

## Milliman Analysis: Funded status drops in March by \$20 billion

The Milliman 100 PFI funded status deficit increases to \$390 billion after discount rates fall below 4%

*First quarter losses total \$83 billion*

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The funded status of the 100 largest corporate defined benefit pension plans dropped by \$20 billion during March as measured by the Milliman 100 Pension Funding Index (PFI). The deficit increased to \$390 billion from \$370 billion at the end of February, primarily due to a drop in the benchmark corporate bond interest rates used to value pension liabilities. Liability losses were partially offset by robust investment gains during March. As of March 31, the funded ratio fell to 77.9%, down from 78.4% at the end of February. This March 31 PFI publication reflects the annual update of the Milliman 100 companies and their 2015 financial figures included in the Milliman 2016 Pension Funding Study, which was published on April 7, 2016.

March's 2.67% investment gain increased Milliman 100 PFI asset values by \$30 billion to \$1.374 trillion. By comparison, the 2016 Milliman Pension Funding Study reported that the monthly median expected investment return during 2015 was 0.58% (7.2% annualized).

The projected benefit obligation (PBO) increased by \$50 billion during March, raising the Milliman 100 PFI value to \$1.763 trillion. The change resulted from a significant decrease of 23 basis points in the monthly discount rate to 3.78% for March, from 4.01% in February.

### HIGHLIGHTS

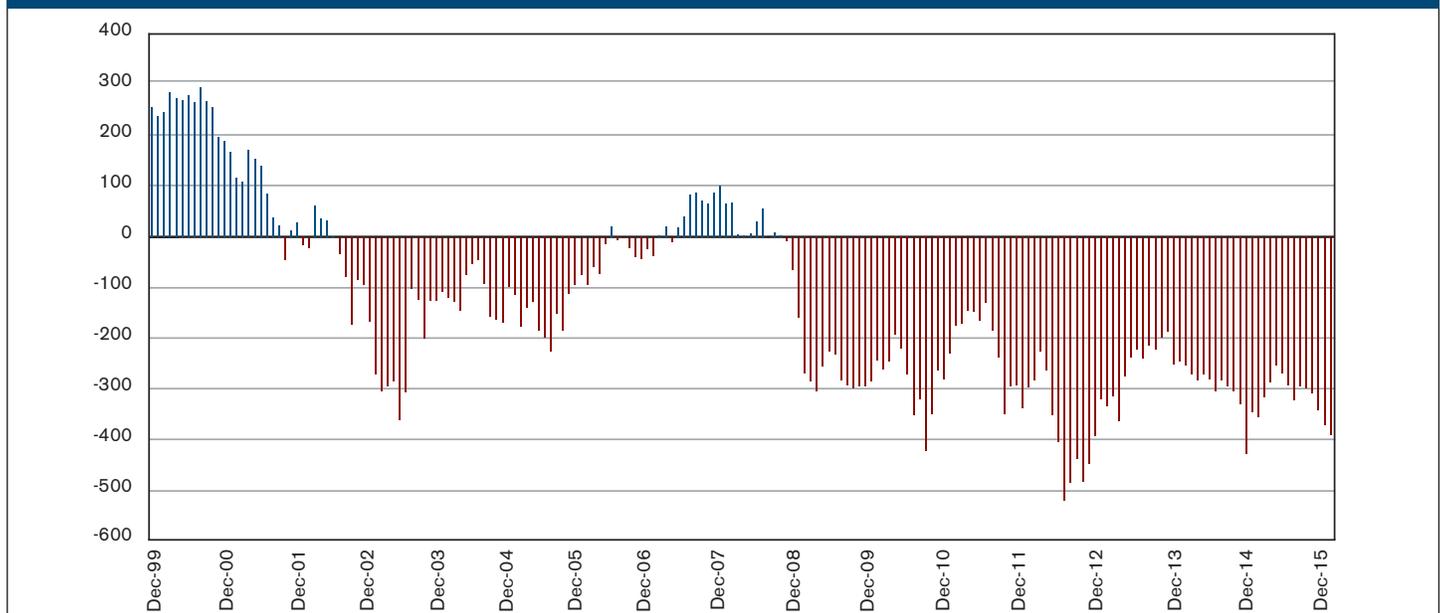
	\$ BILLION		FUNDED STATUS	FUNDED PERCENTAGE
	MV	PBO		
FEB 2016	1,343	1,714	(370)	78.4%
MAR 2016	1,374	1,763	(390)	77.9%
MONTHLY CHANGE	+30	+50	(20)	-0.5%
YTD CHANGE	(1)	+81	(83)	-3.8%

