State Street Target Retirement Annual Review

EVALUATING US TREASURY STRIPS

in Target Retirement Strategies[1]

STATE STREET GLOBAL ADVISORS®

THE TOPLINE

Each year, State Street Global Advisors conducts a comprehensive review of its target retirement strategies. The annual review process is driven by the Defined Contribution Investment Group (DCIG), which blends asset allocation expertise from State Street's Investment Solutions Group with Defined Contribution (DC) market insights from the Global Defined Contribution team. The review follows a consistent and transparent framework to reassess the capital market expectations and demographic assumptions that underpin the glidepath, while also evaluating new asset classes and investment themes for inclusion in the investor portfolios. The process is grounded in three key criteria:

INVESTABILITY

Can we implement this investment theme efficiently? If we are adding an asset class, is there an appropriate benchmark?

DESIRABILITY

Would enacting this change result in either increased return or decreased risk? Put differently, would this change be expected to improve participant outcomes?

SUITABILITY[2]

Is the investment decision under consideration suitable for all DC investors? Is the impact significant enough to justify the cost of addition or removal to improve participant outcomes?

- Since our Target Retirement Strategy's inception in 2005, a hallmark has been incremental strategic enhancements; making big impacts on participant outcomes. However, given today's incompatible forces of long-term return compression and longer life expectancy, this year's review was guided by the goal of identifying solutions that would meaningfully recalibrate outcomes for today and tomorrow — without adding cost or complexity to an already broadly diversified portfolio.

- Raising equity weights is one of the best ways to improve median wealth accumulation, but it increases volatility and introduces a level of uncertainty for participant outcomes that may not be prudent.

- US Treasury STRIPS (an acronym for Separate Trading of Registered Interest and Principal of Securities) are a low-cost, liquid asset class that has historically provided significant diversification benefits. Compared to other defensive asset classes such as long government bonds, it may be possible to use a smaller allocation to STRIPS to achieve this diversification, thereby improving expected returns without compromising portfolio efficiency.

- The current shape of the yield curve diminishes this advantage, and the expected impact of replacing long government bonds with STRIPS at this point is modest. Pairing this change with a reevaluation of the glidepath de-risking trajectory would be more likely to have a significant impact on retirement outcomes.

INVESTABILITY

Defining the Asset Class

Treasury STRIPS are zero-coupon fixed-income securities sold at a discount to face value. First introduced in 1985, STRIPS are constructed by financial institutions who “strip” the coupons from US Treasury bonds. By removing the coupons, STRIPS (both principal and coupon) can offer greater interest-rate risk sensitivity due to their longer durations. Today, while traditional long Treasury indices have durations of 18 years or less, widely used STRIPS indices have durations of 25 years or more, and are sought by asset allocators looking to match longer-term liabilities. The advantage of this increased interest rate risk has historically been strong diversification to equities, and thus STRIPS can exhibit negative correlations to weak equity markets.

While the STRIPS market can be less liquid than US Treasury coupon bonds, it is still quite liquid. State Street’s CIT and Mutual Fund strategies would both provide sufficient scale to implement the asset class effectively. The cost to implement could, however, be 15–30 basis points, higher than the estimated 3–5 basis points to implement a long government bond index. The allocation would be implemented via the Bloomberg Barclays US Treasury STRIPS 20+ Year Index, to which State Street has been managing assets for nearly a decade, as well as managing over $5 billion in an ERISA Commingled Defined Benefit fund today.

DESIRABILITY

The Inspiration for STRIPS

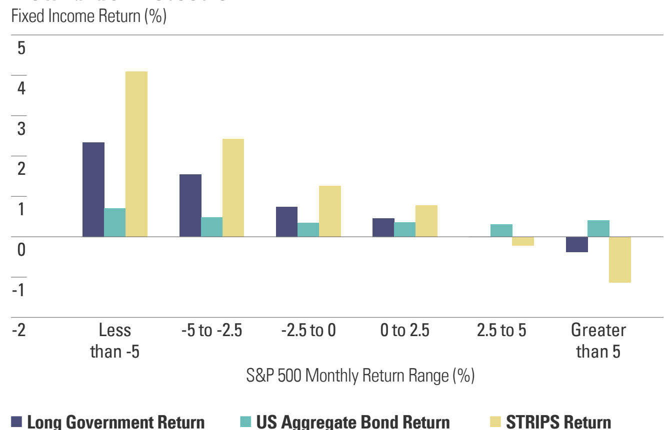
Long-term return expectations have continued to compress and participant lifespans have extended, threatening the ability for participants to achieve meaningful levels of income replacement in retirement. State Street’s 2018 review focused on addressing this reality without deviating from our thoughtful and capitally efficient approach to glidepath construction. While staying true to our core philosophy, we sought to evolve what is already a broadly diversified and efficient portfolio to meet the needs of today’s participants and meaningfully improve outcomes.

