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Target Date Funds

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With the significant reduction in defined benefit retirement plans in the United States, the burden of investing retirement portfolios has been placed on the backs of individual participants, primarily in defined contribution plans. Historically, individuals have significantly underperformed institutional investors due to a lack of time, information, and expertise in managing investments. Target date funds ("TDFs") were created in an effort to bridge the gap between professionally managed pension funds and participant directed retirement plans with the goal of increasing the likelihood that individuals could achieve their retirement income goals.

This paper first provides a brief history of TDFs, followed by a discussion of fund mechanics and their pros and cons. Finally, it provides a review of the marketplace and likely future trends that should help plan sponsors make informed decisions regarding the use of TDFs. We conclude that TDFs represent an important aspect of defined contribution plan design, and should be included in a plan's investment menu.

Introduction

The goal of Target Date Funds ("TDFs") is to provide participants with "one stop shopping" for their retirement savings needs and eliminate the need to choose among several investment options to formulate an appropriate asset allocation. TDFs utilize varied approaches, but the consistent theme among them is a focus on the investor's time horizon (as defined by an expected retirement date) as the key determinant of his or her risk tolerance.

Typically, a suite of TDFs are offered to plan participants in five-year increments that correspond to particular retirement dates. The longer the time horizon until retirement, the more aggressive (e.g., more equity exposure) the asset allocation for the fund tends to be, and vice versa. For example, a "2025" target date fund is designed for investors seeking to retire (and begin withdrawing money) in or near the year 2025. Because of the near-term time horizon implied by that target retirement year, the 2025 target date fund will be more conservatively invested than longer-dated target date funds in a particular target date fund series, such as a "2055" target date fund.

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History

The concept of life cycle investing - the notion that one's asset allocation should become more conservative during the transition from the accumulation phase, when individuals are working and earning significant income, to the retirement phase - is not new or even recent. Even prior to the establishment of the Employee Retirement and Income Security Act ("ERISA") of 1974, it had long been common practice for financial planners to structure their clients' portfolios more conservatively as they neared or entered retirement. However, post-ERISA, a whole new segment of investors entered the marketplace: defined contribution plan participants such as 401(k) investors. These investors generally did not have the same access to financial planning education or professionals, so there was a clear need for a simple, yet practical asset allocation solution for the expanding mass of defined contribution participants.

While a survey conducted by Vanguard reveals that most investors understand that investing in TDFs involves risk, the wide dispersion of equity allocations among these "retirement" or "income" funds was not clearly understood or sufficiently disclosed.

In March 1994, Wells Fargo Investment Advisors (later Barclays Global Investors) introduced the world's first target date funds. However, target date funds did not garner much attention early on due, in part, to relentlessly rising stock prices during the 1990s, which diminished the attractiveness of a "balanced" approach to retirement investing. The 2000 to 2002 period marked the end of the euphoric investment environment of the 1980s and 90s. Many individual investors, having been burned by the bursting of the technology bubble, began to seek more diversified portfolios in their retirement accounts. Mutual fund complexes rushed to meet this new demand from plan participants, creating the catalyst for the initial expansion phase of TDFs. Total assets in target date funds, which stood at just over $20 billion in 2002, rose to $250 billion by 2007.[1]

[1] Nagengast, Target Date Analytics.

The second expansion phase of target date funds followed the Pension Protection Act of 2006 (the "PPA"). The PPA designated TDFs as a Qualified Default Investment Alternative ("QDIA"), and they were granted status as a "safe harbor" default investment for participant directed defined contribution plans. Balanced funds,

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professionally managed accounts, and stable value funds[2] were also approved as QDIAs. The QDIA's safe harbor status provided fiduciary protection for plan sponsors who utilized target date funds as a plan's default investment option. As such, many ERISA qualified defined contribution plans with automatic enrollment features began directing participant contributions into TDFs, which created an additional wave of assets flowing into TDFs.