Note: Numbers may not add up precisely due to rounding

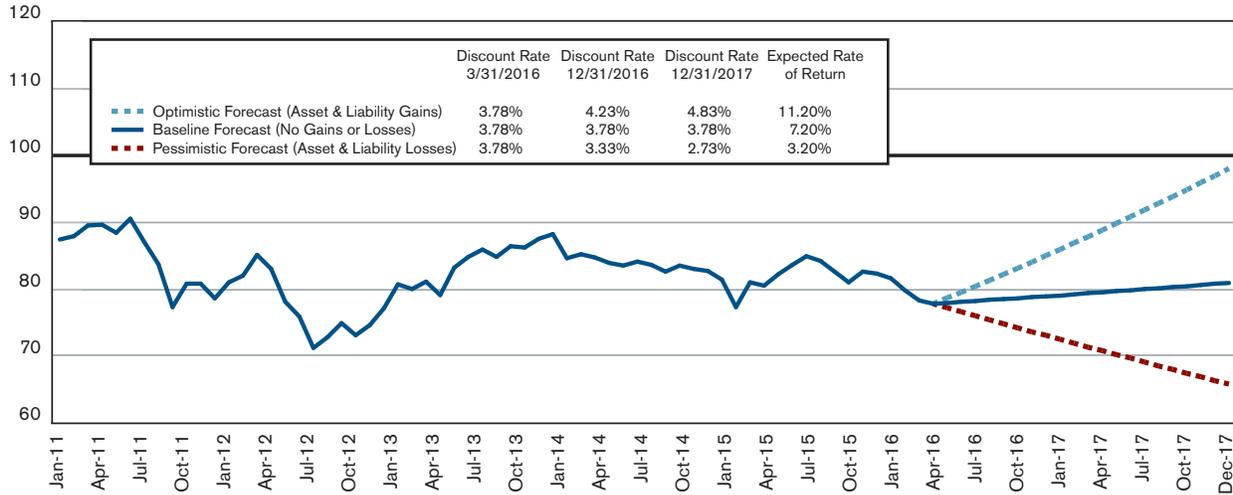
Discount rates have fallen each month during the first quarter of 2016, resulting in a sub-4.00% rate at the end of March.

For the quarter ended March 31, 2016, assets experienced a net investment gain of 1.13%. Since the start of 2016, the funded status deficit has risen by \$83 billion, primarily due to discount rate decreases. March's discount rate of 3.78% was the fourth lowest in the 16-year history of the Milliman 100 Pension Funding Index. Discount rates fell 38 basis points during the first quarter of 2016. The funded ratio of the Milliman 100 companies decreased to 77.9% at the end of March 2016 from 81.7% at the end of December 2015.

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



**FIGURE 2: MILLIMAN 100 PENSION FUNDING INDEX – PENSION FUNDED RATIO**



Over the last 12 months (April 2015–March 2016), the cumulative asset return for these pensions has been -0.67% and the Milliman 100 PFI funded status deficit has worsened by \$36 billion. The primary reason for the decrease in the funded status deficit has been poor investment returns. Discount rates experienced a small increase over the last 12 months, moving from 3.65% as of March 31, 2015, to 3.78% a year later. The funded ratio of the Milliman 100 companies has decreased over the past 12 months to 77.9% from 80.6%.

**PFI RECONCILIATION**

This March 31 PFI publication reflects the annual update of the Milliman 100 companies and their 2015 financial figures included in the Milliman 2016 Pension Funding Study.

The actual December 31, 2015 pension obligation was \$23 billion lower than projected after accounting for settlement de-risking activities and reflection of updated mortality assumptions as of year-end 2015. The discount rate was six basis points lower than projected, standing at 4.16% as of December 31, 2015.

The actual PFI asset value was \$34 billion lower than projected due to actual contributions for 2015 which were lower than expected, primarily attributable to the effects of the Bipartisan Budget Act of 2015, which was passed during November 2015, and settlement de-risking activities, which reduced plan size.

The net adjustments introduced by the Milliman 2016 Pension Funding Study led to a funded status loss of \$11 billion and a corresponding decrease to the funded ratio, bringing it from 82.7% to 81.7% as of December 31, 2015.

