# Milliman Analysis: Funded status dips by \$2 billion in May

The Milliman 100 PFI funded ratio remains static at 91.6%; discount rates drop but investment performance is just enough to keep the funded ratio unchanged

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The funded status of the 100 largest corporate defined benefit pension plans worsened by \$2 billion during May as measured by the Milliman 100 Pension Funding Index (PFI). The deficit rose to \$141 billion from \$139 billion at the end of April due to a decrease in the benchmark corporate bond interest rates used to value pension liabilities. Investment gains during May partially offset the liability increases and limited the funded status decline. As of May 31, the funded ratio was unchanged from 91.6% seen at the end of April.

May's 0.73% investment gain increased Milliman 100 PFI asset values by \$7 billion to \$1.531 trillion at the end of May. By comparison, the 2018 Milliman Pension Funding Study reported that the monthly median expected investment return during 2017 was 0.55% (6.8% annualized).

The Milliman 100 PFI projected benefit obligation (PBO) increased by \$9 billion during May to \$1.672 trillion. The change resulted from a decrease of four basis points in the monthly discount rate to 3.99% for May, from 4.03% in April.

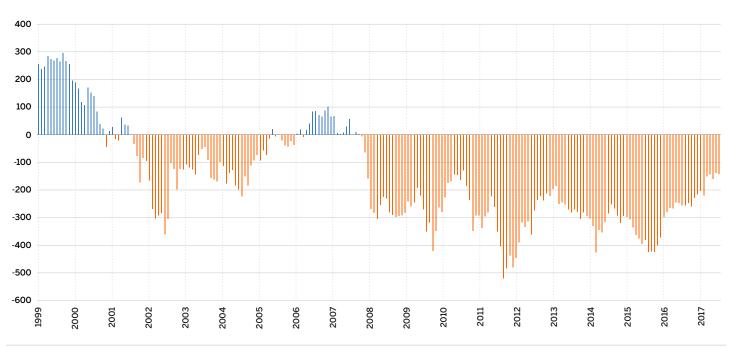
## HIGHLIGHTS

	\$ BILLION			
	MV	РВО	FUNDED STATUS	FUNDED PERCENTAGE
APR 2018	1,524	1,663	(139)	91.6%
MAY 2018	1,531	1,672	(141)	91.6%
MONTHLY CHANGE	+7	+9	(2)	0.0%
YTD CHANGE	(24)	(104)	+80	4.0%

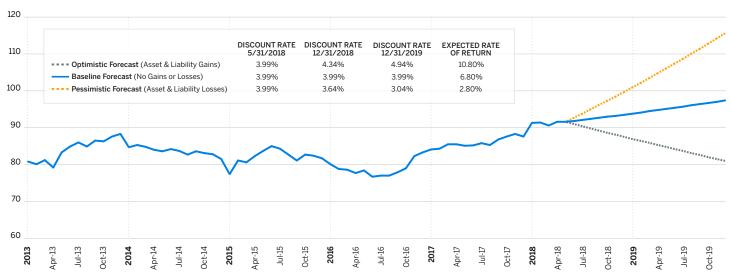
Note: Numbers may not add up precisely due to rounding

Over the last 12 months (June 2017 – May 2018), the cumulative asset gain for these pensions has been 5.79% and the Milliman 100 PFI funded status deficit has improved by \$116 billion. The primary reason for the increase in the funded status deficit has been a moderate uptick in discount rates over the past 12 months. Discount rates experienced an increase over the last 12 months moving from 3.76% as of May 31, 2017 to 3.99% a year later. The funded ratio of the Milliman 100 companies has increased over the past 12 months to 91.6% from 85.1%.









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

## 2018-2019 Projections

If the Milliman 100 PFI companies were to achieve the expected 6.8% median asset return (as per the 2018 pension funding study), and if the current discount rate of 3.99% was maintained during years 2018 through 2019, we forecast the funded status of the surveyed plans would increase. This would result in a projected pension deficit of \$108 billion (funded ratio of 93.5%) by the end of 2018 and a projected pension deficit of \$109, by the end of 2019. For purposes of this forecast, we have assumed 2018 aggregate contributions of \$48 billion and 2019 aggregate contributions.

Under an optimistic forecast with rising interest rates (reaching 4.34% by the end of 2018 and 5.03% by the end of 2019) and asset gains (10.8% annual returns), the funded ratio would climb to 100% by the end of 2018 and 116% by the end of 2019. Under a pessimistic forecast with similar interest rate and asset movements (3.64% discount rate at the end of 2018 and 3.03% by the end of 2019 and 2.8% annual returns), the funded ratio would decline to 87% by the end of 2018 and 81% by the end of 2019.

## About the Milliman 100 Monthly Pension Funding Index

For the past 18 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 2017 fiscal year and for previous fiscal years. This pension plan accounting disclosure information was summarized as part of the Milliman 2018 Pension Funding Study, which was published on April 19, 2018. 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 - MAY 2018 (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
MAY	2017	1,468,174	1,724,992	(256,818)	N/A	85.1%
JUNE	2017	1,472,646	1,729,345	(256,699)	119	85.2%
JULY	2017	1,487,443	1,733,915	(246,472)	10,227	85.8%
AUGUST	2017	1,499,743	1,758,756	(259,013)	(12,541)	85.3%
SEPTEMBER	2017	1,510,478	1,739,278	(228,800)	30,213	86.8%
OCTOBER	2017	1,528,863	1,744,652	(215,789)	13,011	87.6%
NOVEMBER	2017	1,540,006	1,744,398	(204,392)	11,397	88.3%
DECEMBER	2017	1,555,289	1,775,721	(220,432)	(16,040)	87.6%
JANUARY	2018	1,576,415	1,727,191	(150,776)	69,656	91.3%
FEBRUARY	2018	1,536,732	1,680,622	(143,890)	6,886	91.4%
MARCH	2018	1,529,451	1,688,946	(159,495)	(15,605)	90.6%
APRIL	2018	1,524,289	1,663,183	(138,894)	20,601	91.6%
MAY	2018	1,531,020	1,672,278	(141,258)	(2,364)	91.6%

### PENSION ASSET AND LIABILITY RETURNS

ASSET RETURNS LIABILITY RETURNS END OF MONTH YEAR MONTHLY YEAR-TO-DATE DISCOUNT RATE MONTHLY YEAR-TO-DATE MAY 2017 1.14% 5.20% 3.76% 1.88% 4.61% 3.74% JUNE 2017 0.31% 5.53% 0.57% 5.21% JULY 2017 1.01% 6.60% 3.71% 0.58% 5.82% AUGUST 2017 0.83% 7.49% 3.60% 1.74% 7.66% SEPTEMBER 2017 0.72% 8.26% -0.80% 6.80% 3.69% OCTOBER 2017 1.22% 9.58% 3.66% 0.62% 7.46% 2017 10.38% NOVEMBER 0.73% 3.67% 0.29% 7.78% DECEMBER 2017 0.99% 11.48% 3.53% 2.10% 10.04% 2018 JANUARY 1.64% 1.64% 3.74% -2.39% -2.39% 2018 FEBRUARY -2.25% -0.64% 3.96% -2.34% -4.67% MARCH 2018 -0.19% -0.84% 3.91% 0.86% -3.85% APRIL 2018 -0.05% -0.89% 4.03% -1.16% -4.96% MAY 2018 0.73% -0.17% 3.99% 0.92% -4.09%

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