[2] The Department of Labor designated stable value funds as capital preservation options, only for the first 120 days of participation.

Following the two expansion phases for TDFs, the market crash of 2008 exposed wide differences in risk exposure between TDFs from competing fund families. This resulted in greater scrutiny of TDFs by regulators, plan sponsors, and plan participants. It became clear to regulators and plan sponsors that many investors did not fully understand the risks underlying many TDFs. A survey of plan sponsors indicated that 61% were either "somewhat surprised" or "completely surprised" by the magnitude of losses in 2008.[3] In fact, the average "retirement" or "income" TDF returned -18% in 2008.[4] While a survey conducted by Vanguard revealed that most investors understand that investing in TDFs involves risk[5], the wide dispersion of equity allocations among these "retirement" or "income" funds was either not clearly understood or not sufficiently disclosed.

[3] Steyer, Robert, P&I, "Few 'very satisfied' with target-date funds, survey finds" August 1, 2011.

[4] Source: Morningstar, Inc. Data reflects the 2008 average return for Target-Date Retirement US Open-End Fund Category.

[5] Vanguard, 2011. "Investor comprehension and usage of target-date funds: 2010 survey".

The large losses, combined with the reaction of participants and plan sponsors, were enough to elicit a significant regulatory response. Investor education and transparency regarding TDFs was formally addressed in 2009 by a joint hearing of the Securities and Exchange Commission and US Department of Labor. Former SEC Chairwoman Mary Schapiro reported that 31 TDFs surveyed with a "2010" retirement date had returns between -3.6% and -41.0% in 2008.[6] As a result, the Department of Labor issued proposed regulations that, among other things, require plans to provide an explanation of how a suite of TDFs' asset allocations change over time, including a graphical illustration. Furthermore, if a fund refers to a specific date, as most do, the relevance of that date must be explained. And finally, participants must be advised that TDFs do not guarantee a positive rate of return and can experience losses.

[6] Halonen, Doug, P&I, "Regulation of target-date funds debated at hearing" 6/18/2009.

While these initial regulations provided some implicit guidance to participants and plan sponsors on TDFs, the Department of Labor published a supplemental guide, "Target Date Retirement Funds – Tips for ERISA Plan Fiduciaries," in February 2013. This guide provided more explicit best practices for target date fund evaluation, selection and monitoring. The tips now serve as a core guiding framework for plan fiduciaries.

In 2010, TDF assets totaled $341 billion, and represented just under 8% of the $4.5 trillion defined contribution market.[7] Moreover, TDFs were the default investment option for 53% of plans surveyed by the Plan Sponsor Council of America.[8] By 2018, 70% of plans were using a QDIA, and for 75% of those plans, the QDIA was a suite of

[7] Bloomberg, "Target-Date Retirement Funds in U.S. Recover 2008 Losses, Morningstar Says" 4/29/2011.

[8] PSCA's 54th Annual Survey of Profit Sharing and 401(k) plans, 2011.

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target date funds.[9] At the end of 2019, TDF assets were at nearly $2 trillion.[10] The continued popularity of TDFs as retirement-savings vehicles helped drive net inflows, as TDFs received at least $40 billion in inflows during every calendar year of the last decade. The growth rate of inflows has tapered in recent years, but still remains substantial.

[9] PSCA's 62nd Annual Survey of Profit Sharing and 401(k) plans, 2019.

[10] Morningstar, "The Decade in Fund Flows: A Recap in 5 Charts" 1/29/20.

Features and mechanics of target date funds

Asset allocation and glide path

Asset allocation and the glide path are critical components of TDF construction, and they ultimately determine performance on an absolute and peer relative basis. Asset allocation across target date fund providers varies substantially due to differences in each firm's investment philosophy and process. Some managers will invest solely in traditional stock and bond securities, while others will invest in a broader range of asset classes, which for example, may include REITs and commodities. The following chart[11] shows the ranges of equity allocations used by TDFs.

