Creating Meaningful Target Date Fund Comparisons
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Evaluating Target Date Funds

Introduction
Target date funds (TDFs) are funds that employ a long-term investment strategy based on holding a mix of stocks, bonds and other investments (called an asset allocation) that automatically changes over time as the participant ages. The “target date” refers to a target retirement date, and is usually referenced in the fund name. TDFs automatically rebalance to become more conservative as investors age. The shift from more aggressive investments (e.g. equities) to more conservative ones (e.g. bonds) over time is called the TDF’s “glide path.”

Over the past 15 years, recently hired 401(k) participants have more than doubled their use of asset allocation solutions, due in great part to the increasing popularity of TDFs. According to data from the Employee Benefit Research Institute (EBRI) and the Investment Company Institute (ICI), in 1998, less than 30% of recently hired 401(k) participants invested in a balanced fund; by 2013, almost two-thirds used asset allocation solutions. Today, TDFs are often the primary or exclusive investment for new participants. Among recent hires investing in asset allocation funds, more than three-quarters had invested at least 90% of their 401(k) accounts in an asset allocation fund at year-end 2013. Overall, 41% of the 26.4 million 401(k) plan participants in the EBRI/ICI 401(k) database held target date funds in 2013.

New 401(k) Plan Participants Have Increased Use of Balanced Funds over Time

Percentage of recently hired participants holding balanced funds, 1998–2013

Note: Balanced funds include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product holding a mix of equities and fixed-income securities (including target date and lifestyle investments).

Globally, TDFs are becoming an increasingly important component of 401(k) assets. For example, target date mutual funds received $53 billion in net new cash flow during 2013, compared to $22 billion in 2005 and $4 billion in 2002. Consulting firm Cerulli Associates projects that by 2018, 63% of all 401(k) contributions will be directed into TDFs.

There are several reasons for the increasing popularity of TDFs. One key reason is that TDFs are often used as a 401(k) plan’s “qualified default investment alternative” (QDIA) under rules

1 Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project
developed by the U.S. Department of Labor (DOL). The Pension Protection Act of 2006 facilitated the use of automatic enrollment in retirement plans, with default contributions being directed to the plan’s QDIA—usually a series of TDFs. Today, a majority of larger plans use automatic enrollment. Some plan sponsors have attempted to correct past asset allocation “mistakes” by implementing reenrollment programs, whereby participant balances are reinvested in an age-appropriate TDF unless they affirmatively elect another allocation approach. From the participant perspective, TDFs are inherently simple to use, since the only required input is the intended year of retirement.

**DOL Guidance**

Some industry pundits claim that plan sponsors don’t always exercise appropriate fiduciary diligence when selecting and monitoring TDFs. At least one plaintiff’s law firm is actively seeking participants who believe they were offered inappropriate TDFs for one reason or another, be it improper investment strategy, excessive fees, self-dealing, imprudent selection, or improper default selection. To help plan sponsors and other fiduciaries with selecting and monitoring TDFs, the DOL published guidance in 2013 (aka DOL Target Date Tips). In very general terms, the DOL guidance suggests that sponsors should:

- Establish a process for comparing and selecting TDFs.
- Establish a process for the periodic review of selected TDFs.
- Understand the fund’s investments – the allocation in different asset classes (stocks, bonds, and cash), individual investments, and how these will change over time.
- Review the fund’s fees and investment expenses.
- Inquire about whether a custom or non-proprietary target date fund would be a better fit for your plan.
- Develop effective employee communications.
- Take advantage of available sources of information to evaluate the TDF and recommendations you received regarding the TDF selection.
- Document the process.²

It’s hard to argue with the DOL recommendations. But, like most fiduciary tasks, the devil is in the details. Sure, comparing TDFs during the selection and review process makes sense. But different TDFs will necessary have different allocation mixes that are built around different objectives and assumptions. How should a fiduciary conduct the comparisons such that the differences between TDFs are properly accounted for?

**The SageView Study**

As one of the nation’s leading retirement plan fiduciary advisory firms, SageView Advisory Group (SageView) spends a lot of time thinking about how best to prudently select, monitor and evaluate funds offered through retirement plans. As a general rule, we’ve developed the following methodology for evaluating actively managed funds:

1. Review funds for both qualitative characteristics (manager tenure, stylistic consistency, corporate ownership, etc.) and quantitative factors.

