

A Division of **S&P Global**

Overview

S&P Shift To Retirement Income and Decumulation (STRIDE) Indices measure the performance of a liability driven investment (LDI) strategy that incorporates a traditional glidepath approach within a multi-asset framework with a focus on theoretical inflation-adjusted ("real") retirement income. Each vintage reflects a target year for retirement.

The "Cost of Retirement Income" reflects the cost of an inflation-adjusted stream of cash flows equal to USD 1 per year, starting at the assumed retirement date and ending 25 years later. The interest rates used to discount the hypothetical future cash flows to the present are derived from the current U.S. TIPS curve.

Decumulation Rates represent theoretical distributions from net decumulation rate ("NDR") indices. They are computed by dividing an index's decumulation points (hypothetical distributions from NDR indices) by the index levels prior to the distribution. The ratios are annualized to calculate the decumulation rate.

Monthly decumulation points are calculated by: 1) multiplying the index level by the corresponding TIPS-LDI weight, and then 2) dividing by 12 times the Cost of Retirement Income. For each calendar year after the target date maturity, decumulation points are determined based on the index levels as of the end of January. The same number of decumulation points will then be distributed on a monthly basis for the rest of the calendar year.

For more information, please see the [S&P STRIDE Index Series Methodology](#) and the [S&P STRIDE Supplemental Data Guide](#).

Commentary

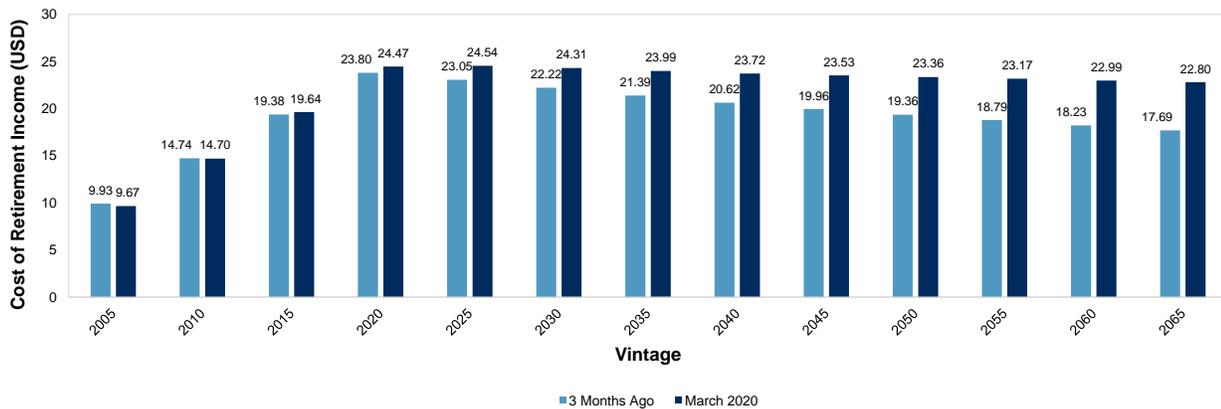
Significant market drawdowns in Q1 2020, coupled with declines in U.S. Treasury yields, presented challenges for market participants looking to secure a desired level of retirement income: the cost of retirement income increased for all but two S&P STRIDE vintages in the last three months.

Pre-retirees were particularly impacted given the greater increases in the cost of retirement income for longer-dated vintages. Higher durations meant these vintages were more sensitive to real interest rates, which declined as the U.S. Federal Reserve cut its policy rate in response to the spread of COVID-19.

Nearer-dated S&P STRIDE indices had significantly higher allocations to Treasury Inflation-Protected Securities (TIPS) than their S&P Target Date counterparts: focusing on income volatility instead of returns volatility impacted asset allocations within a traditional glidepath approach.

For example, the S&P STRIDE 2020 index's TIPS-LDI allocation (77.2%) was 14 times higher than the S&P Target Date 2020 index (5.5%) at the end of March 2020.

