## Milliman analysis: Stable discount rates and a modest investment loss set up the sprint to Dec. 31st



Funded status fell by \$8 billion during November; year-to-date deficit increased by \$175 billion

John Ehrhardt, FSA, MAAA, EA Zorast Wadia, FSA, MAAA, EA

The funded status of the 100 largest corporate defined benefit pension plans decreased by \$8 billion during November 2011 as measured by the Milliman 100 Pension Funding Index (PFI) primarily due to investment losses. As of November 30, the funded ratio dropped to 75.0% from 75.5% at the end of October. The funded status deficit

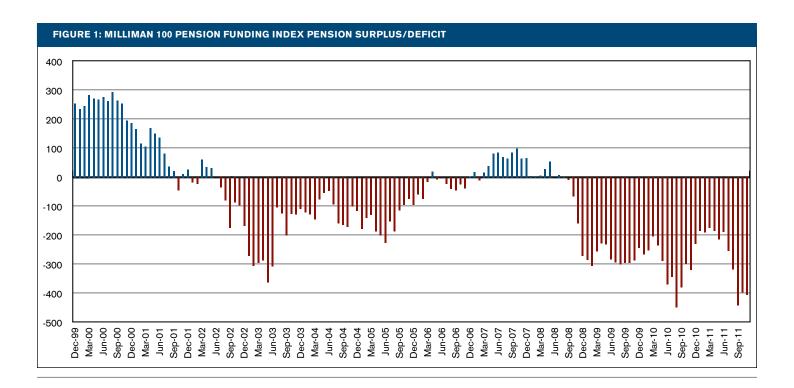
ніднііднтѕ						
		\$ BILLION				
	MV	РВО	FUNDED	FUNDED PERCENTAGE		
OCT 2011	1,220	1,616	(396)	75.5%		
NOV 2011	1,213	1,617	(404)	75.0%		
MONTHLY CHANGE	(7)	+1	(8)	-0.5%		
YTD CHANGE	+6	+181	(175)	-9.1%		

increased to \$404 billion from \$396 billion. With less than three weeks of financial market activity remaining in the fiscal year, plan sponsors and CFOs are likely to scrutinize daily changes in discount rates and investment performance as the volatile fiscal year of 2011 winds down.

The projected benefit obligation (PBO), or pension liabilities, increased by \$1 billion during November, raising the Milliman

100 PFI value to \$1.617 trillion from \$1.616 trillion at the end of October. The monthly discount rate remained flat. At 4.53%, it continues to be the lowest discount rate in the 11-year history of the Milliman 100 PFI.

Triggered by a 0.36% investment loss, November's \$7 billion decrease in market value of assets brings the Milliman 100 PFI asset value to \$1.213 trillion, down from \$1.220 trillion at the end of



October. 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.

Year to date, the cumulative asset return has been 2.27% and the Milliman 100 PFI funded status has decreased by \$175 billion. The paltry returns, however, are not the primary source of this erosion; that distinction goes to the lower trending discount rates. For the past 11 months, the funded ratio of the Milliman 100 companies decreased to 75.0% from 84.1%.

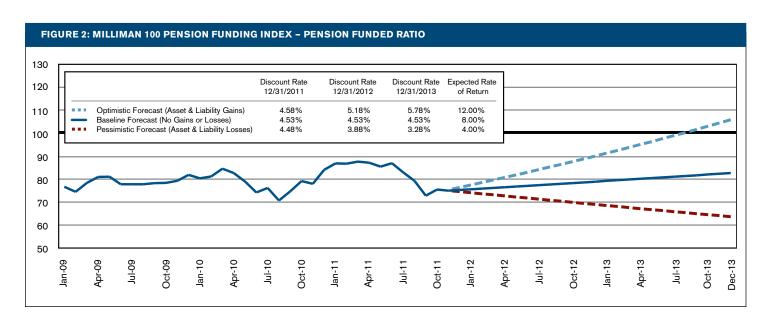
## **2011-2013 PROJECTIONS**

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 4.53% 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 \$345 billion (funded ratio of 78.9%) by the end of 2012 and a projected

pension deficit of \$287 billion (funded ratio of 82.7%) 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 5.18% by the end of 2012 and 5.78% by the end of 2013) and asset gains (12.0% annual returns), the funded ratio would climb to 90% by the end of 2012 and 106% by the end of 2013. Under a pessimistic forecast with similar interest rate and asset movements (3.88% discount rate at the end of 2012 and 3.28% by the end of 2013 and 4.0% annual returns), the funded ratio would decline to 69% by the end of 2012 and 64% by the end of 2013.

John Ehrhardt is a principal and consulting actuary with the New York office of Milliman. Zorast Wadia is a principal and consulting actuary with the New York office of Milliman. Contact them at john.ehrhardt@milliman.com or at 646.473.3000.



END OF MONTH	VEAD	MARKET VALUE OF ASSETS	PROJECTED BENEFIT OBLIGATION (PBO)	FUNDED STATUS	CHANGE IN	FUNDED DATIO
END OF MONTH	YEAR			FUNDED STATUS	FUNDED STATUS	FUNDED RATIO
NOVEMBER	2010	1,121,194	1,437,892	(316,698)	N/A	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	1,250,494	1,462,019	(211,525)	(27,858)	85.5%
JUNE	2011	1,240,458	1,426,542	(186,084)	25,441	87.0%
JULY	2011	1,235,520	1,488,141	(252,621)	(66,537)	83.0%
AUGUST	2011	1,205,921	1,520,685	(314,764)	(62,143)	79.3%
SEPTEMBER	2011	1,174,200	1,613,959	(439,759)	(124,995)	72.8%
OCTOBER	2011	1,220,043	1,615,745	(395,702)	44,057	75.5%
NOVEMBER	2011	1,213,631	1,617,132	(403,501)	(7,799)	75.0%

		ASSET F	LIABILITY RETURNS			
END OF MONTH	YEAR	MONTHLY	YEAR-TO-DATE	DISCOUNT RATE	MONTHLY	YEAR-TO-DATE
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	0.00%	4.35%	5.24%	2.16%	3.66%
IUNE	2011	-0.64%	3.67%	5.43%	-2.07%	1.52%
IULY	2011	-0.24%	3.43%	5.12%	4.67%	6.25%
AUGUST	2011	-2.24%	1.12%	4.96%	2.52%	8.93%
SEPTEMBER	2011	-2.47%	-1.38%	4.54%	6.44%	15.94%
CTOBER	2011	4.08%	2.64%	4.53%	0.40%	16.41%
NOVEMBER	2011	-0.36%	2.27%	4.53%	0.38%	16.85%

## 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.

The materials in this document represent the opinion of the authors and are not representative of the views of Milliman, Inc. Milliman does not certify the information, nor does it guarantee the accuracy and completeness of such information. Use of such information is voluntary and should not be relied upon unless an independent review of its accuracy and completeness has been performed. Materials may not be reproduced without the express consent of Milliman.

Copyright © 2011 Milliman, Inc.