[11] Source: Morningstar, Inc. Latest data available through 5/31/2020. Based on Target-Date US Open-End Fund Categories.

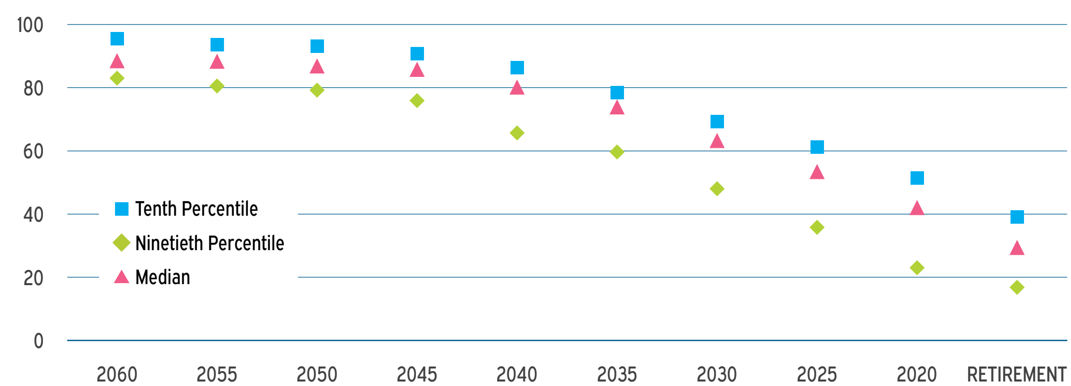

CHART 1
Equity Allocation % by Target Year

As illustrated in this chart, the range of equity exposure can be wide, as the spread between the 10th and 90th percentile equity allocation was more than 20% in some cases.

The glide path is an outline that defines the asset allocation mix for each target date year and shows how the asset allocation mix changes as one progresses towards retirement. A hypothetical TDF glide path is shown in the following chart in five-year increments. Each number on the horizontal axis represents the number of years before, at, and after retirement. There are two distinct phases of a glide path that should be highlighted: the accumulation phase and the decumulation phase. The left side of the chart is the accumulation phase, where an individual is working and saving for retirement. The right side is the decumulation phase, when the individual is no longer working and earning wages, but is beginning to draw down their retirement savings.

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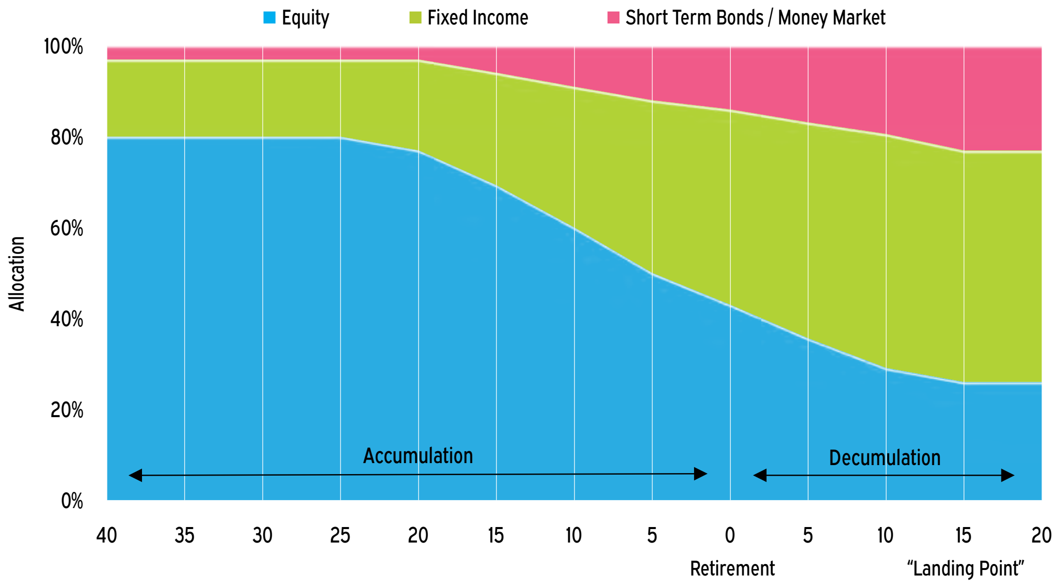

