Milliman analysis shows aggregate funding levels improved in 2021

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Milliman’s December 2021 Multiemployer Pension Funding Study reports on the estimated funded status of all U.S. multiemployer defined benefit (DB) plans as of December 31, 2021.

Key findings

- Strong investment performance during 2021 led to an aggregate funded percentage for all multiemployer plans of 91% as of December 31, 2021, up from 88% at the end of 2020.
- The investment outperformance was partially offset by slightly higher liabilities relative to prior estimates, as the trend of lower discount rates continued. The average discount rate is now below 7.0%. Nearly half of all plans have lowered their discount rates over the past five years.
- 80% of plans are at least 80% funded, and over half of all plans are 100% funded or better.
- To date, five plans in critical and declining status have received Pension Benefit Guaranty Corporation (PBGC) approval for $992 million in special financial assistance (SFA) under the American Rescue Plan Act of 2021 (ARP). SFA will have a significant impact on funded percentages of eligible plans in the coming years.

Current funded percentage

Figure 1 shows that the overall funding shortfall for all plans declined by about $22 billion during 2021 to a total shortfall of approximately $69 billion. The aggregate funded percentage improved from 88% to 91%. Our assumed asset portfolio earned approximately 12% for 2021.[1]

FIGURE 1: AGGREGATE FUNDED PERCENTAGE (IN $ BILLIONS)

	12/31/2020	12/31/2021	Change
Accrued benefit liability	$732	$761	$29
Market value of assets	(641)	(692)	(51)
Shortfall	$91	$69	($22)
Funded percentage	88%	91%	3%

Based on plans with complete IRS Form 5500 filings. Includes 1,220 plans as of December 31, 2020, and 1,216 plans as of December 31, 2021.

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.

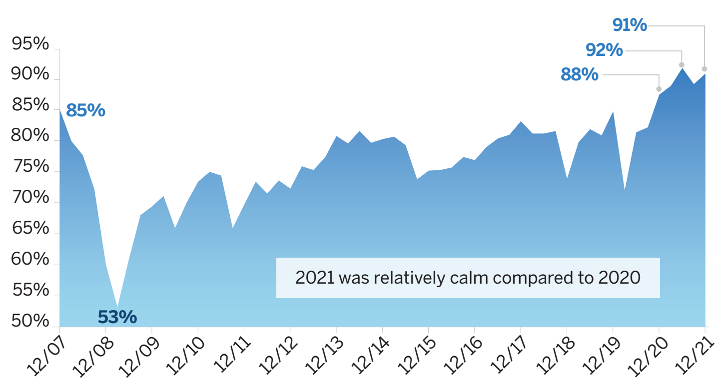
The amounts in Figure 1 do not reflect the SFA granted to five critical and declining plans, because these plans did not receive the funds by December 31, 2021. The liabilities in Figure 1 are projected using discount rates equal to each plan’s actuarial assumed return on assets. Assumed returns generally fall between 6.0% and 8.0%, with a weighted average interest rate assumption for all plans of about 6.8%, a decline from 7.0% in the prior study.

The assets in Figure 1 are based on plans’ most recently reported market value of assets, 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 2021, continuing the upward trend since March 2020, the lowest point in the financial markets since the pandemic began.

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 gains during 2021 were offset by higher liabilities due to lower assumed discount rates. Overall, the aggregate funded percentage improved to 91% by year-end, just shy of the highest point since 2007 of 92% as of June 30, 2021.

