Milliman analysis: Funded status continues its crawl to full funding in May

The Milliman 100 PFI funded ratio increases to 98.8% as investment gains counter the effects of discount rate decreases

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



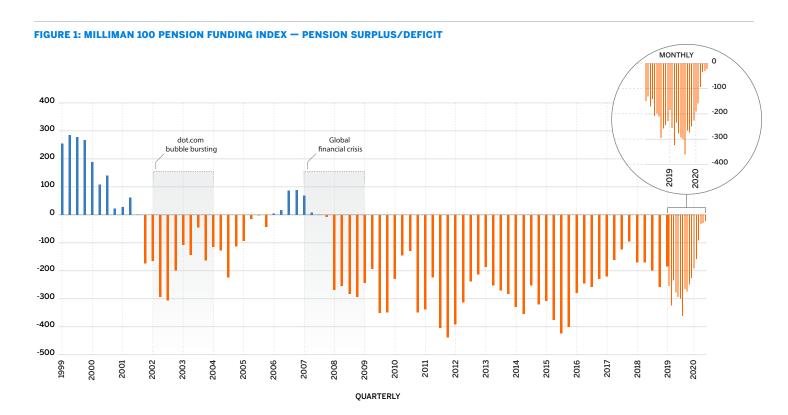
The funded status of the 100 largest corporate defined benefit pension plans increased by \$8 billion during May as measured by the Milliman 100 Pension Funding Index (PFI). As of May 31, the deficit improved to \$21 billion from \$29 billion at the end of April due to strong investment performance. The funded status improvement was partially offset by liability increases due to a decrease in the benchmark corporate bond interest rates used to value pension liabilities. The funded ratio inched upward 0.4% in May, to 98.8%, from 98.4% at the end of April. This is the eighth consecutive month in which the funded ratio has improved.

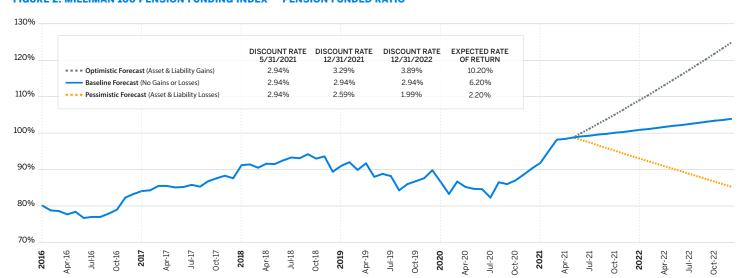
May's strong 1.24% investment gain increased Milliman 100 PFI asset values to \$1.808 trillion from \$1.792 trillion at the end of April. By comparison, the 2021 Milliman Pension Funding Study (PFS) reported that the monthly median expected investment return during 2020 was 0.50% (6.2% annualized). The full results of the annual 2021 study can be found at milliman.com/pfs.

| HIGHLIGHTS | | | | |
|----------------|------------|-------|------------------|----------------------|
| | \$ BILLION | | | |
| - | MV | РВО | FUNDED STATUS | FUNDED PERCENTAGE |
| APRIL | 1,792 | 1,821 | (29) | 98.4% |
| MAY | 1,808 | 1,829 | (21) | 98.8% |
| MONTHLY CHANGE | +15 | +8 | +8 | 0.4% |
| YTD CHANGE | +29 | (140) | +169 | 8.5% |

Note: Numbers may not add up precisely due to rounding

The Milliman 100 PFI projected benefit obligation (PBO) increased by \$8 billion during May to \$1.829 trillion. The change resulted from a decrease of 4 basis points in the monthly discount rate, to 2.94% for May from 2.98% in April. Discount rates above 3.00% have been short-lived, with March being the only month posting such results in the last twelve months.





