

LGIMA's Pension Solutions' Monitor

May 2019 Market Update



Overview

Pension funding ratios decreased throughout the month of May, primarily driven by negative equity performance and declines in Treasury yields. This resulted in a decrease in the discount rate. We estimate that the average plan's funding ratio fell 5% to 82.4% through May.

Global equities

Developments in US-China trade relations have reset market expectations, disrupting the sanguine environment accumulated year-to-date. Coming off of market highs in the S&P 500, a Trump tweet announcing tariff increases on US imports from China began a month-long grind lower. Equity markets across the world declined, with Asia and US experiencing the most substantial drawdowns. Across the world, Technology, Materials, and Consumer Discretionary felt the heaviest impact, all falling more than 7%.

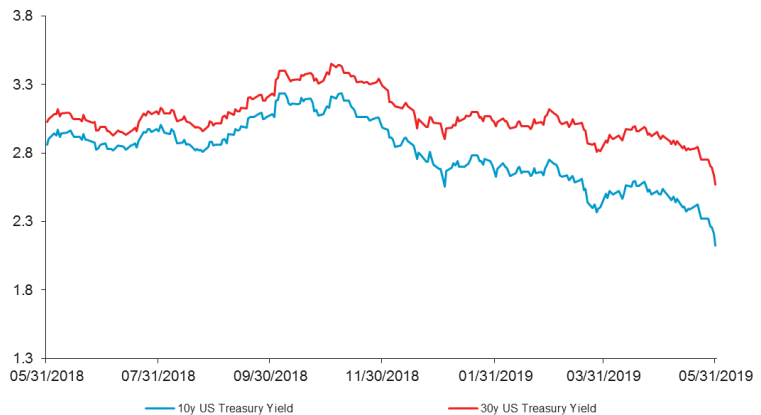


Source: Bloomberg/Barclays and LGIMA as of 5/31/2019.

While the impacts of the tariffs are materializing in the equity market, the broader US economy appears to be strong. Unemployment and wage data remains positive while consumer confidence continues to improve. However, it is important to note that Q1 earnings growth year-over-year for S&P 500 companies was approximately zero, highlighting potential vulnerability in the economy. Other markets paint a similar picture to the US economy. In the derivative space, high realized volatility stole headlines this past month but implied volatility has been consistently pushed back down as traders take advantage of selling volatility. Additionally, the performance of traditional safe haven assets does not suggest investor panic. That said, recent asset return patterns—rates, safe haven currencies, gold, etc. rallying while equities, credit spreads, oil, etc. sell off—may be evincing growing concern for growth and sentiment going forward. Overall, equity performance had a negative impact on pension funding ratios over the month.

Interest rates

Escalating trade war/tariff threats coupled with data weakness pushed long end rates to pre-2016 election levels. The initial read of the May 1 FOMC statement was dovish as the Fed continued to keep their policy rate in the 2.25-2.50 range while lowering the Interest Rate on Excess Reserves 5 basis points to 2.35. Many viewed this move as the Fed back peddling on previous rate hikes or even signaling a rate cut in the foreseeable future. But in the accompanying press conference, Chair Powell emphasized a patient, neutral approach and referred to recent downturns in inflation as “transient” three times. These swings in sentiment were clearly shown in the front end of the curve as the 2-year Treasury rate entered the meeting at 2.26, rallied to 2.20 after the initial statement release, and quickly sold off to 2.30 during the press conference. The rally continued leading into the Memorial Day weekend on the back of weakness in PMI and job growth data out of Europe. Sentiment only deteriorated further over the long weekend with the EU elections and China taking a hardline stance against giving in to US demands on tariffs.

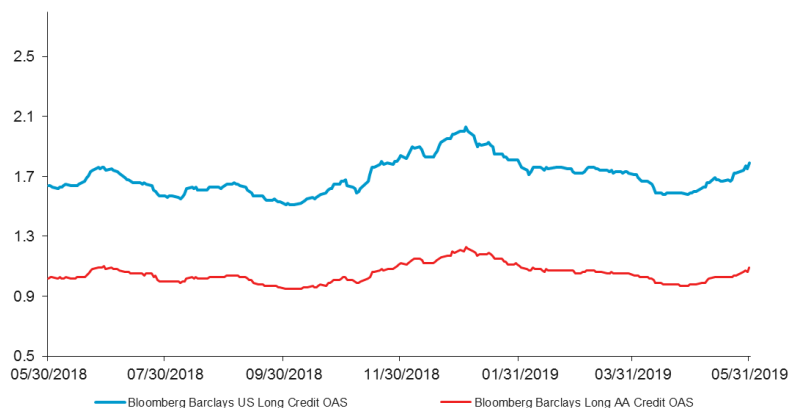


Source: Bloomberg/Barclays and LGIMA as of 5/31/2019.

