

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 November 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.8.7% and the 10-year+ UST index showing a c.9.9% total return over the same period, the expectation is for relatively muted rebalancing between the two asset classes for the month. Indeed, over November it is the relative underperformance of other asset classes (Corporates and Agency & GSE-backed securities) that drives outflows from Equities and Treasuries.

Our expectations for rebalancing flows

In our framework (see below), we see c.-\$8.5bn of rebalancing flows out of equities (the standard deviation of monthly equity rebalancing flows over the last three years is c.\$22bn). In the FI space, the flows break down between c.-\$4.5bn out of Treasuries, c.\$7bn into of Corporates, c.\$5.5bn 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 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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Rates Research
United States

Bruno Braizinha, CFA
Rates Strategist
BofAS
bruno.braizinha@bofa.com

Anna (Caiyi) Zhang
Rates Strategist
BofAS
cai yi.zhang@bofa.com

See Team Page for List of Analysts

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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Research Analysts

Bruno Braizinha, CFA

Rates Strategist

BofAS

bruno.braizinha@bofa.com

Anna (Caiyi) Zhang

Rates Strategist

BofAS

cai yi.zhang@bofa.com

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