

Milliman analysis: Funded status improves by \$38 billion in September

Milliman 100 PFI funded ratio rises to 85.4% due to an increase in interest rates

Zorast Wadia, CFA, FSA, MAAA, EA
Charles Clark, ASA, MAAA, EA



The funded status of the 100 largest corporate defined benefit pension plans rose by \$38 billion during September as measured by the Milliman 100 Pension Funding Index (PFI). The deficit fell to \$269 billion primarily due to an increase in the benchmark corporate bond interest rates used to value pension liabilities. Asset returns were flat during September leaving the market value unchanged from last month. As of September 30, the funded ratio increased to 85.4%, up from 83.8% at the end of August.

The market value of assets remained at \$1.580 trillion at the end of September due to a monthly investment return of 0.25%. By comparison, the 2019 Milliman Pension Funding Study reported that the monthly median expected investment return during 2018 was 0.53% (6.6% annualized).

The projected benefit obligation (PBO) decreased by \$38 billion during September, lowering the Milliman 100 PFI value to \$1.849

HIGHLIGHTS

	\$ BILLION			
	MV	PBO	FUNDED STATUS	FUNDED PERCENTAGE
AUGUST	1,580	1,887	(307)	83.8%
SEPTEMBER	1,580	1,849	(269)	85.4%
MONTHLY CHANGE	+0	(38)	+38	1.6%
YTD CHANGE	+135	+234	(99)	-4.0%

Note: Numbers may not add up precisely due to rounding

trillion from \$1.887 trillion at the end of August. The change resulted from an increase of 14 basis points in the monthly discount rate to 3.09% for September from 2.95% in August. Despite the increase, September's month-end discount rate of 3.09% ranks as the second lowest discount rate recorded in the 19-year history of the Milliman 100 PFI.