After the market close on May 30, President Trump announced a new round of tariffs on Mexico in order to try to get the Mexican government to address the illegal immigration issue that was a pillar of his campaign. Rates gapped lower on Monday's open and continued to rally into the end of the day, with the 30-year Treasury rate closing the day at 2.57, down from 2.93 at April and nearly 90 basis points lower than the local high of 3.45 last November. Bunds also hit their lowest yields of all time, with the 10-year bund ending the day at -0.20. The US yield curve is now inverted at several key points—2s5s is inverted, the 10-year rate is trading below the three month rate, and the 5-year forward 5-year rate is trading below the overnight GC funding rate. Bloomberg is now reporting that Fed fund futures are pricing in two rate cuts by the end of 2019. Overall, interest rates had a negative impact on pension funding ratios over the month.

Credit

The general trend of tightening credit spreads since the start of the year began to reverse in May, illustrated by the US Long Credit index widening 20 basis points over the month. The Fed continues to express patience and data dependence, as they have not signaled any



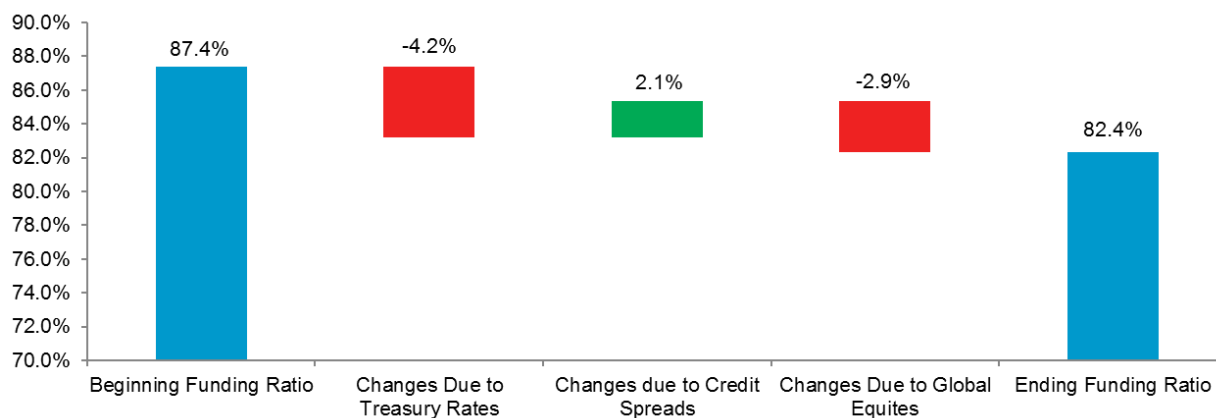
Source: Bloomberg/Barclays and LGIMA as of 5/31/2019.

immediate moves in the Fed Funds rate. The elevated uncertainty arising from increased tariff rhetoric and implementation weighed on credit spreads and the broader market. As a result, the primary issuance calendar was lighter versus expectations as we suspect corporate issuers are waiting for volatility to subdue.

Friction between the US and China has remained elevated, creating a risk-off environment where Treasury yields have declined and credit spreads have widened. Market participants are debating whether the recent market stress will motivate President Trump to adopt a softer tone in an effort to support US risk assets. With the G20 meeting scheduled at the end of June, there is potential for further insight into the ongoing sentiment between both parties. As the US progresses toward the later stages of the economic cycle, the outcome of this meeting could be very impactful on the US Credit Market. Overall, credit spreads had a positive impact on pension funding ratios over the month.

Funding status monitor

LGIMA estimates that pension funding ratios decreased throughout May, with losses driven primarily by poor equity performance and declining Treasury yields. LGIMA estimates the discount rate's Treasury component decreased by 36 basis points while the credit component widened 17 basis points, resulting in a net decrease of 19 basis points¹. Overall, liabilities for the average plan increased 3.1%, while plan assets with a traditional "60/40" asset allocation² decreased by ~2.8%. basis points¹.



¹Discount rates based on a blend of the Intercontinental Exchange US Pension Plan AAA-A and Intercontinental Exchange Mature US Pension Plan AAA-A discount curves

²For the average plan, LGIMA assumes a 60% allocation to MSCI AC World and a 40% allocation to Barclays Aggregate

Potential leverage benefits in an LDI context

Leverage is obtained through derivatives such as futures and swaps

- Allow plans to gain market exposure without having to fully pay the cash cost up front
- Daily risk management makes sure conservative collateral requirements are met

As illustrated below:

- Without leverage: \$60 million of assets hedge \$60 million of liabilities
- With leverage: \$60 million of assets can hedge \$100 million of liabilities

