Milliman analysis: February's funded status declines after discount rate plunges below 4%

Milliman 100 PFI funded ratio drops to 81.5%

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After five straight months of improvement, the funded status of the 100 largest corporate defined benefit pension plans worsened by $6 billion during February as measured by the Milliman 100 Pension Funding Index (PFI). The decline was fueled by discount rates that plunged below 4%. An 11 basis point drop in the benchmark corporate bond interest rates used to value pension liabilities rendered February's strong investment performance almost meaningless. As of February 28, the funded status deficit of these plans widened to $322 billion from $316 billion at the end of January. The funded ratio fell to 81.5% down from 81.6% during the same time period.

The market value of assets grew by $19 billion as a result of February's robust investment return of 1.74%. The Milliman 100 PFI asset value increased to $1.419 trillion from $1.400 trillion at the end of January. 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, increased to $1.741 trillion from $1.716 trillion at the end of January. As mentioned, a decrease of 11 basis points brought interest rates to 3.89% for February from 4.00% for January.

HIGHLIGHTS

	$ BILLION			
	MV	PBO	FUNDED STATUS	FUNDED PERCENTAGE
JAN 2017	1,400	1,716	(316)	81.6%
FEB 2017	1,419	1,741	(322)	81.5%
MONTHLY CHANGE	+19	+25	(6)	-0.1%
YTD CHANGE	+26	+23	+3	0.4%

Note: Numbers may not add up precisely due to rounding

Interest rates had been steadily increasing during the five months starting August 31, 2016.

Over the last 12 months (March 2016 – February 2017), the cumulative asset return for these pensions has been 10.64% and the Milliman 100 PFI funded status deficit has improved by $47 billion. The funded status gain would have been significantly higher where 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 81.5% from 78.4%.

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

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

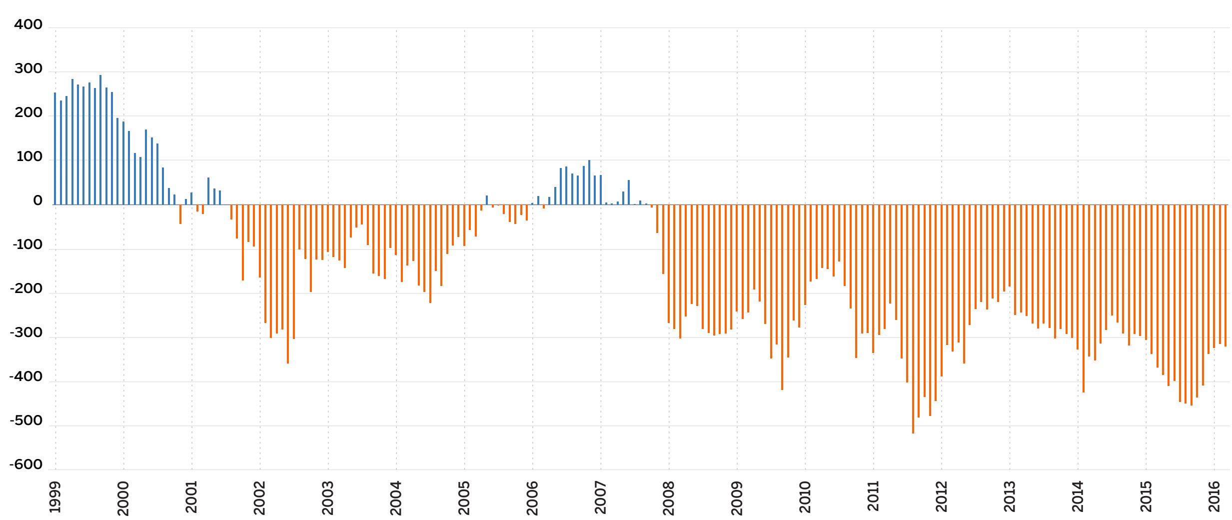
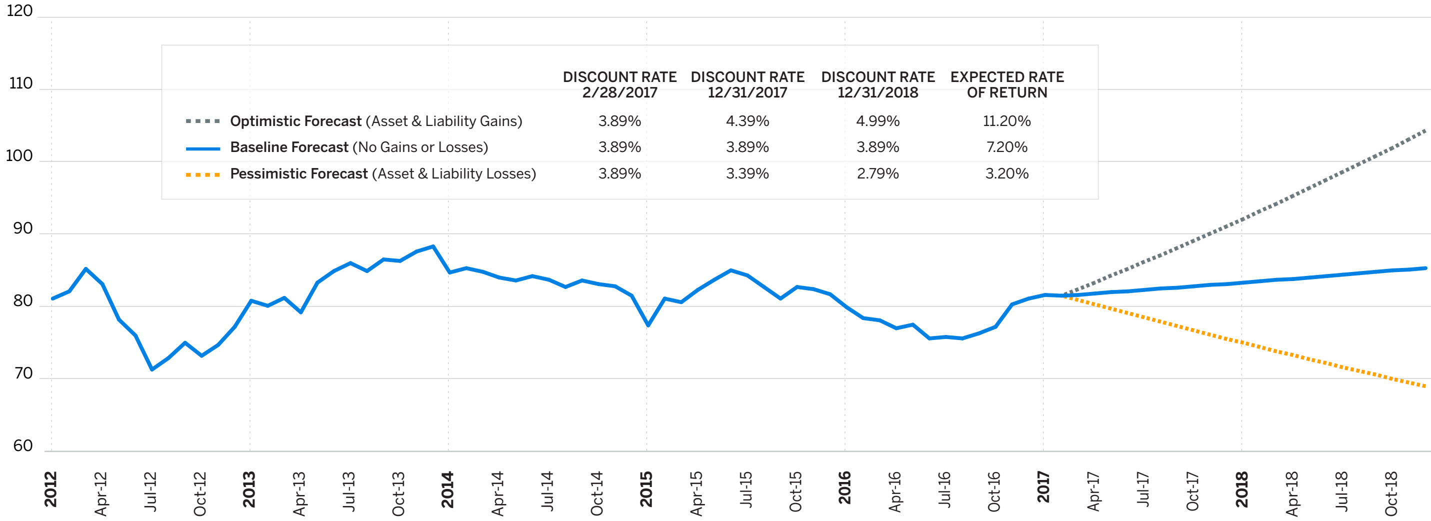


