Monthly pension update

DECEMBER 2018

DID YOU KNOW?

Peaking at almost 90% in September, the year-end funded status of 81.7% marks the lowest reading in two years since January of 2017.

FUNDED STATUS FAST FACTS

81.7%
FUNDED STATUS **FELL 5.3%** THIS MONTH

-3.6% YTD
FUNDED STATUS INCREASE

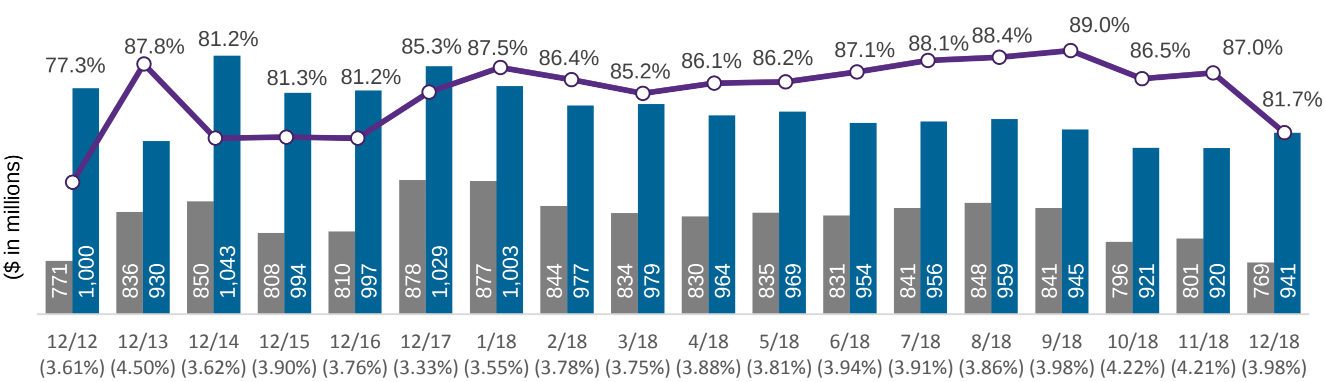
+65BPS
DISCOUNT RATE YEAR TO DATE CHANGE

MONTHLY CONTRIBUTORS OF FUNDED STATUS CHANGE:
CREDIT SPREADS

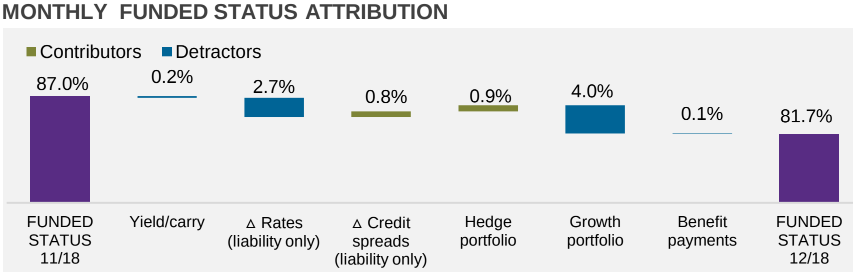
MONTHLY DETRACTORS OF FUNDED STATUS CHANGE:
TREASURY RATES AND GROWTH ASSETS

HISTORICAL FUNDED STATUS

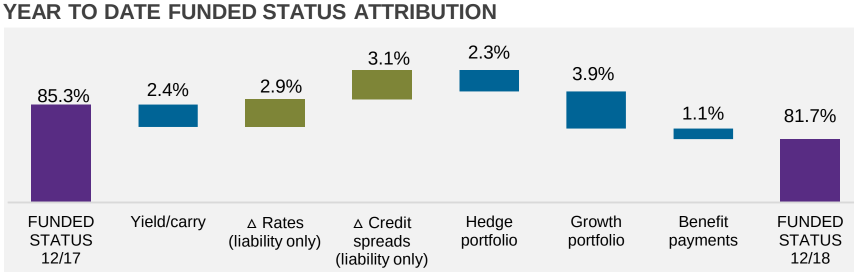
Performance of average defined benefit pension plan since 12/31/12



MONTHLY FUNDED STATUS ATTRIBUTION



YEAR TO DATE FUNDED STATUS ATTRIBUTION



Changes	Month	Year
Funded Status %	▼ (5.3%)	▼ (3.6%)
Discount Rate (bps)	▼ (23)	▲ 65
Treasury Rates(bps)	▼ (31)	▲ 29
Credit Spreads (bps)	▲ 9	▲ 36
Liabilities (mm)	▼ $20.6	▲ ($88.5)
Assets (mm)	▼ ($32.0)	▼ ($109.8)
Funded Status (mm)	▼ ($52.6)	▼ ($21.3)

Note: Arrow indicates effect on funded status.

