ABSTRACT

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

INTRODUCTION

Target date funds have seen rapid growth over the past decade within defined contribution plans. The goal of 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 is the focus on the investor's time horizon as the key determinant of their risk tolerance.

Typically, a suite of TDFs are offered to plan participants with five- or ten-year increments that correspond to particular retirement dates. The longer the time horizon until retirement, the more aggressive the asset allocation for the fund tends to be, and vice versa. For example, a "2015" target date fund is designed for investors seeking to retire (and begin withdrawing money) in the year 2015. Because of the near-time time horizon, it will be more conservatively invested than a "2055" target date fund.

HISTORY

The concept of life cycle investing, that is the notion that one's asset allocation should become more conservative as the investor moves from the accumulation phase to the retirement phase), is not new or even recent. It has 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: the defined contribution plan participant, more commonly known as the 401k investor. 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.

In March 1994, Wells Fargo and 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 1990's, 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]

The second expansion phase of target-date funds followed amendments to the Pension Protection Act (the "PPA") in 2006. The PPA designated TDFs as a Qualified Default Investment Alternative ("QDIA"), and they were granted status as a "safe harbor" default investment. 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 contributions into TDFs.

Following the two expansion phases for TDFs, the market crash of 2008 exposed wide differences in risk exposures between TDFs from competing fund families. This resulted in greater scrutiny of TDFs by regulators, plan sponsors, and 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.[2] In fact, the typical "retirement" or "income" TDF returned on average -28% in 2008. While a survey conducted by Vanguard reveals that most investors understand that investing in TDFs involves risk[3], the wide dispersion of equity allocations among these "retirement" or "income" funds was not clearly understood or sufficiently disclosed.

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 U.S. Department of Labor. SEC Chairwoman Mary Schapiro reported that 31 TDFs surveyed with a "2010" retirement date had returns between -3.6% and -41% in 2008.[4] As a result, the Department of Labor issued proposed regulations that among other things, require plans to provide an explanation of how a TDFs asset allocation changes 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.

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[1] Nagengast, Target Date Analytics.
[2] Steyer, Robert, P&I, "Few 'very satisfied' with target-date funds, survey finds" August 1, 2011.
[3] Vanguard, 2011. "Investor comprehension and usage of target-date funds: 2010 survey".
[4] Halonen, Doug, P&I, "Regulation of target-date funds debated at hearing" 6/18/2009.

Despite these recent challenges, TDFs continue to grow in popularity. In 2010, TDFs assets totaled $341 billion, and represented just under 8% of the $4.5 trillion defined contribution market.[5] Moreover, TDFs were the QDIA for 57% of plans surveyed by the Profit Sharing and 401(k) Council of America in 2010.[6] The growing acceptance by plan sponsors of TDFs as default investments will ensure that a steady stream of inflows will continue for the foreseeable future.

FEATURES AND MECHANICS OF TARGET DATE FUNDS

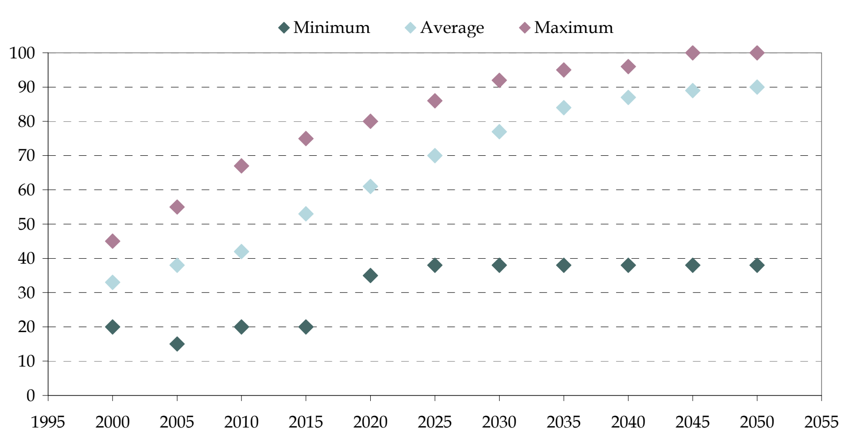
Target-date funds utilize varied investment approaches, but the consistent theme is the focus on an investor's time horizon as the key determinant of their risk exposure. Typically, a suite of TDFs are offered to plan participants with five- or ten-year increments that correspond to particular retirement dates. The longer the time horizon until retirement, the more aggressive the asset allocation for the fund tends to be, and vice versa. For example, a "2015" target date fund is designed for investors seeking to retire (and begin withdrawing money) in the year 2015. Because of the near-term time horizon, it will be more conservatively invested than a "2055" target-date fund.

