

LGIMA's Pension Solutions' Monitor

January 2019 Market Update

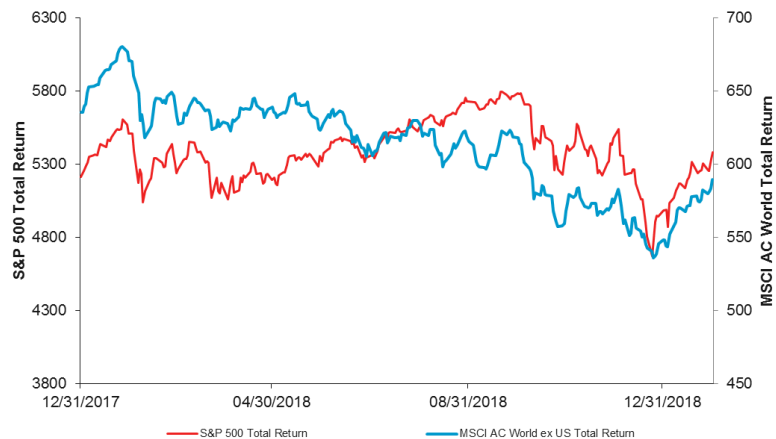


Overview

Pension funding ratios increased throughout the month of January, primarily driven by positive equity returns. These gains were slightly offset by a decrease in Treasury rates and tightening credit spreads, ultimately decreasing the discount rate and increasing the present value of plan liabilities. We estimate that the average plan's funding ratio increased 2.1% to 86.5% during the month of January.

Global equities

Global equities rebounded strongly in January from the sharp December sell-off. Indeed the S&P had its strongest January in over three decades, up 7.9%. The ACWI increased 7.8%, with all major regions posting strong gains. Beyond the ubiquitous gains, there were several other signs within the equity markets pointing to a classic risk-on environment. Loading up on beta paid off—small caps outperformed large caps, emerging markets (particularly LatAm and EMEA) posted the strongest gains, growth outperformed value, and low volatility strategies lagged. Concurrently, volatility collapsed in both realized and implied terms.



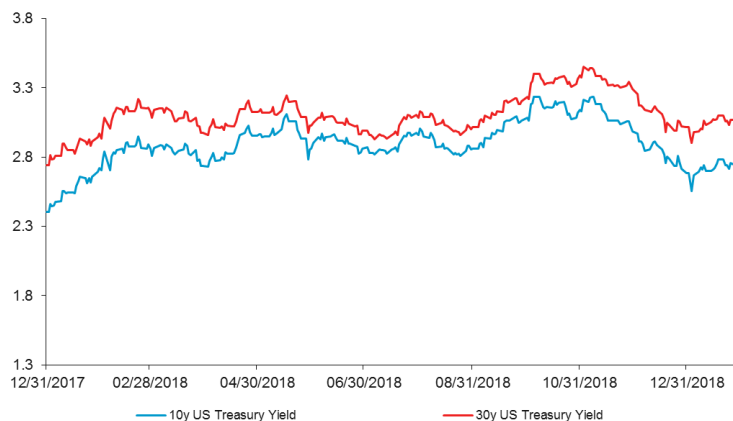
Source: Bloomberg as of 1/31/2019.

A change in the Fed's tone has certainly contributed to the recovery—the comments on flexibility regarding rate and balance sheet size decisions have contributed to a general sense that, despite its claims to the contrary, the Fed is increasingly dovish and attuned to risk markets. But beyond this, it is hard to pinpoint any other specific catalysts for the rebound. Perhaps the explanation is that there is a lot of volatility around economic expectations at this point in the business cycle, with market participants attempting to divine and form narratives around any signs, real or perceived, of an inflection. In such a context, it is possible that expectations for economic data (especially about where we are now in the business cycle), sentiment, flows (particularly retail), and positioning had all become overtly dour into the end of the year, and this recovery—which still leaves many markets in or near correction territory—is some restoration of calm and recalibration in the other direction.