Source: J.P. Morgan, FTSE Pension Discount Curve, Bloomberg. As of December 31, 2018. For illustrative purposes only. Past performance is not indicative of future results.

J.P.Morgan
Asset Management

MACROECONOMIC TRENDS IMPACTING PENSION PLANS

A breakdown of what you need to watch this month as you consider investment implications for your plan

GROWTH

Global growth softened into year end, as the pace of U.S. expansion slowed and drags in Europe failed to fade as quickly as expected. In developed markets, economic growth should remain in-line with its underlying potential this year as a healthy consumer, tightening labor markets and lower inflation provides support for consumption in 2019. While emerging market growth has come under pressure as well, stimulus in China should begin to provide support for the region more broadly this year. Overall we see global growth continuing to converge over the coming months, with the U.S. slowing back towards its trend rate of 1.75-2%, and the rest of the world seeing some mild improvement.

INFLATION

Global inflation remains tepid, as softer economic growth has translated into more mild price changes. In fact, we expect U.S. headline inflation will decelerate towards 1.5% by the middle of the year on the back of lower commodity prices, before rebounding to just below 2% at the end of 2019. We are keeping an eye out for any signs that softer headline inflation is putting additional downward pressure on the core figures, but assuming this does not occur, continued tightening in DM labor markets and more stable emerging market currencies should prevent any significant deceleration.

RATES

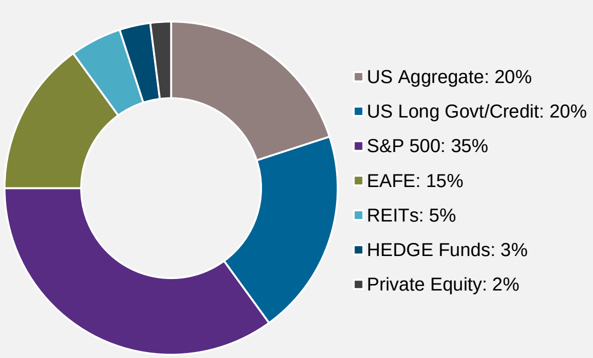
At its December meeting, the Federal Reserve signaled a more dovish approach to monetary policy in 2019, reducing their estimate for the number of interest rate hikes this year from three to two. We expect at least one hike from the Fed in the first half of this year, and anticipate that they will stick to a more data dependent approach in 2019. However, if financial market volatility subsidies, trade tensions are resolved, and economic growth remains solid, the Fed could hike more than the market is currently pricing in.

RETURNS

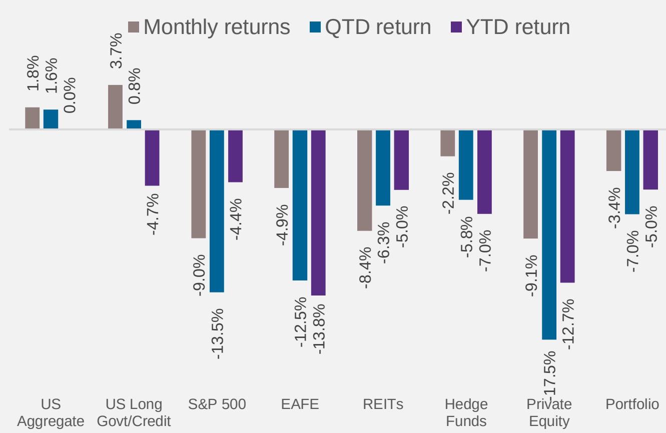
Long-term, forward-looking return assumptions remain muted, but the significant decline in stock market valuations at the end of last year has created some near-term opportunity. The forward P/E ratio of the S&P 500 saw a peak to trough decline of 20% in 2018; historically, valuation declines of this magnitude have been followed by a move higher in multiples during the following year. That said, we have likely seen peak multiples for this cycle, suggesting that the majority of returns in 2019 will be driven by earnings, rather than multiple expansion. Furthermore, given an expectation for elevated volatility, a focus on income-producing assets remains warranted.

ASSET ALLOCATION & MARKET SNAPSHOT (As of 10/31/18)

