## Milliman Analysis: Corporate pension funded status drops by \$25 billion in April

Further discount rate declines worsen the funded ratio to 77.1%

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



The funded status of the 100 largest corporate defined benefit pension plans worsened by \$25 billion during April as measured by the Milliman 100 Pension Funding Index (PFI). The deficit rose to \$411 billion, primarily due to a decrease in the benchmark corporate bond interest rates used to value pension liabilities. Pension asset investment gains in excess of expected returns during April helped to offset the funded status decrease. As of April 30, the funded ratio declined to 77.1% from 78.1% at the end of March. Discount rates have fallen in every month of 2016 so far and funding ratios have followed suit. Funded status losses for the year are \$104 billion.

The projected benefit obligation (PBO), or pension liabilities, increased by \$29 billion during April, raising the Milliman 100 PFI value to \$1.792 trillion from \$1.763 trillion at the end of March. A decrease of 13 basis points in the monthly discount rate lowered rates to 3.65% for April, resulting in a PBO increase.

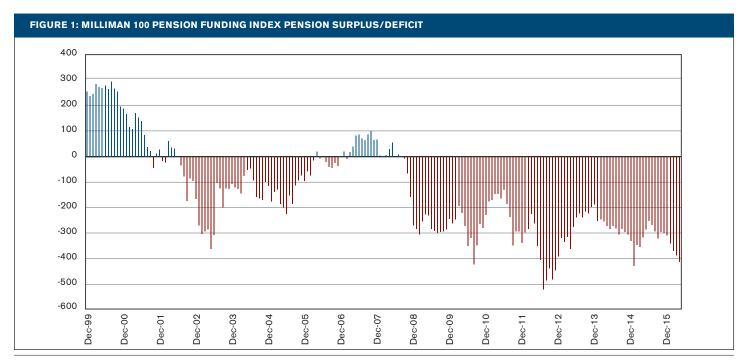
The market value of assets increased by \$4 billion as a result of April's investment gain of 0.69%. The Milliman 100 PFI asset value increased to \$1.381 trillion from \$1.377 trillion at the end of March. By comparison, the 2016 Milliman Pension Funding Study reported

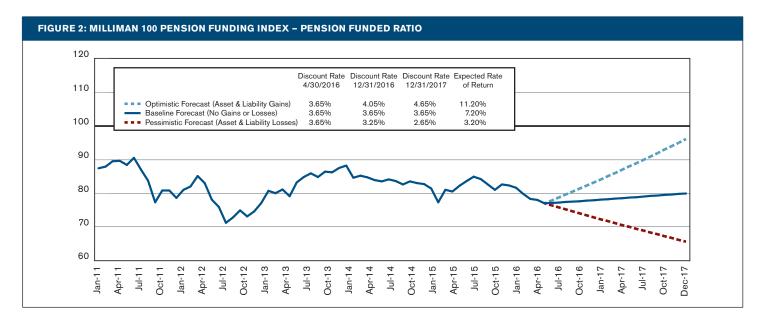
HIGHLIGHTS						
		\$ BILLION				
	MV	РВО	FUNDED STATUS	FUNDED PERCENTAGE		
MAR 2016	1,377	1,763	(386)	78.1%		
APR 2016	1,381	1,792	(411)	77.1%		
MONTHLY CHANGE	+4	+29	(25)	-1.0%		
YTD CHANGE	+6	+110	(104)	-4.6%		

Note: Numbers may not add up precisely due to rounding

that the monthly median expected investment return during 2015 was 0.58% (7.2% annualized).

Over the last 12 months (May 2015 – April 2016), the cumulative asset return for these pensions has been 0.1% and the Milliman 100 PFI funded status deficit has ballooned by \$96 billion. The rise in funded status deficit over the past 12 months is due to the dual effect of decreases in discount rates and less-than-expected investment returns. The funded ratio of the Milliman 100 companies has dropped over the past 12 months to 77.1% from 82.3%.





## **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 3.65% 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 \$392 billion (funded ratio of 78.2%) by the end of 2016 and a projected pension deficit of \$358 billion (funded ratio of 80.0%) by the end of 2017. For purposes of this forecast, we have assumed 2016 aggregate contributions of \$36 billion.

Under an optimistic forecast with rising interest rates (reaching 4.05% by the end of 2016 and 4.65% by the end of 2017) and asset gains (11.2% annual returns), the funded ratio would climb to 84% by the end of 2016 and 96% by the end of 2017. Under a pessimistic forecast with similar interest rate and asset movements (3.25% discount rate at the end of 2016 and 2.65% by the end of 2017 and 3.2% annual returns), the funded ratio would decline to 72% by the end of 2016 and 66% 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.

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

May 2016

END OF MONTH	YEAR	MARKET VALUE OF ASSETS	PROJECTED BENEFIT OBLIGATION (PBO)	FUNDED STATUS	CHANGE IN FUNDED STATUS	FUNDED RATIO
APRIL	2015	1,467,260	1,782,624	(315,364)	N/A	82.3%
MAY	2015	1,461,789	1,746,631	(284,842)	30,522	83.7%
IUNE	2015	1,429,208	1,681,119	(251,911)	32,931	85.0%
IULY	2015	1,437,976	1,705,086	(267,110)	(15,199)	84.3%
AUGUST	2015	1,391,617	1,683,706	(292,089)	(24,979)	82.7%
SEPTEMBER	2015	1,370,308	1,690,590	(320,282)	(28,193)	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	1,348,137	1,687,261	(339,124)	(32,136)	79.9%
FEBRUARY	2016	1,344,065	1,713,513	(369,448)	(30,324)	78.4%
MARCH	2016	1,376,970	1,763,363	(386,393)	(16,945)	78.1%
APRIL	2016	1,381,013	1,792,268	(411,255)	(24,862)	77.1%
PENSION ASSET A	ND LIABILTY RET	TURNS				
		ASSET RETURNS		LIABILITY RETURNS		
END OF MONTH	YEAR	MONTHLY	YEAR-TO-DATE	DISCOUNT RATE	MONTHLY	YEAR-TO-DATE
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%

2.74%

-0.01%

-0.97%

1.97%

2.09%

1.08%

-1.56%

-1.46%

1.36%

2.06%

4.14%

4.23%

4.19%

4.16%

4.16%

4.16%

4.14%

4.01%

3.78%

3.65%

1.85%

-0.83%

0.84%

0.79%

0.30%

-0.33%

0.65%

1.88%

3.22%

1.94%

-1.73%

-2.54%

-1.73%

-0.95%

-0.65%

-0.98%

0.65%

2.54%

5.85%

7.90%

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.

2015

2015

2015

2015

2015

2015

2016

2016

2016

2016

**AUGUST** 

**OCTOBER** 

NOVEMBER

**DECEMBER** 

JANUARY

MARCH

APRIL

**FEBRUARY** 

SEPTEMBER

1.18%

-2.68%

-0.97%

2.97%

0.12%

-0.99%

-1.56%

0.10%

2.86%

0.69%