² “Target Date Retirement Funds - Tips for ERISA Plan Fiduciaries”, U.S. Department of Labor, Employee Benefits Security Administration, February 2013
2. Conduct the quantitative evaluation by comparing each fund to other funds in the same category, considering and weighting multiple factors, including:
   a. Performance relative to other funds in category (over trailing 1, 3, 5 and 10 years)
   b. Rolling performance relative to other funds in category (over trailing 5 and 10 years)
   c. Various risk-adjusted return metrics (Sharpe, Alpha, Up and Down Capture), generally over 5 year periods
   d. Style Consistency compared to the relevant benchmark (R-Squared)
   e. Expense Ratio

Over time, we've found our approach to be quite effective. Consequently, our initial approach to evaluating TDFs was to simply apply the same qualitative and quantitative methodologies to TDFs that we would use to evaluate single-asset class funds.

However, as we applied our quantitative methodology to the evaluation of TDFs, we noted some apparently counterintuitive results. For example:

1. In certain cases, our methodology generated materially disparate rankings for different funds in same TDF series. For example, the 2010 fund in a given series might score well, while the 2050 fund scored poorly—or vice versa.
2. Fund series’ relative rankings shifted significantly over time, as we moved between equity bull and bear markets.
   a. Fund series with relatively low equity exposure tend to score well over periods including equity bear markets and poorly over periods covering only bull markets.
   b. Fund series rankings shifted significantly between 2012 and 2014 as the 2008/09 bear market dropped out of our trailing five year calculations.
3. Other sources of fund series’ differential returns—such as sub-asset class weights, tactical allocation adjustments, quality of security selection, and fund costs—seemed to be overshadowed by differences in macro allocation policy.

Based on these observations, SageView developed an initial hypothesis about the apparently counterintuitive results. We noted that the various funds were classified solely based on the target date referenced in the fund’s name. However, two funds from different companies using the same target date might have adopted dramatically different asset allocation methodologies. The two series’ glide paths might also be very different. We hypothesized that if we could reclassify TDFs such that each fund in a given TDF category had more similar asset allocations and glide paths, our evaluation results would be more consistent. We also predicted that reclassifying TDFs based on glide path would lead to a better assessment of managers’ skill in creating differential returns through sub-asset class weights, tactical allocation decisions, and security selection. With the support and approval of the SageView Investment Committee, we started a major project to reclassify all TDFs based on asset allocation and glide path, and not solely on target year.

Reclassification/Reranking Approach
The reclassification process was highly time consuming and labor intensive. Our process was as follows:

- Collect current and historical target glide path information over the past five years for all TDF series rated by SageView. Special handling was necessary for series whose glide paths had
changed during the evaluation period. In these instances, we calculated a weighted average for the series’ current and former glide path for purposes of our evaluations.

- Compare each fund’s target glide path to the average glide path of all similarly dated funds to identify outliers.
- Use the average industry glide path to identify the “best-fit” vintage for each fund based on target equity exposure. If the best-fit vintage was not the fund’s current Morningstar category, we “shifted” the fund to a neighboring peer group, moving each fund up to three categories (we applied the three category “shift” limit to avoid concentrating too many funds from a single series in the same category).
  - For example, a 2020 fund with higher than normal equity exposure could be moved up to the 2035 category (a three category shift), but would not be moved to the 2040 category, even if the 2040 category were a better “fit” for the fund.
- Create custom reclassified TDF categories in a test version of SageView’s proprietary fund evaluation and scoring database.
- Rescore/rerank all TDFs relative to the reclassified categories.
- Compare the original and revised scores and ranks for all TDFs to determine whether the seemingly counterintuitive results had been appropriately resolved.

The charts below illustrate the glide path distribution prior to and after the reclassification process. Note how the glide paths are clustered much more tightly after reclassification, indicating that the process successfully neutralized macro allocation differentials.

Figure 1--Glide Paths Prior to Reclassification
However, as we solved one classification problem, we created another. While the reclassified categories became more uniform from a glide path perspective, the categories became less homogenous, since some strategies were underrepresented in certain categories, and overrepresented in others. Stated differently, prior to reclassification, most categories contained 50–60 funds, and no more than one fund from the same series. After reclassification, categories held as few as 23 funds, and as many as 108—and some categories might have three funds from the same series, while other categories held no funds from that series at all. The table below summarizes results from the reclassification process (green means multiple funds were added to the category, red means multiple funds were removed).

