

# Milliman Analysis: Corporate pension funded status improved by \$28 billion in October

Second straight month of funded status gains

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The funded status of the 100 largest corporate defined benefit pension plans improved by \$28 billion during October as measured by the Milliman 100 Pension Funding Index (PFI).

October's funded status boost was the largest of 2016. The deficit fell to \$410 billion due to interest rate gains experienced during October. As of October 31, the funded ratio increased to 77.3%, up from 76.3% at the end of September.

The market value of assets declined by \$17 billion as a result of October's investment loss of 0.84%. The Milliman 100 PFI asset value decreased to \$1.393 trillion at the end of October from \$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 \$1.803 trillion at the end of October from \$1.848 trillion at the end of September. The change resulted from an increase of 19 basis points in the monthly discount rate to 3.61% for October, from 3.42% for September. Discount rates

## HIGHLIGHTS

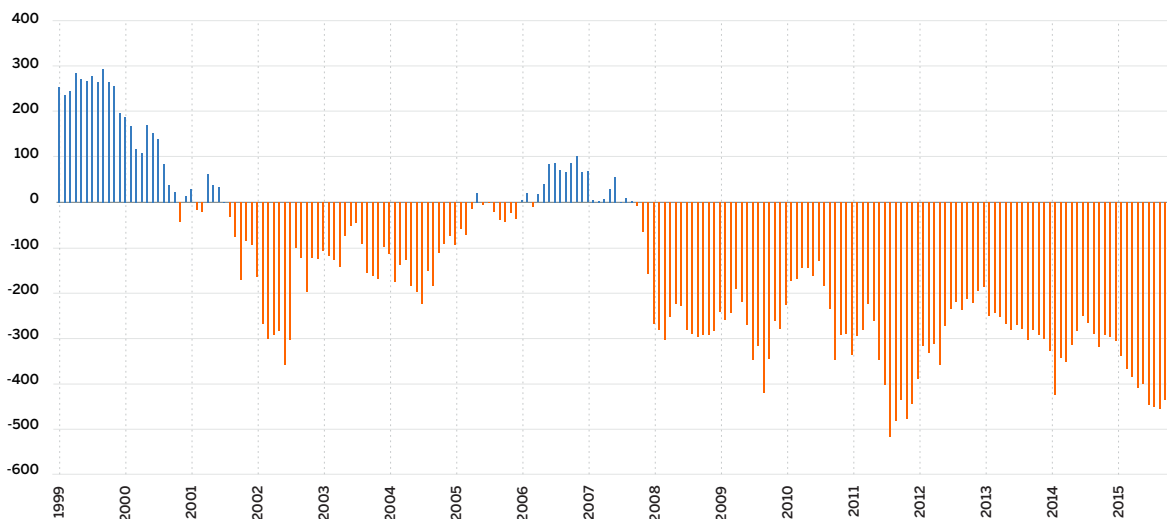
	\$ BILLION			
	MV	PBO	FUNDED STATUS	FUNDED PERCENTAGE
SEPT 2016	1,410	1,848	(438)	76.3%
OCT 2016	1,393	1,803	(410)	77.3%
MONTHLY CHANGE	(17)	(45)	+28	1.0%
YTD CHANGE	+18	+121	(103)	-4.4%