CHART 2

Glide Path (Hypothetical)

As we move from left to right, the time horizon until retirement decreases and eventually the individual reaches the post-retirement phase, and, correspondingly, the asset allocation becomes more conservative (i.e., stocks compose a diminishing amount of the allocation). As time progresses, the asset allocation of each fund rebalances, or rolls-down the glide path. For example, over five years, a fund that is 20 years from retirement will shift gradually to the allocation of the fund that is 15 years from retirement, while a fund that is 25 years from retirement will change to resemble that of the fund that was 20 years out, and so forth.

The decumulation phase begins at, or very near, retirement, which is represented by "0" on the horizontal axis of the chart. This phase will include the "landing point", which typically represents the most conservative asset allocation; this is the point where the glide path reaches its smallest equity allocation. It is assumed that such investors, well into retirement, prioritize safety of principal, liquidity, and current income. Ultimately, each TDF will arrive at the landing point, which is discussed in more detail below.

Methodology and structure

There are two different approaches used by TDF managers in their glide path once the retirement landing point has been reached. Some managers implement a "to" retirement glide path where the TDF's reach their most conservative equity allocation at retirement. The reasoning is that investors should be most conservatively positioned when they reach retirement and begin the decumulation phase. The majority of TDF managers, however, implement a "through" retirement glide path, anticipating that individuals will likely live for many years beyond their retirement date, and as a result, need to maintain meaningful equity exposure during retirement to ensure capital continues to grow to meet retirement spending needs.

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Managers who employ a "through" approach could take anywhere from 5 to 30 years to reach their respective landing point. Regardless of the "to" or "through" nature of the glide path, once a fund reaches its equity landing point, it is then usually merged in to the Retirement Income focused fund in the suite of TDFs. To maintain the time span of a given glide path for a target date series, new longer-dated target date funds are launched, typically in 5 year intervals.

The differing equity allocations among competing TDFs with similar time horizons may be a result of providers employing a "to" versus "through" glide path, but it also may be the result of differing views on the capital markets and asset allocation. Some may employ a more traditional, static approach, while others may be more tactical in nature, and adjust their portfolios in response to short-term market events. Other providers will employ a specific strategy such as liability-driven investing with a focus on future payment streams.

The most commonly used TDFs, offered by large mutual fund companies (e.g., Fidelity, T. Rowe Price, and Vanguard), are composed exclusively of proprietary mutual funds and collective investment trusts ("CIT"). However, customized options exist and record-keepers with open architecture platforms have increasingly allowed plan sponsors to build customized TDFs, which are implemented using the underlying investment options and glide path of their choice.

Some mutual fund companies charge a fee in addition to the underlying mutual funds' fees for their TDFs. According to Morningstar, the average TDF fee was 0.58% in 2019 (both passive and active) on an asset-weighted basis.[12] This fee is inclusive of underlying fund expenses. Creating customized funds comes with additional fees, as well as an additional layer of oversight, which can require substantial scale to make the decision to go custom worthwhile.

[12] Morningstar, "2020 Target-Date Fund Landscape" 5/8/20.

In response to growing demand for low-fee options, some providers offer target date strategies through CITs. They differ from mutual funds, as most CITs are maintained by a trust company or bank, are offered to qualified retirement plans, and are regulated differently than mutual funds. CITs are generally less expensive than mutual funds because they have lower marketing expenses, no SEC filing requirements, typically lower operating costs, and fees can sometimes be negotiated.

