

Milliman analysis: Funded status improves in April by \$29 billion

The Milliman 100 PFI funded ratio increases to 91.4%, discount rates rise, solid investment performance continues

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The funded status of the 100 largest corporate defined benefit pension plans increased by \$29 billion during April as measured by the Milliman 100 Pension Funding Index (PFI). The deficit fell to \$145 billion from \$174 billion at the end of March due to an increase in the benchmark corporate bond interest rates used to value pension liabilities. The funded status improvement was also supported by investment gains during April. As of April 30, the funded ratio rose to 91.4%, up from 89.7% at the end of March.

April's robust 1.09% investment gain increased Milliman 100 PFI asset values by \$13 billion to \$1.536 trillion at the end of April. By comparison, the 2019 Milliman Pension Funding Study reported that the monthly median expected investment return during 2018 was 0.53% (6.6% annualized). The full results of the annual 2019 study can be found at milliman.com/pfs.

The Milliman 100 PFI projected benefit obligation (PBO) decreased by \$16 billion during April to \$1.681 trillion. The change resulted from an increase of seven basis points in the monthly discount rate to 3.85% for April from 3.78% in March.

HIGHLIGHTS

	\$ BILLION			
	MV	PBO	FUNDED STATUS	FUNDED PERCENTAGE
MARCH	1,523	1,697	(174)	89.7%
APRIL	1,536	1,681	(145)	91.4%
MONTHLY CHANGE	+13	(16)	+29	1.7%
YTD CHANGE	+91	+66	+25	2.0%

Note: Numbers may not add up precisely due to rounding

Over the last 12 months (May 2018 – April 2019), the cumulative asset gain for these pensions has been 5.19% and the Milliman 100 PFI funded status deficit has grown by \$5 billion. The primary reason for the worsening of the funded status deficit has been a decline in discount rates over the past 12 months. During that period, discount rates decreased, moving from 4.03% as of April 30, 2018, to 3.85% a year later. The funded ratio of the Milliman 100 companies has slightly decreased over the past 12 months to 91.4% from 91.6%.

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

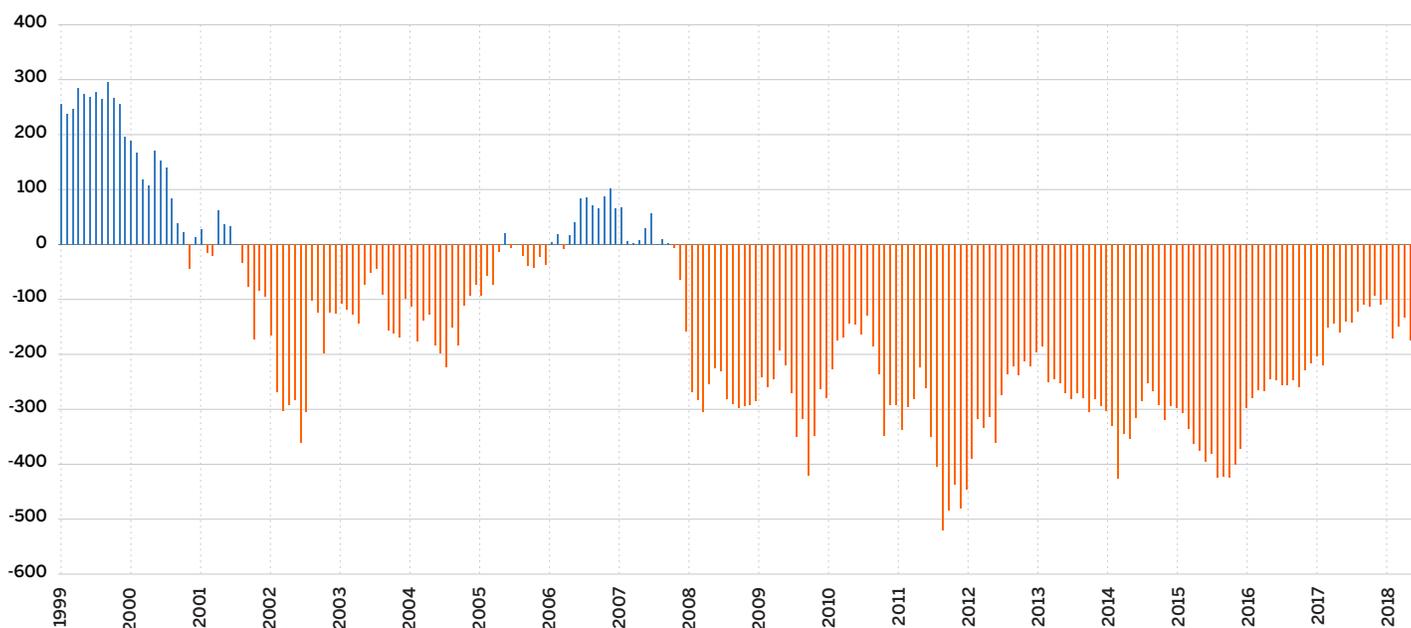
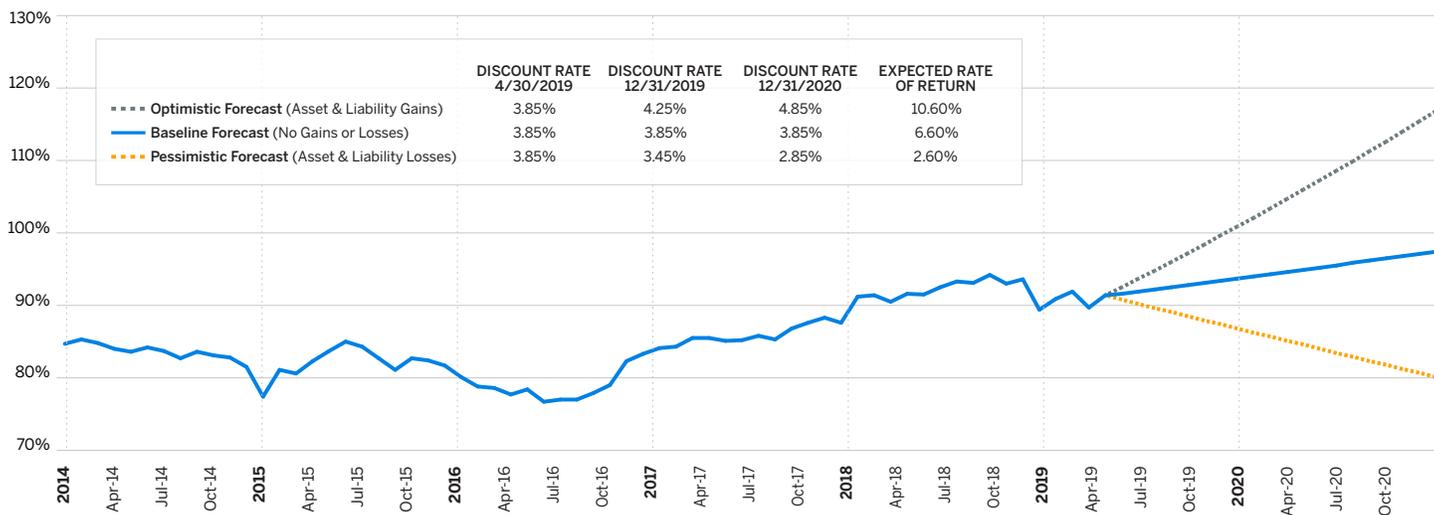