A simple step toward improving expected returns, and therefore wealth accumulation at retirement, is to increase the equity weight in the glidepath. Higher equity weights will improve outcomes in the median case, but introduce more uncertainty due to the higher volatility of the asset class. To diversify the market risk of our equity-heavy starting portfolios, State Street holds an allocation to long government bonds. Long government bonds offer meaningful downside protection when equities perform poorly; creating a more efficient starting point , e.g., our 2060 Fund, that ultimately allows the glidepath to hold on to equity risk for longer.

An increased equity allocation would reduce the long government bonds allocation, which may lead to a bumpier ride for participants and less downside protection in volatile equity markets. To counteract the loss of downside protection, we considered the introduction of Treasury STRIPS as a substitute for long government bonds. Treasury STRIPS offer more concentrated exposure to long-duration government debt and thus can provide a level of downside protection that is similar to long government bonds but at a smaller absolute allocation.

In the chart below, we compare the performance of three different fixed income indices during various equity environments. STRIPS have historically offered materially higher returns during periods when equities were down the most.

Figure 1: STRIPS Have Historically Offered Greater Downside Protection



Sources: State Street Global Advisors, FactSet as of September 30, 2018.
Past performance is not indicative of future results.

SUITABILITY

Is Efficiency Enough?

To judge the appropriateness of STRIPS — and a higher starting equity weight —in State Street's Target Retirement strategies, we begin by evaluating the trade-offs inherent to the current glidepath.

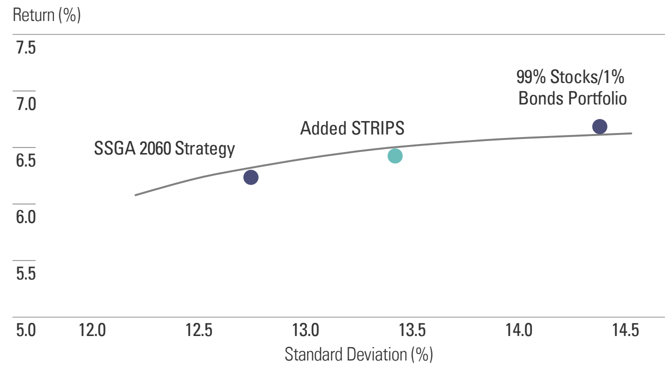
Given the slope of the efficient frontier (see Figure 2), managers that seek to improve returns simply by increasing equities at the expense of fixed income likely face decreased portfolio efficiency. A more impactful fixed income allocation may mitigate this concern.

Today, our starting allocation of 90% equities and 10% long government bonds allows State Street to provide approximately 95% of the expected return of an all-equity portfolio with approximately 90% of the volatility. Given the lower risk qualities of this starting portfolio, we are comfortable maintaining this allocation until 27 years from retirement at which time we begin to de-risk. A more efficient starting point allows for more gradual de-risking, and holding equity risk when balances are higher is expected to lead to higher wealth accumulation over the course of a participant's career.

If we moved the starting point portfolio to 95% equities and 5% STRIPS, our modeling suggests that expected returns would modestly improve without significantly impacting the efficiency of the portfolio (return per unit of risk). This portfolio would allow State Street to provide approximately 97% of the expected return of an all-equity portfolio with approximately 93% of the risk.