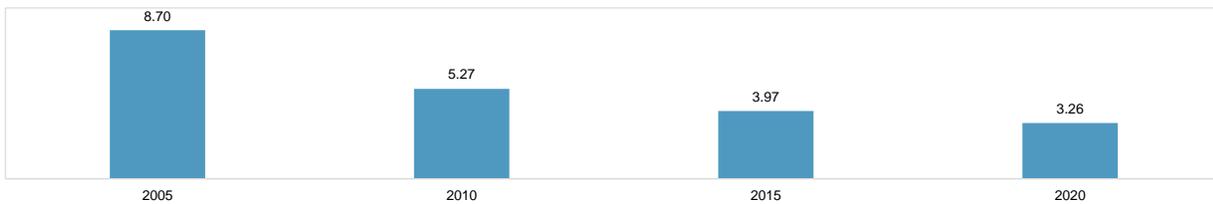
S&P STRIDE Cost of Retirement Income



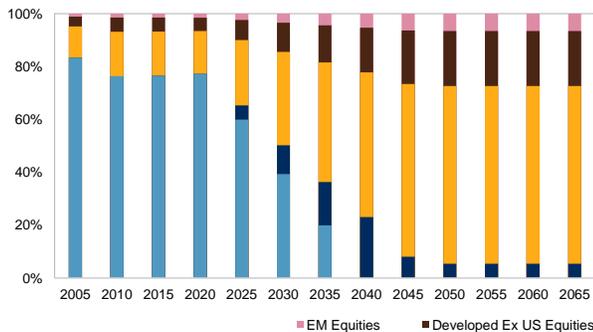
Change in Cost of Retirement Income

| S&P STRIDE Vintage | 2005 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 | 2055 | 2060 | 2065 |
|--------------------|---------|---------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 3 Months | -2.56% | -0.28% | 1.35% | 2.82% | 6.47% | 9.40% | 12.15% | 15.03% | 17.89% | 20.65% | 23.35% | 26.11% | 28.93% |
| 6 Months | -4.26% | -1.48% | 0.37% | 2.95% | 6.23% | 8.75% | 11.19% | 13.73% | 16.30% | 18.79% | 21.20% | 23.66% | N/A |
| 1-Year | -7.62% | -2.30% | 1.31% | 7.76% | 13.48% | 18.49% | 23.32% | 28.43% | 33.64% | 38.93% | 44.32% | 49.91% | N/A |
| 3-Year | -22.77% | -13.64% | -7.63% | 9.00% | 15.97% | 21.79% | 27.34% | 33.16% | 39.01% | 44.91% | 50.93% | 57.20% | N/A |

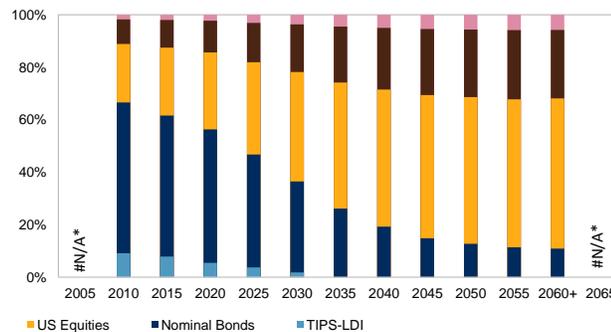
Decumulation Rate (%)



S&P STRIDE Asset Allocations



S&P Target Date Asset Allocations



Source: S&P Dow Jones Indices LLC. Data as of March 31, 2020. *2005 and 2065 vintages do not exist for the S&P Target Date Indices. Charts are provided for illustrative purposes. Past performance is no guarantee of future results. For more information, please visit our website at www.spdji.com

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Charts and graphs are provided for illustrative purposes. Past performance is not an indication or guarantee of future results. The charts and graphs may reflect hypothetical historical performance. All information presented prior to the launch date is back-tested. Back-tested performance is not actual performance, but is hypothetical. The back-test calculations are based on the same methodology that was in effect when the index(es) was officially launched. However, it should be noted that the historic calculations of an Economic Index may change from month to month based on revisions to the underlying economic data used in the calculation of the index. Complete index methodology details are available at www.spdji.com. It is not possible to invest directly in any index.

S&P Dow Jones Indices defines various dates to assist our clients in providing transparency on their products. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which a given index is set at a fixed value for calculation purposes. The Launch Date designates the date upon which the values of a given index are first considered live: index values provided for any date or time period prior to the index's Launch Date are considered back-tested. S&P Dow Jones Indices defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via S&P Dow Jones Indices's public website or its datafeed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed "Date of introduction") is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the index's public release date. Prospective application of the methodology used to construct the index(es) as well as revisions to economic data may not result in performance commensurate with the back-test returns shown. The back-test period does not necessarily correspond to the entire available history of the index(es). Please refer to the index methodology for the particular index in question, available at www.spdji.com, for more details about such index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations.

Another limitation of using back-tested information is that the back-tested calculation is generally prepared with the benefit of hindsight. Back-tested data and/or information reflects the application of the index methodology and selection of index constituents in hindsight. No hypothetical record can completely account for the impact of financial risk in actual trading. For example, there are numerous factors related to the equities, fixed income, or commodities markets in general which cannot be, and have not been accounted for in the preparation of the index information set forth, all of which can affect actual performance.

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