Milliman analysis shows multiemployer pension funded status improves during 2017

Despite significant improvement for noncritical plans, unhealthy plans continue to struggle

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Milliman's Spring 2018 Multiemployer Pension Funding Study reports on the estimated funded status of all U.S. multiemployer plans as of December 31, 2017.

Key findings

- The estimated 2017 calendar year investment return for our simplified portfolio was about 16%, more than double the investment return assumption of most plans.
- The aggregate market value funded percentage improved from 81% to 83% over the last six months, compared to 85% a decade ago.
- For noncritical plans, the aggregate funded percentage was 93% compared with 90% a decade ago.
- Unhealthy plans continue to struggle. The aggregate funded percentage for critical plans was 60% as of December 31, 2017. These plans had a 76% funded status ratio a decade ago.
- Healthier plans are more likely to have a lower negative cash flow and to have fewer inactive members per working active. They also allocate more contributions to funding shortfalls.

Current funded percentage

Figure 1 shows that the overall funding shortfall for all plans declined by about $15 billion for the six-month period ending December 31, 2017, while the aggregate funded percentage improved from 81% to 83%. For comparison purposes, 2007 is also shown.

FIGURE 1: AGGREGATE FUNDED PERCENTAGE (IN $ BILLIONS)

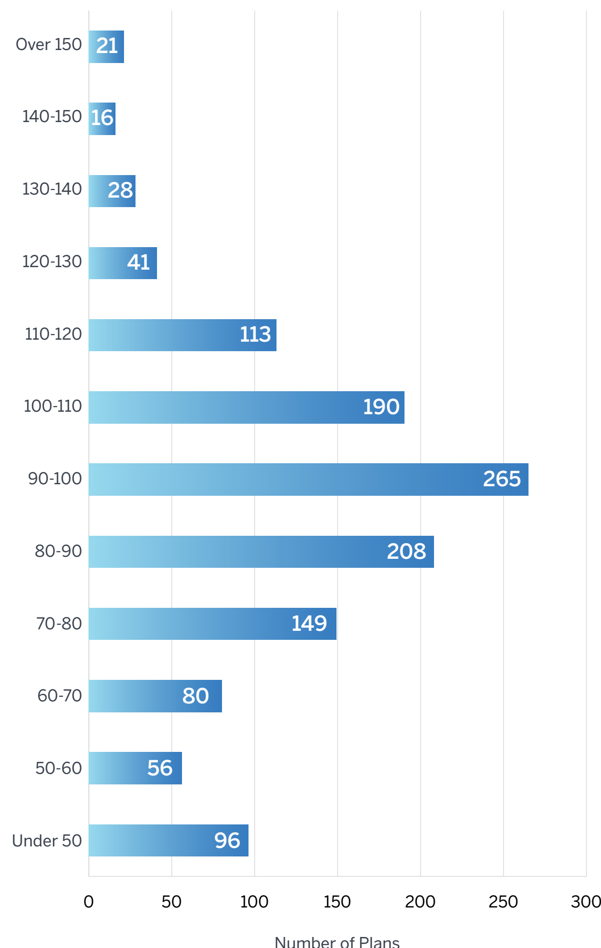
	2007 12/31	*2017* 6/30	12/31	change since 6/30
Accrued benefit liability	$492	$642	$659	$17
Market value of assets	419	517	549	32
Shortfall	**$73**	**$125**	**$110**	**($15)**
Funded percentage	**85%**	**81%**	**83%**	**2%**

Based on plans with complete IRS Form 5500 filings. Includes 1,219 plans as of December 31, 2007, 1,269 plans as of June 30, 2017, and 1,263 plans as of December 31, 2017.

The key assumption here is the discount rate used to measure liabilities, with each plan using its actuary's assumed return on assets. Assumed returns are generally between 6% and 8%, with a weighted average interest rate assumption for all plans equal to 7.34%, down from 7.43% in our prior study. The decrease was primarily driven by the change in the assumption used by the Central States, Southeast and Southwest Areas Pension Plan, which reduced its assumption from 7.50% to 6.25%.

