Milliman Analysis: Corporate pension funded status improved by \$19 billion in September

Pension funded status has declined by \$130 billion this year

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



The funded status of the 100 largest corporate defined benefit pension plans improved by \$19 billion during September as measured by the Milliman 100 Pension Funding Index (PFI).

The deficit fell to \$437 billion due to interest rate gains during September. As of September 30, the funded ratio increased to 76.3%, up from 75.6% at the end of August.

The market value of assets fell by \$4 billion as a result of September's flat investment return of 0.07%. The Milliman 100 PFI asset value decreased to \$1.410 trillion at the end of September. 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), or pension liabilities, decreased to \$1.848 trillion at the end of September from \$1.871 trillion at the end of August. The change resulted from an increase of 10 basis points in the monthly discount rate to 3.42% for September from 3.32% for August. Discount rates had reached a record low in August and this improvement helped to boost funded status.

HIGHLIGHTS

	\$ BILLION				
	MV	РВО	FUNDED STATUS	FUNDED PERCENTAGE	
AUG 2016	1,415	1,871	(457)	75.6%	
SEPT 2016	1,410	1,848	(437)	76.3%	
MONTHLY CHANGE	(4)	(24)	+19	0.7%	
YTD CHANGE	+35	+166	(130)	-5.4%	

Note: Numbers may not add up precisely due to rounding

Third Quarter 2016 Summary

During the quarter ended September 30, 2016, the funded status deficit improved by \$11 billion. This was primarily due to the September funded status gain. The funded status worsened in July and August due to discount rate declines, but September reversed the trend resulting in the third quarter net improvement. The asset gains in the third quarter were at 2.53% as strong performance for the quarter helped to offset liability losses due to discount rate declines. Overall, discount rates fell by three basis points for the Milliman 100 PFI during the third quarter of 2016. The funded ratio of the Milliman 100 companies rose to 76.3% at the end of September from 75.6% at the end of June.

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

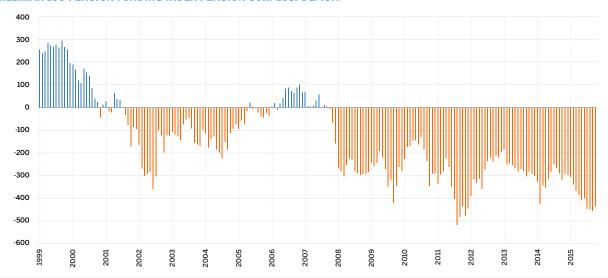




FIGURE 2: MILLIMAN 100 PENSION FUNDING INDEX — PENSION FUNDED RATIO

Over the last 12 months (October 2015 – September 2016), the cumulative asset return for these pensions has been 8.47%; however, the Milliman 100 PFI funded status deficit has deteriorated by \$117 billion. The rise in the funded status deficit over the past 12 months is primarily due to decreases in discount rates, on the order of 77 basis points. The funded ratio of the Milliman 100 companies has decreased over the past 12 months to 76.3% from 81.1%. Getting back to the 80% funded level before the end of the year requires a 3.7% improvement and remains a significant hurdle for the Milliman 100 plans in aggregate as the funded status deficit has risen by \$130 billion so far in 2016.

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 3.42% 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 \$429 billion (funded ratio of 76.8%) by the end of 2016 and a projected pension deficit of \$394 billion (funded ratio of 78.7%) 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 3.57% by the end of 2016 and 4.17% by the end of 2017) and asset gains (11.2% annual returns), the funded ratio would climb to 79% by the end of 2016 and 91% by the end of 2017. Under a pessimistic forecast with similar interest rate and asset movements (3.27% discount rate at the end of 2016 and 2.67% by the end of 2017 and 3.2% annual returns), the funded ratio would decline to 75% by the end of 2016 and 68% by the end of 2017.

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 6, 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.

CONTACT

Zorast Wadia zorast.wadia@milliman.com

2 OCTOBER 2016

MILLIMAN 100 PENSION FUNDING INDEX — SEPTEMBER 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
SEPTEMBER	2015	1,370,308	1,690,590	(320,282)	N/A	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	1,347,911	1,687,261	(339,350)	(32,362)	79.9%
FEBRUARY	2016	1,343,755	1,713,513	(369,758)	(30,408)	78.4%
MARCH	2016	1,376,714	1,763,363	(386,649)	(16,891)	78.1%
APRIL	2016	1,380,561	1,792,268	(411,707)	(25,058)	77.0%
MAY	2016	1,384,166	1,785,396	(401,230)	10,477	77.5%
JUNE	2016	1,391,465	1,839,493	(448,028)	(46,798)	75.6%
JULY	2016	1,416,294	1,868,152	(451,858)	(3,830)	75.8%
AUGUST	2016	1,414,693	1,871,278	(456,585)	(4,727)	75.6%
SEPTEMBER	2016	1,410,239	1,847,619	(437,380)	19,205	76.3%

PENSION ASSET AND LIABILITY RETURNS

		ASSET RETURNS			LIABILITY RETURNS	
END OF MONTH	YEAR	MONTHLY	YEAR-TO-DATE	DISCOUNT RATE	MONTHLY	YEAR-TO-DATE
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	-1.58%	-1.58%	4.14%	0.65%	0.65%
FEBRUARY	2016	0.10%	-1.48%	4.01%	1.88%	2.54%
MARCH	2016	2.86%	1.34%	3.78%	3.22%	5.85%
APRIL	2016	0.68%	2.03%	3.65%	1.94%	7.90%
MAY	2016	0.66%	2.70%	3.68%	-0.08%	7.81%
JUNE	2016	0.92%	3.65%	3.45%	3.32%	11.39%
JULY	2016	2.18%	5.91%	3.33%	1.84%	13.43%
AUGUST	2016	0.27%	6.20%	3.32%	0.44%	13.93%
SEPTEMBER	2016	0.07%	6.27%	3.42%	-0.99%	12.81%

©2016 Milliman, Inc. All Rights Reserved. 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.