

Milliman analysis: 2014 ends almost as badly as 2012



Milliman 100 PFI funded ratio deteriorates to 83.6%

Interest rates settle at 3.80%, reaching lowest value ever

Forecast for end of year 2015 and 2016

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YEAR IN REVIEW

The story for 2014 and 2012 are mirror images, declining discount rates driving the funded ratio down despite investment gains of approximately 9.5% in both years. Discount rates dropped by 88 basis points to 3.80% at the end of 2014 from 4.68% at the end of 2013. Just one year ago, the setting was very different. 2013 ended with an air of optimism where interest rates had risen following four consecutive years of declines from 2009 – 2012. The pension asset portfolios produced an investment gain, as the total return was 9.5% versus an expectation of 7.4%.

The funded status decreased by \$22 billion during December 2014 for the 100 largest corporate defined benefit pension plans as measured by the Milliman 100 Pension Funding Index (PFI). Historically low interest rates were the dominant factor in the \$105 billion deficit increase during 2014. While higher than expected investment returns produced a solid \$81 billion gain, pension liabilities increased by \$186 billion. The funded ratio was 83.6% as of December 31, 2014, down compared with the ratio on

HIGHLIGHTS

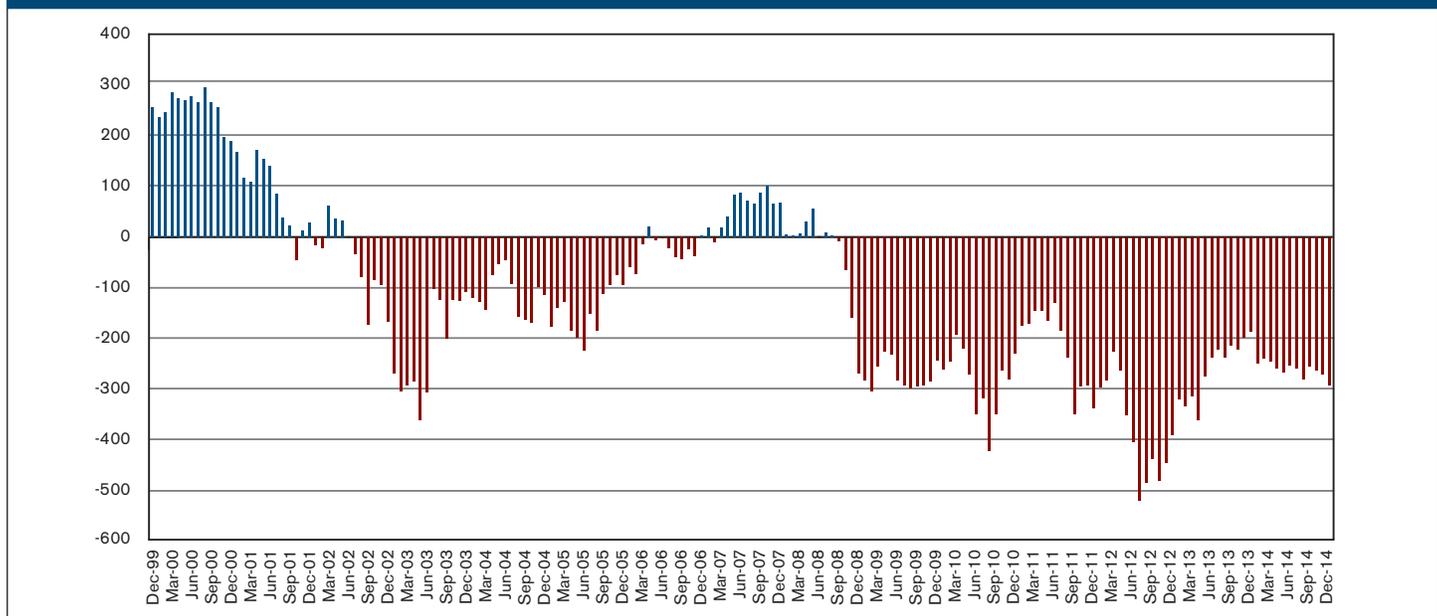
	\$ BILLION		FUNDED STATUS	FUNDED PERCENTAGE
	MV	PBO		
NOV 2014	1,487	1,756	(269)	84.7%
DEC 2014	1,484	1,775	(292)	83.6%
MONTHLY CHANGE	(3)	+19	(22)	-1.1%
YTD CHANGE	+81	+186	(105)	-4.7%