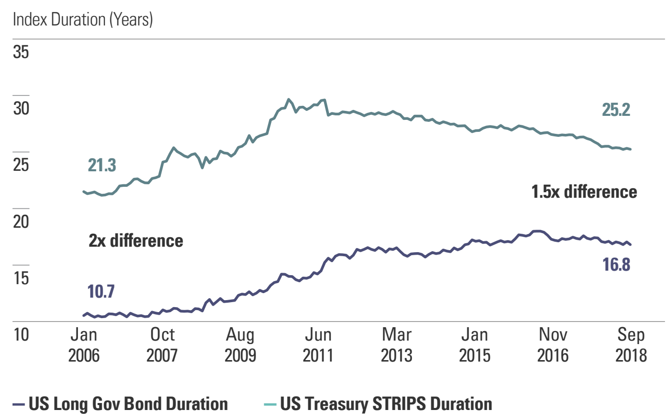
Taken in isolation, the impact of adding STRIPS today is modest. The muted impact of this change on portfolio efficiency can be attributed to the relative decline in duration for STRIPS versus long government bonds compared to historical norms (as seen in Figure 3). While we have historically observed that STRIPS may provide nearly double the returns of long bonds in down equity markets, the state of fixed income markets today reduces those assumed diversification benefits. One can correct for the impact by allocating a greater percentage back to STRIPS, but such a change further reduces long-term return expectations and diminishes the rationale for the change.

Figure 2: Efficient Frontier Shows Nominal Benefit from Adding STRIPS



Source: State Street Global Advisors Investment Solutions Group, Long-Term Risk and Return Forecasts as of June 30, 2018.[3]

Figure 3: In Today's Environment, STRIPS and Long Government Bond Durations Have Compressed



Sources: State Street Global Advisors, Bloomberg Barclays as of September 30, 2018.

KEEPING STRIPS IN VIEW

We believe that STRIPS can play a key role in improving capital efficiency in today's low return environment. However, given the rationale outlined above, and based on the current characteristics of each asset class, we do not believe that the modest improvement in return expectations from adding STRIPS would justify the change at this point. The impact of STRIPS on forecasted wealth accumulation is muted by the fact that it would be held by younger investors in the earliest stages of the glidepath. Changes early in the glidepath , e.g., our 2060 Fund, have a relatively modest impact on wealth accumulation for younger participants; generally younger participants have lower balances, and the growth in their balance is driven more by how much they are saving than how much they achieve in investment returns.

We will continue to monitor this asset class in 2019 as part of next year's review, and we expect to reevaluate the inclusion of STRIPS in the context of a broader assessment of our glidepath shape. While the benefit of introducing STRIPS and increasing the equity allocation at the starting point by itself is muted, this change can become more impactful when paired with changes to the equity/bond split at other points. For example, it would likely be magnified if we were to also consider delaying the start of the glidepath de-risking, allowing for greater equity weights later in the glidepath when participant balances are assumed to be higher, and portfolio efficiency and returns become much more impactful to wealth accumulation.

Additional Considerations

We will also continue to monitor policy changes that may directly impact the DC landscape. For example, this September President Trump asked the Treasury Department to review the rules surrounding Required Minimum Distributions (RMDs) for traditional Individual Retirement Accounts (IRAs) and 401(k) plans. Given that life expectancy has increased by one year since the tables last update in April 2002,[4] the review, particularly around standard withdrawal start times, makes sense. More so, it suggests that policymakers could be preparing to move out the 70.5 years old starting age for RMDs — potentially influencing participant drawdown behavior assumptions and ultimately the glidepath de-risking trajectory. Because public policy is often a driver of change for DC plans, our review for 2019 will be comprehensive in examining the ongoing investment case as well as considering any changes in suitability for DC participants. We will continue to seek to calibrate to the changing retirement savings landscape while maintaining our focus on thoughtfully and efficiently addressing the key risks that participants face throughout their careers.

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*AUM reflects approximately $28.32 billion (as of September 30, 2018), with respect to which State Street Global Advisors Funds Distributors, LLC (SSGA FD) serves as marketing agent; SSGA FD and State Street Global Advisors are affiliated.

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[2] When analyzing whether any investment is suitable for an individual, the individual's investment profile must be considered.

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[4] https://www.forbes.com/sites/howardgleckman/2018/09/07/treasury-should-review-ira-minimum-distribution-tables-but-changes-would-help-few-seniors/#374055a71d33

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ID14740-2293329.1.1.AM.RTL 1218 Exp. Date: 12/31/2019