Figure 2 is a distribution of funded percentages for all plans in the study as of December 31, 2017.

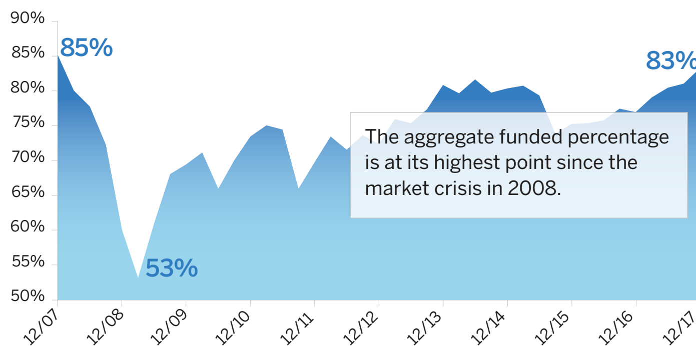
FIGURE 2: MARKET VALUE FUNDED PERCENTAGE (%)



Historical funded percentage

Figure 3 provides a historical perspective on the aggregate market value funded percentage of all multiemployer plans since the end of 2007.

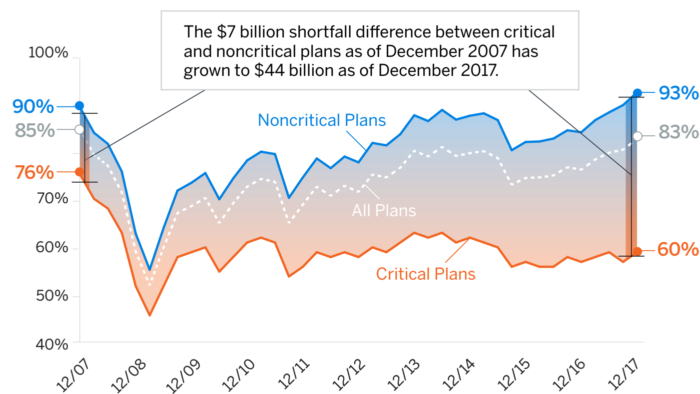
FIGURE 3: AGGREGATE HISTORICAL FUNDED PERCENTAGE MARKET VALUE BASIS



The aggregate funded percentage as of December 31, 2017, was 83%, its highest point since the global financial crisis. The improvement has been due in part to contribution increases (including withdrawal liability payments) and benefit reductions made in the last 10 years as a response to the global financial crisis. However, because plans are maturing, the primary driver continues to be investment performance. Our simplified portfolio earned nearly 16% in 2017 and an annualized return of about 10% since 2008.

Figure 4 shows the historical funded percentage of all multiemployer plans since the end of 2007 separately for plans that are critical now (red line) and plans that are not critical now (blue line).

FIGURE 4: AGGREGATE HISTORICAL FUNDED PERCENTAGE CRITICAL VERSUS NONCRITICAL PLANS.

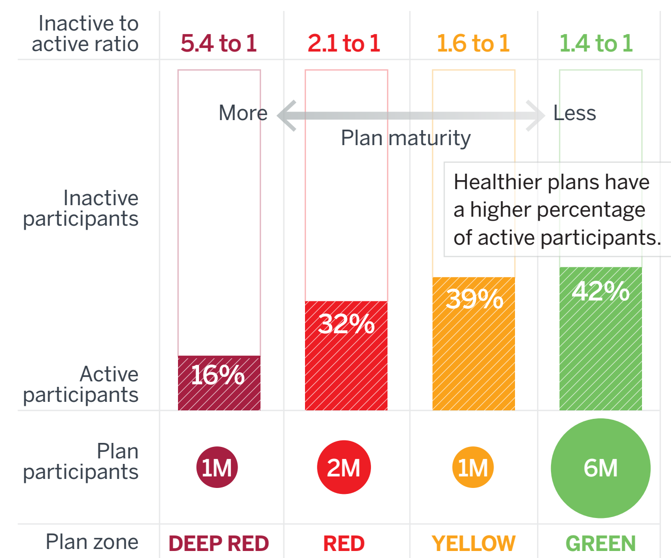


As noted in previous studies, the gap between the funded percentages of critical versus noncritical plans has widened considerably since the market crash. The aggregate funded percentage of critical plans has struggled to improve, hovering around 60% for the past eight years. In contrast, the funded percentage of noncritical plans has improved to 93% as of December 31, 2017, better than the funded percentage of these same plans 10 years ago. Put another way, noncritical plans have largely recovered from the global financial crisis while critical plans have not.

