Milliman Analysis: 2015 ends with modest funded status improvement over 2014 based on rising interest rates

Milliman 100 PFI funded ratio ends at 82.7% in 2015 compared to 81.5% at end of 2014

Discount rate settles at 4.22%, up 38 basis points during 2015

Forecast for end of year 2016 and 2017

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YEAR IN REVIEW

Based on a review of interest rate activity over the last six years ending with 2014, an increase in the net interest rate for the year has occurred just once. The year 2015, like 2013, changes the history to two years in the last seven years in which interest rates increased, resulting in lower pension liabilities. The Milliman 100 discount rate climbed 38 basis points to 4.22% at the end of 2015, from 3.84% at the end of 2014.

While 2012, 2013, and 2014 resulted in asset returns above expectations, 2015 asset performance was dismal: investment return was 1.15% for the year, well under the annual asset return expectation of 7.3%.

The result was a funded status improvement of $35 billion at the end of 2015 when compared to the end of 2014. The year-end 2015 funded ratio was 82.7%, up from 81.5% at the end of 2014. But the 2015 funded ratio still trails the year-end high point over the last seven years of 88.3% at the end of 2013.

The funded status increased by $35 billion during 2015 for the 100 largest corporate defined benefit pension plans, as measured by the Milliman 100 Pension Funding Index (PFI). Higher interest rates were the dominant factor in the funded status improvement. While lower-than-expected investment returns produced a $45 billion loss, pension liabilities decreased by $80 billion.

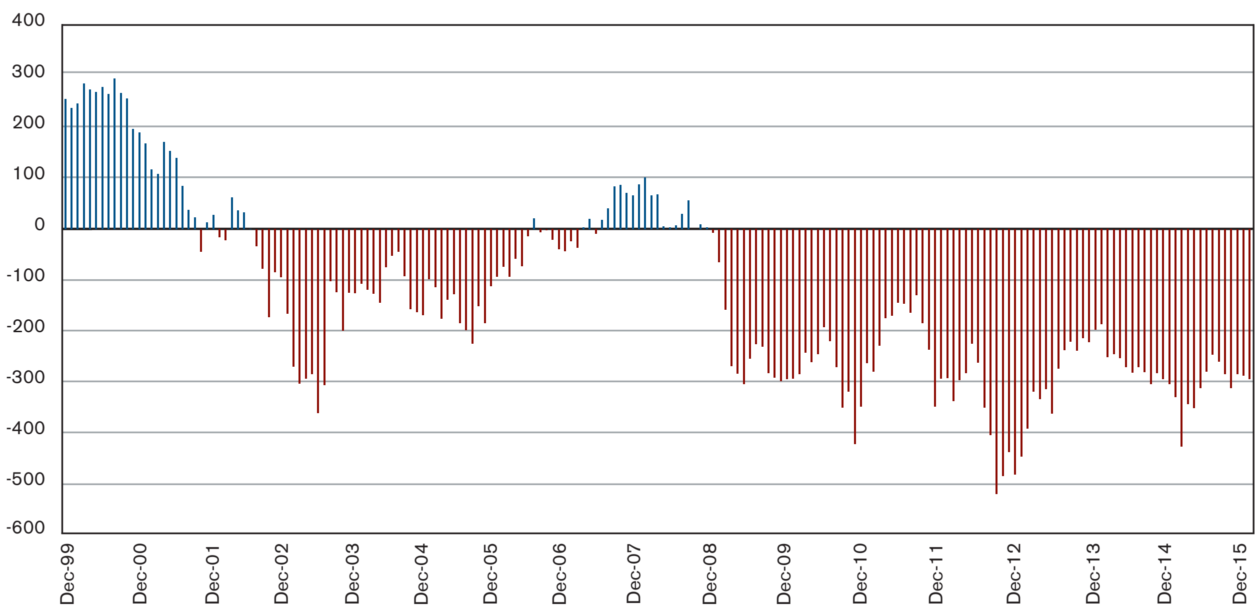
HIGHLIGHTS

	$ BILLION			
	MV	PBO	FUNDED STATUS	FUNDED PERCENTAGE
NOV 2015	1,429	1,716	(287)	83.3%
DEC 2015	1,410	1,705	(294)	82.7%
MONTHLY CHANGE	(18)	(11)	(7)	-0.6%
YTD CHANGE	(45)	(80)	+35	1.2%

Note: Numbers may not add up precisely due to rounding

The projected asset and liability figures presented in this analysis will be adjusted as part of Milliman's annual 2016 Pension Funding Study. The study will also adjust for pension settlement and annuity purchase activities that occurred during 2015. De-risking transactions generally result in reductions in pension funded status since 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.

