

Milliman analysis: Funded status improves by \$17 billion in October

Strong investment returns drive Milliman 100 PFI funded ratio to 98.1%

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



The funded status of the 100 largest corporate defined benefit pension plans moved closer to “fully funded” this October, increasing by \$17 billion as measured by the Milliman 100 Pension Funding Index (PFI). The deficit declined to \$36 billion primarily due to robust investment gains for the month. As the PFI approaches “full funding” the index’s funded status deficit will approach zero, which can be seen by the string of only double-digit monthly reported deficits over 2021, the lowest being \$23 billion at the end of May.

Offsetting October’s funded status gain were pension liabilities that increased due to declines in the benchmark corporate bond interest rates used to value those pension liabilities. As of October 31, the funded ratio climbed to 98.1%, increasing from 97.2% reported at the end of September.

The market value of assets grew by \$31 billion as a result of October’s 2.10% investment gain. This was the second largest monthly investment increase during 2021 next to the

HIGHLIGHTS

	\$ BILLION			FUNDED PERCENTAGE
	MV	PBO	FUNDED STATUS	
SEPTEMBER	1,807	1,860	(52)	97.2%
OCTOBER	1,839	1,874	(36)	98.1%
MONTHLY CHANGE	+31	+15	+17	0.9%
YTD CHANGE	+60	(94)	+155	7.8%

Note: Numbers may not add up precisely due to rounding

2.39% investment gain in April. The Milliman 100 PFI asset value increased to \$1.839 trillion at the end of October. By comparison, the 2021 Milliman Pension Funding Study reported that the monthly median expected investment return during 2020 was 0.50% (6.2% annualized). The full results of the annual 2021 study can be found at [milliman.com/pfs](https://www.milliman.com/pfs).