FIGURE 2: MILLIMAN 100 PENSION FUNDING INDEX — PENSION FUNDED RATIO



PFI Reconciliation

This May PFI publication reflects the annual update of the Milliman 100 companies and their 2018 financial figures included in the Milliman 2019 Pension Funding Study. The revised December 31, 2018, pension obligation was \$11 billion lower than we previously projected after accounting for lump-sum window settlements and pension risk transfers (de-risking activities) and updated mortality assumptions as of year-end 2018.

The actual PFI asset value was \$14 billion lower than projected due to actual investment losses higher than anticipated experienced during 2018. Higher than expected plan sponsor contributions during 2018 helped offset the declining plan asset values.

The net adjustments introduced by the Milliman 2019 Pension Funding Study led to a small funded status drop of \$3 billion and a corresponding decrease to the funded ratio, bringing it to 89.4% from 89.7% as of December 31, 2018.

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 3.85% 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 \$105 billion (funded ratio of 93.7%) by the end of 2019 and a projected pension deficit of \$43 billion (funded ratio of 97.4%) 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 4.25% by the end of 2019 and 4.85% by the end of 2020) and asset gains (10.6% annual returns), the funded ratio would climb to 101% by the end of 2019 and 117% by the end of 2020.

Under a pessimistic forecast with similar interest rate and asset movements (3.45% discount rate at the end of 2019 and 2.85% by the end of 2020 and 2.6% annual returns), the funded ratio would decline to 87% by the end of 2019 and 80% 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 — APRIL 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
APRIL	2018	1,519,188	1,659,323	(140,135)	N/A	91.6%
MAY	2018	1,525,102	1,667,428	(142,326)	(2,191)	91.5%
JUNE	2018	1,516,129	1,638,647	(122,518)	19,808	92.5%
JULY	2018	1,528,868	1,638,479	(109,611)	12,907	93.3%
AUGUST	2018	1,536,024	1,649,661	(113,637)	(4,026)	93.1%
SEPTEMBER	2018	1,527,545	1,621,478	(93,933)	19,704	94.2%
OCTOBER	2018	1,466,720	1,577,044	(110,324)	(16,391)	93.0%
NOVEMBER	2018	1,474,575	1,574,756	(100,181)	10,143	93.6%
DECEMBER	2018	1,444,671	1,615,128	(170,457)	(70,276)	89.4%
JANUARY	2019	1,491,597	1,640,656	(149,059)	21,398	90.9%
FEBRUARY	2019	1,502,125	1,635,088	(132,963)	16,096	91.9%
MARCH	2019	1,523,209	1,697,476	(174,267)	(41,304)	89.7%
APRIL	2019	1,535,620	1,681,005	(145,385)	28,882	91.4%

PENSION ASSET AND LIABILITY RETURNS

END OF MONTH	YEAR	ASSET RETURNS			LIABILITY RETURNS	
		MONTHLY	YEAR-TO-DATE	DISCOUNT RATE	MONTHLY	YEAR-TO-DATE
APRIL	2018	-0.06%	-0.89%	4.03%	-1.16%	-4.96%
MAY	2018	0.76%	-0.14%	3.99%	0.92%	-4.09%
JUNE	2018	-0.22%	-0.37%	4.12%	-1.30%	-5.34%
JULY	2018	1.21%	0.84%	4.11%	0.42%	-4.94%
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	1.68%	6.31%	3.78%	4.19%	6.30%
APRIL	2019	1.09%	7.47%	3.85%	-0.60%	5.66%