

S&P Dow Jones Indices

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S&P STRIDE Index Series Supplemental Data Guide

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S&P STRIDE SUPPLEMENTAL DATA

The methodology of the [S&P STRIDE Index Series](#) seeks to reflect an investment strategy designed to mitigate the uncertainty of how much future, inflation-adjusted income may be available to an investor as of a specified theoretical retirement date. As such, it represents an alternative risk management framework in contrast to what is often thought of as risk-mitigating investment drawdowns. In addition to the S&P STRIDE Index Series values and constituents, which are published daily, S&P DJI also publishes supplemental index data metrics on a monthly basis. These data provide additional information about the risk management framework that the index methodology seeks to reflect.

The Cost of Retirement Income

The cost of retirement income is defined as the present value of a specific set of cash flows—the Generalized Retirement Income Liability, or “GRIL.” In the S&P STRIDE Index Series methodology, GRIL is defined as the equivalent of an inflation-adjusted stream of cash flows equal to USD 1 per year that starts at the target date and ends 25 years later. The interest rates used to discount these future hypothetical cash flows to the present are derived from the current U.S. TIPS curve.

GRIL is expressed monthly, so the cost of income at time t is given by:

$$P_{GRIL,t} = \sum_{i=1}^{300} \left(\frac{1}{12}\right) \times e^{-\tilde{R}_{i,t}(T_i-t)}$$

where:

t = the calculation date;

T_i = the month and year the i^{th} payment is made;

$\tilde{R}_{i,t}$ = the discount rate corresponding to maturity ($T_i - t$)

Standard Deviation of Income Cost

The standard deviation of the cost of retirement income equals the standard deviation of the present value of GRIL over the trailing 36 months

TIPS-LDI Allocation

TIPS-LDI allocations are the then-current allocations of the TIPS-LDI index portfolio in the S&P STRIDE Index Series for each of the vintages (or cohort year), for each of the two styles, and after each monthly rebalancing.

Decumulation Points

Decumulation points are index points that represent hypothetical distributions from a net decumulation rate (“NDR”) index. 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.

Decumulation points are computed as follows:

$$\text{Monthly Decumulation Points } (t) = \frac{\text{Index Level } (t) \times l_t}{12 * P_{GRIL,t}}$$

where:

l_t = the TIPS-LDI weight at time t ; and

$P_{GRIL,t}$ = the cost of income as defined above

Decumulation Rate

The S&P STRIDE Indices include two return types—total return (TR) and net decumulation rate indices. Beginning in January of the target date year, NDR indices start to hypothetically divest assets in order to reflect theoretical income payouts. The income levels are dynamically determined using the cost of GRIL for the year. For each of the months within the same calendar year, the monthly simulated payouts remain the same as the January payment of that year.

The decumulation rate is expressed in annualized percentage and represents a theoretical distribution from an NDR index. It is derived from a ratio of index points distributed to the overall index level before the distribution. The ratio is annualized to calculate the decumulation rate.

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