

Milliman analysis: Declining interest rates fuel record growth in pension funding deficit



Funded status decreased by \$124 billion during September and by an astounding \$252 billion since June 30

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The funded status of the 100 largest corporate defined benefit pension plans dropped by \$124 billion during September 2011 as measured by the Milliman 100 Pension Funding Index (PFI). This marks the largest monthly drop in funded status during the 11-year history of the Milliman 100 PFI. The funded status decline was due to the two-fold effect of investment losses coupled with a decrease in corporate bond interest rates that are the benchmarks used to value pension liabilities. As of September 30, the funded ratio plummeted to 72.8% from 79.3% at the end of August. The funded status deficit increased from \$315 billion to \$439 billion. The funded status has eroded by more than \$252 billion since June 30. The third calendar quarter of 2011 has been the most significant three-month decline since the start of the financial crisis during the last quarter of 2008.

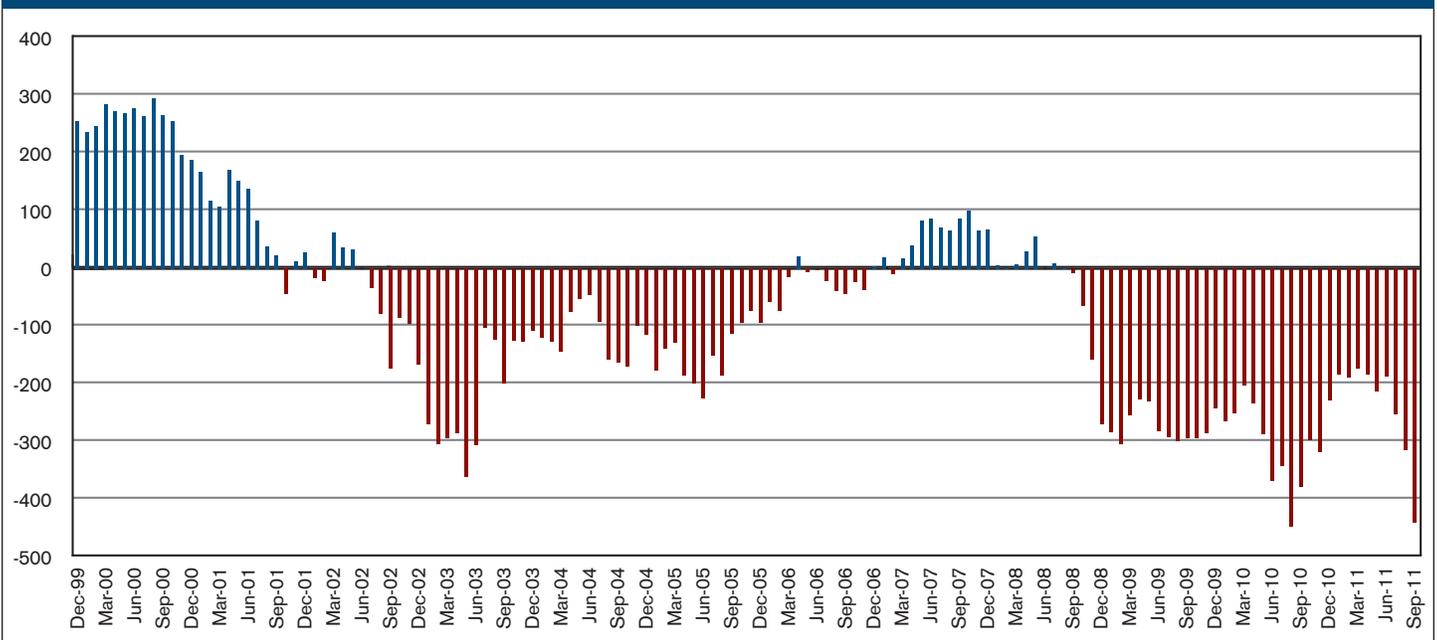
The projected benefit obligation (PBO), or pension liabilities, increased by \$93 billion during September, raising the Milliman 100 PFI value to \$1.614 trillion from \$1.521 trillion at the end of

August. The change resulted from a decrease of 42 basis points in the monthly discount rate to 4.54% for September from 4.96% for August 2011. The discount rate of 4.54% is the lowest in the 11-year history of the Milliman 100 PFI. The question is whether the volatility in the financial markets will exacerbate a pattern that could result in a new funded ratio low before year-end.

