

Milliman analysis: Corporate pension funded status improves by \$7 billion in October

Pensions experience first back-to-back monthly improvement in funded status during 2017

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The funded status of the 100 largest corporate defined benefit pension plans improved by \$7 billion during October as measured by the Milliman 100 Pension Funding Index (PFI). The deficit fell to \$266 billion primarily due to a robust investment gain of 1.19% during October. The funded status improvement was partially offset by pension liability increases resulting from a decrease in the benchmark corporate bond interest rates used to value those liabilities. As of October 31, the funded ratio increased to 84.7%, up from 84.3% at the end of September. Factoring in September's \$25 billion gain, the funded status has improved by \$32 billion since August 31.

The market value of assets rose by \$12 billion as a result of October's investment gain of 1.19%. The Milliman 100 PFI asset value increased to \$1.476 trillion at the end of October. Cumulative investment gains in 2017 are 9.57% year-to-date. 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), or pension liabilities, increased to \$1.742 trillion at the end of October from \$1.737 trillion at the end of September. The change resulted from a

HIGHLIGHTS

	\$ BILLION			
	MV	PBO	FUNDED STATUS	FUNDED PERCENTAGE
SEP 2017	1,464	1,737	(273)	84.3%
OCT 2017	1,476	1,742	(266)	84.7%
MONTHLY CHANGE	+12	+5	+7	0.4%
YTD CHANGE	+80	+66	+14	1.4%

Note: Numbers may not add up precisely due to rounding

decrease of three basis points in the monthly discount rate to 3.66% for October from 3.69% for September.

Over the last 12 months (November 2016–October 2017), the cumulative asset return for these pensions has been 10.53% and the Milliman 100 PFI funded status deficit has improved by \$105 billion. Discount rates experienced a small increase over the last 12 months, moving from 3.61% as of October 31, 2016, to 3.66% a year later. The funded ratio of the Milliman 100 companies has increased over the past 12 months to 84.3% from 79.0% due primarily to higher-than-expected investment returns.

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

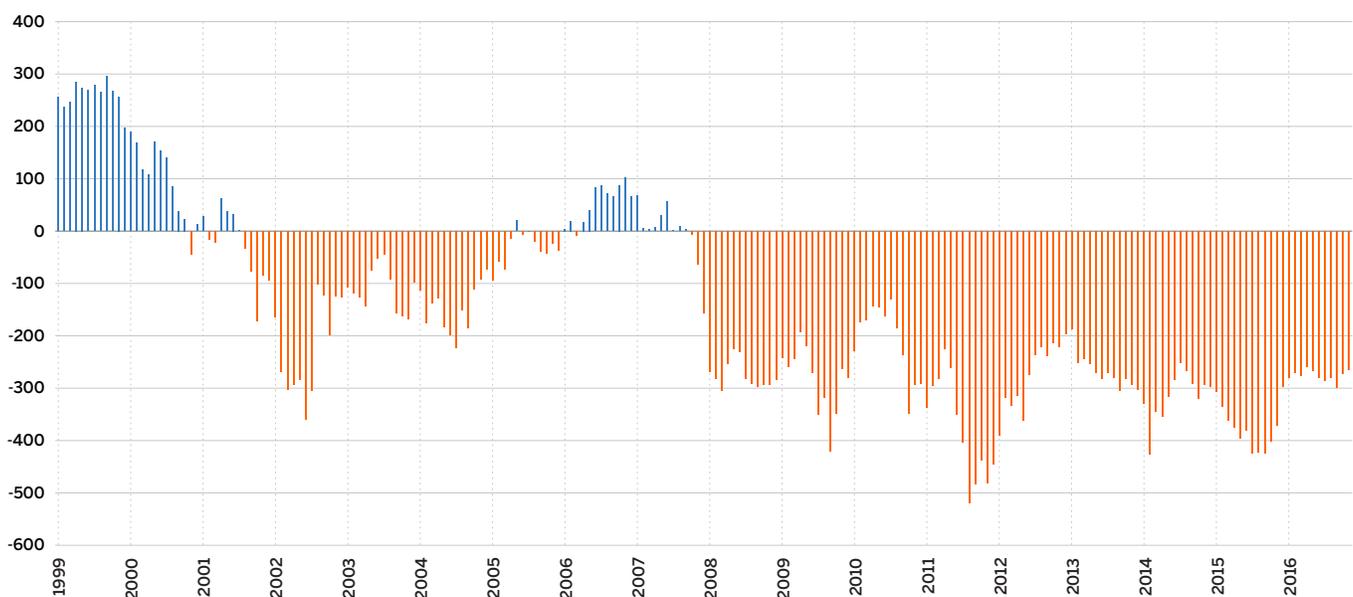
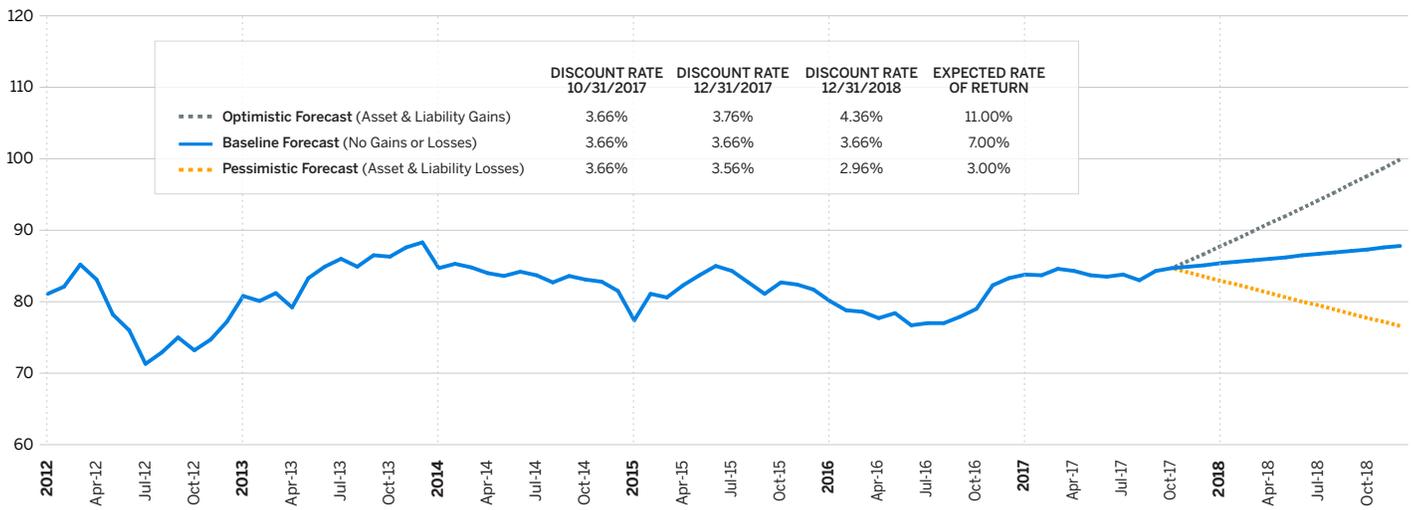