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

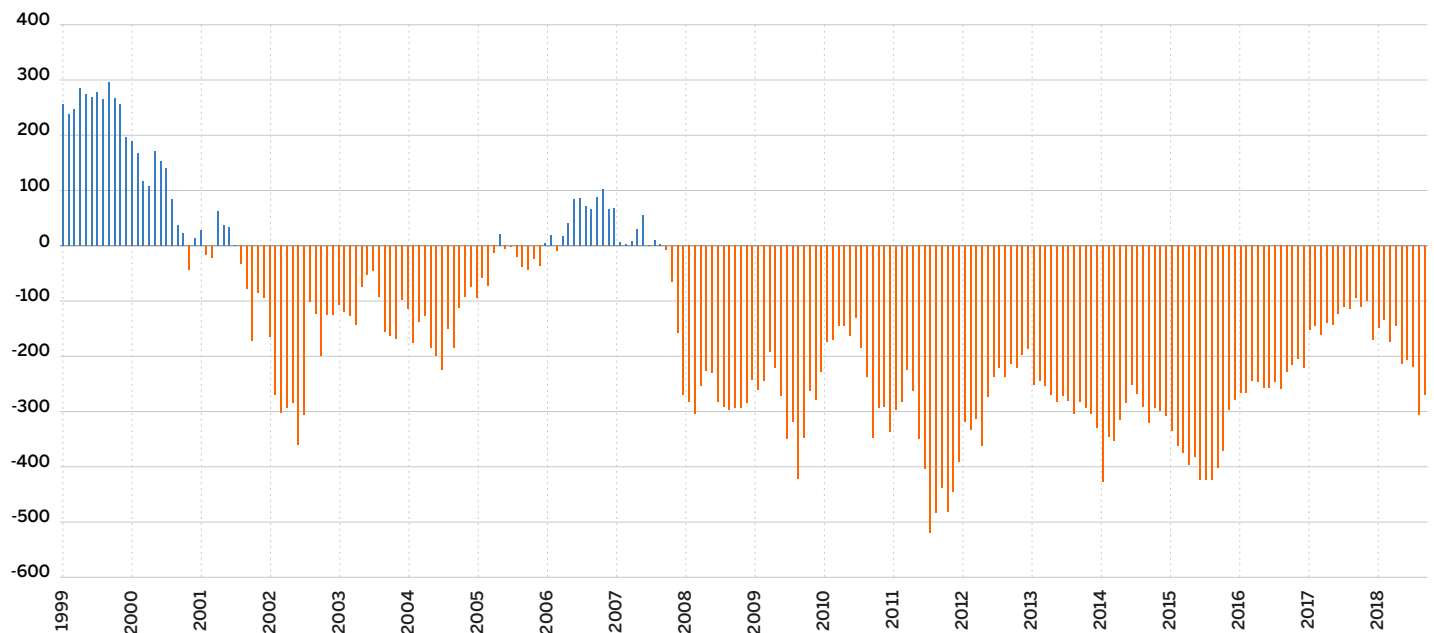
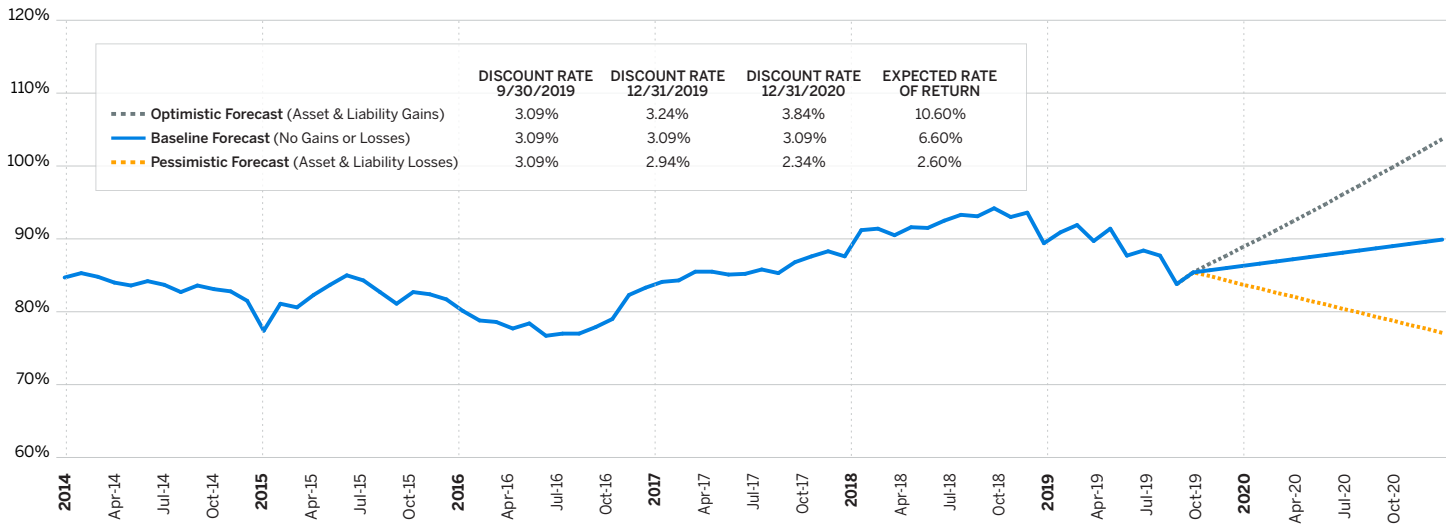


FIGURE 2: MILLIMAN 100 PENSION FUNDING INDEX — PENSION FUNDED RATIO



Third Quarter 2019 Summary

During the quarter ending September 30, 2019, the funded status deficit expanded by \$64 billion. These plans experienced consecutive all-time discount rate lows at the end of August and September. While assets were up \$18 billion during the quarter, plan liabilities were up by \$82 billion primarily due to declining discount rates. The funded ratio of the Milliman 100 companies declined to 85.4% at the end of September from 88.4% at the end of June.

Over the last 12 months (October 2018–September 2019), the cumulative asset return for these pensions has been 7.17% and yet the Milliman 100 PFI funded status has worsened by \$175 billion. The primary reason for the widening of the funded status deficit has been discount rate declines over the past 12 months. Discount rates have eroded falling from 4.18% as of September 30, 2018, to 3.09% a year later. The funded ratio of the Milliman 100 companies has decreased significantly over the past 12 months to 85.4% from 94.2%.

