

# Pension Finance Watch

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## Pension index increased in December

The Willis Towers Watson Pension Index ended the year on a positive note, increasing to levels not seen since May 2008. This was primarily due to strong equity investment returns, aided by increased discount rates. The end-of-December index level of 89.6 reflects an increase of 4.1% for the month and 14.2% for the year.

### Willis Towers Watson Pension Index



#### About this report

*Pension Finance Watch* is designed to support our clients in the ongoing financial management of their U.S. retirement plans. The report tracks the value of the Willis Towers Watson Pension Index in a series that was initiated in 1990.

The index reflects the asset/liability performance of a hypothetical benchmark pension plan, and it provides an indicator of capital market effects on pension plan financing. Individual plan results will vary based on such factors as portfolio composition, investment management strategy, liability characteristics and contribution policy.

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## Investment returns

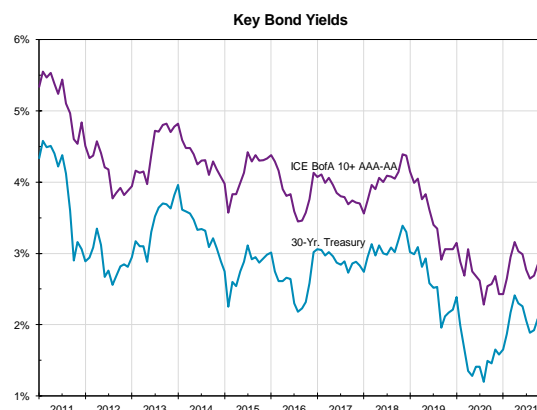
The equity portion of the benchmark portfolio returned 4.4% in December, with the international equity asset class incurring the largest gain. The fixed income investments of the tracked benchmark portfolio had a negative return at -0.2%, with long Treasury bonds experiencing the largest loss.

Asset Class Returns		
	December 2021	Full Year
<b>Stock Returns</b>		
S&P 500 (Large Cap)	4.5%	28.7%
Russell 2500 (U.S. Small/Mid-Cap)	3.3%	18.2%
EAFE (International)	5.1%	11.3%
<b>Fixed Income Returns</b>		
3-Month T-Bills	0.0%	0.0%
Long Treasury Bonds	-1.4%	-4.7%
Bloomberg Barclays U.S. Aggregate	-0.3%	-1.5%
Long Corporate Bonds (AAA/AA)	-0.9%	-2.3%

## Interest rates

Yields on long high-quality corporate bond indices increased an average of 7 basis points. These were matched by the increasing long Treasury rates. Yields on 10- and 30-year Treasury bonds increased 9 and 12 basis points, respectively.

Bond Yields		
	Dec. 2021	Dec. 2020
<b>U.S. Treasuries</b>		
30-Year	1.90	1.65
10-Year	1.52	0.93
3-Month	0.06	0.09
<b>Corporate Bonds</b>		
ML AA-AAA 10+	2.78	2.43
FTSE HG Credit	2.81	2.45
BB Aggregate	1.76	1.14



## Effect on pension index

The Willis Towers Watson Pension Index tracks the performance of a hypothetical pension plan invested in a 60% equity/40% fixed income portfolio. This portfolio recorded a 2.5% return for December. Several alternative portfolios are also monitored. Portfolios with 20% and 60% fixed income allocations produced 3.5% and 1.6% returns, respectively. A variation of the 60% fixed income portfolio that incorporates longer-duration fixed income investments generated a 1.1% monthly return.

Discount rates used by U.S. plan sponsors to measure pension obligations are typically measured with reference to yields on high quality corporate bonds. The index relies on Willis Towers Watson's proprietary RATE:Link model for this purpose.

Pension obligations move in the opposite direction of the interest rates used for their valuation. The liability implicit in the index decreased by 1.5% from the discount rate change and the accumulation of interest.

These factors contributed to an overall increase of 4.1% in the Willis Towers Watson Pension Index, which closes the month at 89.6.

<b>Pension Index Results</b>		
	<i>December 2021</i>	<i>Full Year</i>
<b>Benchmark Portfolio Returns</b>		
20% Fixed Income	3.5%	18.6%
40% Fixed Income (benchmark)	2.5%	13.3%
60% Fixed Income	1.6%	8.3%
60% Fixed Income (long duration version)	1.1%	7.2%
<b>Benchmark Plan Liability Results</b>		
Discount Rate (at valuation date)*	3.03	2.78
Liability Growth Factor	-1.5%	-0.7%
<b>Pension Index*</b>		
Percentage change	+4.1%	+14.2%

\*Discount rates and pension index values in the two columns are as of 12/31/2021 and 12/31/2020.