FIGURE 2: MILLIMAN 100 PENSION FUNDING INDEX – PENSION FUNDED RATIO



We will closely monitor the movement of the financial markets and interest rate environment, in particular now that we have been advised of the nomination of Jerome Powell to succeed Janet Yellen as chairman of the Federal Reserve in 2018, as well as the progress of the tax reform proposals released by the House Ways and Means Committee.

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 3.66% were 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 \$259 billion (funded ratio of 85.1%) by the end of 2017 and a projected pension deficit of \$212 billion (funded ratio of 87.8%) 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 3.76% by the end of 2017 and 4.36% by the end of 2018) and asset gains (11.0% annual returns), the funded ratio would climb to 87% by the end of 2017 and 100% by the end of 2018. Under a pessimistic forecast with similar interest rate and asset movements (3.56% discount rate at the end of 2017 and 2.96% by the end of 2018 and 3.0% annual returns), the funded ratio would decline to 84% by the end of 2017 and 77% by the end of 2018.

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 — OCTOBER 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
OCTOBER	2016	1,394,862	1,765,970	(371,108)	N/A	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	1,403,106	1,673,506	(270,400)	9,121	83.8%
FEBRUARY	2017	1,421,420	1,697,625	(276,205)	(5,805)	83.7%
MARCH	2017	1,422,044	1,680,752	(258,708)	17,497	84.6%
APRIL	2017	1,431,650	1,697,629	(265,979)	(7,271)	84.3%
MAY	2017	1,442,833	1,723,815	(280,982)	(15,003)	83.7%
JUNE	2017	1,442,170	1,727,929	(285,759)	(4,777)	83.5%
JULY	2017	1,451,624	1,732,259	(280,635)	5,124	83.8%
AUGUST	2017	1,458,514	1,756,836	(298,322)	(17,687)	83.0%
SEPTEMBER	2017	1,464,188	1,737,142	(272,954)	25,368	84.3%
OCTOBER	2017	1,476,432	1,742,272	(265,840)	7,114	84.7%

PENSION ASSET AND LIABILITY RETURNS

END OF MONTH	YEAR	ASSET RETURNS			LIABILITY RETURNS	
		MONTHLY	YEAR-TO-DATE	DISCOUNT RATE	MONTHLY	YEAR-TO-DATE
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	0.83%	0.83%	4.00%	0.19%	0.19%
FEBRUARY	2017	1.68%	2.52%	3.88%	1.79%	1.98%
MARCH	2017	0.41%	2.94%	3.96%	-0.65%	1.32%
APRIL	2017	1.04%	4.01%	3.88%	1.35%	2.68%
MAY	2017	1.14%	5.20%	3.76%	1.88%	4.61%
JUNE	2017	0.31%	5.53%	3.74%	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	0.74%	8.29%	3.69%	-0.80%	6.80%
OCTOBER	2017	1.19%	9.57%	3.66%	0.62%	7.46%