Milliman analysis shows aggregate funding levels for multiemployer plans at their highest point since 2007 following turbulent year

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Milliman's December 2020 Multiemployer Pension Funding Study reports on the estimated funded status of all U.S. multiemployer defined benefit (DB) plans as of December 31, 2020.

Key findings

- 2020 was unlike any year in recent history. Investment turbulence due to the pandemic was dramatic. However, markets managed to recover and returns generally exceeded expectations by year-end.
- The aggregate funded percentage for all multiemployer plans was 88% as of December 31, 2020, up from 85% at the end of 2019.
- The aggregate market value funded percentage of 88% is at its highest point since December 31, 2007.
- About 80% of plans are at least 80% funded, and nearly half of all plans are 100% funded or better.
- However, the aggregate funded percentage at the end of 2020 for the 124 critical and declining plans was only 34%. That is less than half of what it was for the same plans at the end of 2007 (74%).

Current funded percentage

Figure 1 shows that the overall funding shortfall for all plans declined by about $16 billion to a total shortfall of approximately $91 billion during 2020. The aggregate funded percentage improved from 85% to 88%. Our hypothetical asset portfolio earned approximately 12% for 2020.[1]

FIGURE 1: AGGREGATE FUNDED PERCENTAGE (IN $ BILLIONS)

	12/31/2019	12/31/2020	Change
Accrued benefit liability	$712	$732	$20
Market value of assets	(605)	(641)	(36)
Shortfall	$107	$91	($16)
Funded percentage	85%	88%	3%

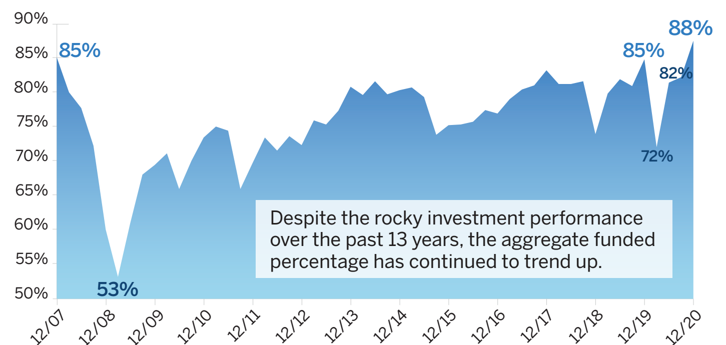
Based on plans with complete IRS Form 5500 filings. Includes 1,249 plans as of December 31, 2019, and 1,220 plans as of December 31, 2020.

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.

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



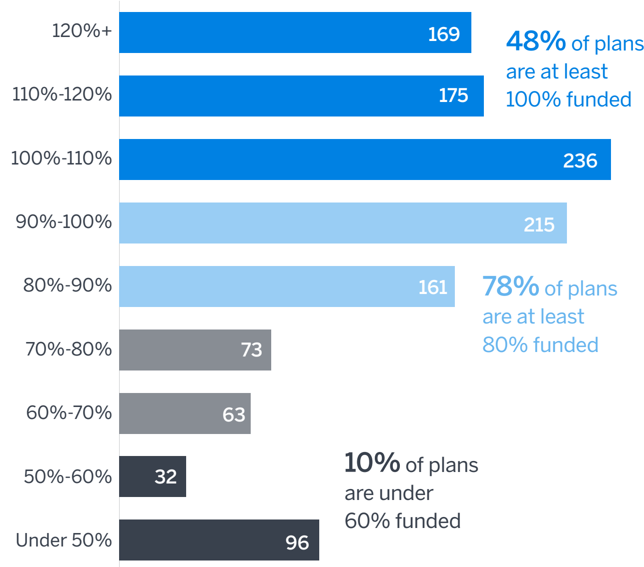
The aggregate funded percentage for multiemployer DB plans is 88%, which now exceeds the pre-2008 market crash level of 85%. The pandemic shocked the markets in the first quarter of 2020 and asset values plummeted, resulting in a drop in the aggregate funded percentage from 85% to 72%, the largest single quarterly drop in funded percentage since 2007 and its lowest point in nearly eight years. The aggregate funded percentage rebounded to 82% in the second quarter of 2020, the largest single quarterly increase in funded percentage since 2007. Continued market recovery and higher asset values allowed the aggregate funded percentage to improve to 88% by year-end.