FIGURE 2: MILLIMAN 100 PENSION FUNDING INDEX — PENSION FUNDED RATIO



occurred during 2016 will be reflected. De-risking transactions generally result in reductions in pension funded 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 of 2017 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 3.89% 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 $295 billion (funded ratio of 83.1%) by the end of 2017 and a projected pension deficit of $256 billion (funded ratio of 85.3%) 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 4.39% by the end of 2017 and 4.99% by the end of 2018) and asset gains (11.2% annual returns), the funded ratio would climb to 91% by the end of 2017 and 104% by the end of 2018. Under a pessimistic forecast with similar interest rate and asset movements (3.39% discount rate at the end of 2017 and 2.79% 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.

CONTACT

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MILLIMAN 100 PENSION FUNDING INDEX — FEBRUARY 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
FEBRUARY	2016	1,343,755	1,713,513	(369,758)	N/A	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	1,409,878	1,847,619	(437,741)	18,983	76.3%
OCTOBER	2016	1,391,701	1,802,720	(411,019)	26,722	77.2%
NOVEMBER	2016	1,381,533	1,720,876	(339,343)	71,676	80.3%
DECEMBER	2016	1,392,864	1,718,126	(325,262)	14,081	81.1%
JANUARY	2017	1,399,889	1,715,954	(316,065)	9,197	81.6%
FEBRUARY	2017	1,418,964	1,741,417	(322,453)	(6,388)	81.5%

PENSION ASSET AND LIABILITY RETURNS

		ASSET RETURNS			LIABILITY RETURNS	
END OF MONTH	YEAR	MONTHLY	YEAR-TO-DATE	DISCOUNT RATE	MONTHLY	YEAR-TO-DATE
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%	4.93%	3.98%	-4.24%	5.71%
DECEMBER	2016	1.22%	6.21%	3.99%	0.16%	5.88%
JANUARY	2017	0.88%	0.88%	4.00%	0.19%	0.19%
FEBRUARY	2017	1.74%	2.63%	3.89%	1.80%	1.99%