Note: Numbers may not add up precisely due to rounding

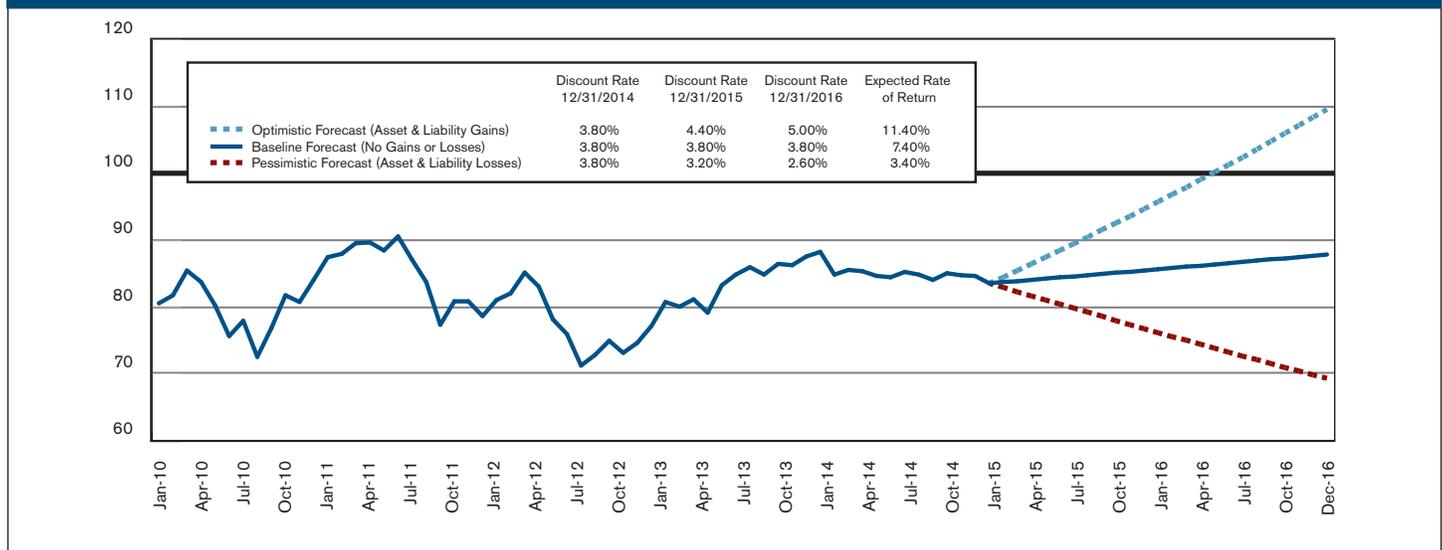
December 31, 2013, of 88.3%. The dismal funded ratio of 77.2% at December 31, 2012, was the last and only other time the discount rate fell below 4.0% at year-end.

December 31 pension disclosures are expected to also reflect adoption by many plan sponsors of new mortality assumptions that generally reflect increases in life expectancy, resulting in higher pension liabilities. The magnitude of these increases depends on

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



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



the age, gender, and composition of annuitants and non-annuitants by individual pension plan. The January Milliman 100 PFI has not been adjusted to estimate the increase in PBO to reflect the mortality tables recently finalized by the Society of Actuaries. However, our preliminary analysis of the impact indicates an estimated increase of 6% to 8% in pension liabilities. This would imply a PBO increase of up to \$142 billion and would decrease the funded ratio by over six percentage points, bringing it to 77.4%, another unfortunate similarity to year-end 2012.

Furthermore, the projected asset and liability figures presented in this analysis will be adjusted as part of our annual 2015 Pension Funding Study, where pension settlement and annuity purchase activities that occurred during 2014 will be reflected. De-risking transactions generally result in reductions in pension funded status since the assets paid to the participants or assumed by the insurance companies as part of the risk transfer are larger than the corresponding liabilities that are extinguished from the balance sheets. To offset this decrease effect, many companies engaging in de-risking transactions make additional cash contributions to their pension plans to improve the plan's funded status.

During 2014, the cumulative investment return was 9.5% while the cumulative liability return (i.e., the projected benefit obligation [PBO] increase) was 15.9%. The \$105 billion funding decrease during 2014 resulted in a year-end funded status deficit of \$292 billion. The loss in funded status during 2014 resulted in a charge to corporate balance sheets at the end of the 2014 fiscal year and is expected to produce an estimated increase of \$9.2 billion in pension expense for 2015.

2014 got off to a poor start as discount rates dropped for the first five months of the year by 60 basis points. The funded ratio dropped to 84.5% at the end of May, then slightly improved to 85.3% at the end of June based on a small discount rate increase and positive investment returns. Year-to-date investment returns as of June 30

were 5.86%, and this helped to limit the funded status deterioration being caused by falling discount rates. The second half of the year was marked by more funded status erosion, as discount rates fell in four out of the six remaining months for a cumulative drop of 28 basis points. Combined with the first half of the year, discount rates fell a total of 88 basis points during 2014, and the funded ratio ended the year at 83.6%. We are unaware of any indications from the Federal Reserve that could cause discount rates to rise greatly during 2015. If low discount rates are sustained, the only two ways for the funded status to improve are by exceptional investment returns and higher cash contributions by plan sponsors, the latter of which are expected to remain relatively low given the contribution funding relief implemented by the Highway and Transportation Funding Act, passed in August of 2014.

Pension plan accounting information disclosed in the footnotes of the Milliman 100 companies' annual reports for the 2014 fiscal year is expected to be available during the first quarter of 2015 as part of the 2015 Milliman Pension Funding Study.