September's \$31 billion decrease in market value brings the Milliman 100 PFI asset value to \$1.175 trillion, down from \$1.206 trillion at the end of August triggered by an investment loss of -2.43% for the month. By comparison, the Milliman 2011 Pension Funding Study, published in March, reported a 0.64% (8.00% annualized) median expected monthly investment return during 2010.

For the quarter that ended September 30, these pensions have encountered a perfect storm. The cumulative asset return has been -4.81% and the cumulative increase in pension liabilities has been

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



14.22%. The result has been a funded status decline of \$252 billion for the last quarter. The funded ratio of the Milliman 100 companies decreased to 72.8% from 87.0%. The pension assets would have to provide a 9.4% return by the close of the year just to meet the expected 8.0% return assumption.

Year to date (January 2011-September 2011), the cumulative asset return has been -1.31% and the Milliman 100 PFI funded status has decreased by \$211 billion. For the past eight months, the funded ratio of the Milliman 100 companies decreased to 72.8% from 84.1%.

2011-2013 PROJECTIONS

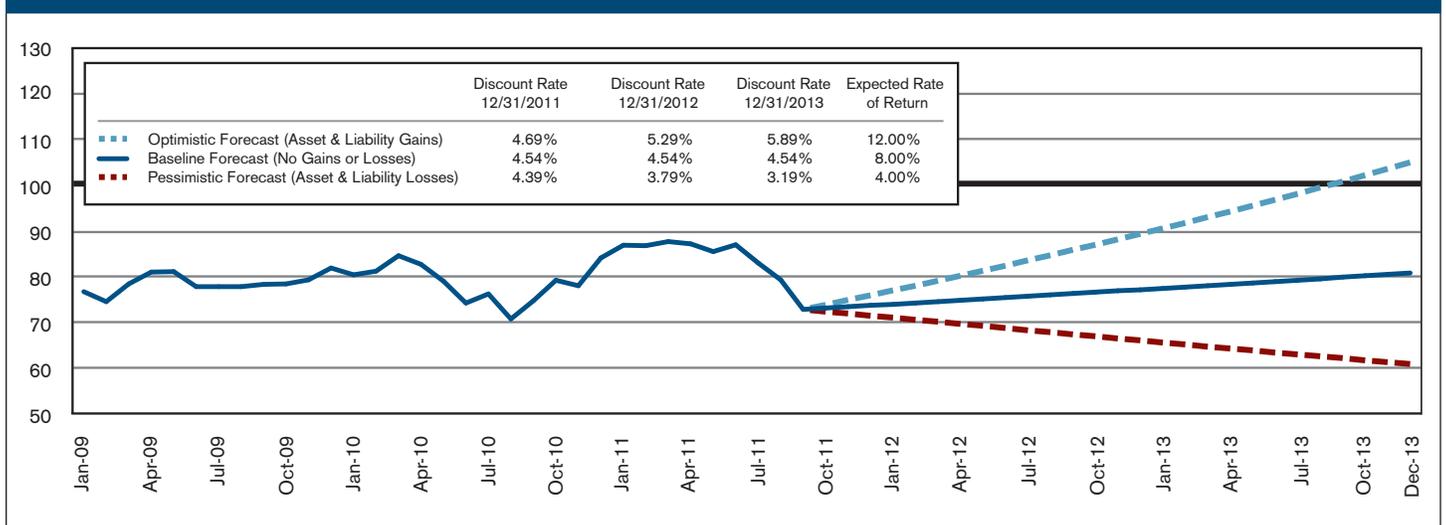
If the Milliman 100 PFI companies were to achieve the expected 8.0% median asset return (as per the 2011 pension funding study) prorated for the remainder of the year, and if the current discount rate of 4.54% were to be maintained through 2013, we forecast the funded status of the surveyed plans would increase. This would result in a projected pension deficit of \$426 billion (funded ratio of 73.7%) by the end of 2011, a projected pension deficit of \$374 billion (funded ratio of 77.1%) by the end of

2012, and a projected pension deficit of \$319 billion (funded ratio of 80.8%) by the end of 2013. For purposes of this forecast, we have assumed 2011-2013 aggregate contributions to remain level with 2010 contribution amounts, which were a record \$60 billion.