The aggregate funded percentages during 2020 reflect the impact of COVID-19 on investment returns only. The underlying data for this study is largely based on the 2018 and 2019 plan year Form 5500 information, and therefore does not yet reflect the impact of the pandemic on plan participation and contribution levels. Some industries (such as entertainment and travel) have been decimated by shutdowns, while other industries (such as construction and

food retail) have continued with less disruption. The full impact of the pandemic on multiemployer plans will emerge in future studies as more information becomes available.

Figure 3 shows the distribution of funded percentages for all plans in the study as of December 31, 2020.

FIGURE 3: MARKET VALUE FUNDED PERCENTAGE (%) AS OF 12/31/2020



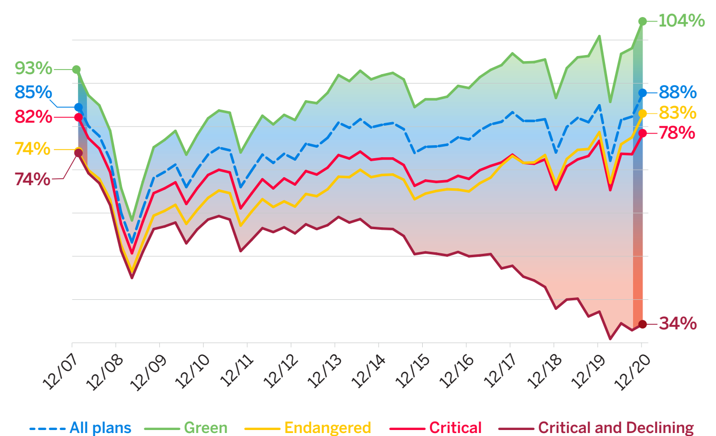
Nearly half of all plans (580) are at or above 100% funded, and another 30% of plans (376) are 80% to 100% funded. Stated another way, almost 80% of all plans are 80% funded or better. Under the Pension Protection Act (PPA), plans that are at least 80% funded generally fall in the green zone. These plans still face a lot of uncertainty, however, and trustees must remain vigilant to manage plan risks, such as those related to economic volatility and growing plan maturity, in order to remain in the green zone.

Ten percent of plans (128) are below 60% funded and may be headed toward insolvency. Many have exhausted all reasonable measures to adjust contributions and benefit levels to the maximum extent possible. Because asset values are low, these plans will need sustained (likely double-digit) investment returns each year to remain solvent and/or recover.

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

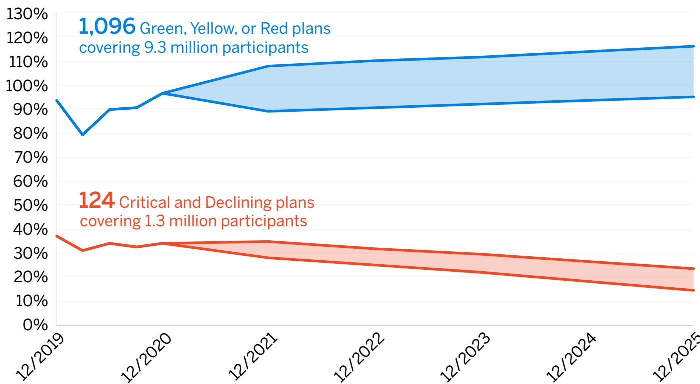


Critical and declining (C&D) plans continue on a diverging path from all other plans. The aggregate funded percentage of C&D plans is now less than half of what it was back in 2007. In contrast, the majority of non-C&D plans in aggregate have largely recovered from the 2008 global financial crisis. However, prospects for continued improvement for non-C&D plans remain tenuous due to continued market volatility, economic uncertainty related to the COVID-19 pandemic, and increasing plan maturity levels. Financially distressed plans feel the pressure even more, since 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 in C&D 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 2021 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 they are still expected to continue on an upward trend. In contrast, C&D plans would need sustained market outperformance in consecutive years in order to reverse their paths toward insolvency.