## Aggregate funded status for the Willis Towers Watson 300 Companies

The Willis Towers Watson Pension Index measures the impact of capital market results, primarily investment returns and Aa-grade corporate bond yields, on a representative but hypothetical pension plan. An actual pension plan’s financial condition relies on several additional factors, including:

- The level of plan sponsor contributions
- The plan’s asset allocation and actual return performance
- The discount rate used to value plan liabilities
- Other assumptions, including demographic and ancillary assumptions
- Plan amendments, settlement transactions, acquisitions/divestitures, currency adjustments
- Other experience gains and losses.

To capture these effects, we supplement the Willis Towers Watson Pension Index results with a report on the financial condition of the Willis Towers Watson 300. These statistics reflect assets and liabilities on an aggregated global basis.

Aggregated Pension Financial Results for the WTW 300 Companies			
(\$ billions)	December 31, 2021 (estimated)	December 31, 2020*	December 31, 2019*
Pension Assets (Market Value)	\$2,162	\$2,077	\$1,896
Projected Benefit Obligations	2,252	2,366	2,175
Unfunded Liability (Surplus)	90	289	279
Aggregate Funded Ratio	96.0%	87.8%	87.2%

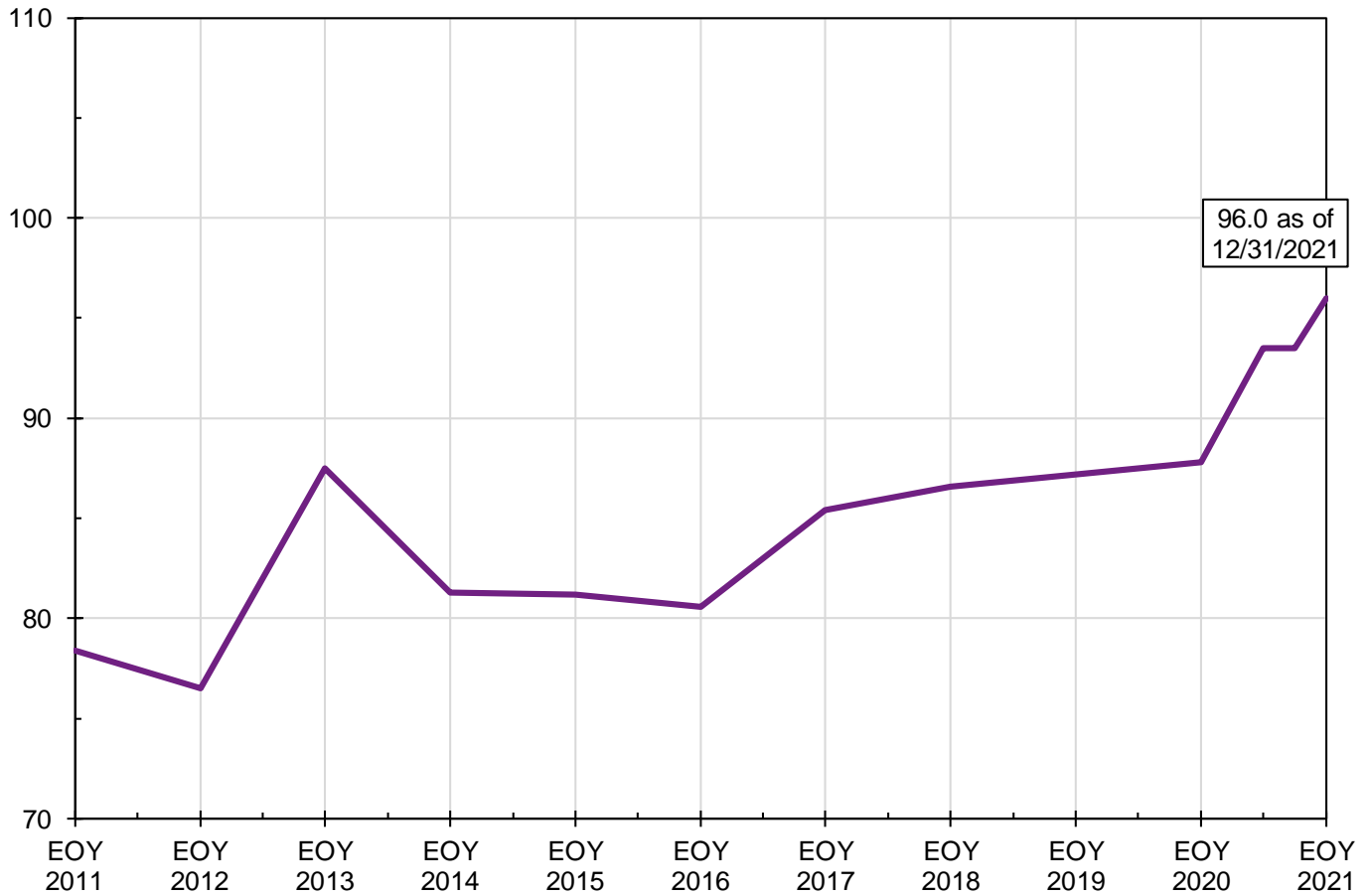
\*Values as of December 31st have been estimated for companies with non-calendar year fiscal years.

