

Milliman analysis: Funded status drops in May by \$22 billion

Declining interest rates push
funded ratio down to 83.8%

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The funded status of the 100 largest corporate defined benefit pension plans decreased by \$22 billion during May as measured by the Milliman 100 Pension Funding Index (PFI). The deficit grew to \$279 billion from \$257 billion at the end of April due to a decrease in the benchmark corporate bond interest rates used to value pension liabilities. The funded status decline was partially offset by investment returns during May. As of May 31, the funded ratio fell to 83.8%, down from 84.9% at the end of April. The funded status deficit and ratio at the end of May is almost spot-on to the level on December 31, 2016 even though the discount rate has declined 23 basis points.

May's 0.62% investment return increased Milliman 100 PFI asset values by \$4 billion to \$1.445 trillion from \$1.441 trillion at the end of April. By comparison, the 2017 Milliman Pension Funding Study reported that the monthly median expected investment return during 2016 was 0.57% (7.0% annualized).

The projected benefit obligation (PBO) increased by \$26 billion during May, raising the Milliman 100 PFI value to \$1.724 trillion. The change resulted from a decrease of 12 basis points in the monthly discount rate to 3.76% for May, from 3.88% in April.

HIGHLIGHTS

	\$ BILLION			
	MV	PBO	FUNDED STATUS	FUNDED PERCENTAGE
APR 2017	1,441	1,698	(257)	84.9%
MAY 2017	1,445	1,724	(279)	83.8%
MONTHLY CHANGE	+4	+26	(22)	-1.1%
YTD CHANGE	+48	+48	0	0.5%

Note: Numbers may not add up precisely due to rounding

Over the last 12 months (June 2016 – May 2017), the cumulative asset return for these pensions has been 8.91% and the Milliman 100 PFI funded status deficit has improved by \$102 billion. The primary reason for the increase in the funded status has been investment returns above expectations. Discount rates increased over the last 12 months as well, moving from 3.68% as of May 31, 2016 to 3.76% a year later. The funded ratio of the Milliman 100 companies has increased over the past 12 months to 78.4% from 83.8%.

