

Milliman Analysis: Funded status rises in June by \$23 billion

The Milliman 100 PFI funded ratio increases to 92.8% as discount rates climb above 4% to reach a two-year high

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The funded status of the 100 largest corporate defined benefit pension plans increased by \$23 billion during June as measured by the Milliman 100 Pension Funding Index (PFI). The deficit fell to \$118 billion from \$141 billion at the end of May due to an increase in the benchmark corporate bond interest rates used to value pension liabilities. June's funded status improvement would have been even higher were it not for offsetting poor investment returns. As of June 30, the funded ratio climbed to 92.8%, up from 91.6% at the end of May. The mid-year funded ratio is well above the 87.6% at the start of 2018.

June's -0.09% investment return pushed assets down to \$1,526 trillion from \$1,531 trillion at the end of May. By comparison, the 2018 Milliman Pension Funding Study reported that the monthly median expected investment return during 2017 was 0.55% (6.8% annualized).

The projected benefit obligation (PBO) decreased by \$28 billion during June, lowering the Milliman 100 PFI value to \$1,644 trillion. The change resulted from an increase of 13 basis points in the monthly discount rate; the rate reached 4.12% for June, from 3.99% in May. June's discount rate marks the highest rate since 4.14% observed at the end of January 2016.

HIGHLIGHTS

	\$ BILLION			
	MV	PBO	FUNDED STATUS	FUNDED PERCENTAGE
MAY	1,531	1,672	(141)	91.6%
JUNE	1,526	1,644	(118)	92.8%
MONTHLY CHANGE	(5)	(28)	+23	1.2%
YTD CHANGE	(29)	(132)	+103	5.2%

Note: Numbers may not add up precisely due to rounding

Second Quarter 2018 Summary

For the quarter ending June 30, 2018, assets experienced a net investment gain of 0.61% with returns falling short of expectations. However, discount rates rose by 21 basis points in that same quarter resulting in a net funded status improvement of \$40 billion. The funded status deficit shrank to \$118 billion by the end of the second quarter. The funded ratio of the Milliman 100 companies increased to 92.8% at the end of June from 90.6% at the end of March primarily due to discount rate gains during this period.