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



During 2015, the cumulative investment return was 1.15%, while the cumulative liability return (i.e., the projected benefit obligation (PBO) decrease) was 0.98%. The $35 billion funded status improvement during 2015 resulted in a year-end funded status deficit of $294 billion. Despite the gain in funded status during 2015, pension expense for 2016 is estimated to increase by $6 billion, primarily due to the asset losses experienced during 2015.

The year 2015 got off to a poor start as interest rates dropped 43 basis points in January 2015, resulting in the funded ratio hitting its low point for the year at 77.5%. The activity during the remainder of the first quarter of 2015 was largely positive, with strong asset performance boosting the funded ratio to 80.9% as of March 31, 2015. In spite of poor asset performance in June, the second quarter of 2015 was largely optimistic given that interest rates rose 60 basis points during this period. The funded ratio at the end of June 2015 was 85.5%, its peak for 2015. From there, funded status deterioration set in, with dismal asset returns being recorded during the third quarter of 2015. As of September 30, asset returns were already negative for the year, and the funded ratio had declined to 81.7%. The fourth quarter provided some improvement, primarily due to strong investment returns in October, which turned out to be the best month of the year with returns of 2.97%. Interest rates were mainly flat in the fourth quarter, and the funded ratio ended the year slightly up at 82.7%.

Rumors were rampant in the fourth quarter of a looming rate hike by the Federal Reserve and were realized with a small 25 basis point rate hike in December. But by the time of the announcements, major markets had already reflected the action. Hence, discount rates for pensions only increased by six basis points in December. The action by the Fed primarily affected liabilities at the short end (low duration) of the yield curve and did not have much effect beyond that. Of course if interest rates continue their upward path during 2016, the funded ratio could make some major gains. More information on this is provided in the 2016-2017 projections discussion below.

Pension plan accounting information disclosed in the footnotes of the Milliman 100 companies' annual reports for the 2015 fiscal year is expected to be available during the first quarter of 2016 as part of the 2016 Milliman Pension Funding Study.

DECEMBER REVIEW

The funded status decreased by $7 billion during December. The deficit increased to $294 billion from a deficit of $287 billion at the end of November. The funded status drop for the month of December was due to negative investment returns of 0.93%. The decrease in pension assets was offset by the decrease in pension liabilities based on a small increase in corporate bond interest rates that are the benchmarks used to value pension liabilities. As of December 31, the funded ratio decreased to 82.7% from 83.3% at the end of November.

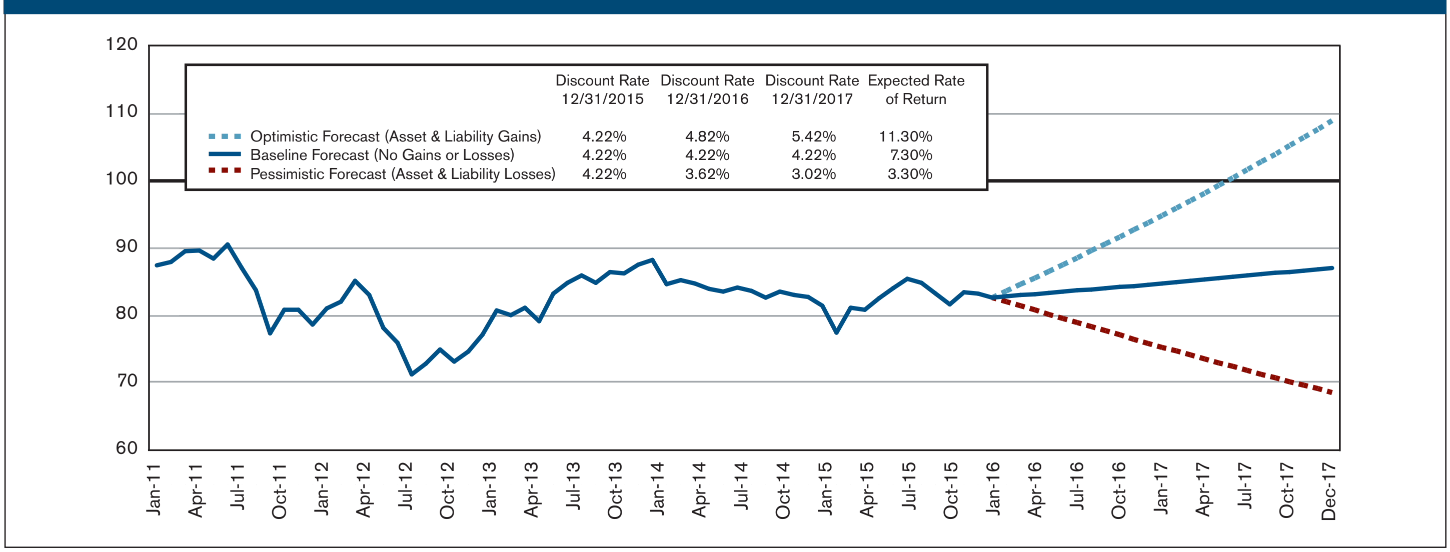
December's $18 billion decrease in market value brings the Milliman 100 PFI asset value to $1.410 trillion at year-end 2015. The PBO, or pension liabilities, decreased by $11 billion during December, lowering the Milliman 100 PFI value to $1.705 trillion from $1.716 trillion at the end of November 2015. The change resulted from an increase of six basis points in the monthly discount rate to 4.22% for December from 4.16% for November.