Advantages of TDFs

Target date funds provide two primary advantages to investors. First, TDFs are professionally managed portfolios, which help take the investment decision-making burden out of the hands of participants who feel that they are inexperienced or ill-informed investors. Second, allocations of TDFs evolve over time to meet the time

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horizon of investors and are more dynamic than traditional stock/bond balanced funds that have existed for decades.

Professionally managed portfolios

Behavioral finance, or the study of how individuals make investment decisions, has investigated defined contribution investor behavior extensively. It is well established that individuals tend to make poor investment decisions resulting from a myriad of cognitive biases, including that they: chase returns,[13] underestimate risk, exercise naive diversification,[14] become anchored to inappropriate reference points,[15] and will hold "losing" investments stubbornly.[16] Not surprisingly, depending on an investor's personality and behavior, vastly different decisions and investment outcomes are likely.

TDFs are designed to provide individuals with a professionally managed solution if they feel they do not have the time, resources, or inclination to make prudent decisions with respect to their retirement portfolios.

TDFs are designed to provide individuals with a professionally managed solution if they feel they do not have the time, resources, or inclination to make prudent decisions with respect to their retirement portfolios. Offering TDFs *and* appropriate participant education (to ensure proper usage) may mitigate behavioral flaws such as "naive diversification," whereby participants opt to invest their plan account balance equally in each fund that is offered.

At the same time, default-designated TDFs *exploit* a behavioral bias sometimes referred to as "inertia," or the tendency of participants to change investments infrequently. Inertia may ensure that a participant remains invested in a TDF once "defaulted" into it - a desirable result, assuming the asset allocation is appropriate for the investor. Thus, a behavioral vice is turned into a virtue.

Target date funds vs. balanced funds

Prior to the widespread availability of target date funds, most defined contribution plans included a traditional static balanced fund option. This fund usually offered a simple stock/bond portfolio, such as 60% equities and 40% bonds. Alternatively, defined contribution plans may have offered multiple balanced funds, each reflecting a different risk level (e.g., conservative, moderate, and aggressive). This latter variety is also referred to as risk based funds.

[13] Karceski, Jason, "Returns-Chasing Behavior, Mutual Funds, and Beta's Death," 2002.

[14] "Naive Diversification Strategies in Defined Contribution Saving Plans." Shlomo Benartzi and Richard H. Thaler; American Economic Review, 2001.

[15] "Judgment under Uncertainty: Heuristics and Biases" Tversky and Kahneman, 1974.

[16] Barber, B., and T. Odean, 1999. "The Courage of Misguided Convictions." Financial Analysts Journal.

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While balanced funds may employ a similar fund of funds structure to TDFs (especially those with varying risk tolerance options), the perceived advantage of TDFs is their dynamic focus on time-horizon asset allocation. As discussed previously, the TDFs' asset allocation will roll down the glide path "automatically" (from the point of view of the participant), becoming more conservative over time. Individual participants have historically been unlikely to follow such a disciplined approach.

Disadvantages of TDFs

Despite the advantages detailed above, TDFs contain drawbacks that should continue to be addressed by investment managers and monitored by plan sponsors and advisors. Drawbacks fall into two major categories: how a lack of independence affects the objectivity of most TDFs, and how the definition of risk affects the TDF design.

Independence and objectivity

By investing in TDFs, the plan sponsor is relying on the manager to prudently select appropriate underlying investment options. Yet, the vast majority of TDFs are issued by large financial institutions that offer investment strategies across a variety of asset classes. Clearly, there is a revenue incentive for these institutions to include proprietary strategies in their TDF's. Not surprisingly, it is unusual to find an "off the shelf" TDF that is not comprised solely of proprietary funds. This approach is in stark contrast to a defined benefit plan managed by independent fiduciaries, where the underlying managers are selected based on their expertise in a particular area.