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

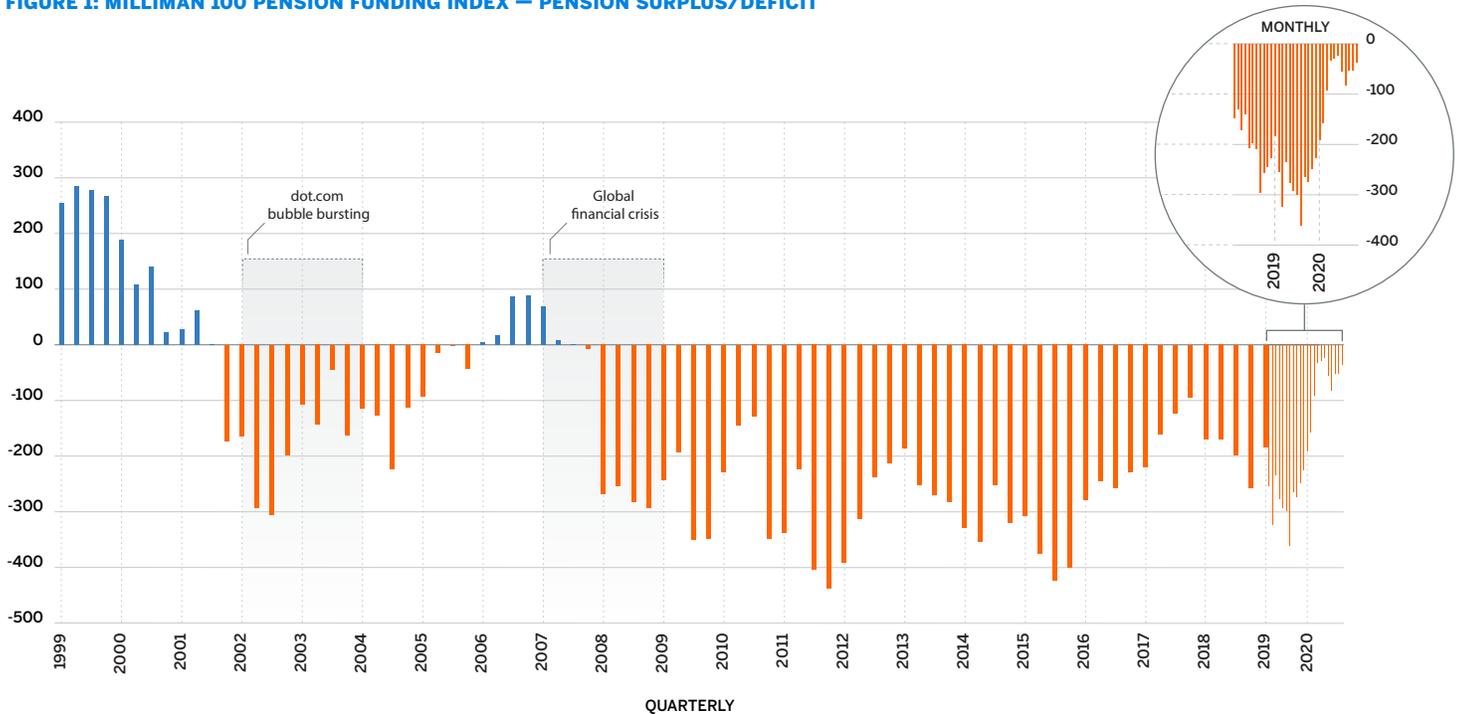
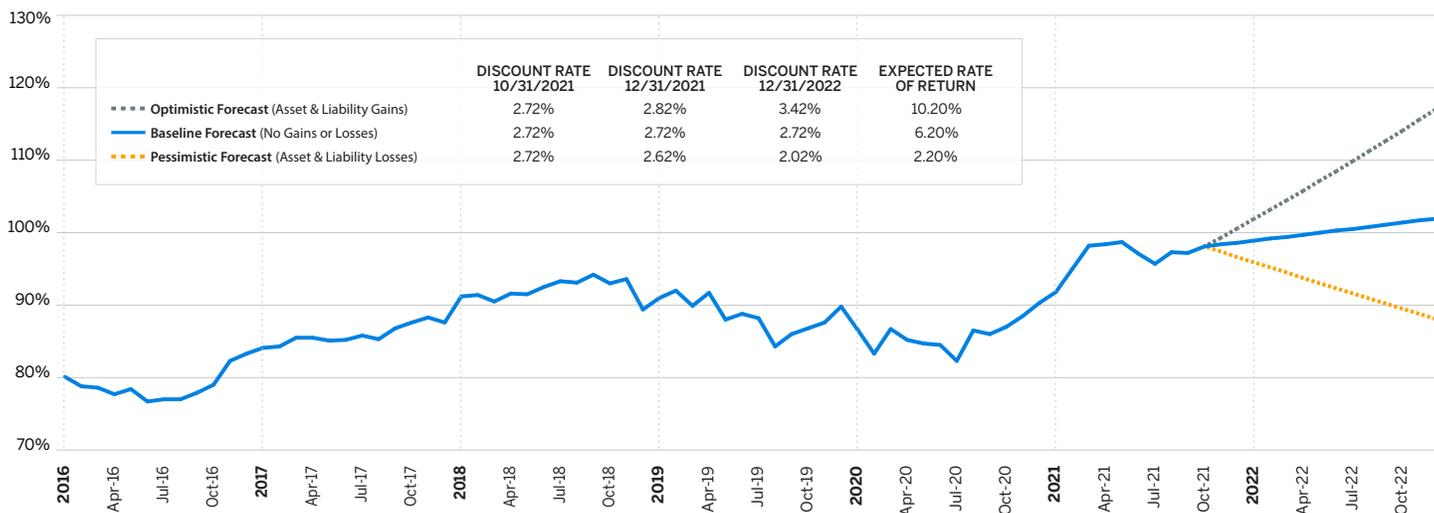


FIGURE 2: MILLIMAN 100 PENSION FUNDING INDEX — PENSION FUNDED RATIO



The projected benefit obligation increased to \$1.874 trillion. The change resulted from a decrease of six basis points in the monthly discount rate, to 2.72% for October from 2.78% in September. Discount rates have only been above 3.00% once over the past 12 months.

Over the last 12 months (November 2020 to October 2021), the cumulative asset return for these pensions has been 15.55% and the Milliman 100 PFI funded status deficit has improved by \$213 billion. Discount rates have shown a net increase of one basis point from 2.71% as of October 31, 2020, to 2.72% a year later. The funded ratio of the Milliman 100 companies has improved to 98.1% from 87.0% during this time. We will continue to closely monitor the movement of the financial markets and the interest rate environment as year-end approaches.