2016-2017 PROJECTIONS

If the Milliman 100 PFI companies were to achieve the expected 7.3% (as per the 2015 pension funding study) median asset return for their pension plan portfolios, and the current discount rate of 4.22% was 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 $260 billion (funded ratio of 84.8%) by the end of 2016 and a projected pension deficit of $221 billion (funded ratio of 87.1%) by the end of 2017. For purposes of this forecast, we have assumed 2016 aggregate contributions of $36 billion and 2017 aggregate contributions of $39 billion.

Under an optimistic forecast with rising interest rates (reaching 4.82% by the end of 2016 and 5.42% by the end of 2017) and asset gains (11.3% annual returns), the funded ratio would climb to 95% by the end of 2016 and 109% by the end of 2017. Under a pessimistic forecast with similar interest rate and asset movements (3.62% discount rate at the end of 2016 and 3.02% by the end of 2017 and 3.3% annual returns), the funded ratio would decline to 75% by the end of 2016 and 69% by the end of 2017.

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



MILLIMAN 100 PENSION FUNDING INDEX – DECEMBER 2015 (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
DECEMBER	2014	1,455,159	1,784,747	(329,588)	N/A	81.5%
JANUARY	2015	1,466,814	1,892,551	(425,737)	(96,149)	77.5%
FEBRUARY	2015	1,484,594	1,827,742	(343,148)	82,589	81.2%
MARCH	2015	1,481,729	1,832,227	(350,498)	(7,350)	80.9%
APRIL	2015	1,479,378	1,790,601	(311,223)	39,275	82.6%
MAY	2015	1,476,896	1,756,407	(279,511)	31,712	84.1%
JUNE	2015	1,446,951	1,692,416	(245,465)	34,046	85.5%
JULY	2015	1,458,824	1,718,461	(259,637)	(14,172)	84.9%
AUGUST	2015	1,414,728	1,698,809	(284,081)	(24,444)	83.3%
SEPTEMBER	2015	1,395,962	1,707,660	(311,698)	(27,617)	81.7%
OCTOBER	2015	1,432,182	1,715,849	(283,667)	28,031	83.5%
NOVEMBER	2015	1,428,807	1,715,749	(286,942)	(3,275)	83.3%
DECEMBER	2015	1,410,402	1,704,667	(294,265)	(7,323)	82.7%

PENSION ASSET AND LIABILTY RETURNS

		ASSET RETURNS			LIABILITY RETURNS	
END OF MONTH	YEAR	MONTHLY	YEAR-TO-DATE	DISCOUNT RATE	MONTHLY	YEAR-TO-DATE
DECEMBER	2014	0.00%	9.46%	3.84%	1.37%	15.95%
JANUARY	2015	1.16%	1.16%	3.41%	6.32%	6.32%
FEBRUARY	2015	1.57%	2.74%	3.67%	-3.15%	2.97%
MARCH	2015	0.15%	2.90%	3.65%	0.52%	3.51%
APRIL	2015	0.19%	3.10%	3.82%	-1.99%	1.45%
MAY	2015	0.18%	3.28%	3.97%	-1.61%	-0.19%
JUNE	2015	-1.68%	1.55%	4.25%	-3.33%	-3.52%
JULY	2015	1.18%	2.74%	4.14%	1.85%	-1.73%
AUGUST	2015	-2.67%	0.00%	4.23%	-0.83%	-2.54%
SEPTEMBER	2015	-0.96%	-0.97%	4.19%	0.84%	-1.73%
OCTOBER	2015	2.97%	1.97%	4.16%	0.79%	-0.95%
NOVEMBER	2015	0.12%	2.10%	4.16%	0.30%	-0.65%
DECEMBER	2015	-0.93%	1.15%	4.22%	-0.33%	-0.98%

ABOUT THE MILLIMAN 100 MONTHLY PENSION FUNDING INDEX

For the past 15 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 2014 fiscal year and for previous fiscal years. This pension plan accounting disclosure information was summarized as part of the Milliman 2015 Pension Funding Study, which was published on April 2, 2015. 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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