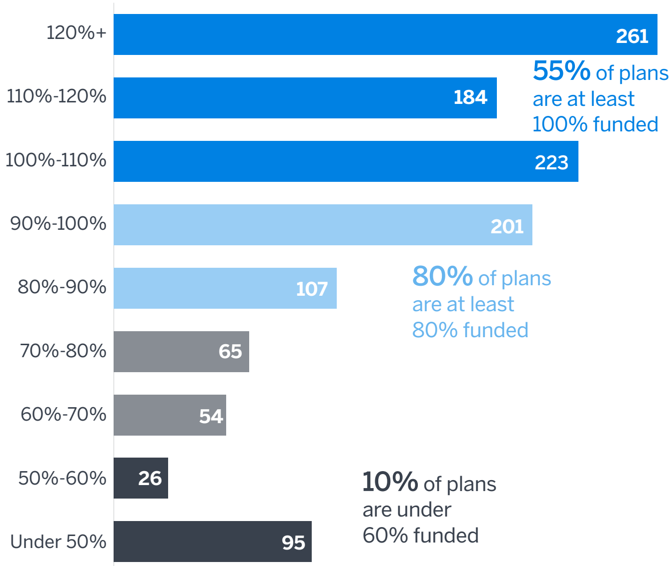
Impact of COVID-19

Some data has begun to emerge from plan filings, but it is too early to draw definitive conclusions. For example, our study analyzed 2020 contribution information for calendar year plans and found, when compared to 2019, that aggregate contributions for green and yellow zone plans dropped about 5%, while contributions for red and deep red zone plans increased 2% to 3%. Contribution income in the aggregate was surely influenced by decreased workforce levels in some industries due to COVID-19. However, unhealthy plans may have seen an increase in contributions due to rehabilitation plan requirements and/or withdrawal liability income despite the impact COVID-19 may have had on workforce levels.

We will continue to study these impacts as more data becomes available, though we expect the impact of COVID-19 to vary across plans and industries.

Figure 3 shows the distribution of funded percentages for all plans in the study as of December 31, 2021.

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



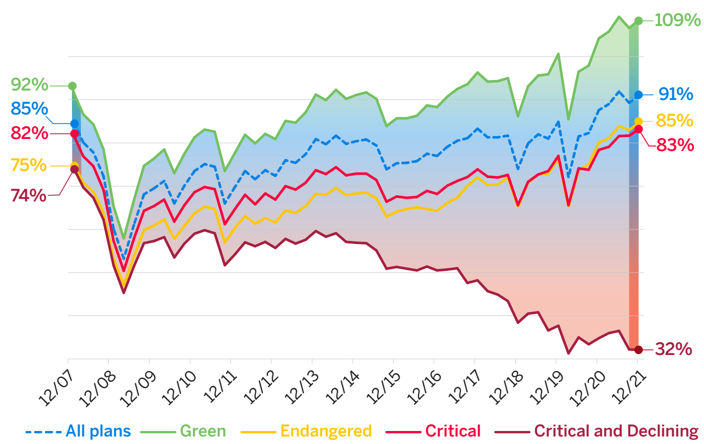
Over half of all plans (668 of 1,216) are at or above 100% funded. Eighty percent of all plans (976) are 80% funded or better. Under the Pension Protection Act (PPA), plans that are at least 80% funded generally fall in the green zone. However, these plans still face significant risks, such as those 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.

Ten percent of plans (121) are below 60% funded and may be headed toward insolvency. These plans may have exhausted all reasonable measures to adjust contributions and benefit levels to the maximum extent possible. The SFA program established by the American Rescue Plan should provide much needed relief to many of these plans. However, the application period for most eligible plans is scheduled to open on March 11, 2023, so the impact of SFA will not be seen for a few years.

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. The blue dotted line represents all plans combined.

FIGURE 4: AGGREGATE HISTORICAL FUNDED PERCENTAGE BY ZONE STATUS



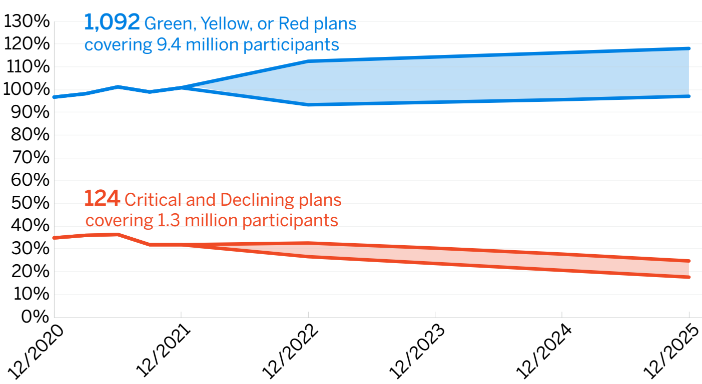
Critical and declining (C&D) plans continue to diverge from all other plans. The aggregate funded percentage of C&D plans is less than half of what it was back in 2007. These plans have not been able to recover on their own, which led to Congress passing the American Rescue Plan and establishing the SFA program.

In contrast, non-C&D plans in aggregate have recovered from the 2008 global financial crisis and are now better funded than they were in 2007. Not only are funded percentages higher now, but many of these plans are also better funded based on lower discount rates today. However, prospects for continued improvement for non-C&D plans remain highly dependent on asset performance, which is influenced by economic uncertainty related to inflation and the pandemic. Also, increasing negative cash flows put even more pressure on plans to achieve their targeted returns. Financially distressed plans feel the pressure more acutely, because excess investment returns have a smaller impact as asset values drop.