**DECEMBER 2014 REVIEW**

The funded status decreased by \$22 billion during December. The deficit increased to \$292 billion from a deficit of \$269 billion at the end of November. The funded status drop for the month of December was due to higher liabilities based on a decrease in corporate bond interest rates that are the benchmarks used to value pension liabilities and investment underperformance. As of December 31, the funded ratio decreased to 83.6% from 84.7% at the end of November.

December's \$3 billion decrease in market value brings the Milliman 100 PFI asset value to \$1.484 trillion, down from \$1.487 trillion at the end of November 2014, an investment gain of 0.06% for the month. The PBO, or pension liabilities, increased by \$19 billion during December, raising the Milliman 100 PFI value to \$1.775 trillion from \$1.756 trillion at the end of November 2014.

**MILLIMAN 100 PENSION FUNDING INDEX – DECEMBER 2014 (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
DECEMBER	2013	1,403,016	1,589,236	(186,220)	N/A	88.3%
JANUARY	2014	1,393,680	1,641,543	(247,863)	(61,643)	84.9%
FEBRUARY	2014	1,421,399	1,660,091	(238,692)	9,171	85.6%
MARCH	2014	1,420,855	1,664,589	(243,734)	(5,042)	85.4%
APRIL	2014	1,427,415	1,685,496	(258,081)	(14,347)	84.7%
MAY	2014	1,448,161	1,714,506	(266,345)	(8,264)	84.5%
JUNE	2014	1,458,994	1,711,208	(252,214)	14,131	85.3%
JULY	2014	1,449,730	1,708,381	(258,651)	(6,437)	84.9%
AUGUST	2014	1,474,908	1,754,214	(279,306)	(20,655)	84.1%
SEPTEMBER	2014	1,454,046	1,708,725	(254,679)	24,627	85.1%
OCTOBER	2014	1,467,962	1,730,602	(262,640)	(7,961)	84.8%
NOVEMBER	2014	1,485,264	1,756,216	(270,952)	(8,027)	84.6%
DECEMBER	2014	1,483,607	1,775,156	(291,549)	(22,339)	83.6%

**PENSION ASSET AND LIABILITY RETURNS**

END OF MONTH	YEAR	ASSET RETURNS			LIABILITY RETURNS	
		MONTHLY	YEAR-TO-DATE	DISCOUNT RATE	MONTHLY	YEAR-TO-DATE
DECEMBER	2013	0.85%	11.29%	4.68%	-0.29%	-7.43%
JANUARY	2014	-0.36%	-0.36%	4.41%	3.64%	3.64%
FEBRUARY	2014	2.30%	1.92%	4.32%	1.46%	5.15%
MARCH	2014	0.26%	2.19%	4.30%	0.60%	5.78%
APRIL	2014	0.76%	2.96%	4.20%	1.58%	7.46%
MAY	2014	1.75%	4.77%	4.06%	2.04%	9.64%
JUNE	2014	1.04%	5.86%	4.08%	0.12%	9.77%
JULY	2014	-0.35%	5.49%	4.10%	0.15%	9.93%
AUGUST	2014	2.03%	7.64%	3.89%	2.99%	13.22%
SEPTEMBER	2014	-1.13%	6.42%	4.10%	-2.29%	10.63%
OCTOBER	2014	1.25%	7.75%	4.00%	1.59%	12.38%
NOVEMBER	2014	1.49%	9.33%	3.89%	1.78%	14.38%
DECEMBER	2014	0.06%	9.52%	3.80%	1.37%	15.95%

The change resulted from a decrease of nine basis points in the monthly discount rate, to 3.80% for December from 3.89% for November.

**2015-2016 PROJECTIONS**

If the Milliman 100 PFI companies were to achieve the expected 7.4% (as per the 2014 Milliman Pension Funding Study) median asset return for their pension plan portfolios and the current discount rate of 3.80% were maintained during 2015 and 2016, we forecast that the funded status of the surveyed plans would increase. This would result in a projected pension deficit of \$255 billion (funded ratio of 85.7%) by the end of 2015 and a projected pension deficit of \$217 billion (funded ratio of 87.9%) by the end of 2016. For purposes of this forecast, we have assumed 2014 aggregate contributions of \$44 billion and 2015 and 2016 aggregate contributions of \$31 billion.

Under an optimistic forecast with rising interest rates (reaching 4.40% by the end of 2015 and 5.00% by the end of 2016) and asset gains (11.4% annual returns), the funded ratio would climb to 96% by the end of 2015 and 110% by the end of 2016. Under a pessimistic forecast with similar interest rate and asset movements (3.20% discount rate at the end of 2015 and 2.60% by the end of 2016 and 3.4% annual returns), the funded ratio would decline to 76% by the end of 2015 and 69% by the end of 2016.

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

For the past 14 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 2013 fiscal year and for previous fiscal years. This pension plan accounting disclosure information was summarized as part of the Milliman 2014 Pension Funding Study, which was published on April 2, 2014. 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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