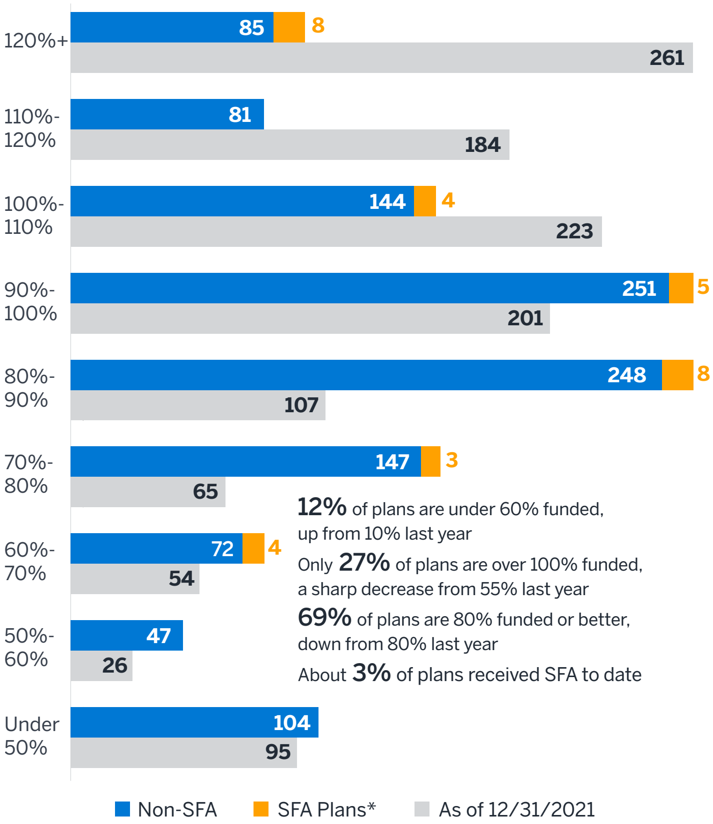
FIGURE 2: AGGREGATE HISTORICAL FUNDED PERCENTAGE, MARKET VALUE BASIS



Investment losses during 2022 were coupled with higher liabilities due to lower assumed discount rates. From June 30, 2021, to September 30, 2022, the aggregate funded percentage fell from 92% to 76%. The aggregate funded percentage began to trend up again during the fourth quarter of 2022, landing at 79% by year-end.

Figure 3 shows the distribution of funded percentages for all plans in the study as of December 31, 2022.

FIGURE 3: MARKET VALUE FUNDED PERCENTAGE (%) AS OF 12/31/2021 AND 12/31/2022



* Three of the 35 plans were not included in the study due to their small size.

Taking a closer look at funding across all plans in our study, 27% (322 of 1,211) are at or above 100% funded, and 69% (834) are 80% funded or better. Under the Pension Protection Act (PPA), plans that are at least 80% funded are typically in the green zone. 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 these plans in the green zone.

Conversely, 12% of plans (151) are below 60% funded and may be headed toward insolvency. Some of these plans were approved for SFA but did not receive the funds by December 31, 2022. Many other plans are likely eligible for SFA and will apply for it in 2023.

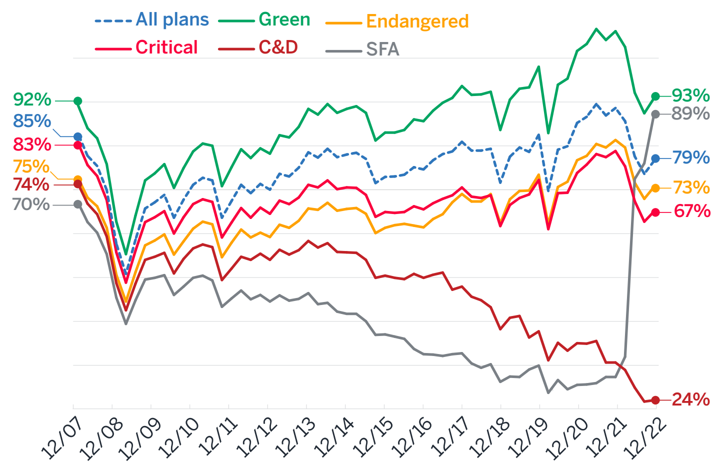
The application period for all remaining eligible plans is scheduled to open on March 11, 2023. However, the PBGC has limited capacity to review all the applications at the same time. Therefore, the full impact of the SFA will not be seen for a few years.