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

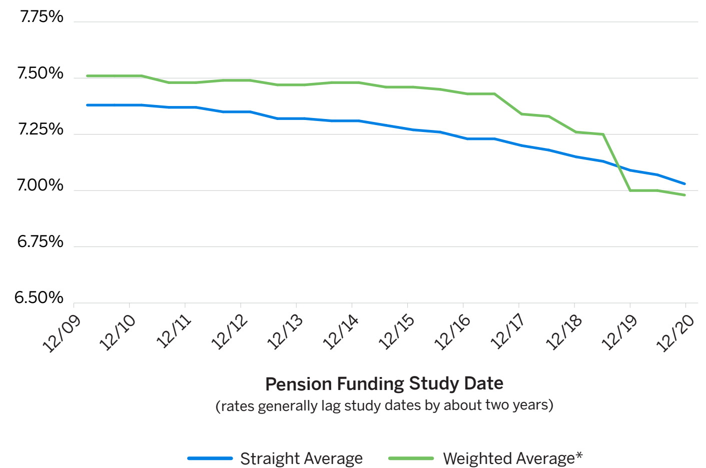
- **COVID-19.** The country is still struggling from the effects of the pandemic. Vaccines and other public health measures appear to hold the best promise for economic shutdowns to end and for a new normal to begin. The long-term effects of COVID-19 are still uncertain but it could have a long-lasting effect on plan funding.
- **Looming PBGC insolvency.** In September of last year, the Pension Benefit Guaranty Corporation (PBGC) released its 2019 fiscal year projections report, stating the agency's multiemployer program is highly likely to become insolvent in FY 2026. Without Congressional intervention, program insolvency would result in guaranteed benefits being reduced to levels that could be afforded by premium income only, a reduction of about 85% to 90%.
- **Funding relief legislation.** Bills have recently been introduced in the House and Senate to address the challenges facing the multiemployer system. Because many of the proposed solutions are vastly different, it remains to be seen what the ultimate solution may look like or when that might happen.

  In January of this year, House Democrats introduced the Emergency Pension Plan Relief Act (EPPRA), which contains many of the same provisions as the HEROES Act that was passed by the House in May 2020.

  In December 2020, Senate Republicans introduced the Chris Allen Multiemployer Pension Recapitalization and Reform Act (CAMPRRA). One of the key changes proposed is to cap the discount rate used by plans to value their past service liabilities at 6.5%, which is phased in over 15 years. We note that of the 1,220 plans included in this study, only about 210 plans (less than 20% of all plans) have a discount rate of 6.5% or less.

  Figure 6 shows a history of the average discount rate assumption[2] for all plans in our study. Since the study's inception, the average discount rate has dropped around 30-50 basis points to about 7.0%. However, due to the lag in reporting (the most recent information is as of the beginning of the 2018 or 2019 plan year for most plans), discount rates may be even lower today. Recent market outperformance, particularly in 2019 and 2020, has allowed many plans to collect on future earnings earlier than expected, suggesting lower return expectations going forward. The proposed change in CAMPRRA could further accelerate the downward trend in discount rates.

FIGURE 6: AVERAGE DISCOUNT RATE



* The drop in the weighted average discount rate over the past couple of years is primarily due to the decrease in the discount rate for one large plan (Central States, Southeast & Southwest Areas Pension Plan).

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

2 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 are shown.

ABOUT THIS STUDY

The results in this study were derived from publicly available IRS Form 5500 data filed through December 2020 for all multiemployer plans, numbering between 1,200 and 1,300. Data for a limited number of plans that clearly appeared to be erroneous was modified to ensure the results were reasonable and a sufficiently complete representation of the multiemployer universe.

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 an asset portfolio composed of 23.4% U.S. stocks, 8.9% international stocks, 8.8% global equity, 31.2% U.S. fixed income, 1.1% global or international fixed income, 0.8% cash, 7.2% private equity, 9.1% real estate equity, and 9.5% alternative investments. This asset portfolio is the average asset mix as of September 30, 2019, for the top 1,000 union defined benefit plans, as reported in the February 10, 2020, 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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