

Pension Funded Status Tracker

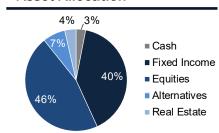
August 2018

ASSET MANAGEMENT | REPORT

The funded status of the average US corporate defined benefit pension plan remained flat at 89% funded at the beginning and end of August 2018.

- » The asset portfolio increased in value as both the hedging and growth portfolios outperformed:
 - US equities had strong outperformance whereas global equities (ex. US) underperformed relative to US equities.
 - Within fixed income, both US Treasuries and corporate bonds generated positive return.
- » Liabilities also increased in value, mostly driven by a drop in interest rates:
 - The interest rate decrease was slightly offset by a widening in high-quality corporate bond spreads.
 - As a result, the effective discount rate dropped five basis points in August.

Asset Allocation



Prepared by Conning, Inc. Source: ©2018 Bloomberg, L.P. As of August 31, 2018

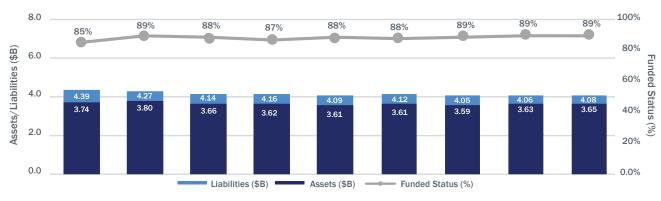
Key Metrics

Pension Plan	Assets	Liabilities†	Funded Status†	
Valuation (\$B)	3.65	4.08	89%	
Duration (Yr)	4.3	12.7	Interest Rate	
Dollar Duration (\$mm)	1.6	5.2	Hedge Ratio	
Yield* / Discount Rate	3.8%	3.9%	31%	

Prepared by Conning, Inc. Source: ©2018 Bloomberg L.P. August 31, 2018 *Yield quoted is duration-weighted yield

† Funded Status is hypothetical and calculated according to the Data and Methodology section outlined on Page 3. Refer to the Hypothetical Model Disclosures (page 3) for more important information.

Pension Plan Tracker (August 2018)†



	Dec'17	Jan	Feb	Mar	Apr	May	June	July	Aug '18
Funded Status (%)	85%	89%	88%	87%	88%	88%	89%	89%	89%
Assets (\$B)	3.74	3.80	3.66	3.62	3.61	3.61	3.59	3.63	3.65
Liabilities (\$B)	4.39	4.27	4.14	4.16	4.09	4.12	4.05	4.06	4.08
Discount Rate (GAAP)	3.4%	3.6%	3.9%	3.8%	3.9%	3.9%	4.0%	4.0%	3.9%

[†] Pension Plan Tracker results presented do not reflect actual performance. The results are hypothetical, and are generated according to the Data and Methodology section outlined on Page 3. Refer to the Hypothetical Model Disclosures (page 3) for more important information. Prepared by Conning, Inc. for illustrative purposes only. Source: ©2017-2018 Bloomberg, L.P.

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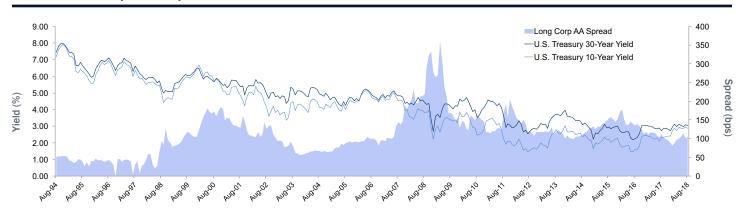


Funded Status Attribution (July 31, 2018 - August 31, 2018)



[†] Funded Status Attribution presented does not reflect actual performance. The results are hypothetical, and are generated according to the Data and Methodology section outlined on Page 3. Refer to the Hypothetical Model Disclosures (page 3) for more important information. Chart shows the liability proxy and asset portfolio factors that contributed to the change in funded status over the month. Prepared by Conning, Inc., for illustrative purposes only. Source: ©2018 Bloomberg, L.P.