Interest rates

US rates had a sharp rally into year end and the first two trading days of 2019, but bounced back as the yield curve steepened. Continued global growth slowdown, mixed data, and an intense focus on the Fed fueled these moves. 2019 got off to a rough start with disappointing PMI data out of China further stoking concerns of slowing global growth. The Fed's Kaplan voiced his concerns in simultaneously hiking while reducing

the Fed's balance sheet and exiting QE, something no central bank had faced before. During this time the US 30-year rate closed at 2.90—over 50 basis points lower than the cycle high of 3.46 hit just two months earlier. The next day proved to be a turning point though as the December payroll data exceeded even the most optimistic expectations, the US added 312k jobs (versus 184k consensus expectation), and average hourly earnings surprised to the upside at 3.2% yearly growth (versus 3.0% consensus). More importantly, Powell used his time at an economics conference to calm the markets. He gave a statement saying the Fed is listening to the markets and is not on “autopilot” with regards to unwinding their balance sheet, emphasizing the Fed will proceed with patience and flexibility. Rates traded sideways from there with the 30-year rate staying in a 3.00-3.10 range. The market had a dovish interpretation of the Jan 30 FOMC meeting. Most notably they removed the “further gradual increases” language in their statement, and instead referenced “future adjustments to the target rate”, which many are interpreting as the Fed being ready to cut should the economy take a downturn. Prior to the January meeting, the markets were pricing in a ~25% chance of a hike before year end, and a 6% chance of a cut. At month end, the day after the meeting, the market was pricing in a ~25% of a cut by year end. The US yield curve bull steepened in the wake of the meeting, with 5s30s steepening 6 basis points to 55 basis points, and the 30-year rate closing out the month at 3.00, which was one basis point lower than the year end close.



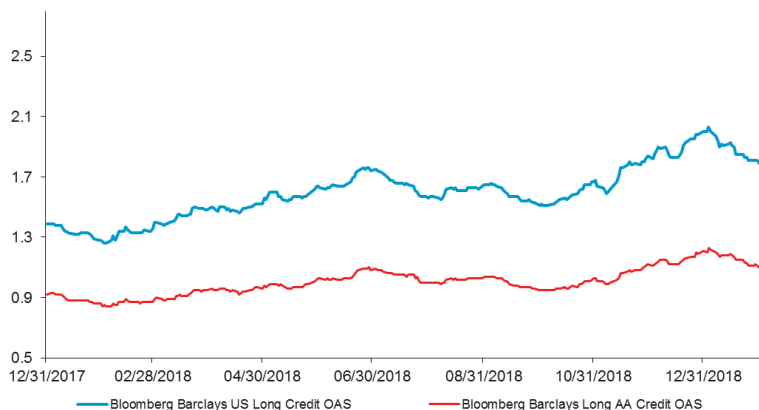
Source: Bloomberg as of 1/31/2019.

Credit

The investment grade credit market has experienced a strong relief rally this past month after the significant 4Q18 risk-asset sell-off. The Bloomberg Barclays Credit US Index tightened 21 basis points in January, recovering 50% of the spread widening that occurred in November and December. Several market themes have contributed to the rally, and investor sentiment is considerably more bullish than where the market stood one month

ago. The Fed's increasingly dovish stance, with emphasis placed on rate hike patience and balance sheet flexibility, has alleviated investor concerns for the foreseeable future. Foreign demand for USD credit has picked up this month and has been supportive of credit spreads. The expected pause in the Fed hiking cycle is another factor for the increase in overseas demand, as cross-currency hedging costs are expected to be more manageable given global central bank rate differentials are less likely to increase. Furthermore, liquidity conditions have materially improved—in fact, investment grade trading volume was 13% higher (\$25.8bn average trading/day) this past month compared to January 2018. According to TRACE¹, January 29 is the most active day on record with \$34.1bn bonds trading in the marketplace.

High quality credit has outperformed in this rally based on non-financial investment grade issuers. Over the course of this month, single A credits have meaningfully outperformed BBBs—single As have retraced 58% of the spread widening from 4Q18, whereas BBBs have only retraced 35%. Even though bullish sentiment has picked up in the market, BBBs underperforming single A credit suggests investors still remain cautious. Another credit market theme is the outperformance of financials over non-financial credits YTD. The combination of strong US bank earnings, relatively subdued bank issuance, and mitigated European growth fears have all contributed to the strength of financial credits. It remains to be seen how much more this rally has legs from here. The amount of supply, especially from mega M&A deals, will certainly play a role in the near future.