If each investment strategy offered by the financial institution was truly superior and their fees were universally low, this would not be an issue. But this scenario is not realistic. Managers of TDFs have an incentive to put only their own funds in their TDF line-up, regardless of their quality. Hence, many poorly performing or high priced strategies that an independent fiduciary would be highly unlikely to recommend, are often included within a TDF structure, where they can still generate revenues and their poor performance is less likely to be noticed.

An additional consequence of including proprietary strategies may come from the construction of TDFs based on an all-active or all-passive underlying funds. This type of construction forgoes the potential value from blending both active and passive strategies. Active management can be beneficial in less efficient areas of the market, while the same can be said for passive management in more efficient areas. There is a fee consideration here as well, because TDF expenses generally increase with more active fund exposure. Based on the lowest-cost share classes, six low-fee strategies that utilize only index funds had average expense ratios between 0.08% and 0.11%, while strategies that held only active funds were just below 0.60%, on average.[17]

[17] Morningstar, "2019 Target-Date Fund Landscape" 5/9/19. The six strategies that utilize only index funds are: Schwab Target Index, Fidelity Freedom Index, State Street Target Retirement, Vanguard Target Retirement, TIAA-CREF Lifecycle Index, and BlackRock LifePath Index.

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Risk and target date fund design

An advantage of TDFs is the use of the target date to determine risk tolerance. This potential advantage can be overstated, however, as time horizon is only one consideration in determining an appropriate mix of asset classes.

For example, different individuals and plan populations are likely to have different tolerances for risk, even if they theoretically possess the same investment time horizon. Psychological factors, type of work, health benefits, other sources of retirement savings, and education level can all affect one's willingness and ability to take on and tolerate risk.

Consider two different groups of investors: teachers and construction workers. The first group may have predictable income and benefits, while the latter may not, as a construction worker's income may be highly correlated with the business and real estate cycles. Further, the construction worker is much less likely than the teacher to be physically able to continue his or her vocation up to and beyond the traditional retirement age of 65. Consequently, a construction worker may require a higher-returning, more aggressively-invested TDF as compared to an educator. Alternatively, a construction worker may instead choose to balance their more risky "human capital" with less aggressive investments.[18]

As this simple example illustrates, there are many factors beyond one's retirement date that can affect the asset allocation decision. Consistency of income, predictability and level of benefits, risk tolerance, and other factors should also help determine the appropriate glide path and choice of TDF family or design.

TDF industry overview

Based on assets under management ("AUM"), the three largest providers within the target date space are Vanguard, Fidelity, and T. Rowe Price. The "big three" make up nearly 65%[19] of the target date market in terms of AUM. Vanguard alone accounted for 38% of the target date market, with Fidelity and T. Rowe Price a distant second and third, at 14% and 13%, respectively. The demand for low-cost TDFs helped drive Vanguard's impressive growth, along with that of other target date series that consist of passive underlying funds. Vanguard offers a single target date series based on five underlying proprietary index funds. Generally speaking, TDF fees decrease when they employ more passive underlying funds.

At the end of 2018, TDFs with mainly active underlying funds still had more assets (excluding CITs) versus those that were mostly passive.[19] Recent asset flow trends indicate that passive-based strategies could overtake active-based ones in terms of overall assets, as net inflows have predominantly gone to TDFs with passive-based strategies over the last few years.

[18] Idzorek, Tom, "Target Date Solutions: Is a Target Date Enough?" 2009.

[19] Morningstar, "2019 Target-Date Fund Landscape" 5/9/19.

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CITs, as an alternative to the mutual fund vehicle, also experienced asset growth amid the increased focus on expenses. At the end of 2018, approximately $660 billion of the total $1.7 trillion in TDF assets were invested through CITs.[19]

Evaluating, selecting, and monitoring TDFs

In February of 2013, the US Department of Labor (DOL) released its set of "tips" to help plan fiduciaries evaluate TDFs and better understand their obligations. Within "Target Date Retirement Funds – Tips for ERISA Plan Fiduciaries", the DOL provided general guidance that highlighted the importance of a prudent selection and monitoring process, understanding the principal strategies and risks of the plan's TDF, effectively communicating with employees, and documenting appropriately. The complete list of "tips" from the DOL can be found in the appendix.