Yields and Corporate Spreads



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Market Performance (August 2018 YTD)

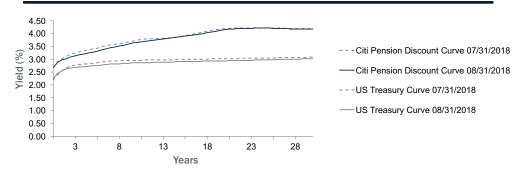
		MTD	QTD	YTD
	S&P 500	3.3%	7.1%	9.9%
	Russell 2000	4.3%	6.1%	14.3%
Equities	MSCI World ACWI	0.8%	3.9%	3.8%
	EAFE	-1.9%	0.5%	-1.9%
	MSCI Emerging Markets	-2.7%	-0.5%	-7.0%
	Private Equity	-0.3%	4.6%	4.1%
Alternatives	Hedge Funds	i 0.7%	1 .2%	2.0%
	Real Estate	2.4%	3.3%	4.8%
	High Yield	0.7%	1.8%	2.0%
	US Aggregate	I 0.6%	0.7%	-1.0%
Fixed Income	US Long Gov/Credit	0.9%	1.1%	-3.9%
	US Long Credit	0.3%	1.8%	-4.7%
	US Long Corporate AA	0.7%	1.6%	-4.2%
	US Treasury 10 Yrs	1.0%	0.4%	-1.9%
	US Treasury 30 Yrs	1 .3%	-0.2%	-3.7%

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Liability Discount Curve



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Pension Plan Tracker (Annual 2013-2017)



	2013	2014	2015	2016	2017
Funded Status (%)	87%	81%	80%	80%	85%
Assets (\$B)	3.48	3.65	3.44	3.51	3.74
Liabilities (\$B)	4.00	4.52	4.28	4.40	4.39
Discount Rate (GAAP)	4.6%	3.7%	4.1%	3.9%	3.4%

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Conning's LDI Team

Sean Kurian, FSA, CAIA
Head of Pension LDI Solutions

Erin Spalsbury, CFA Head of LDI Portfolio Management

Hamdan Malik, CFA LDI & Derivatives Strategist

Frank Shi Quantitative Analyst

Conning Pension Risk Analyzer®

Learn more about Conning's LDI approach and try the interactive Pension Risk Analyzer

Contact us at LDI@conning.com

About Conning®

Conning (http://www.conning.com) is a leading investment management firm with approximately \$132 billion in global assets under management as of June 30, 2018.* With a long history of serving the insurance industry, Conning supports institutional investors, including pension plans, with investment solutions and asset management offerings, award-winning risk modeling software, and industry research. Founded in 1912, Conning has investment centers in Asia, Europe and North America.

*As of June 30, 2018, represents the combined global assets under management for the affiliated firms under Conning Holdings Limited, and Cathay Securities Investment Trust Co., Ltd. ("SITE"). SITE reports internally into Conning Asia Pacific Limited, but is a separate legal entity under Cathay Financial Holding Co., Ltd. which is the ultimate controlling parent of all Conning controlled entities.

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Data and Methodology

Conning's Funded Status Tracker is a monthly publication that tracks the performance of the average defined benefit pension plan (the "Plan") of select corporate sponsors comprising a subset of the Russell 3000 Index. The data in this monthly review was reported in the 10-Ks of 496 publicly traded companies from the Russell 3000 index for the 2017 year-end.[†] Further, the Funded Status Tracker was updated retroactively to reflect published 10-K data for the 2017 year-end. All months of 2018 have been restated to account for the, now known, 2017 year-end position. Note: these assets may include non-U.S. pension plans. In aggregate, these 496 entities reported \$1.8 trillion in plan assets and \$2.2 trillion in plan liabilities at year end 2017.

The average plan size of the subset of the Russell 3000 index universe outlined above is approximately \$3.74 billion in assets and \$4.39 billion in liabilities, as of December 31, 2017. The Plan's liability is a hypothetical cash flow generated from our proprietary model to reflect a 13-year duration and valuation equivalent to the Plan's PBO on a US GAAP valuation basis as at the end of 2017, but allowed to drift with market conditions during the following year.

It is important to note that asset definitions are not uniform. Conning's analysis of companies' financial statements has found that some firms only report individual stocks as equities, while other firms include stock mutual funds. A similar mixing of types occurs in fixed income. In this analysis, Conning has used the allocations as reported by the companies and not adjusted them. Funded status is the percentage of liabilities that are covered by assets. Interest rate hedge ratio is the dollar duration of assets as a percentage of liability dollar duration.

+For the periods 2012-2016, data from 389 publicly traded companies were used. These companies were selected because they had consistently filed pension data every year for the period from 2012 through to 2016. However, for the year 2017: an aggregate of 496 publicly traded companies were used since by this time more companies reported on a consistent basis.

LDI Hypothetical Model Disclosures

The proprietary model analysis presented herein is for illustrative purposes only. The model relies on a number of assumptions that are generally stated in the Data and Methodology and within the illustrations. The assumptions can be subject to significant uncertainties and contingencies, and such illustrations may change materially in response to small changes in one or more of such assumptions. The data used for this model was obtained from sources deemed reliable, and then organized by Connie, Inc, and was not audited by any third party. Errors could have occurred in the data, in the calculations, or in the preparation of this analysis. Therefore, information contained in this analysis may not be precise. C: 7502331

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