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

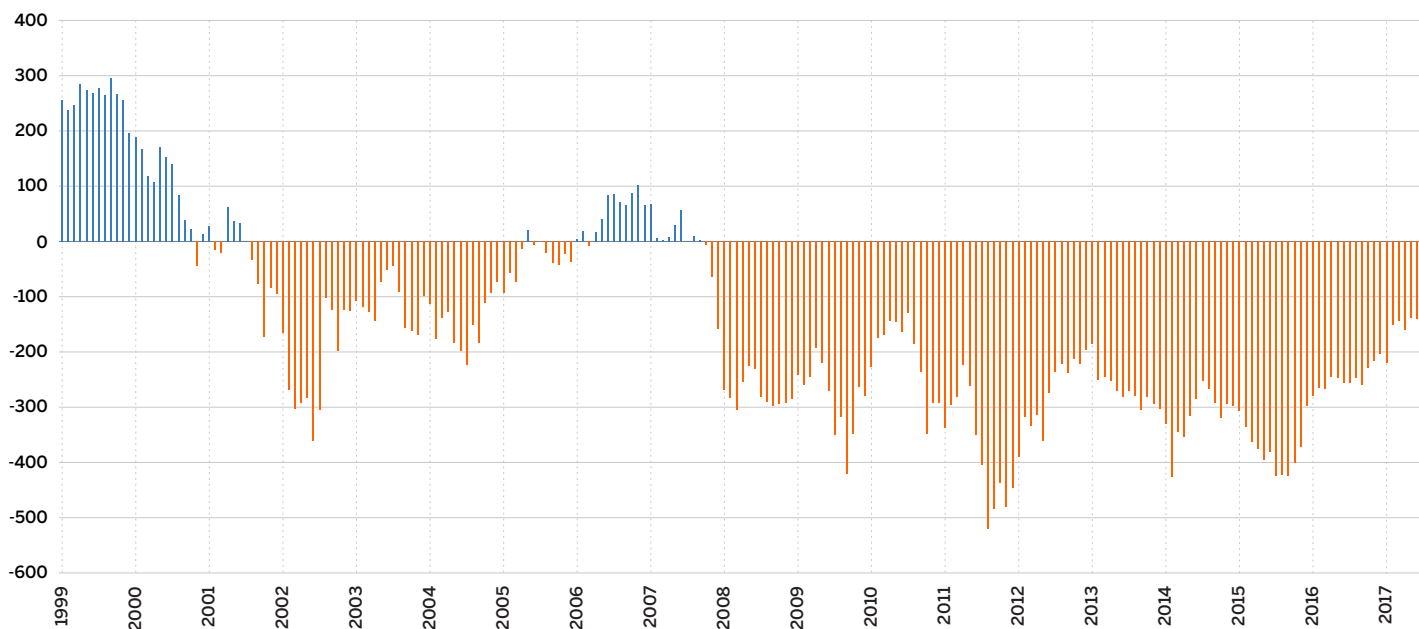
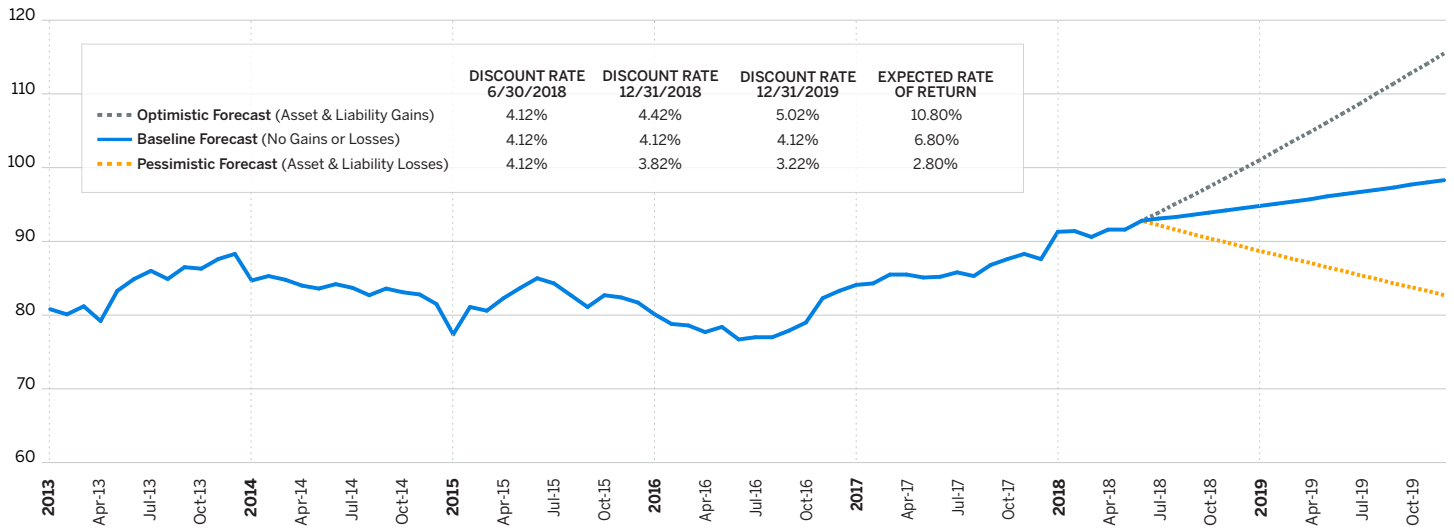


FIGURE 2: MILLIMAN 100 PENSION FUNDING INDEX – PENSION FUNDED RATIO



Over the last 12 months (July 2017 – June 2018), the cumulative asset return for these pensions has been 5.39% and the Milliman 100 PFI funded status deficit has improved by \$138 billion. The primary reason for the increase in the funded status deficit was discount rate gains over the past 12 months. Discount rates have risen from 3.74% as of June 30, 2017 to 4.12% a year later. The funded ratio of the Milliman 100 companies has increased over the past 12 months to 92.8% from 85.2%.