PLAN ASSET ALLOCATION

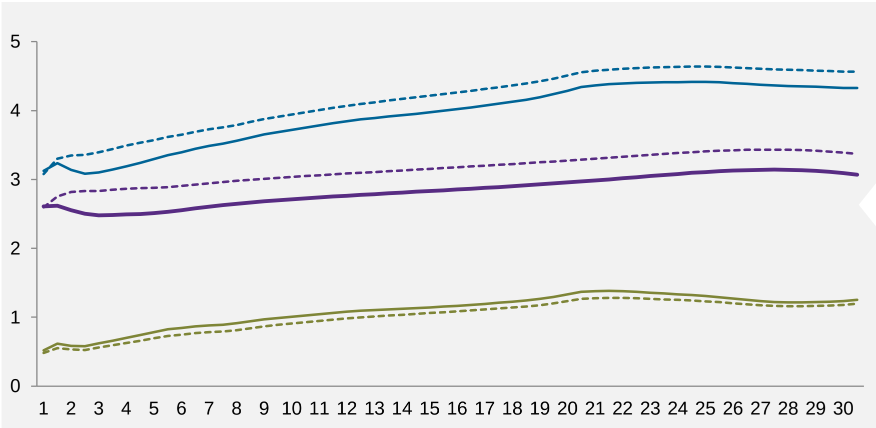


ASSET AND PORTFOLIO RETURNS



Source: J.P. Morgan, FTSE Pension Discount Curve, Bloomberg. As of December 31, 2018. For illustrative purposes only.
Past performance is not indicative of future results. For more information on our fixed income outlook, please visit our blog: http://blog.jpmorganinstitutional.com

YIELD CURVE CHANGES

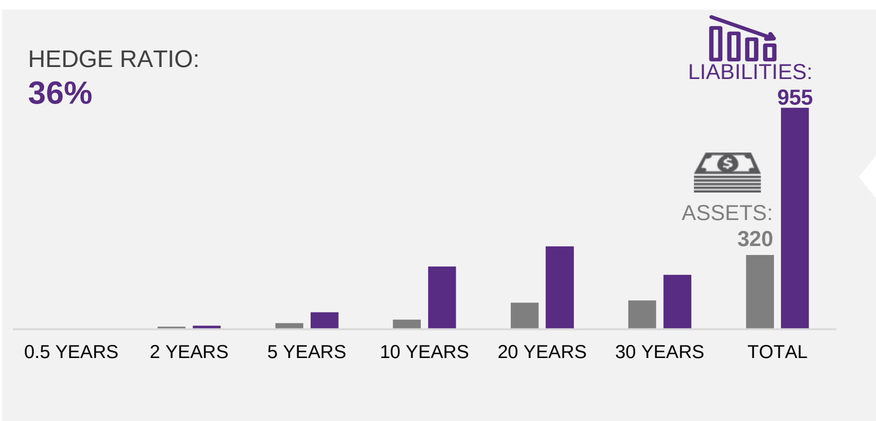


Over the month treasury rates fell while credit spreads widened, leaving discount rates down 23bps for the month.

INTERESTED IN A DEEPER DIVE ON FIXED INCOME?

Click here for all the charts you need to understand what is happening in the fixed income markets.

PLAN RISK ANALYTICS



DURATION SENSITIVITY

The overall hedge ratio is defined as the ratio of asset dollar duration to liability dollar duration.

We estimate that this is approximately 34%.

We note that a higher hedge ratio, constructed with better key rate duration (KRD) matching along the curve would reduce funded status volatility. Matching the dollar duration of assets and liabilities across the curve structure would better insulate the plan against non-parallel yield curve movements.

Change in Interest Rates	*Change in Growth Portfolio*								
	-20%	-15%	-10%	-5%	-	+5%	+10%	+15%	+20%
+100bps	75.7%	78.5%	81.4%	84.3%	87.1%	90.0%	92.9%	95.7%	98.6%
+75bps	74.5%	77.3%	80.1%	82.9%	85.7%	88.4%	91.2%	94.0%	96.8%
+50bps	73.4%	76.1%	78.8%	81.6%	84.3%	87.0%	89.7%	92.4%	95.1%
+25bps	72.4%	75.0%	77.7%	80.3%	82.9%	85.6%	88.2%	90.9%	93.5%
-	71.4%	74.0%	76.5%	79.1%	81.7%	84.3%	86.8%	89.4%	92.0%
-25bps	70.5%	73.0%	75.5%	78.0%	80.5%	83.0%	85.5%	88.0%	90.5%
-50bps	69.6%	72.0%	74.5%	76.9%	79.4%	81.8%	84.3%	86.7%	89.2%
-75bps	68.7%	71.1%	73.5%	75.9%	78.3%	80.7%	83.1%	85.5%	87.9%
-100bps	67.9%	70.2%	72.6%	74.9%	77.3%	79.6%	81.9%	84.3%	86.6%

SCENARIO ANALYSIS

The heat map shows the change in funded status under different instantaneous interest rate and growth portfolio movements.

We note that reducing the allocation to equities and increasing the hedge ratio will likely narrow the change of possible outcomes and help limit downside funded status scenarios.

Source: J.P. Morgan, FTSE Pension Discount Curve, Bloomberg. As of December 31, 2018. For illustrative purposes only.
Past performance is not indicative of future results.

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Market volatility impact on funded status– Learn why fundamentals and knowing what you own have become increasingly important in this environment.

Fixed Income Blog – Our fixed income team's perspective on global fixed income markets and the global economy.

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