Plan maturity

Figure 5 shows the link between demographics and zone status.

FIGURE 5: DEMOGRAPHIC BREAKDOWN BY MOST RECENT ZONE STATUS



By itself, a relatively small proportion of active to inactive participants does not mean a plan is in poor financial health. In fact, benefit payments plus expenses for most multiemployer plans are in excess of contributions. However, as a plan becomes more mature, contributions become relatively small compared to the size of the plan's assets and liabilities, making it difficult to recover following a downturn. For underfunded plans in particular, this situation puts more pressure on investment performance because the net cash outflows deplete the assets available to experience good investment returns. It is notable that on average even green zone plans have less than 50% of the population composed of actives.

FIGURE 6: NET CASH FLOW AND FUNDED PERCENTAGE BY MOST RECENT ZONE STATUS

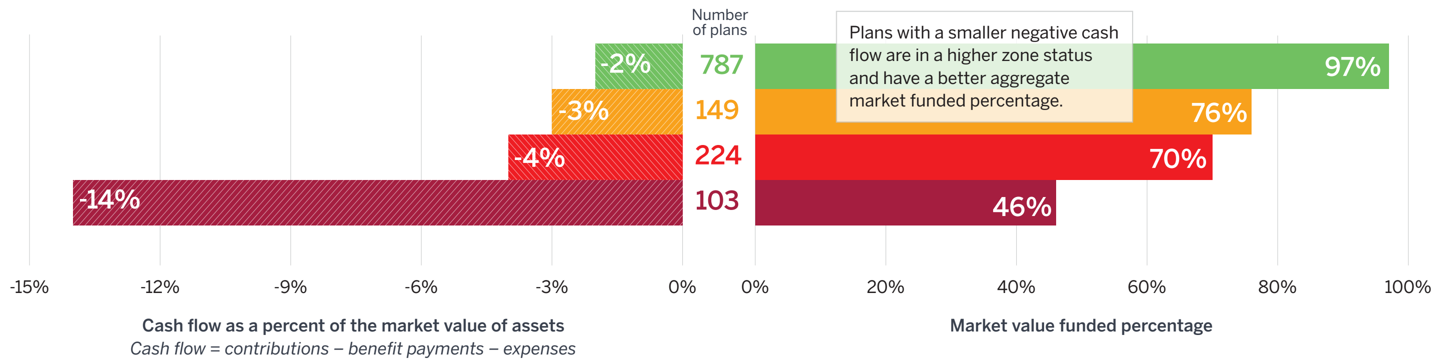


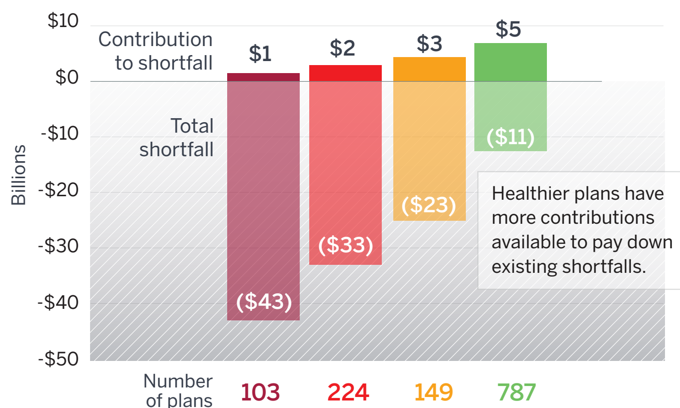
Figure 6 shows the relationship between cash flow and zone status.