<table>
<thead>
<tr>
<th>Category Name</th>
<th>Number of Unique Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Base</td>
</tr>
<tr>
<td>Ret. Income</td>
<td>38</td>
</tr>
<tr>
<td>2000-2010</td>
<td>42</td>
</tr>
<tr>
<td>2011-2015</td>
<td>49</td>
</tr>
<tr>
<td>2016-2020</td>
<td>60</td>
</tr>
<tr>
<td>2021-2025</td>
<td>53</td>
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<tr>
<td>2026-2030</td>
<td>60</td>
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<tr>
<td>2031-2035</td>
<td>53</td>
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<tr>
<td>2036-2040</td>
<td>60</td>
</tr>
<tr>
<td>2041-2045</td>
<td>53</td>
</tr>
<tr>
<td>2046-2050</td>
<td>59</td>
</tr>
<tr>
<td>2051+</td>
<td>71</td>
</tr>
</tbody>
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Summary of Results

Frequency of Reclassification
To “normalize” asset allocation, we needed to reclassify over two-thirds (67%) of rated TDFs—we reclassified 1,510 out of 2,263 unique TDFs in SageView’s database.

Reduction of Apparently Counterintuitive Results
The good—fund scores and rankings generally moved in the direction we expected. Given that the last five years have provided mostly positive equity market returns with only sporadic and modest dips, our expectation was for funds with higher equity exposure to have poorer rankings once they were reclassified alongside funds with more similar equity allocations. As predicted, fund scores and rankings moved in the “intuitive” direction 67% of the time (1,514 out of 2,263 reclassifications).

The bad—the dispersion of scores among the different vintages of funds in a given series generally widened. The dispersion fell or stayed same in only 35% of cases, meaning 65% of the time, the scores among the different vintages of funds in a given series became more unequal after the reclassification.

Magnitude of changes
Most changes to fund scores and rankings were relatively minor. Expressed in percentile terms, scores stayed within ± 5% of original score in 58% of cases, within ± 10% in 86% of cases, and within ± 15% in over 97% of cases. The largest score change was ± 24%, a change that applied to two unique funds.

Conclusions
After reviewing the study results, we concluded that the overall impact of the reclassification process was smaller and less predictable than expected based on our hypothesis. In general, a fund’s rank following reclassification was quite similar to the fund’s original rank. This indicates that SageView’s current scoring system is generally reasonably effective for evaluating TDFs, even with the significant variations in equity exposure from one series’ glide path to another. The reclassification process doesn’t materially improve results because the current results are already quite accurate, recognizing the inherent limitations of using a peer group-based assessment methodology in the target date space, where categories suffer from small sample size (low total number of unique funds) and lack of homogeneity (materially different approaches to implementing asset allocation and glide path strategies). To a degree, the data also reinforces the concept that while equity exposure in an asset allocation portfolio is an important driver of returns, it is only one component of asset allocation in its fullest sense. Sub-asset class allocation decisions may collectively be more meaningful than the single decision concerning the glide path “risk” level.

While we noted some improvement in rankings, moving in the direction we expected, we noted that these scoring improvements were somewhat unpredictable due to lack of homogeneity among the reclassified peer groups. Our issues with lack of homogeneity were compounded by the small sample size of both the original and reclassified categories.

Further, the principal benefit of the test (generally improved rankings) was countered by wider dispersion in scores across individual vintages in a given TDF series.
Given the difficulties inherent in reclassifying the universe of TDF funds, the modest and unpredictable improvement in fund scores and rankings, and the deterioration in dispersion of scores across individual vintages in a given TDF series, we concluded that the benefits from reclassification did not justify implementing the process.
**Action Steps**

While we were slightly disappointed that the reclassification process wasn’t more successful at resolving more of the apparently counterintuitive results from our current scoring process, we learned a great deal from conducting the study, and will be implementing certain changes to our TDF selection and monitoring process, such as:

- Use of “series average” scoring, that considers the average of all individual vintages in a given TDF series, to mitigate against the dispersion problem
- Development of a revised and enhanced target date fund selection guide.

Projects for further consideration include new and different ways to evaluate TDFs, such as:

- Use of different factors or weightings in the quantitative evaluation
- Benchmarking against customized index series
- “Look through” evaluations of a TDF series’ underlying funds

We will keep you posted as we continue to revise and refine our TDF evaluation processes.

**IMPORTANT DISCLOSURES:**

SageView Investment Committee understands that each plan sponsor has unique needs and goals, and its actions and timing of its actions may differ depending on circumstances specific to the plan sponsor.

The target date of a target date fund may be a useful starting point in selecting a fund, but investors should not rely solely on the date when choosing a fund or deciding to remain invested in one. Investors should consider the fund’s asset allocation over the whole life of the fund. Often, target date funds invest in other mutual funds, and fees may be charged by both the target date fund and the underlying mutual funds. A fund with higher costs must perform better than lower cost funds to generate the same net returns over time.

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