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

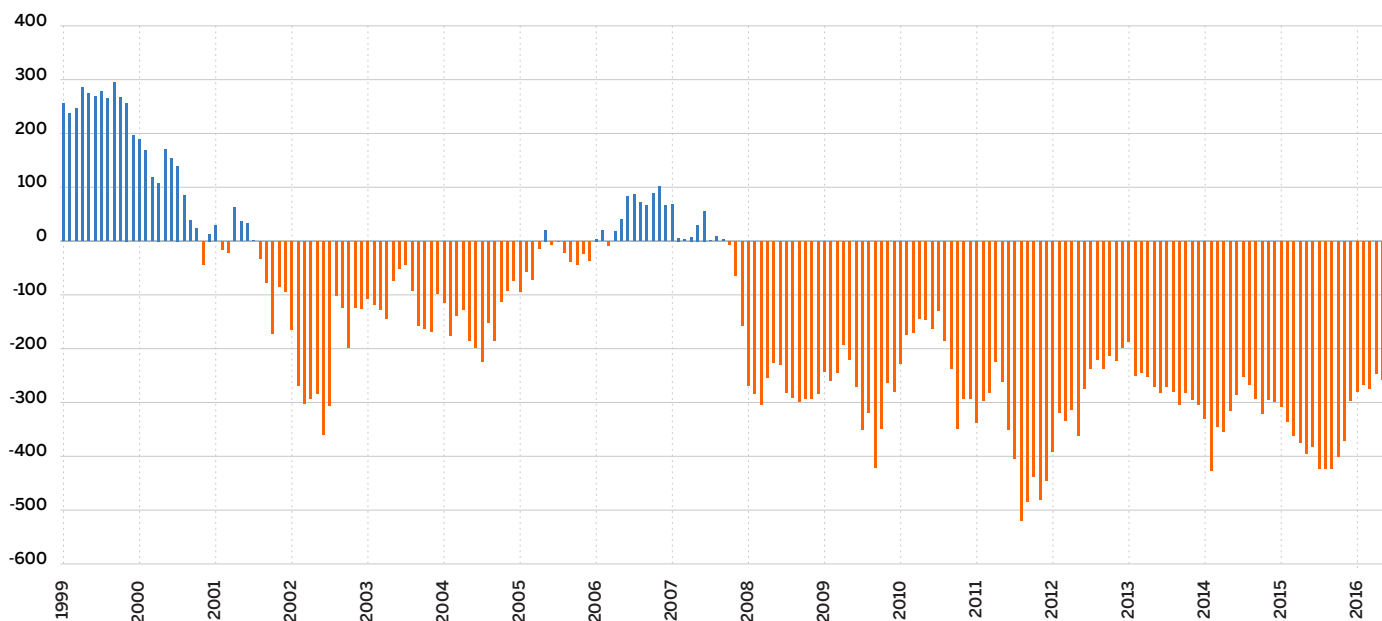
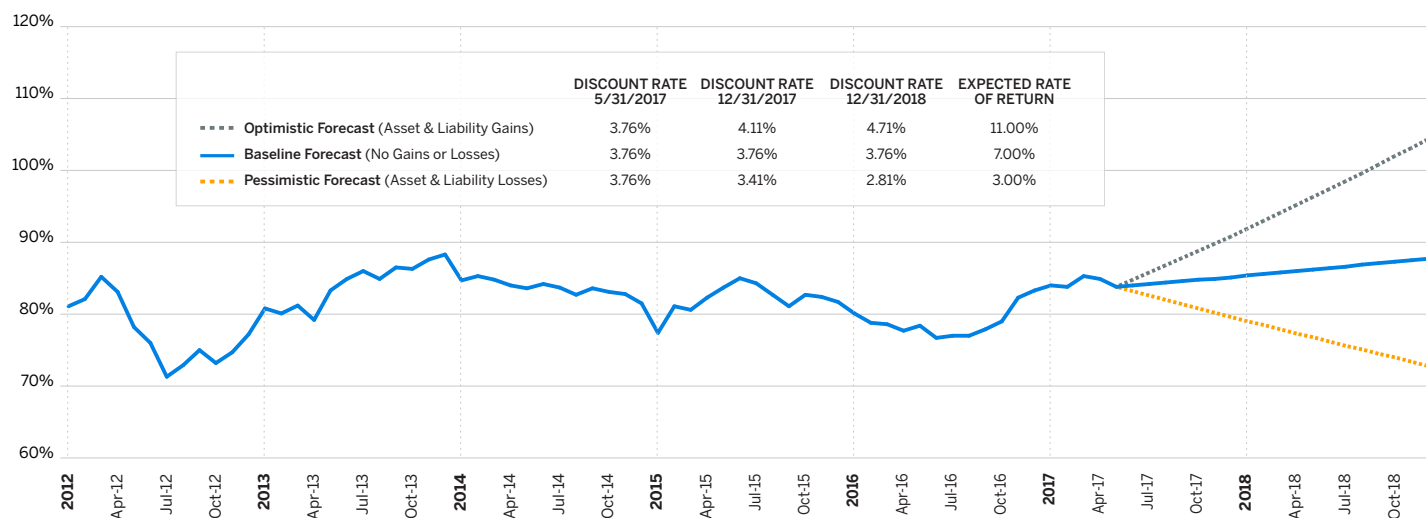


FIGURE 2: MILLIMAN 100 PENSION FUNDING INDEX — PENSION FUNDED RATIO

2017-2018 Projections

If the Milliman 100 PFI companies were to achieve the expected 7.0% median asset return (as per the 2017 pension funding study), and if the current discount rate of 3.76% was maintained during years 2017 and 2018, we forecast the funded status of the surveyed plans would increase. This would result in a projected pension deficit of \$256 billion (funded ratio of 85.1%) by the end of 2017 and a projected pension deficit of \$211 billion (funded ratio of 87.7%) by the end of 2018. For purposes of this forecast, we have assumed 2017 aggregate contributions of \$36 billion and 2018 aggregate contributions of \$39 billion.