Significant elements of the 2021 estimated funded status change include:

- Expected results, including plan sponsors contributions, expected asset returns, benefit accruals and benefit payments, which increased funded status by 2.2%
- An average 31 basis point increase in the discount rates used to determine benefit obligations, which increased funded status by approximately 3.0%
- Estimated investment return above prior expectations, which increased funded status by 3.0%

The historical and estimated current funded ratios for the 300-company database are charted below. (Historical figures are based on annual report disclosures.)

### Aggregate Funded Ratio for Willis Towers Watson 300 Companies



The 300 companies included in the Willis Towers Watson 300 represent a select group of U.S.-based companies with annual revenues in excess of \$4 billion and financial statements that indicate significant pension obligations. The universe is reconstituted each year. Figures shown for year-end 2019 and year-end 2020 include adjustments to December 31<sup>st</sup> using the methods described below for companies with non-calendar year fiscal years.

Fiscal year-end 2020 asset and liability amounts have been projected to December 31, 2021 based on the companies' disclosed contribution expectations, asset allocation data and other available data. Obligations are modelled based on outcomes from Willis Towers Watson's global suite of discount rate models and estimated sensitivities.

## Definition of terms

### Asset Class Returns

- Total return incorporates the combined effect of price changes and interest/dividend income; this may differ from index results which are based only on price changes.
- The Russell 2500 Index tracks companies ranked 501 to 3000 ordered by market value of equity; these are considered small and mid-capitalization stocks.
- EAFE refers to the Morgan Stanley Capital International Europe, Australasia, Far East Index of equity securities; total return is reported in U.S. dollars, which includes the effect of currency changes.
- 3-Month T-Bill returns are based on the FTSE 3-Month Treasury Bill Index.
- Long Treasury Bond returns are based on the Bloomberg Barclays Long Treasury Bond Index.
- Long Corporate Bond returns are based on the FTSE High Grade Credit Index (as described above).

### Bond Yields

- Treasury yields are constant maturity yields reported by the Federal Reserve.
- ML 10+ AA-AAA 10+ Index includes issues with 10+ years to maturity and AA or AAA ratings from the Merrill Lynch U.S. Corporate Master Index.
- FTSE High Grade Credit Index includes issues with 10+ years to maturity and a minimum rating of AA-/Aa3.
- Bloomberg Barclays U.S. Aggregate Bond Index covers the broad range of investment grade bonds, including government and corporate securities (minimum grade Baa) and mortgages.
- Bond yields are stated as yields to maturity, on a bond-equivalent basis (reflecting semi-annual coupons).

### Benchmark Portfolio Returns

- The benchmark portfolio reflects a diversified asset allocation of 60% equity (40% large cap, 10% small/mid-cap, 10% international) and 40% fixed income (35% BB Aggregate bonds, 5% T-bills). This generally aligns with the average portfolio for the 300 large companies included in Willis Towers Watson's benchmarking database.
- Alternative portfolios with 20% and 60% fixed income allocations are constructed with similar asset class ratios within their equity and fixed income segments.
- The 60% fixed income-long duration portfolio includes a similarly constructed equity segment along with a fixed income segment consisting of 27.5% long corporate bonds, 27.5% long Treasury bonds and 5% T-bills.

### Benchmark Discount Rate

- The discount rate is determined for our benchmark plan each month using a yield curve developed based on high-quality corporate bonds (10th-90th percentiles). This calculation uses Willis Towers Watson's RATE:Link methodology to develop an appropriate discount rate based on the benchmark plan's projected cash flows. Higher or lower discount rates might be appropriate for other plans.

### Liability Growth Factor

- The benchmark plan is based on a traditional final-pay based formula and covers a relatively mature population. Roughly one-half of the plan's obligations are related to inactive participants. The liability growth factor measures the change in the plan's projected benefit obligation due to the accumulation of interest and changes in financial assumptions.\*

### Willis Towers Watson Pension Index

- The index is designed to capture the impact of capital market results, without influence from the costs of ongoing accruals or cash inflows/outflows related to contributions and benefit payments.
- The index reflects the PBO funded ratio (market value of assets/projected benefit obligation) for a benchmark pension plan. The asset value changes from month to month based on the investment performance of the 40% fixed income portfolio. Liability values are adjusted to reflect changes in financial assumptions.

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\* Discount rate and compensation increase assumptions are adjusted to reflect changes in market interest rates. The net sensitivity of the benchmark plan's benefit obligation to a percentage point change in interest rates is roughly 14%. These dynamics vary considerably among plans, depending on characteristics such as the benefit formula and on the demographic profile of the covered population.

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