2021-2022 Projections

If the Milliman 100 PFI companies were to achieve the expected 6.2% median asset return (as per the 2021 PFS), and if the current discount rate of 2.72% were maintained during 2021 and 2022, we forecast that the funded status of the surveyed plans would increase. This would result in a projected pension deficit of \$26 billion (funded ratio of 98.6%) by the end of 2021 and a projected pension surplus of \$36 billion (funded ratio of 101.9%) by the end of 2022. For purposes of this forecast, we have assumed 2021 and 2022 aggregate annual contributions of \$25 billion and \$28 billion, respectively.

Under an optimistic forecast with rising interest rates (reaching 2.82% by the end of 2021 and 3.42% by the end of 2022) and asset gains (10.2% annual returns), the funded ratio would climb to 101% by the end of 2021 and 117% by the end of 2022.

Under a pessimistic forecast with similar interest rate and asset movements (2.62% discount rate at the end of 2021 and 2.02% by the end of 2022 and 2.2% annual returns), the funded ratio would decline to 97% by the end of 2021 and 88% by the end of 2022.

About the Milliman 100 monthly Pension Funding Index

For the past 21 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 2020 fiscal year and for previous fiscal years. This pension plan accounting disclosure information was summarized as part of the Milliman 2021 Pension Funding Study, which was published on April 7, 2021. 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.

MILLIMAN 100 PENSION FUNDING INDEX — OCTOBER 2021 (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	2020	1,656,117	1,904,612	(248,495)	N/A	87.0%
NOVEMBER	2020	1,742,745	1,968,350	(225,605)	22,890	88.5%
DECEMBER	2020	1,778,535	1,968,688	(190,153)	35,452	90.3%
JANUARY	2021	1,763,529	1,921,148	(157,619)	32,534	91.8%
FEBRUARY	2021	1,759,672	1,851,360	(91,688)	65,931	95.0%
MARCH	2021	1,756,805	1,789,278	(32,473)	59,215	98.2%
APRIL	2021	1,791,884	1,821,118	(29,234)	3,239	98.4%
MAY	2021	1,806,000	1,829,032	(23,032)	6,202	98.7%
JUNE	2021	1,823,087	1,878,342	(55,255)	(32,223)	97.1%
JULY	2021	1,834,558	1,916,518	(81,960)	(26,705)	95.7%
AUGUST	2021	1,846,432	1,898,593	(52,161)	29,799	97.3%
SEPTEMBER	2021	1,807,469	1,859,659	(52,190)	(29)	97.2%
OCTOBER	2021	1,838,683	1,874,311	(35,628)	16,562	98.1%

PENSION ASSET AND LIABILITY RETURNS

END OF MONTH	YEAR	ASSET RETURNS		DISCOUNT RATE	LIABILITY RETURNS	
		MONTHLY	YEAR-TO-DATE		MONTHLY	YEAR-TO-DATE
OCTOBER	2020	-0.86%	3.63%	2.71%	-1.78%	9.29%
NOVEMBER	2020	5.39%	9.21%	2.47%	3.70%	13.33%
DECEMBER	2020	2.15%	11.56%	2.46%	0.36%	13.73%
JANUARY	2021	-0.47%	-0.47%	2.62%	-2.08%	-2.08%
FEBRUARY	2021	0.16%	-0.30%	2.88%	-3.28%	-5.29%
MARCH	2021	0.22%	-0.08%	3.12%	-2.98%	-8.11%
APRIL	2021	2.39%	2.30%	2.98%	2.15%	-6.13%
MAY	2021	1.17%	3.50%	2.94%	0.80%	-5.38%
JUNE	2021	1.32%	4.86%	2.74%	3.06%	-2.49%
JULY	2021	1.00%	5.91%	2.59%	2.38%	-0.17%
AUGUST	2021	1.02%	6.99%	2.65%	-0.59%	-0.76%
SEPTEMBER	2021	-1.75%	5.12%	2.78%	-1.70%	-2.44%
OCTOBER	2021	2.10%	7.33%	2.72%	1.14%	-1.33%



Milliman is among the world's largest providers of actuarial and related products and services. The firm has consulting practices in life insurance and financial services, property & casualty insurance, healthcare, and employee benefits. Founded in 1947, Milliman is an independent firm with offices in major cities around the globe.

CONTACT

Zorast Wadia
zorast.wadia@milliman.com

milliman.com