**2016-2017 PROJECTIONS**

If the Milliman 100 PFI companies were to achieve the expected 7.2% median asset return (as per the 2016 pension funding study), and if the current discount rate of 3.78% were maintained during years 2016 and 2017, we forecast the funded status of the surveyed plans would increase. This would result in a projected pension deficit of \$368 billion (funded ratio of 79.1%) by the end of 2016 and a projected pension deficit of \$336 billion (funded ratio of 81.0%) by the end of 2017. For purposes of this forecast, we have assumed 2016 aggregate contributions of \$33 billion and 2017 aggregate contributions of \$36 billion.

Under an optimistic forecast with rising interest rates (reaching 4.23% by the end of 2016 and 4.83% by the end of 2017) and asset gains (11.2% annual returns), the funded ratio would climb to 86% by the end of 2016 and 98% by the end of 2017. Under a pessimistic forecast with similar interest rate and asset movements (3.33% discount rate at the end of 2016 and 2.73% by the end of 2017 and 3.2% annual returns), the funded ratio would decline to 73% by the end of 2016 and 66% by the end of 2017.

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**MILLIMAN 100 PENSION FUNDING INDEX – MARCH 2016 (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
MARCH	2015	1,472,616	1,826,102	(353,486)	N/A	80.6%
APRIL	2015	1,467,260	1,782,624	(315,364)	38,122	82.3%
MAY	2015	1,461,789	1,746,631	(284,842)	30,522	83.7%
JUNE	2015	1,429,208	1,681,119	(251,911)	32,931	85.0%
JULY	2015	1,437,976	1,705,086	(267,110)	(15,199)	84.3%
AUGUST	2015	1,391,617	1,683,706	(292,089)	(24,979)	82.7%
SEPTEMBER	2015	1,370,308	1,690,590	(320,282)	(28,193)	81.1%
OCTOBER	2015	1,403,004	1,696,802	(293,798)	26,484	82.7%
NOVEMBER	2015	1,396,737	1,694,810	(298,073)	(4,275)	82.4%
DECEMBER	2015	1,374,997	1,681,985	(306,988)	(8,915)	81.7%
JANUARY	2016	1,347,574	1,687,261	(339,687)	(32,699)	79.9%
FEBRUARY	2016	1,343,448	1,713,513	(370,065)	(30,378)	78.4%
MARCH	2016	1,373,766	1,763,363	(389,597)	(19,532)	77.9%

**PENSION ASSET AND LIABILITY RETURNS**

END OF MONTH	YEAR	ASSET RETURNS			LIABILITY RETURNS	
		MONTHLY	YEAR-TO-DATE	DISCOUNT RATE	MONTHLY	YEAR-TO-DATE
MARCH	2015	0.15%	2.90%	3.65%	0.52%	3.51%
APRIL	2015	0.19%	3.10%	3.82%	-1.99%	1.45%
MAY	2015	0.18%	3.28%	3.97%	-1.61%	-0.19%
JUNE	2015	-1.68%	1.55%	4.25%	-3.33%	-3.52%
JULY	2015	1.18%	2.74%	4.14%	1.85%	-1.73%
AUGUST	2015	-2.68%	-0.01%	4.23%	-0.83%	-2.54%
SEPTEMBER	2015	-0.97%	-0.97%	4.19%	0.84%	-1.73%
OCTOBER	2015	2.97%	1.97%	4.16%	0.79%	-0.95%
NOVEMBER	2015	0.12%	2.09%	4.16%	0.30%	-0.65%
DECEMBER	2015	-0.99%	1.08%	4.16%	-0.33%	-0.98%
JANUARY	2016	-1.60%	-1.60%	4.14%	0.65%	0.65%
FEBRUARY	2016	0.10%	-1.50%	4.01%	1.88%	2.54%
MARCH	2016	2.67%	1.13%	3.78%	3.22%	5.85%

The March 31 report (published in April) of the Milliman 100 Pension Funding Index (Milliman 100 PFI) reflects the annual update of the Milliman 100 companies and their 2015 financial figures included in the Milliman 2016 Pension Funding Study published on April 7, 2016. The March 31 Milliman 100 PFI replaces previously published results for January and February 2016 and adjusts the monthly projections for 2015 to reflect actual gains and losses for 2015. Go to [milliman.com](http://milliman.com) to view the Milliman 2016 Pension Funding Study.

**ABOUT THE MILLIMAN 100 MONTHLY PENSION FUNDING INDEX**

For the past 16 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 2015 fiscal year and for previous fiscal years. This pension plan accounting disclosure information was summarized as part of the Milliman 2016 Pension Funding Study, which was published on April 7, 2016. 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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