Milliman analysis: Funded status deficit grew to \$299 billion at end of April

The Milliman 100 PFI funded ratio decreased to 84.0% as discount rates fell below 3%, nearing all-time lows

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The funded status of the 100 largest corporate defined benefit pension plans worsened by \$58 billion during April as measured by the Milliman 100 Pension Funding Index (PFI). The deficit swelled to \$299 billion, from \$241 billion at the end of March, 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 gains during April. As of April 30, the funded ratio fell to 84.0%, down from 86.3% at the end of March.

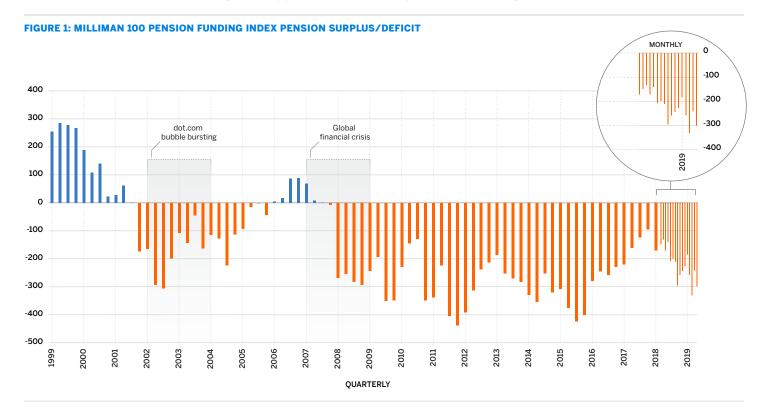
April's robust 3.93% investment gain increased Milliman 100 PFI asset values by \$55 billion, to \$1.571 trillion at the end of April. By comparison, the 2020 Milliman Pension Funding Study reported that the monthly median expected investment return during 2019 was 0.53% (6.5% annualized). The full results of the annual 2020 study can be found at www.milliman.com/pfs.

The Milliman 100 PFI projected benefit obligation (PBO) increased by \$113 billion during April to \$1.870 trillion. The change resulted from a sharp decrease of 47 basis points in the monthly discount rate, to 2.92% for April from 3.39% in March.

HIGHLIGHTS	\$ BILLION			
	MV	РВО	FUNDED STATUS	FUNDED PERCENTAGE
MARCH	1,517	1,757	(241)	86.3%
APRIL	1,571	1,870	(299)	84.0%
MONTHLY CHANGE	+55	+113	(58)	-2.3%
YTD CHANGE	(52)	+63	(115)	-5.8%

Note: Numbers may not add up precisely due to rounding

Over the last 12 months (May 2019 – April 2020), the cumulative asset gain for these pensions has been 5.49% and the Milliman 100 PFI funded status deficit has grown by \$159 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 3.85% as of April 30, 2019, to 2.92% as of April 30, 2020. The funded ratio of the Milliman 100 companies has decreased significantly over the past 12 months, to 84.0% from 91.7%.



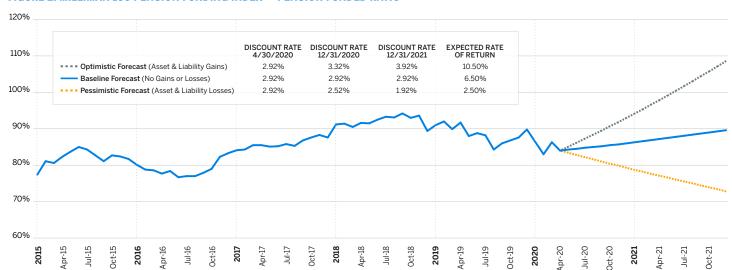


FIGURE 2: MILLIMAN 100 PENSION FUNDING INDEX — PENSION FUNDED RATIO

PFI Reconciliation

This May PFI publication reflects the annual update of the Milliman 100 companies and their 2019 financial figures included in the Milliman 2020 Pension Funding Study. The revised December 31, 2019, pension obligation was \$13 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 2019. The actual PFI asset value was \$5 billion higher than projected due to actual investment gains higher than anticipated during 2019.

The net adjustments introduced by the Milliman 2020 Pension Funding Study led to a funded status gain of \$18 billion and a corresponding increase to the funded ratio, bringing it from 89.0% to 89.8% as of December 31, 2019.

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 2.92% 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 \$261 billion (funded ratio of 86.0%) by the end of 2020 and a projected pension deficit of \$191 billion (funded ratio of 89.6%) 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 3.32% by the end of 2020 and 3.92% by the end of 2021) and asset gains (10.5% annual returns), the funded ratio would climb to 93% by the end of 2020 and 109% by the end of 2021.

Under a pessimistic forecast with similar interest rate and asset movements (2.52% discount rate at the end of 2020 and 1.92% by the end of 2021 and 2.5% annual returns), the funded ratio would decline to 79% by the end of 2020 and 73% 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.

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2

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MAY 2020

MILLIMAN 100 PENSION FUNDING INDEX — APRIL 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
APRIL	2019	1,537,532	1,677,173	(139,641)	N/A	91.7%
MAY	2019	1,519,250	1,725,673	(206,423)	(66,782)	88.0%
JUNE	2019	1,564,211	1,761,819	(197,608)	8,815	88.8%
JULY	2019	1,566,982	1,776,274	(209,292)	(11,684)	88.2%
AUGUST	2019	1,582,941	1,878,014	(295,073)	(85,781)	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	1,634,305	1,892,068	(257,763)	(74,246)	86.4%
FEBRUARY	2020	1,605,186	1,934,508	(329,322)	(71,559)	83.0%
MARCH	2020	1,516,732	1,757,304	(240,572)	88,750	86.3%
APRIL	2020	1,571,287	1,869,878	(298,591)	(58,019)	84.0%

PENSION ASSET AND LIABILITY RETURNS

END OF MONTH		ASSET RETURNS			LIABILITY RETURNS	
	YEAR	MONTHLY	YEAR-TO-DATE	DISCOUNT RATE	MONTHLY	YEAR-TO-DATE
APRIL	2019	1.13%	7.50%	3.85%	-0.60%	5.66%
MAY	2019	-0.95%	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	1.26%	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%	-0.48%	2.69%	2.55%	7.75%
MARCH	2020	-5.21%	-5.66%	3.39%	-8.83%	-1.77%
APRIL	2020	3.93%	-1.95%	2.92%	6.74%	4.86%

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