Plans with smaller negative cash flows are more likely to have a healthier zone status and a higher funded percentage. Large negative cash flows combined with low funded percentages is the challenge for troubled plans. In fact, 2017 is a perfect example. The funded percentage for noncritical plans went up significantly while the funded percentage for critical plans remained relatively level. Critical plans are sinking in quicksand and not capable of benefitting from strong investment returns. In the upcoming year, deep red zone plans need to earn 14% for the market value of assets to remain level from the prior year.

Where are contributions going?

Figure 7 highlights the portion of annual contributions available to pay plan shortfalls after benefit accruals and expenses have been covered.

FIGURE 7: CONTRIBUTIONS ALLOCATED TO PLAN UNDERFUNDING BY MOST RECENT ZONE STATUS.

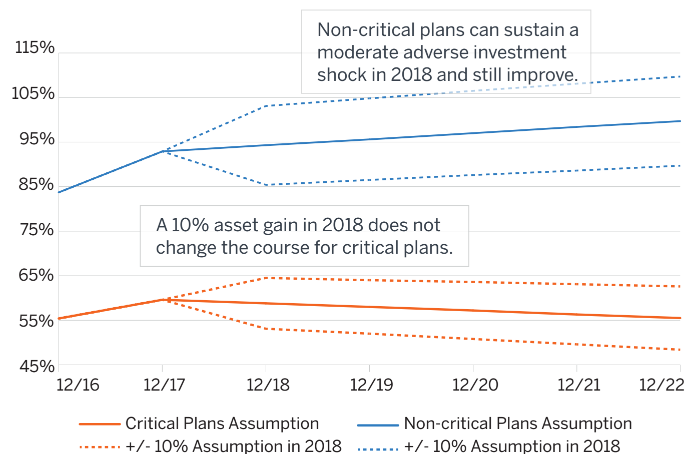


Green zone plans are in the best position to reach 100% funding. The shortfall for red zone and deep red zone plans is expected to grow unless the plans experience superior asset returns, increase contributions, and/or reduce benefits. Given the level of shortfall and the amount of contributions allocated to red and deep red zone plans, it is no surprise that legislators are exploring potential solutions.

What lies ahead?

Figure 8 illustrates the impact one year's investment return can have on the projected funded status. Plans that are critical status now are shown in red and those that are not critical now are shown in blue. The solid lines represent the projected funded percentage over the next five years, assuming asset returns are equal to each plan's actuarial assumption. The dotted lines illustrate the impact to the projected funded percentage if actual returns for 2018 differ from the assumed return by plus or minus 10%, followed by the assumed return for each year thereafter.

FIGURE 8: PROJECTED FUNDED PERCENTAGE THROUGH 2022 CRITICAL VERSUS NONCRITICAL PLANS



While the primary driver of multiemployer health continues to be asset performance, lawmakers have increased their efforts for legislative solutions to improve the funded status of all multiemployer pension plans. In addition to the benefit suspensions and partitions for critical and declining plans under the Multiemployer Pension Reform Act (MPRA) passed in late 2014, additional legislation has recently been introduced in Congress. One proposal would provide long-term, low-interest government loans to plans in critical and declining status. Another bill recently introduced allows for the creation of funding rules called the "composite plan" that could be considered for plans not in critical status and not projected to be critical in the next five years. Further, a Joint Select Committee on Solvency of Multiemployer Pension Plans has been established, composed of equal numbers of House and Senate members from each party, tasked with recommending legislation by November 30, 2018, designed to improve the solvency of multiemployer pension plans and the Pension Benefit Guaranty Corporation (PBGC).

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ABOUT THIS STUDY

The results in this study were derived from publicly available Internal Revenue Service (IRS) Form 5500 data as of February 2018 for all multiemployer plans, numbering between 1,200 and 1,300, depending on the measurement date used. 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 a simplified portfolio composed of 45% U.S. equities, 20% international equities, and 35% U.S. fixed income investments.

Significant changes to the data and assumptions could lead to much 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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