

Milliman analysis: Funded status declines in September

The Milliman 100 PFI funded ratio slides down to 84.5% due to 0.74% investment loss in September

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The funded status of the 100 largest corporate defined benefit pension plans decreased by \$8 billion during September as measured by the Milliman 100 Pension Funding Index (PFI). The deficit rose to \$302 billion due to investment losses for the month. Pension liabilities declined due to an increase in the benchmark corporate bond interest rates used to value those liabilities, and this helped to limit the funded status decline. As of September 30, the funded ratio declined to 84.5%, down from 85.0% at the end of August.

September's -0.74% investment return lowered the Milliman 100 PFI asset value by \$17 billion, to \$1.653 trillion. By comparison, the 2020 Milliman Pension Funding Study reported that the monthly median expected investment return during 2019 was 0.53% (6.5% annualized). The full results of the annual 2020 study can be found at [milliman.com/pfs](https://www.milliman.com/pfs). September's asset decline reversed the upward trend of above-average returns observed over the past five months.

HIGHLIGHTS

	\$ BILLION			
	MV	PBO	FUNDED STATUS	FUNDED PERCENTAGE
AUGUST	1,671	1,964	(294)	85.0%
SEPTEMBER	1,653	1,955	(302)	84.5%
MONTHLY CHANGE	(17)	(9)	(8)	-0.5%
YTD CHANGE	+30	+149	(119)	-5.3%

Note: Numbers may not add up precisely due to rounding

The projected benefit obligation (PBO) fell by \$9 billion during September, decreasing the Milliman 100 PFI value to \$1.955 trillion from \$1.964 trillion at the end of August. The change resulted from an increase of three basis points in the monthly discount rate, to 2.57% for September from 2.54% in August. The discount rate in July was the all-time lowest discount rate observed in the 20-year history of the Milliman 100 PFI, and since then, we have seen two consecutive months of rate increases.

