# Milliman analysis: Funded status improves by \$93 billion in August

The Milliman 100 PFI funded ratio soars to 85.1% from 81.1% in one month

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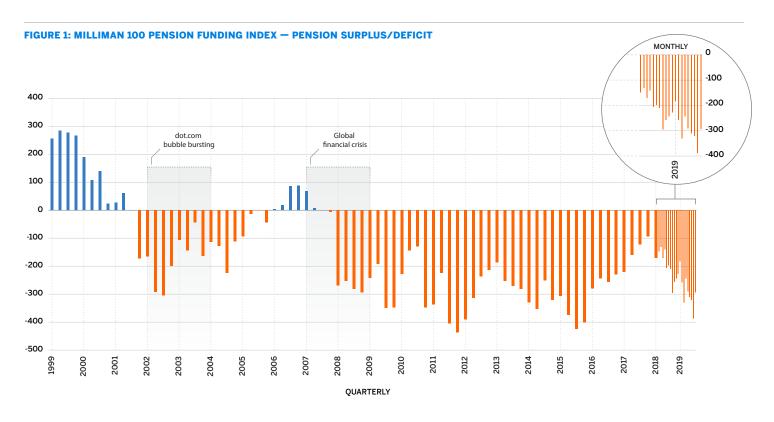
The funded status of the 100 largest corporate defined benefit pension plans increased by \$93 billion during August as measured by the Milliman 100 Pension Funding Index (PFI). The deficit fell to \$293 billion based on liability declines combined with asset gains for the month. Pension liabilities declined due to a 12.4% increase in the benchmark corporate bond interest rates (to 2.54% from 2.26%) used to value pension liabilities. As of August 31, the funded ratio rose to 85.1%, up from 81.1% at the end of July. This reverses the declines experienced during the previous four months. August's \$93 billion funded status improvement was the second-largest monthly increase in the 20-year history of the Milliman 100 PFI. Only July 2003's monthly increase of \$203.8 billion was higher.

August's 0.94% investment gain raised the Milliman 100 PFI asset value by \$11 billion to \$1.671 trillion from \$1.660 trillion at the end of July. These pensions have gained approximately 5.6% since December 31, 2019. By comparison, the 2020 Milliman Pension

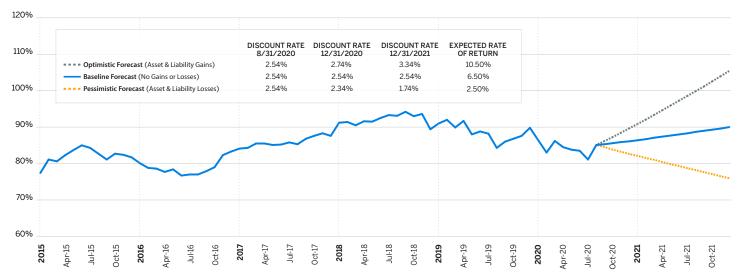
HIGHLIGHTS									
		\$ BILLION							
	MV	РВО	FUNDED STATUS	FUNDED PERCENTAGE					
JULY	1,660	2,047	(387)	81.1%					
AUGUST	1,671	1,964	(293)	85.1%					
MONTHLY CHANGE	+11	(83)	+93	4.0%					
YTD CHANGE	+48	+158	(110)	-4.7%					

Note: Numbers may not add up precisely due to rounding

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. August's asset return marks five consecutive months of above-average returns, which more than offset losses experienced during the first quarter of 2020.







#### FIGURE 2: MILLIMAN 100 PENSION FUNDING INDEX - PENSION FUNDED RATIO

The projected benefit obligation (PBO) fell during August, decreasing the Milliman 100 PFI value to \$1.964 trillion. This brings the PBO of the Milliman 100 PFI back under the \$2 trillion threshold; in July, the PBO for these plans crossed that threshold for the first time. This month's PBO improvement resulted from an increase of 28 basis points in the monthly discount rate to 2.54% for August, from 2.26% in July. The discount rate in July was the all-time lowest discount rate observed in the 20-year history of the Milliman 100 PFI. The discount rate has exceeded 3.00% only once in 2020, when it was 3.39% in March. For comparison, the last time the discount rate was over 4.00% was in February 2019, when it settled at 4.08%.

Over the last 12 months (September 2019 – August 2020), the cumulative asset return for these pensions has been 9.25% but the Milliman 100 PFI funded status deficit has only improved by \$2 billion. The primary reason for the meager improvement in the funded status deficit has been discount rate declines over the past 12 months. Discount rates have fallen from 2.95% as of August 31, 2019 to 2.54% a year later. The funded ratio of the Milliman 100 companies has marginally increased over the past 12 months to 85.1% from 84.3%.

### 2020-2021 Projections

If the Milliman 100 PFI companies were to achieve the expected 6.5% median asset return (as per the 2020 pension funding study), and if the current discount rate of 2.54% 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 \$271 billion (funded ratio of 86.1%) by the end of 2020 and a projected pension deficit of \$105 billion (funded ratio of 90.0%) 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 2.74% by the end of 2020 and 3.34% by the end of 2021) and asset gains (10.5% annual returns), the funded ratio would climb to 90% by the end of 2020 and 105% by the end of 2021. Under a pessimistic forecast with similar interest rate and asset movements (2.34% discount rate at the end of 2020 and 1.74% 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.

#### **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.

#### MILLIMAN 100 PENSION FUNDING INDEX - AUGUST 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
AUGUST	2019	1,582,941	1,878,014	(295,073)	N/A	84.3%
SEPTEMBER	2019	1,583,143	1,839,978	(256,835)	38,238	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	1,601,406	1,911,178	(309,772)	(19,613)	83.8%
JUNE	2020	1,618,216	1,938,415	(320,199)	(10,427)	83.5%
JULY	2020	1,660,206	2,047,070	(386,864)	(66,665)	81.1%
AUGUST	2020	1,670,849	1,964,217	(293,368)	93,496	85.1%

#### PENSION ASSET AND LIABILITY RETURNS

		ASSET RETURNS			LIABILITY RETURNS	
END OF MONTH	YEAR	MONTHLY	YEAR-TO-DATE	DISCOUNT RATE	MONTHLY	YEAR-TO-DATE
AUGUST	2019	1.26%	11.76%	2.95%	6.11%	20.18%
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%	1.61%	2.65%	1.73%	9.36%
JULY	2020	2.91%	4.57%	2.26%	5.89%	15.80%
AUGUST	2020	0.94%	5.56%	2.54%	-3.76%	11.45%

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