Milliman analysis: 2017 starts optimistically with a funded status improvement

Milliman 100 PFI funded ratio rises to 81.6%

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The funded status of the 100 largest corporate defined benefit pension plans improved by \$9 billion during January as measured by the Milliman 100 Pension Funding Index (PFI). The funded status deficit narrowed to \$316 billion from \$325 billion at the end of December 2016 due to investment gains and relatively flat benchmark corporate bond interest rates used to value pension liabilities. As of January 31, the funded ratio rose to 81.6%, up from 81.1% at the end of December.

The market value of assets grew by \$7 billion as a result of January's investment gain of 0.87%. The Milliman 100 PFI asset value increased to \$1.400 trillion from \$1.393 trillion at the end of December 2016. 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 expected rate of return for 2016 will be updated in the 2017 Milliman Pension Funding Study, which will be released in April.

The projected benefit obligation (PBO), or pension liabilities, decreased to \$1.716 trillion at the end of January. The change resulted from a miniscule increase of one basis point in the monthly discount rate to 4.00% for January from 3.99% for December 2016. The fact that discount rates returned to 4.00% was noteworthy, a similar occurrence was last witnessed nearly one year ago in February 2016.

HIGHLIGHTS

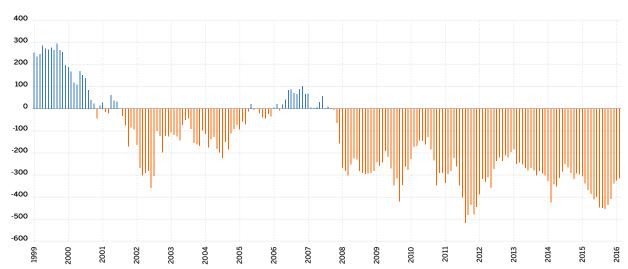
	\$ BILLION				
	MV	РВО	FUNDED STATUS	FUNDED PERCENTAGE	
DEC 2016	1,393	1,718	(325)	81.1%	
JAN 2017	1,400	1,716	(316)	81.6%	
MONTHLY CHANGE	+7	(2)	+9	0.5%	
YTD CHANGE	+7	(2)	+9	0.5%	

Note: Numbers may not add up precisely due to rounding

Over the last 12 months (February 2016–January 2017), the cumulative asset gain for these pensions has been 8.86%, but the Milliman 100 PFI funded status deficit only improved by \$23 billion. The funded status gain would have been significantly higher were it not for the general downward trend in discount rates during 2016. The funded ratio of the Milliman 100 companies has increased over the past 12 months to 81.6% from 79.9%.

The projected asset and liability figures presented in this analysis will be adjusted as part of our annual 2017 Pension Funding Study where pension settlement and annuity purchase activities that occurred during 2016 will be reflected. De-risking transactions generally result in reductions in pension funded

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



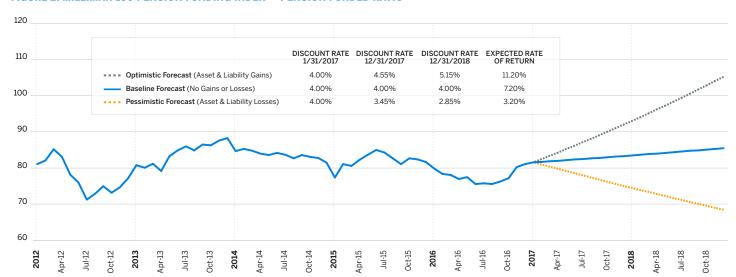


FIGURE 2: MILLIMAN 100 PENSION FUNDING INDEX — PENSION FUNDED RATIO

status because 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.

Pension plan accounting information disclosed in the footnotes of the Milliman 100 companies' annual reports for the 2016 fiscal year is expected to be available in April as part of the 2017 Milliman Pension Funding Study.

2017-2018 Projections

If the Milliman 100 PFI companies were to achieve the expected 7.2% (as per the 2016 pension funding study) median asset return for their pension plan portfolios and the current discount rate of 4.00% 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 \$287 billion (funded ratio of 83.3%) by the end of 2017 and a projected pension deficit of \$250 billion (funded ratio of 85.5%) by the end of 2018. For purposes of this forecast, we have assumed 2017 aggregate contributions of \$33 billion and 2018 aggregate contributions of \$36 billion.

Under an optimistic forecast with rising interest rates (reaching 4.55% by the end of 2017 and 5.15% by the end of 2018) and asset gains (11.2% annual returns), the funded ratio would climb to 92% by the end of 2017 and 105% by the end of 2018. Under a pessimistic forecast with similar interest rate and asset movements (3.45% discount rate at the end of 2017 and 2.85% by the end of 2018 and 3.2% annual returns), the funded ratio would decline to 75% by the end of 2017 and 69% by the end of 2018.

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.

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MILLIMAN 100 PENSION FUNDING INDEX — JANUARY 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
JANUARY	2016	1,347,911	1,687,261	(339,350)	N/A	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	1,391,437	1,839,493	(448,056)	(46,826)	75.6%
JULY	2016	1,416,211	1,868,152	(451,941)	(3,885)	75.8%
AUGUST	2016	1,414,554	1,871,278	(456,724)	(4,783)	75.6%
SEPTEMBER	2016	1,409,988	1,847,619	(437,631)	19,093	76.3%
OCTOBER	2016	1,391,811	1,802,720	(410,909)	26,722	77.2%
NOVEMBER	2016	1,381,616	1,720,876	(339,260)	71,649	80.3%
DECEMBER	2016	1,392,947	1,718,126	(325,179)	14,081	81.1%
JANUARY	2017	1,399,861	1,715,954	(316,093)	9,086	81.6%

PENSION ASSET AND LIABILITY RETURNS

		ASSET RETURNS			LIABILITY RETURNS	
END OF MONTH	YEAR	MONTHLY	YEAR-TO-DATE	DISCOUNT RATE	MONTHLY	YEAR-TO-DATE
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%	5.90%	3.33%	1.84%	13.43%
AUGUST	2016	0.27%	6.19%	3.32%	0.44%	13.93%
SEPTEMBER	2016	0.06%	6.25%	3.42%	-0.99%	12.81%
OCTOBER	2016	-0.90%	5.29%	3.61%	-2.14%	10.39%
NOVEMBER	2016	-0.34%	4.94%	3.98%	-4.24%	5.71%
DECEMBER	2016	1.22%	6.21%	3.99%	0.16%	5.88%
JANUARY	2017	0.87%	0.87%	4.00%	0.19%	0.19%

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