FIGURE 1: MILLIMAN 100 PENSION FUNDING INDEX — PENSION SURPLUS/DEFICIT

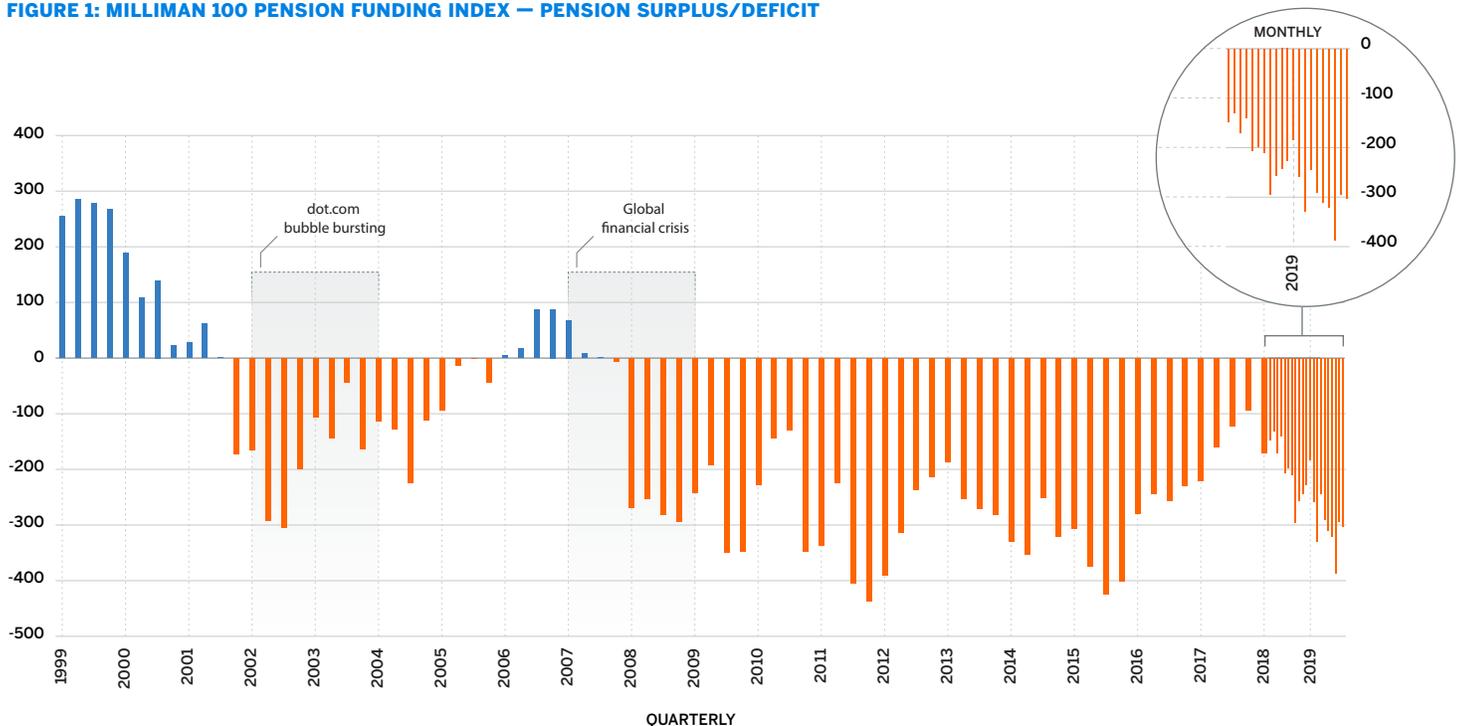
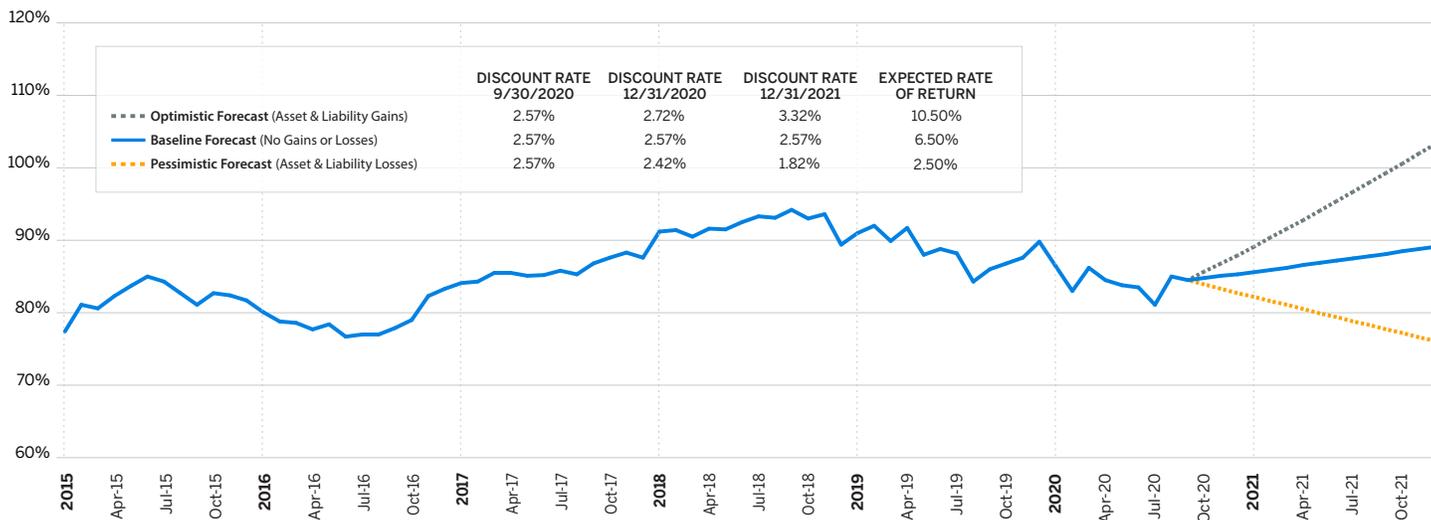


FIGURE 2: MILLIMAN 100 PENSION FUNDING INDEX — PENSION FUNDED RATIO

Third quarter 2020 summary

During the quarter ended September 30, 2020, the funded status deficit improved by \$18 billion. While the year's lowest discount rate to date, at 2.26%, was in July, the large asset return in that month was equally noteworthy. The discount rate increase and above-average asset return in August resulted in the largest monthly funded status gain for the year. In September, asset returns faltered, resulting in a small setback in an otherwise strong quarter for the PFI funded status. While plan liabilities were up \$17 billion during the quarter, plan assets were up by \$35 billion. The funded ratio of the Milliman 100 companies improved to 84.5% at the end of September from 83.5% at the end of June.

Over the last 12 months (October 2019–September 2020), the cumulative asset return for these pensions has been 8.15%, yet the Milliman 100 PFI funded status deficit has grown by \$45 billion. The primary reason for the worsening of the funded status has been discount rate declines over the past 12 months. Discount rates have fallen from 3.09% as of September 30, 2019, to 2.57% a year later. The funded ratio of the Milliman 100 companies has decreased over the past 12 months to 84.5% from 86.0%.

ABOUT THE MILLIMAN 100 MONTHLY PENSION FUNDING INDEX

For the past 20 years, Milliman has conducted an annual study of the 100 largest defined benefit pension plans sponsored by U.S. public companies. The Milliman 100 Pension Funding Index projects the funded status for pension plans included in our study, reflecting the impact of market returns and interest rate changes on pension funded status, utilizing the actual reported asset values, liabilities, and asset allocations of the companies' pension plans.