2

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

Over the last 12 months (June 2020 – May 2021), the cumulative asset gain for these pensions has been 15.3% and the Milliman 100 PFI funded status deficit has improved by \$271 billion. The funded status gain is primarily the result of stellar investments over the past 12-month period. Discount rates declined through most of 2020 and only recently showed upward movements during the first quarter of 2021. The funded ratio of the Milliman 100 companies has increased significantly over the past 12 months, to 98.8% from 84.7%.

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 2.94% 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 surplus of \$11 billion (funded ratio of 100.6%) by the end of 2021 and a projected pension surplus of \$70 billion (funded ratio of 103.9%) 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 3.29% by the end of 2021 and 3.89% by the end of 2022) and asset gains (10.2% annual returns), the funded ratio would climb to 108% by the end of 2021 and 125% by the end of 2022. Under a pessimistic forecast with similar interest rate and asset movements (2.59% discount rate at the end of 2021 and 1.99% by the end of 2022 and 2.2% annual returns), the funded ratio would decline to 94% by the end of 2021 and 85% 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.

MAY 2021

MILLIMAN 100 PENSION FUNDING INDEX — MAY 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 |
|--------------|------|---------------------------|------------------------------------|---------------|-------------------------|--------------|
| MAY | 2020 | 1,614,226 | 1,906,180 | (291,954) | N/A | 84.7% |
| JUNE | 2020 | 1,633,797 | 1,932,334 | (298,537) | (6,583) | 84.6% |
| JULY | 2020 | 1,679,006 | 2,039,579 | (360,573) | (62,036) | 82.3% |
| AUGUST | 2020 | 1,691,960 | 1,956,005 | (264,045) | 96,528 | 86.5% |
| SEPTEMBER | 2020 | 1,673,462 | 1,946,196 | (272,734) | (8,689) | 86.0% |
| OCTOBER | 2020 | 1,656,595 | 1,904,612 | (248,017) | 24,717 | 87.0% |
| NOVEMBER | 2020 | 1,743,353 | 1,968,350 | (224,997) | 23,020 | 88.6% |
| DECEMBER | 2020 | 1,778,535 | 1,968,688 | (190,153) | 34,844 | 90.3% |
| JANUARY | 2021 | 1,763,529 | 1,921,148 | (157,619) | 32,534 | 91.8% |
| FEBRUARY | 2021 | 1,759,640 | 1,851,360 | (91,720) | 65,899 | 95.0% |
| MARCH | 2021 | 1,756,870 | 1,789,278 | (32,408) | 59,312 | 98.2% |
| APRIL | 2021 | 1,792,248 | 1,821,118 | (28,870) | 3,538 | 98.4% |
| MAY | 2021 | 1,807,721 | 1,829,032 | (21,311) | 7,559 | 98.8% |

PENSION ASSET AND LIABILITY RETURNS

| | | ASSET RETURNS | | | LIABILITY RETURNS | |
|--------------|------|---------------|--------------|---------------|-------------------|--------------|
| END OF MONTH | YEAR | MONTHLY | YEAR-TO-DATE | DISCOUNT RATE | MONTHLY | YEAR-TO-DATE |
| MAY | 2020 | 1.69% | 0.25% | 2.76% | 2.52% | 7.50% |
| JUNE | 2020 | 1.37% | 1.62% | 2.65% | 1.73% | 9.36% |
| JULY | 2020 | 2.92% | 4.58% | 2.26% | 5.89% | 15.80% |
| AUGUST | 2020 | 0.91% | 5.54% | 2.54% | -3.76% | 11.45% |
| SEPTEMBER | 2020 | -0.95% | 4.53% | 2.57% | -0.15% | 11.27% |
| 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 | 0.23% | -0.08% | 3.12% | -2.98% | -8.11% |
| APRIL | 2021 | 2.40% | 2.32% | 2.98% | 2.15% | -6.13% |
| MAY | 2021 | 1.24% | 3.59% | 2.94% | 0.80% | -5.38% |



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

©2021 Milliman, Inc. All Rights Reserved. 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.