# Milliman analysis: All-time low discount rate in August increases funded status deficit by \$87 billion

The Milliman 100 PFI funded ratio decreases to 83.8%

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The funded status deficit of the 100 largest corporate defined benefit pension plans increased by \$87 billion during August as measured by the Milliman 100 Pension Funding Index (PFI). The funded status deficit ballooned to \$306 billion from \$219 billion at the end of July due to a decrease in the benchmark corporate bond interest rates used to value pension liabilities. The funded status decline was partially offset by strong investment returns particularly due to fixed income asset holdings during August. As of August 31, the funded ratio fell to 83.8%, down from 87.7% at the end of July.

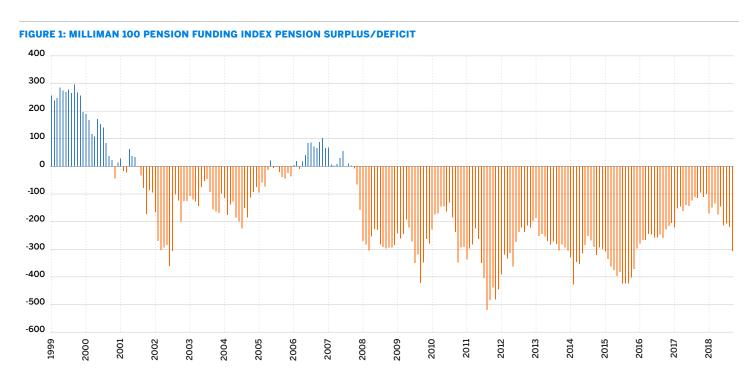
The projected benefit obligation (PBO) increased by a whopping \$104 billion during August, raising the Milliman 100 PFI liability value to \$1.887 trillion from \$1.783 trillion at the end of July. Liabilities grew thanks to a decrease of 42 basis points in the monthly discount rate to 2.95% for August, from 3.37% in July. August's discount rate is the lowest discount recorded in the 19-year history of the Milliman 100 PFI. The Milliman 100 PFI has never previously reported a discount rate below 3.00%.

HIGHLIGHTS				
	\$ BILLION			
	MV	РВО	FUNDED STATUS	FUNDED PERCENTAGE
JULY	1,564	1,783	(219)	87.7%
AUGUST	1,581	1,887	(306)	83.8%
MONTHLY CHANGE	+17	+104	(87)	-3.9%
YTD CHANGE	+136	+272	(136)	-5.6%

Note: Numbers may not add up precisely due to rounding

A monthly increase of at least \$100 billion in the PBO is the first since a \$117 billion increase for January 2015.

August's 1.33% investment return raised the Milliman 100 PFI asset value by \$17 billion to \$1.581 trillion. By comparison, the 2019 Milliman Pension Funding Study reported that the monthly median expected investment return during 2018 was 0.53% (6.6% annualized).



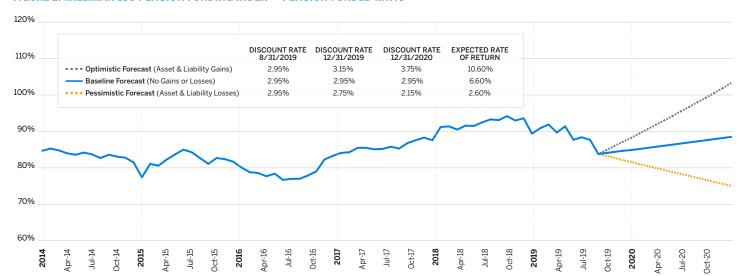


FIGURE 2: MILLIMAN 100 PENSION FUNDING INDEX — PENSION FUNDED RATIO

Over the last 12 months (September 2018 – August 2019), the cumulative asset return for these pensions has been 6.76% but the Milliman 100 PFI funded status deficit has worsened by \$192 billion. Discount rates have fallen by 110 basis points over the last 12 months moving from 4.05% as of August 31, 2018 to 2.95% a year later. The funded ratio of the Milliman 100 companies has plummeted over the past 12 months to 83.8% from 93.1%.

