

## US Rates Watch

## Private pension fund rebalancing update

**Rough estimate for direction of rebalancing needs**

We use the framework introduced in the report Pension fund rebalancing and UST demand to estimate the expected February month-end rebalancing flows. The rebalancing needs of a portfolio that contains two assets (with allocation weights  $w_1$  and  $1-w_1$ ) and  $N$  assets under management is a function of the relative total performance of the two asset classes ( $r_1-r_2$ ):

$$\text{Rebalance} = N * w_1 * (1-w_1) * (r_1-r_2)$$

With the S&P total return in the month to date at c.5.2% and the 10-year+ UST index showing a c.-4.2% total return over the same period, the expectation is for material rebalancing flows out of equities and into Fixed Income for the month.

**Our expectations for rebalancing flows**

In our framework (see below), we see c.-\$46bn of rebalancing flows out of equities (the standard deviation of monthly equity rebalancing flows over the last three years is c.\$22bn, so this is a significant rebalancing flow). In the FI space, the flows break down between c.\$16bn into Treasuries, c.\$25bn into Corporates, c.\$4.5bn into Agency & GSE-backed securities, and c.\$0.5bn into Mortgages. Significantly, these results may be a decent gauge for a broader class of investors with relatively stable allocations and monthly/quarterly rebalancing needs.

**Caveat 1 - Month-end vs quarterly rebalance**

Only part of the rebalancing is likely to be performed at month-end; we expected the larger part of the rebalance generally at quarter-end, reflecting the broader relative performance of asset classes throughout the quarter.

**Caveat 2 - Rebalance in the broader context of de-risking**

It is important to note that beyond the passive rebalancing flow, we continue to expect some structural demand for duration from private pension funds, particularly as funded ratios push > 100% (see [Pension de-risking opportunity may narrow with lower rates](#)). In the de-risking process, the broader pension fund allocation profile converges over time to a target allocation with significantly higher fixed income content and lower equity exposure. This structural demand is likely to persist medium/longer term.

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c.: circa

FI: fixed income

GSE: Government-Sponsored Enterprise

UST: US Treasury

N: Assets Under Management

r: Return

UST: U.S. Treasury

w = Allocation Weight

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## Methodology

The data sources we use in our framework are pension fund allocation weights obtained from the Federal Reserve Bank (FRB) Z.1 release and total return performance for each of the asset classes. Critical to this process is the choice of the appropriate benchmarks that define the performance of each asset class.

The FRB Z.1 release segregates private pension fund assets into (1) checkable deposits and currency; (2) time and savings deposits; (3) money market fund shares; (4) security repurchase agreements; (5) open market paper, aka commercial paper; (6) Treasury securities; (7) agency and GSE-backed securities; (8) corporate and foreign bonds; (9) loans (mortgages); (10) corporate securities; (11) mutual fund shares; (12) unallocated insurance contracts; (13) assets of private pension plans held at life insurance (LI) companies; (14) contributions receivable; and (14) claims of pension fund on sponsor (unfunded) defined benefit pension entitlements.

In our approach, we aggregate these into equities (10+11), fixed income securities (6+7+8+9), and other assets. Together, the first two generally amount to 70-80% of total assets (5-10% in Treasuries). For each of these assets (6-11 above), we assign a benchmark to calculate their expected performance – for example, the S&P total return for the equity portion of the allocation (10+11) and the total return on the ICE BofA 10+ Year US Treasury Index for the Treasury portion (6).

In this framework we assume that the allocation weights are kept constant from the last information available and calculate the monthly and quarterly rebalancing needs based on the assets' performance and the assumption of convergence back to target allocation. Because there are clear trends in allocation weights over time, we correct the rebalancing weights by the average allocation drift seen over the last two quarters.

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