2019-2020 Projections

If the Milliman 100 PFI companies were to achieve the expected 6.6% median asset return (as per the 2019 pension funding study), and if the current discount rate of 3.09% were maintained during years 2019 through 2020, we forecast that the funded status of the surveyed plans would increase. This would result in a projected pension deficit of \$253 billion (funded ratio of 86.3%) by the end of 2019 and a projected pension deficit of \$186 billion (funded ratio of 89.9%) by the end of 2020. For purposes of this forecast, we have assumed 2019 and 2020 aggregate annual contributions of \$50 billion.

Under an optimistic forecast with rising interest rates (reaching 3.24% by the end of 2019 and 3.84% by the end of 2020) and asset gains (10.6% annual returns), the funded ratio would climb to 89% by the end of 2019 and 104% by the end of 2020. Under a pessimistic forecast with similar interest rate and asset movements (2.94% discount rate at the end of 2019 and 2.34% by the end of 2020 and 2.6% annual returns), the funded ratio would decline to 84% by the end of 2019 and 77% by the end of 2020.

CONTACT

Zorast Wadia
zorast.wadia@milliman.com

MILLIMAN 100 PENSION FUNDING INDEX — SEPTEMBER 2019 (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
SEPTEMBER	2018	1,527,545	1,621,478	(93,933)	N/A	94.2%
OCTOBER	2018	1,466,721	1,577,044	(110,323)	(16,390)	93.0%
NOVEMBER	2018	1,474,576	1,574,756	(100,180)	10,143	93.6%
DECEMBER	2018	1,444,672	1,615,128	(170,456)	(70,276)	89.4%
JANUARY	2019	1,491,598	1,640,656	(149,058)	21,398	90.9%
FEBRUARY	2019	1,502,098	1,635,088	(132,990)	16,068	91.9%
MARCH	2019	1,523,066	1,697,476	(174,410)	(41,420)	89.7%
APRIL	2019	1,536,084	1,681,005	(144,921)	29,489	91.4%
MAY	2019	1,517,461	1,730,603	(213,142)	(68,221)	87.7%
JUNE	2019	1,562,001	1,767,860	(205,859)	7,283	88.4%
JULY	2019	1,564,400	1,783,382	(218,982)	(13,123)	87.7%
AUGUST	2019	1,580,135	1,886,605	(306,470)	(87,488)	83.8%
SEPTEMBER	2019	1,579,995	1,849,450	(269,455)	37,015	85.4%

PENSION ASSET AND LIABILITY RETURNS

END OF MONTH	YEAR	ASSET RETURNS		DISCOUNT RATE	LIABILITY RETURNS	
		MONTHLY	YEAR-TO-DATE		MONTHLY	YEAR-TO-DATE
SEPTEMBER	2018	-0.19%	1.48%	4.18%	-1.28%	-5.10%
OCTOBER	2018	-3.63%	-2.20%	4.40%	-2.30%	-7.28%
NOVEMBER	2018	0.91%	-1.30%	4.41%	0.31%	-6.99%
DECEMBER	2018	-1.66%	-2.94%	4.19%	3.01%	-4.19%
JANUARY	2019	3.54%	3.54%	4.06%	1.97%	1.97%
FEBRUARY	2019	0.98%	4.56%	4.08%	0.05%	2.02%
MARCH	2019	1.67%	6.30%	3.78%	4.19%	6.30%
APRIL	2019	1.13%	7.50%	3.85%	-0.60%	5.66%
MAY	2019	-0.95%	6.49%	3.61%	3.31%	9.16%
JUNE	2019	3.21%	9.91%	3.45%	2.50%	11.89%
JULY	2019	0.42%	10.37%	3.37%	1.22%	13.26%
AUGUST	2019	1.27%	11.77%	2.95%	6.11%	20.18%
SEPTEMBER	2019	0.25%	12.05%	3.09%	-1.66%	18.19%