### 2019-2020 Projections

If the Milliman 100 PFI companies were to achieve the expected 6.6% median asset return (as per the 2019 pension funding study), and if the current discount rate of 2.95% were maintained during years 2019 through 2020, we forecast that the funded status of the surveyed plans would increase. This would result in a projected pension deficit of \$283 billion (funded ratio of 84.9%) by the end of 2019 and a projected pension deficit of \$215 billion (funded ratio of 88.5%) by the end of 2020. For purposes of this forecast, we have assumed 2019 and 2020 aggregate annual contributions of \$50 billion.

Under an optimistic forecast with rising interest rates (reaching 3.15% by the end of 2019 and 3.75% by the end of 2020) and asset gains (10.6% annual returns), the funded ratio would climb to 88% by the end of 2019 and 103% by the end of 2020. Under a pessimistic forecast with similar interest rate and asset movements (2.75% discount rate at the end of 2019 and 2.15% by the end of 2020 and 2.6% annual returns), the funded ratio would decline to 82% by the end of 2019 and 75% by the end of 2020.

## About the Milliman 100 Monthly Pension Funding Index

For the past 19 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 2018 fiscal year and for previous fiscal years. This pension plan accounting disclosure information was summarized as part of the Milliman 2019 Pension Funding Study, which was published on April 16, 2019. 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.

#### CONTACT

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#### MILLIMAN 100 PENSION FUNDING INDEX — AUGUST 2019 (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	2018	1,536,024	1,649,661	(113,637)	N/A	93.1%
SEPTEMBER	2018	1,527,545	1,621,478	(93,933)	19,704	94.2%
OCTOBER	2018	1,466,721	1,577,044	(110,323)	(16,390)	93.0%
NOVEMBER	2018	1,474,576	1,574,756	(100,180)	10,143	93.6%
DECEMBER	2018	1,444,672	1,615,128	(170,456)	(70,276)	89.4%
JANUARY	2019	1,491,598	1,640,656	(149,058)	21,398	90.9%
FEBRUARY	2019	1,502,098	1,635,088	(132,990)	16,068	91.9%
MARCH	2019	1,523,066	1,697,476	(174,410)	(41,420)	89.7%
APRIL	2019	1,536,084	1,681,005	(144,921)	29,489	91.4%
MAY	2019	1,517,490	1,730,603	(213,113)	(68,192)	87.7%
JUNE	2019	1,562,002	1,767,860	(205,858)	7,255	88.4%
JULY	2019	1,564,401	1,783,382	(218,981)	(13,123)	87.7%
AUGUST	2019	1,581,128	1,886,605	(305,477)	(86,496)	83.8%

#### PENSION ASSET AND LIABILITY RETURNS

END OF MONTH YE		ASSET RETURNS			LIABILITY RETURNS	
	YEAR	MONTHLY	YEAR-TO-DATE	DISCOUNT RATE	MONTHLY	YEAR-TO-DATE
AUGUST	2018	0.83%	1.68%	4.05%	1.11%	-3.88%
SEPTEMBER	2018	-0.19%	1.48%	4.18%	-1.28%	-5.10%
OCTOBER	2018	-3.63%	-2.20%	4.40%	-2.30%	-7.28%
NOVEMBER	2018	0.91%	-1.30%	4.41%	0.31%	-6.99%
DECEMBER	2018	-1.66%	-2.94%	4.19%	3.01%	-4.19%
JANUARY	2019	3.54%	3.54%	4.06%	1.97%	1.97%
FEBRUARY	2019	0.98%	4.56%	4.08%	0.05%	2.02%
MARCH	2019	1.67%	6.30%	3.78%	4.19%	6.30%
APRIL	2019	1.13%	7.50%	3.85%	-0.60%	5.66%
MAY	2019	-0.94%	6.49%	3.61%	3.31%	9.16%
JUNE	2019	3.21%	9.91%	3.45%	2.50%	11.89%
JULY	2019	0.42%	10.37%	3.37%	1.22%	13.26%
AUGUST	2019	1.33%	11.84%	2.95%	6.11%	20.18%

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