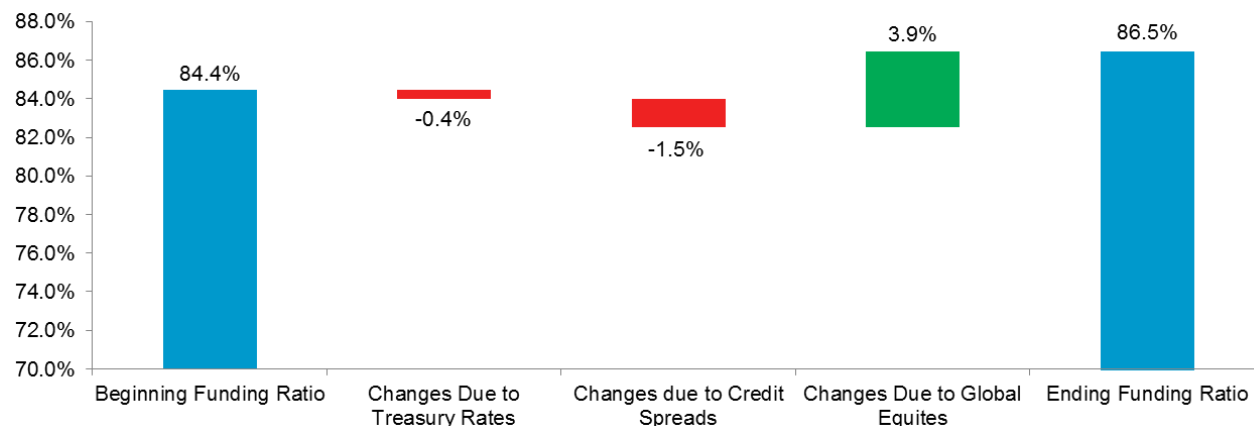
Source: TRACE - The "Trade Reporting and Compliance Engine" is the FINRA-developed vehicle that facilitates the mandatory reporting of over-the-counter secondary market transactions in eligible fixed income securities.

¹TRACE is a globally recognized anti-bribery business organization and leading provider of third party risk management solutions.

Funding status monitor

LGIMA estimates that pension funding ratios increased throughout January, with gains driven primarily by positive equity returns. LGIMA estimates the discount rate's Treasury component decreased by 3 basis points while the credit component decreased 14 basis points, resulting in an overall decrease of 17 basis points². Overall, liabilities for the average plan increased ~3.0%, while plan assets with a traditional "60/40" asset allocation³ increased by ~5.2%.

Funding Ratio Progression over the Month



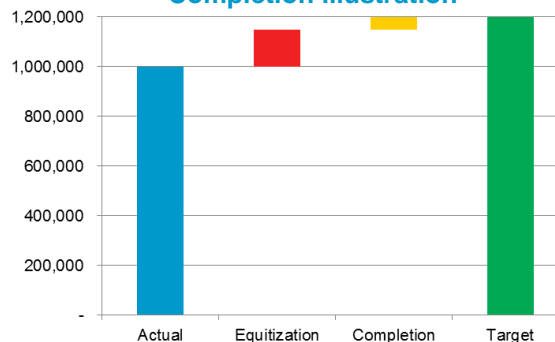
²Discount rates based on a blend of the Intercontinental Exchange Indices Average US Pension Plan AAA-A and Intercontinental Exchange Indices Mature US Pension Plan AAA-A discount curves

³For the average plan, LGIMA assumes a 60% allocation to MSCI AC World and a 40% allocation to Barclays Aggregate

Pension market highlights

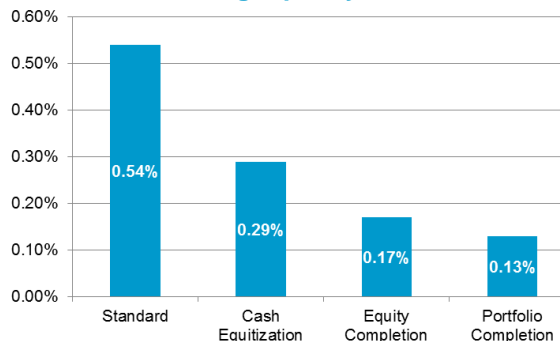
- Pension plans often have cash set aside for paying benefits / cash calls of illiquid assets / etc.
- This cash position can create a drag on performance
- **"Equitization"** is the process of using derivatives to achieve exposure backed by the cash available
 - Increases capital efficiency
 - Decreases drag from cash allocation
 - Reduces tracking error vs. policy target exposures
- Going one step beyond equitization, **"completion"** aims to neutralize drifts away from the allocation policy targets
 - Reduces cost of rebalancing by using derivatives instead of physicals
 - Eliminates drift from market moves resulting in unintended biases
 - Enhances plan governance
 - Optimizes collateral constraints / capital efficiency, as one manager can leverage a plan's other assets (ex: posting Treasuries as collateral for equity exposure)

Completion illustration



Source: LGIMA

Expected tracking error vs. target policy allocation



Source: LGIMA