Note: Numbers may not add up precisely due to rounding

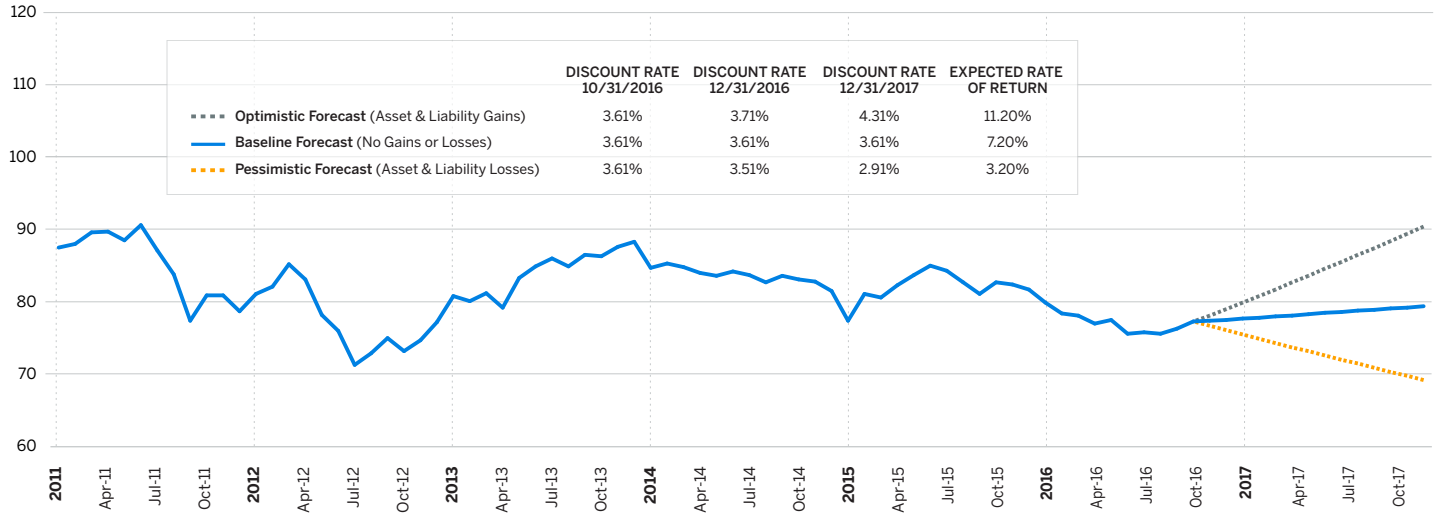
had reached a record low in August and have climbed 29 basis points since then to help boost funded status.

Over the last 12 months (November 2015 – October 2016), the cumulative asset return for these pensions has been 4.44% and the Milliman 100 PFI funded status deficit has deteriorated by \$116 billion. The rise in the funded status deficit over the past 12 months is due to a combination of decreases in discount rates, on the order of 55 basis points, and lower-than-expected investment returns. The funded ratio of the Milliman 100 companies has decreased over the past 12 months to 77.3% from 82.7%. Getting back above the 80% funded level before the end of the year remains a significant hurdle for the Milliman 100 plans in aggregate as the funded status deficit has risen by \$103 billion so far in 2016.

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



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



## 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 3.61% 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 \$405 billion (funded ratio of 77.5%) by the end of 2016 and a projected pension deficit of \$372 billion (funded ratio of 79.4%) 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 3.71% by the end of 2016 and 4.31% 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 90% by the end of 2017. Under a pessimistic forecast with similar interest rate and asset movements (3.51% discount rate at the end of 2016 and 2.91% by the end of 2017 and 3.2% annual returns), the funded ratio would decline to 76% by the end of 2016 and 69% 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

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**MILLIMAN 100 PENSION FUNDING INDEX — OCTOBER 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
OCTOBER	2015	1,403,004	1,696,802	(293,798)	N/A	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	1,391,437	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	1,414,582	1,871,278	(456,696)	(4,755)	75.6%
SEPTEMBER	2016	1,410,044	1,847,619	(437,575)	19,121	76.3%
OCTOBER	2016	1,392,724	1,802,720	(409,996)	27,579	77.3%

**PENSION ASSET AND LIABILITY RETURNS**

END OF MONTH	YEAR	ASSET RETURNS			LIABILITY RETURNS	
		MONTHLY	YEAR-TO-DATE	DISCOUNT RATE	MONTHLY	YEAR-TO-DATE
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%	5.90%	3.33%	1.84%	13.43%
AUGUST	2016	0.27%	6.19%	3.32%	0.44%	13.93%
SEPTEMBER	2016	0.07%	6.26%	3.42%	-0.99%	12.81%
OCTOBER	2016	-0.84%	5.36%	3.61%	-2.14%	10.39%