BUCK

February 2022

U.S. Pension Funded Status

A look back at 2021

Scott Kropf
FSA, CFA, EA, FCA, MAAA

Jeff Gabrione
CFA

No two defined benefit pension plans are the same. Different plans will see changes in their funded status based on their specific liability characteristics, the assets that make up their investment portfolio and other factors such as contributions, expenses, etc.

This recap covers 2021 performance of asset values, pension discount rates, and the funded status implications of these movements for plans in various financial positions based on some typical investment portfolios. Individual plan performance will differ based on the specific characteristics mentioned above.

Asset values

The table below lists broad market benchmark returns for 2021. It shows that 2021 was a "risk-on" year, with very strong U.S. equity returns far outpacing fixed income.

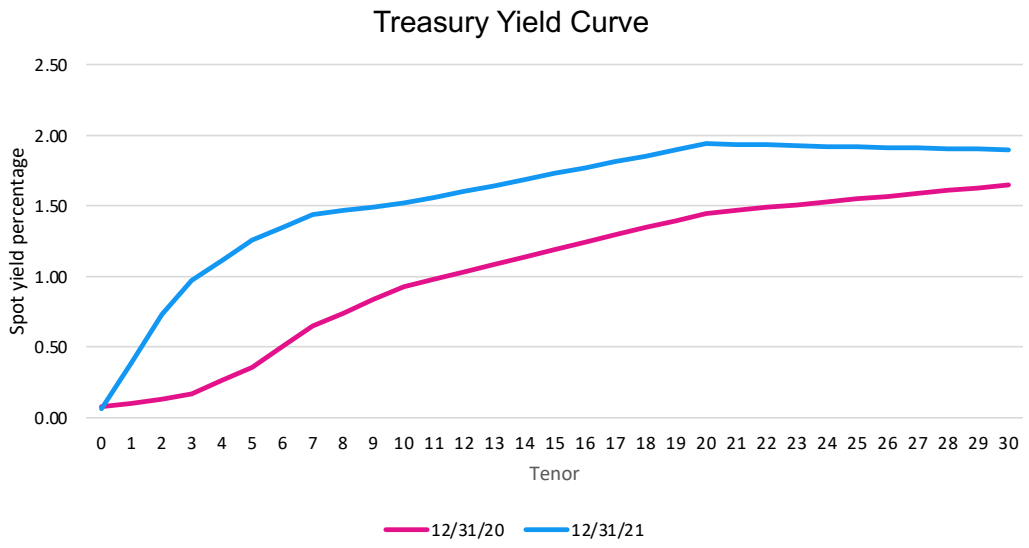
Asset class	2021 total return
REITs	40.0%
U.S. Large Cap Equity	28.7%
Commodities	27.1%
U.S. Small Cap Equity	14.8%
Non-US Developed Equity	11.3%
TIPs	6.0%
High Yield	5.4%
Cash	0.0%
Intermediate Corporate Bonds	-1.0%
Long Corporate Bonds	-1.1%
Emerging Markets Equity	-2.5%

Source: Morningstar. Asset class returns are represented by the following indices: REITs = FTSE Nareit Composite; US Large Cap Equity = S&P 500; Commodities = Bloomberg Commodity; US Small Cap Equity = Russell 2000; Non-US Developed Equity = MSCI EAFE; TIPs = Bloomberg US Treasury US TIPS; High Yield = ICE BofA US High Yield; Cash = S&P Cash Composite; Intermediate Corporate Bonds = Bloomberg US Corp Bond; Long Corporate Bonds = Bloomberg US Corporate 10+ Yr; Emerging Markets Equity = MSCI EM

From the returns shown above, plans with a high proportion of "risky" assets had the highest returns. Pension plans with asset allocations from 50% to 70% risk assets were rewarded for that risk. Their 2021 total returns ranged from 10% to almost 20% for the highest risk allocations.

Pension plans with a high proportion of fixed income had the lowest asset returns. These portfolios returned a still respectable 5% to 10%, but for these plans the goal is likely to minimize the impact of interest rate changes on the funded status.

If these plans hedged their interest rate risk with fixed income, they likely improved their overall funded status.



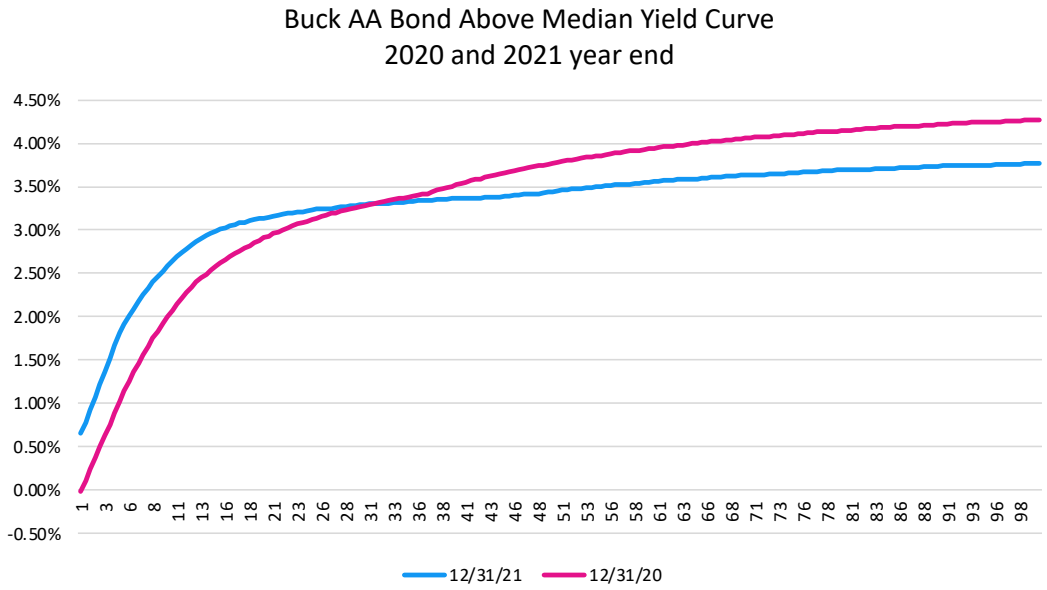
Interest rates

Interest rates increased in 2021, as shown by the US Treasury yield curves above. The short end of the curve increased much more than the long end, with a +90bp move at the 5-year tenor and a +25bp move at the 30-year tenor.