Effectively monitoring and evaluating target date funds has proven difficult. Most TDFs contain several distinct underlying investments and each TDF provider uses a different set of assumptions and methodologies to design and implement their glide path. Actively monitoring and evaluating these underlying components requires significant time and resources. Moreover, differing designs and methodologies across TDF managers complicate the ability to make useful peer comparisons. Proper "benchmarking" of TDFs - comparing one to another or to an appropriate blend of indexes - is not straightforward.

As with TDFs, Target Date Indexes ("TDIs") must specify an initial asset allocation and glide path, but no two index provider glide paths are identical, nor are most index provider allocations or glide paths precisely like those employed by TDF managers. Any comparisons should be made with care. Failure to account for even small differences in TDF asset allocation relative to TDIs may result in erroneous attribution, crediting, for instance, active management when asset allocation, or a fortunately-timed rebalancing or reallocation, is responsible for outperformance.

It should also be noted that TDF providers often create their own custom benchmarks, typically by using a broad market benchmark as a proxy for each underlying strategy, while also employing the same underlying fund weightings. These custom blended benchmarks are often considered secondary versus indexes that are available off-the-shelf.

Proper TDF evaluation may require the services of an investment advisor equipped to perform intensive fund attribution and evaluation.

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Customized target date funds

The most commonly used TDFs are offered by large mutual fund companies and are composed exclusively of proprietary funds. Given the conflicts that may exist with off-the-shelf proprietary target date funds, many record-keepers with open architecture platforms now allow plan sponsors to build customized TDFs.

A customized approach allows plan sponsors to design a glide path specific to the plan's demographics. A participant population that is likely to withdraw plan assets at or shortly after retirement may be better served by a 'to' glide path where the allocation generally becomes more conservative at the retirement date. Additionally, actively managed funds can be combined with low cost passive options, so that active management can be utilized in more inefficient areas of the market where outperformance is more likely, with low cost index funds used for efficient asset classes to help reduce the overall cost of the TDFs.

A customized approach also has the potential to bring greater continuity to a plan's investment lineup and help simplify monitoring. For example, a plan often has a hand selected menu of top tier investment options across several asset classes, with a TDF containing underlying components managed exclusively by a single company. A customized approach could allow the plan sponsor to utilize an open architecture structure with its preferred managers and strategies and not "settle" for the pre-selected components of an off-the-shelf TDF.

A customized approach, however, can result in additional fees and plan revenue challenges. A record-keeper may charge additional administrative fees, such as a "unitization" fee, which covers the book-keeping costs associated with assembling a group of underlying mutual funds into a single fund that must be valued and administered on a daily basis. Unitization fees can be fixed or based on a percentage of fund assets. There may also be a fee for an investment manager to design the customized glide path for a plan population that should be considered. Additional costs could also arise from custom participant communications and notifications. For plans with small asset levels, these fees can make customization cost prohibitive. Additional costs and resources to implement and maintain a customized approach will usually make this a less feasible option for smaller plans. For those plans that possess uncommon participant demographics and distinctive plan design issues, a customized approach may be more suitable than an off-the-shelf strategy.

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Conclusion

Defined contribution plan participants face a challenge for which few are prepared. Successful asset allocation and manager selection are a daunting challenge for most individual investors, yet both are critical to ensure retirement readiness.

Target date funds, though still evolving, represent an important improvement over the "do it yourself" approach to defined contribution investing. If properly selected and monitored, and with appropriate and regular participant education, TDFs should improve the financial well-being of most defined contribution plan investors.

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Appendix

Department of Labor Tips – what to remember when choosing target date funds:

→ 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, 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

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