2018-2019 Projections

If the Milliman 100 PFI companies were to achieve the expected 6.8% median asset return (as per the 2018 pension funding study), and if the current discount rate of 4.12% was maintained during years 2018 through 2019, we forecast the funded status of the surveyed plans would increase. This would result in a projected pension deficit of \$91 billion (funded ratio of 94.5%) by the end of 2018 and a projected pension deficit of \$28 billion (funded ratio of 98.3%) by the end of 2019. For purposes of this forecast, we have assumed 2018 aggregate contributions of \$48 billion and 2019 aggregate contributions of \$52 billion.

Under an optimistic forecast with rising interest rates (reaching 4.42% by the end of 2018 and 5.02% by the end of 2019) and asset gains (10.8% annual returns), the funded ratio would climb to 100% by the end of 2018 and 116% by the end of 2019. Under a pessimistic forecast with similar interest rate and asset movements (3.82% discount rate at the end of 2018 and 3.22% by the end of 2019 and 2.8% annual returns), the funded ratio would decline to 89% by the end of 2018 and 83% by the end of 2019.

About the Milliman 100 Monthly Pension Funding Index

For the past 18 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 2017 fiscal year and for previous fiscal years. This pension plan accounting disclosure information was summarized as part of the Milliman 2018 Pension Funding Study, which was published on April 19, 2018. 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 — JUNE 2018 (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
JUNE	2017	1,472,646	1,729,345	(256,699)	N/A	85.2%
JULY	2017	1,487,443	1,733,915	(246,472)	10,227	85.8%
AUGUST	2017	1,499,743	1,758,756	(259,013)	(12,541)	85.3%
SEPTEMBER	2017	1,510,478	1,739,278	(228,800)	30,213	86.8%
OCTOBER	2017	1,528,863	1,744,652	(215,789)	13,011	87.6%
NOVEMBER	2017	1,540,006	1,744,398	(204,392)	11,397	88.3%
DECEMBER	2017	1,555,289	1,775,721	(220,432)	(16,040)	87.6%
JANUARY	2018	1,576,415	1,727,191	(150,776)	69,656	91.3%
FEBRUARY	2018	1,536,732	1,680,622	(143,890)	6,886	91.4%
MARCH	2018	1,529,451	1,688,946	(159,495)	(15,605)	90.6%
APRIL	2018	1,524,260	1,663,183	(138,923)	20,572	91.6%
MAY	2018	1,531,492	1,672,278	(140,786)	(1,863)	91.6%
JUNE	2018	1,525,731	1,644,368	(118,637)	22,149	92.8%

PENSION ASSET AND LIABILITY RETURNS

END OF MONTH	YEAR	ASSET RETURNS		DISCOUNT RATE	LIABILITY RETURNS	
		MONTHLY	YEAR-TO-DATE		MONTHLY	YEAR-TO-DATE
JUNE	2017	0.31%	5.53%	3.74%	0.57%	5.21%
JULY	2017	1.01%	6.60%	3.71%	0.58%	5.82%
AUGUST	2017	0.83%	7.49%	3.60%	1.74%	7.66%
SEPTEMBER	2017	0.72%	8.26%	3.69%	-0.80%	6.80%
OCTOBER	2017	1.22%	9.58%	3.66%	0.62%	7.46%
NOVEMBER	2017	0.73%	10.38%	3.67%	0.29%	7.78%
DECEMBER	2017	0.99%	11.48%	3.53%	2.10%	10.04%
JANUARY	2018	1.64%	1.64%	3.74%	-2.39%	-2.39%
FEBRUARY	2018	-2.25%	-0.64%	3.96%	-2.34%	-4.67%
MARCH	2018	-0.19%	-0.84%	3.91%	0.86%	-3.85%
APRIL	2018	-0.06%	-0.89%	4.03%	-1.16%	-4.96%
MAY	2018	0.76%	-0.14%	3.99%	0.92%	-4.09%
JUNE	2018	-0.09%	-0.23%	4.12%	-1.30%	-5.34%