The 3% of plans that received SFA prior to December 31, 2022, saw a significant improvement in their funded status and in some cases may appear inflated due to the simplified methodology used for this study. Some of these plans may have restored benefits reduced under the Multiemployer Pension Reform Act of 2014 (MPRA) or restored benefits that were reduced to the PBGC guaranteed level when they became insolvent. In addition, some of the SFA was to repay loans to the PBGC for the insolvent plans. The liabilities and assets in the study were not adjusted for these items. Future studies will incorporate adjustments made by the plans' actuaries 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, 2022. 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



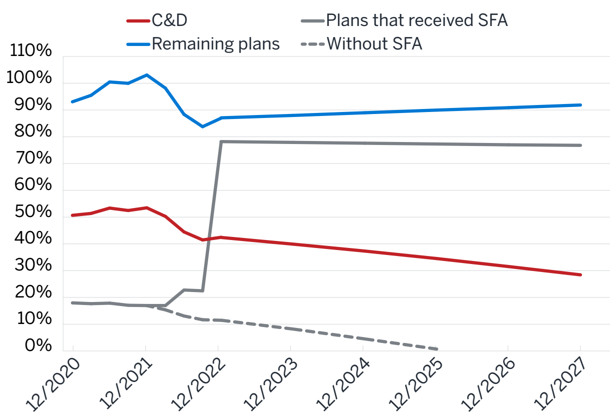
Through December 2022, about $9 billion in SFA has been paid to 35 plans. Most of these plans were insolvent or going insolvent in the near future and were in worse financial condition than other plans eligible for SFA. As expected, their funded status improved substantially after receiving SFA.

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 their decline. 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 January 31, 2023, are shown in grey, and all other plans are shown in blue. The dotted grey line shows the projected funded percentage if the plans that received SFA had not received that assistance.

FIGURE 5: PROJECTED FUNDED PERCENTAGE THROUGH 2027 PLANS THAT RECEIVED SFA THROUGH JANUARY 31, 2023 VERSUS OTHER PLANS



As noted previously, the plans that have received SFA were in more dire financial condition compared to other C&D plans. Without the SFA, these plans were in the aggregate projected to run out of money in five years. As expected, their funded status improved significantly with the SFA, which is intended to sustain these plans through the 2051 plan year. However, the underlying conditions for these plans have not changed. They continue to be very mature and have high negative cash flow. Investment returns on the SFA funds will be vital for these plans to sustain themselves through the 2051 plan year as intended by ARP. One challenge for the trustees of these plans is that they are limited by law in how the SFA is invested. Only up to 33% of the SFA can be invested in return-seeking investments (such as stocks).

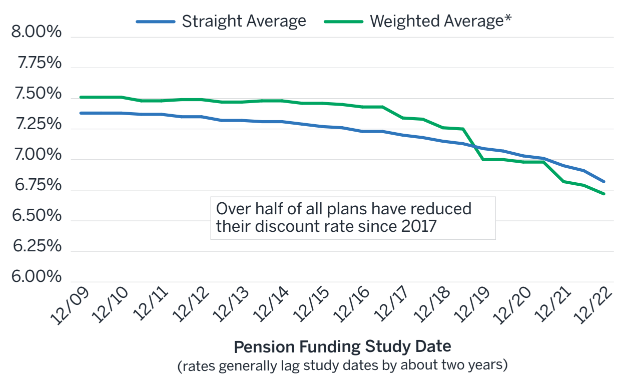
The aggregate funded status of the remaining C&D plans continues to trend downward. The projections do not reflect anticipated SFA for these plans. The full impact of the SFA will emerge over time and will be reflected in the study as those funds are received. The SFA application period for all remaining eligible plans is scheduled to start on March 11, 2023 and extends through 2025. The PBGC estimates that the SFA program will ultimately pay between $74 billion to $91 billion in assistance to about 200 plans.

Like previous studies, the aggregate funded status of the remaining plans is expected to improve over time if plan assets achieve their targeted returns. Prospects for continued improvement remain highly dependent on asset performance. In addition, increasingly negative cash flows put more pressure on plans to achieve their assumed returns. Financially distressed plans feel the pressure more acutely because excess investment returns have a smaller impact as asset values drop.

Beyond asset returns and SFA, multiemployer pension plans could be significantly impacted by changes in the discount rate.

Figure 6 shows a history of the average discount rate assumption[2] for all plans in our study.

FIGURE 6: AVERAGE DISCOUNT RATE



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

Since the study's inception, the average discount rate has dropped 50 to 80 basis points and is below 6.75% today. Due to the lag in reporting (the latest information is as of the beginning of the 2020 or 2021 plan year for most plans), discount rates may be even lower today, assuming the trend has continued. It is difficult to predict how the trend in discount rates will change over the next few years given recent movements in capital markets and SFA investments.

Since 2017, over half of all plans have reduced their assumed discount rates. Most of these decreases were at least 50 basis points.

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

2 Figure 7 shows 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.

ABOUT THIS STUDY

The results in this study were derived from publicly available IRS Form 5500 data filed through December 2022 for all multiemployer plans, numbering between 1,200 and 1,300. 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 21.9% U.S. stocks, 10.7% international stocks, 10.8% global equity, 27.8% U.S. fixed income, 1.2% global or international fixed income, 1.0% cash, 10.1% private equity, 6.8% real estate equity, and 9.7% alternative investments. This asset portfolio is the average asset mix as of September 30, 2021, for the top 1,000 union defined benefit plans, as reported in the February 14, 2022, issue of Pension & Investments.

Significant changes to the data and assumptions could lead to materially different results for individual plans but would likely not have a significant impact on the aggregate results or the conclusions in this study.

Milliman

Milliman is among the world's largest providers of actuarial and related products and services. The firm has consulting practices in life insurance and financial services, property & casualty insurance, healthcare, and employee benefits. Founded in 1947, Milliman is an independent firm with offices in major cities around the globe.

milliman.com

CONTACT

Tim Connor
tim.connor@milliman.com