What lies ahead?

Figure 5 illustrates the impact one year's investment return can have on the projected funded status. Plans that are in critical and declining status now are shown in red, and those that are not are shown in blue. The solid lines represent the impact on the projected funded percentage if actual returns for 2022 differ from each plan's actuarial assumption by plus or minus 10%, followed by the assumed return for each year thereafter.

**FIGURE 5: PROJECTED FUNDED PERCENTAGE THROUGH 2025
C&D VERSUS NON-C&D PLANS**

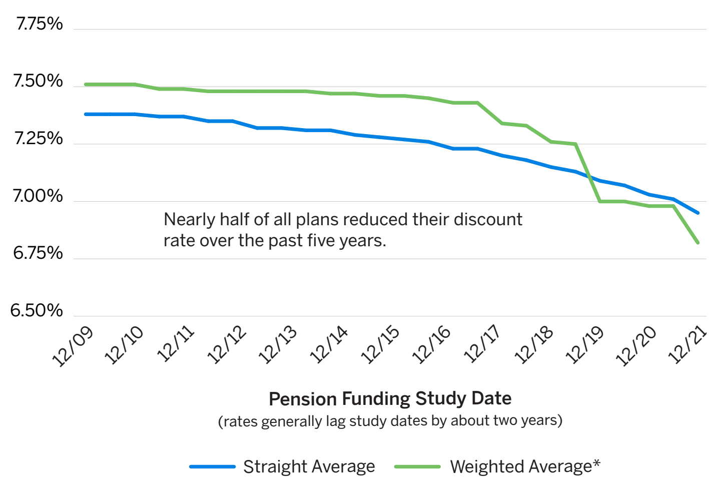


In the aggregate, non-C&D plans can withstand a year in which investments underperform by 10%, as their aggregate funded status is still expected to improve. In contrast, C&D plans continue to trend toward insolvency, even with the one-year outperformance of 10%. The projections above do not reflect any SFA for eligible plans in the coming years.

Beyond asset returns, multiemployer pension plans could be significantly impacted by the following:

- **COVID-19.** The pandemic continues to present a challenge. Emerging COVID-19 variants have created sustained headwinds to economic recovery for many industries. Future funding levels for multiemployer plans will depend on the resiliency of industries to restore and/or maintain work levels under changing conditions to avoid deteriorating contributions.
- **Special financial assistance.** SFA amounts are expected to have a meaningful impact on the funded percentage for eligible critical and C&D plans. The full impact of ARP will emerge over time, as the SFA application period for most eligible plans starts on March 11, 2023, and extends through 2025. The PBGC estimates that about $97 billion in SFA will be paid to approximately 268 critical and C&D plans through 2027. However, after SFA is received, most of these plans will likely need market outperformance to avoid insolvency in the future because SFA is intended to cover only benefit payments and expenses through the 2051 plan year. Currently the PBGC permits SFA to be invested only in fixed income securities, which could lead to projected insolvency for these plans sooner than 2051. However, final PBGC regulations on SFA are pending that could allow for other acceptable investments.
- **Declining discount rates.** Figure 6 shows a history of the average discount rate assumption[2] for all plans in our study.

FIGURE 6: AVERAGE DISCOUNT RATE



* The drop 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 & Southwest Areas Pension Plan).

Since the study's inception, the average discount rate has dropped 40 to 70 basis points and is below 7.0% today. It is important to note that, due to the lag in reporting (the latest information is as of the beginning of the 2019 or 2020 plan year for most plans), discount rates may be even lower today assuming the trend has continued.

Looking back over the past five years, nearly half of all plans have reduced their assumed discount rates. Over 350 plans reduced their rate by at least 50 basis points, and over 100 of those reduced it by at least 75 basis points.

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

2 Figure 6 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 2021 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 22.8% U.S. stocks, 8.8% international stocks, 9.2% global equity, 31.5% U.S. fixed income, 1.1% global or international fixed income, 1.0% cash, 7.8% private equity, 8.5% real estate equity, and 9.3% alternative investments. This asset portfolio is the average asset mix as of September 30, 2020, for the top 1,000 union defined benefit plans, as reported in the February 8, 2021, 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.

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