The results of the Milliman 100 Pension Funding Index were based on the actual pension plan accounting information disclosed in the footnotes to the companies' annual reports for the 2019 fiscal year and for previous fiscal years. This pension plan accounting disclosure information was summarized as part of the Milliman 2020 Pension Funding Study, which was published on April 28, 2020. In addition to providing the financial information on the funded status of U.S. qualified pension plans, the footnotes may also include figures for the companies' nonqualified and foreign plans, both of which are often unfunded or subject to different funding standards than those for U.S. qualified pension plans. They do not represent the funded status of the companies' U.S. qualified pension plans under ERISA.

2020-2021 Projections

If the Milliman 100 PFI companies were to achieve the expected 6.5% median asset return (as per the 2020 Milliman Pension Funding Study), and if the current discount rate of 2.57% were maintained during years 2020 through 2021, we forecast that the funded status of the surveyed plans would increase. This would result in a projected pension deficit of \$286 billion (funded ratio of 85.3%) by the end of 2020 and a projected pension deficit of \$211 billion (funded ratio of 89.1%) by the end of 2021. For purposes of this forecast, we have assumed 2020 and 2021 aggregate annual contributions of \$40 billion and \$50 billion, respectively.

Under an optimistic forecast with rising interest rates (reaching 2.72% by the end of 2020 and 3.32% by the end of 2021) and asset gains (10.5% annual returns), the funded ratio would climb to 88% by the end of 2020 and 103% by the end of 2021. Under a pessimistic forecast with similar interest rate and asset movements (2.42% discount rate at the end of 2020 and 1.82% by the end of 2021 and 2.5% annual returns), the funded ratio would decline to 83% by the end of 2020 and 76% by the end of 2021.

MILLIMAN 100 PENSION FUNDING INDEX — SEPTEMBER 2020 (ALL DOLLAR AMOUNTS IN MILLIONS)

END OF MONTH	YEAR	MARKET VALUE OF ASSETS	PROJECTED BENEFIT OBLIGATION (PBO)	FUNDED STATUS	CHANGE IN FUNDED STATUS	FUNDED RATIO
SEPTEMBER	2019	1,583,143	1,839,978	(256,835)	N/A	86.0%
OCTOBER	2019	1,596,825	1,840,012	(243,187)	13,648	86.8%
NOVEMBER	2019	1,608,203	1,835,329	(227,126)	16,061	87.6%
DECEMBER	2019	1,622,903	1,806,420	(183,517)	43,609	89.8%
JANUARY	2020	1,634,276	1,892,068	(257,792)	(74,275)	86.4%
FEBRUARY	2020	1,605,039	1,934,508	(329,469)	(71,677)	83.0%
MARCH	2020	1,513,944	1,757,304	(243,360)	86,109	86.2%
APRIL	2020	1,579,719	1,869,878	(290,159)	(46,799)	84.5%
MAY	2020	1,601,435	1,911,178	(309,743)	(19,584)	83.8%
JUNE	2020	1,618,245	1,938,415	(320,170)	(10,427)	83.5%
JULY	2020	1,660,381	2,047,070	(386,689)	(66,519)	81.1%
AUGUST	2020	1,670,532	1,964,217	(293,685)	93,004	85.0%
SEPTEMBER	2020	1,653,238	1,955,391	(302,153)	(8,468)	84.5%

PENSION ASSET AND LIABILITY RETURNS

END OF MONTH	YEAR	ASSET RETURNS		DISCOUNT RATE	LIABILITY RETURNS	
		MONTHLY	YEAR-TO-DATE		MONTHLY	YEAR-TO-DATE
SEPTEMBER	2019	0.25%	12.04%	3.09%	-1.66%	18.19%
OCTOBER	2019	1.10%	13.27%	3.08%	0.38%	18.63%
NOVEMBER	2019	0.95%	14.35%	3.09%	0.12%	18.77%
DECEMBER	2019	1.15%	15.66%	3.20%	-1.20%	17.35%
JANUARY	2020	1.01%	1.01%	2.85%	5.07%	5.07%
FEBRUARY	2020	-1.48%	-0.49%	2.69%	2.55%	7.75%
MARCH	2020	-5.37%	-5.83%	3.39%	-8.83%	-1.77%
APRIL	2020	4.68%	-1.42%	2.92%	6.74%	4.86%
MAY	2020	1.69%	0.25%	2.76%	2.52%	7.50%
JUNE	2020	1.36%	1.62%	2.65%	1.73%	9.36%
JULY	2020	2.92%	4.58%	2.26%	5.89%	15.80%
AUGUST	2020	0.91%	5.54%	2.54%	-3.76%	11.45%
SEPTEMBER	2020	-0.74%	4.76%	2.57%	-0.15%	11.27%



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