Under an optimistic forecast with rising interest rates (reaching 5.29% by the end of 2012 and 5.89% by the end of 2013) and asset gains (12.0% annual returns), the funded ratio would climb to 89% by the end of 2012 and 105% by the end of 2013. Under a pessimistic forecast with similar interest rate and asset movements (3.79% discount rate at the end of 2012 and 3.19% by the end of 2013 and 4.0% annual returns), the funded ratio would decline to 66% by the end of 2012 and 61% by the end of 2013.

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



ABOUT THE MILLIMAN 100 MONTHLY PENSION FUNDING INDEX

For the past 11 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 2010 fiscal year and for previous fiscal years. The 2011 Milliman 100 Pension Funding Study was published on March 29, 2011. 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.

MILLIMAN 100 PENSION FUNDING INDEX – SEPTEMBER 2011 (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
SEPTEMBER	2010	1,113,943	1,491,257	(377,314)	N/A	74.7%
OCTOBER	2010	1,129,348	1,426,392	(297,044)	80,270	79.2%
NOVEMBER	2010	1,121,194	1,437,892	(316,698)	(19,654)	78.0%
DECEMBER	2010	1,208,155	1,436,204	(228,049)	88,649	84.1%
JANUARY	2011	1,215,845	1,399,652	(183,807)	44,242	86.9%
FEBRUARY	2011	1,233,216	1,421,372	(188,156)	(4,349)	86.8%
MARCH	2011	1,232,559	1,404,940	(172,381)	15,775	87.7%
APRIL	2011	1,252,450	1,436,117	(183,667)	(11,286)	87.2%
MAY	2011	1,250,519	1,462,019	(211,500)	(27,833)	85.5%
JUNE	2011	1,240,507	1,426,542	(186,035)	25,465	87.0%
JULY	2011	1,235,595	1,488,141	(252,546)	(66,511)	83.0%
AUGUST	2011	1,206,349	1,520,685	(314,336)	(61,790)	79.3%
SEPTEMBER	2011	1,175,086	1,613,959	(438,873)	(124,537)	72.8%

PENSION ASSET AND LIABILITY RETURNS (ALL DOLLAR AMOUNTS IN MILLIONS)

END OF MONTH	YEAR	ASSET RETURNS		DISCOUNT RATE	LIABILITY RETURNS	
		MONTHLY	YEAR-TO-DATE		MONTHLY	YEAR-TO-DATE
SEPTEMBER	2010	4.00%	5.94%	4.93%	-1.59%	16.36%
OCTOBER	2010	1.82%	7.88%	5.27%	-3.91%	11.81%
NOVEMBER	2010	-0.29%	7.56%	5.20%	1.26%	13.21%
DECEMBER	2010	2.63%	10.39%	5.34%	-1.04%	12.04%
JANUARY	2011	0.80%	0.80%	5.55%	-2.18%	-2.18%
FEBRUARY	2011	1.59%	2.41%	5.43%	1.92%	-0.30%
MARCH	2011	0.11%	2.52%	5.53%	-0.79%	-1.08%
APRIL	2011	1.78%	4.34%	5.37%	2.58%	1.48%
MAY	2011	0.01%	4.35%	5.24%	2.16%	3.66%
JUNE	2011	-0.64%	3.68%	5.43%	-2.07%	1.52%
JULY	2011	-0.24%	3.43%	5.12%	4.67%	6.25%
AUGUST	2011	-2.21%	1.15%	4.96%	2.52%	8.93%
SEPTEMBER	2011	-2.43%	-1.31%	4.54%	6.44%	15.94%

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