Several factors contributed to the increase in these rates, including:

- More clarity around the pandemic's economic impact by the end of 2021
- The Federal Reserve beginning to taper Treasury purchases as well as signaling potential increases in the Federal Funds rate in 2022
- Inflation increasing to levels not seen in decades

The AA corporate bond pension yield curves also increased very similarly to the Treasury yield curve. These curves are more important to pension plan sponsors because they are used to determine the discount rate under U.S. and international accounting standards. AA credit spreads did not change very much during 2021, even though there was some volatility in spreads during the year.



Tenor	Treasury change	AA credit spread change
5-yr	+90 bp	-1 bp
10-yr	+59 bp	+4 bp
20-yr	+49 bp	-13 bp
30-yr	+25 bp	+22 bp

Further out on the yield curve, over about 50 years, bond yields declined. At 12/31/2021, the curve had a more typical gradual upward sloping shape than it did in the year prior. This was attributable to investors looking further out on the yield curve to take advantage of those higher yields in 2021. Note also that significantly fewer bonds are traded out past 50 years, which adds more volatility to the rates.

As a result of these changes in the yield curve, most pension plans saw discount rate increases from year-end 2020 to year end-2021. These increases ranged from 40bps to 60bps, and plans with shorter duration liabilities (i.e., more mature plans, with large proportion of retirees) generally saw the largest increases in the discount rate.

Plans that use a subset of the AA yield curve, such as an "above median" curve that uses the highest yielding 50% of the AA universe, experienced lower increases in the discount rate. This occurred because the highest yielding bonds saw larger reductions in credit spreads during 2021 than lower yielding bonds. This situation was the opposite of 2020 when spreads on higher yielding debt widened more than lower yielding debt.

Tenor	Treasury change	AA Above median credit spread change
5-yr	+90 bp	-13 bp
10-yr	+59 bp	-2 bp
20-yr	+49 bp	-27 bp
30-yr	+25 bp	-24 bp

As a result of these spread movements, plans that use an above median curve experienced increases in their discount rates in the range of 10bp to 30bp, with the largest increase again being for the shorter duration plans.

Pension funded status

For most funded pension plans, 2021 was a very good year in terms of funded status improvement.

The change in pension funded status over a year depends on the two factors discussed above, asset performance and interest rate changes, but it also depends on several other factors:

- Contributions paid to the plan directly increase funded status
- Beginning funded status: more well-funded plans do better when asset and liability returns are favorable
- Benefits paid by the plan is usually minor, but can improve funded status for overfunded plans and reduce it for underfunded plans
- Benefits accruing, if any, directly reduce funded status
- Amount of expenses paid by the plan directly reduce funded status

Taking into account only asset and liability returns in 2021, pension plan funded status improved for most plans between 10% and 20%. Plans that took more risk on the asset side in 2021 were rewarded with larger increases in funded status. At the high end would be a plan that was primarily invested in risky assets, such as equities, and had shorter duration liability. A plan that would have seen a lower funded status improvement would be one that was invested primarily in fixed income investments and/or had a longer duration liability.

Where will funded status move in 2022? If January is any guide, it certainly looks to be a challenging environment. The Federal Reserve seems intent on raising interest rates to combat inflation, and U.S. equities are coming off three consecutive years of double-digit gains. Volatility is coming back to markets. No two plans are identical, so be sure that your plan is well-positioned to handle whatever 2022 brings.

For insight on this topic and a look ahead to 2022, watch our on-demand webinar **Defined benefit plan economic performance: A look back and a look ahead**.

For more information

We welcome feedback and would be happy to discuss your specific needs as you plan for the upcoming year.

Please reach out to your consultant or contact:

Scott Kropf
Principal, Wealth Practice
Scott.Kropf@buck.com
203-246-2108

Jeff Gabrione
Director, Investments (Head of U.S. Manager Research)
Jeffrey.Gabrione@buck.com
224-239-1378

buck.com | talktous@buck.com | 866-355-6647

Buck Global LLC is registered in the United States as an investment advisor with the SEC. Registration does not imply a certain level or skill or training. Further information about buck may be found at : https://adviserinfo.sec.gov/

The investment products and strategies in this document are for presentation purposes only. Any dissemination, distribution, or duplication of this document or any of its contents without prior written consent from Buck Global, LLC is strictly prohibited.

This document does not consider your or your plans' specific investment needs. This document is not a solicitation to buy or sell any investment, nor to participate in any type of trading or investment strategy. The purpose of this document is to illustrate hypothetical scenarios with respect to funding and managing pension plans and other guaranteed benefits. Before making any investment decision, you should seek the guidance of a qualified financial or investment advisor such as Buck.

© Morningstar 2022. All rights reserved. Use of this content requires expert knowledge. It is to be used by specialist institutions only. The information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied, adapted or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information, except where such damages or losses cannot be limited or excluded by law in your jurisdiction.

All information that is obtained from external sources cannot be guaranteed but is provided by those who have been proven to be credible, reliable, and recognizable.

Buck Global, LLC, 420 Lexington Ave, Suite 2220, New York, NY 10170

For institutional investor use only