Under an optimistic forecast with rising interest rates (reaching 4.11% by the end of 2017 and 4.71% by the end of 2018) and asset gains (11.0% annual returns), the funded ratio would climb to 91% by the end of 2017 and 104% by the end of 2018. Under a pessimistic forecast with similar interest rate and asset movements (3.41% discount rate at the end of 2017 and 2.81% by the end of 2018 and 3.0% annual returns), the funded ratio would decline to 80% by the end of 2017 and 73% by the end of 2018.

We are keeping a close watch on what the Federal Reserve will do to interest rates in the next few months. As we have previously acknowledged, the Federal Reserve changes affect short term borrowing rates, while the discount rates for pension obligations are long term. However, it appears that Federal Reserve action does influence the discount rates, if only tangentially.

About the Milliman 100 Monthly Pension Funding Index

For the past 17 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 2016 fiscal year and for previous fiscal years. This pension plan accounting disclosure information was summarized as part of the Milliman 2017 Pension Funding Study, which was published on April 6, 2017. 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 2017 (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	2016	1,385,737	1,767,104	(381,367)	N/A	78.4%
JUNE	2016	1,393,332	1,816,901	(423,569)	(42,202)	76.7%
JULY	2016	1,418,462	1,841,411	(422,949)	620	77.0%
AUGUST	2016	1,417,124	1,840,697	(423,573)	(624)	77.0%
SEPTEMBER	2016	1,412,760	1,813,686	(400,926)	22,647	77.9%
OCTOBER	2016	1,394,862	1,765,970	(371,108)	29,818	79.0%
NOVEMBER	2016	1,384,985	1,682,326	(297,341)	73,767	82.3%
DECEMBER	2016	1,396,661	1,676,182	(279,521)	17,820	83.3%
JANUARY	2017	1,406,432	1,673,506	(267,074)	12,447	84.0%
FEBRUARY	2017	1,422,986	1,697,625	(274,639)	(7,565)	83.8%
MARCH	2017	1,433,923	1,680,752	(246,829)	27,810	85.3%
APRIL	2017	1,440,718	1,697,629	(256,911)	(10,082)	84.9%
MAY	2017	1,444,506	1,723,815	(279,309)	(22,398)	83.8%

PENSION ASSET AND LIABILITY RETURNS

END OF MONTH	YEAR	ASSET RETURNS		DISCOUNT RATE	LIABILITY RETURNS	
		MONTHLY	YEAR-TO-DATE		MONTHLY	YEAR-TO-DATE
MAY	2016	0.66%	2.70%	3.68%	-0.08%	7.81%
JUNE	2016	0.92%	3.65%	3.45%	3.32%	11.39%
JULY	2016	2.18%	5.90%	3.33%	1.84%	13.43%
AUGUST	2016	0.27%	6.19%	3.32%	0.44%	13.93%
SEPTEMBER	2016	0.06%	6.25%	3.42%	-0.99%	12.81%
OCTOBER	2016	-0.90%	5.29%	3.61%	-2.14%	10.39%
NOVEMBER	2016	-0.34%	4.93%	3.98%	-4.24%	5.71%
DECEMBER	2016	1.22%	6.21%	3.99%	0.16%	5.88%
JANUARY	2017	1.07%	1.07%	4.00%	0.19%	0.19%
FEBRUARY	2017	1.55%	2.63%	3.88%	1.79%	1.98%
MARCH	2017	1.13%	3.80%	3.96%	-0.65%	1.32%
APRIL	2017	0.84%	4.66%	3.88%	1.35%	2.68%
MAY	2017	0.62%	5.31%	3.76%	1.88%	4.61%