All target date funds are essentially diversified fund of funds, consisting of multiple underlying investments and asset classes. Over time, each fund's asset allocation becomes more conservative as the target retirement date approaches. The predetermined path each fund follows is referred to as the "glide path."

Asset Allocation

Asset allocation across target-date fund providers varies substantially due to differences in each firm's glide path philosophy and asset classes utilized. A recent study by Morningstar[7] surveyed the equity allocations of nearly forty large TDF providers across target dates. The ranges are shown below:

Equity Allocation % by Target Year

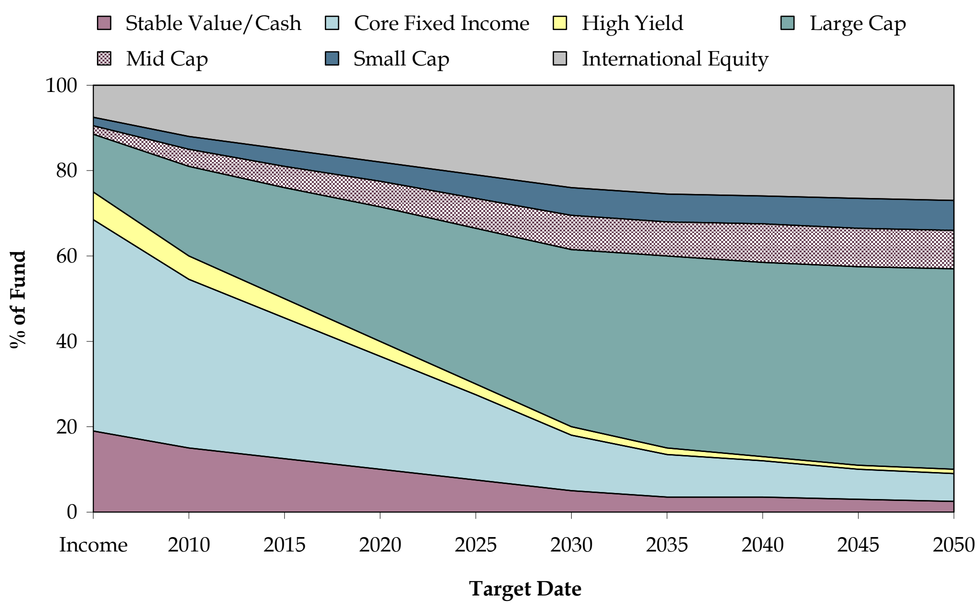


[5] Bloomberg, "Target-Date Retirement Funds in U.S. Recover 2008 Losses, Morningstar Says" 4/29/2011.
[6] PSCA's 53rd Annual Survey of Profit Sharing and 401(k) plans, September 2010.
[7] Morningstar, 2011.

As evidenced above, the range of equity exposure is significant across all target dates. It should be noted that the minimum equity allocation for the longer dated funds is skewed by one company employing a "risk parity" approach that levers bond holdings for longer dated funds instead of increasing the equity allocation. The industry's average allocation to equity has generally decreased since 2009.

Glide Path

A typical TDF glide path is shown in the following chart for a suite of funds with five-year target date increments. Each date on the horizontal axis represents the allocation of a distinct fund within a target date series.



Moving backwards in time, the left side of the chart, often referred to as the "landing point," (labeled "income" on the x-axis) represents the most conservative asset allocation, and is intended for the investor at, in, or very near retirement. It is assumed that such investors require liquidity and current income. As we move from left to right, time horizon until retirement increases, and correspondingly the TDFs asset allocation becomes more aggressive (i.e., stocks compose an increasing amount of the TDFs allocation). As time progresses, the asset allocation of each fund rebalances to become more conservative according to the glide path. For example, over five years the 2020 fund will shift gradually to the allocation of the current 2015 fund, while the 2025 will change to resemble that of the current 2020 fund, and so forth. Ultimately, each TDF will arrive at the landing point, which is the most conservative fund allocation.

Methodology and Structure

Some providers believe in managing their funds "to" retirement, believing participants should be conservatively positioned when they reach retirement. Other providers manage their funds "through" retirement, arguing that participants today 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. The differing equity allocations among competing funds with similar time horizons may be a result of providers employing a "to" versus "through" methodology, but it also may be the result of differing views on the capital markets and asset allocation. Some managers will invest solely in traditional stock and bond securities, while others will invest in a broader range of asset classes that may include REITs, commodities, and TIPS, for example. 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.

The most commonly used TDFs are offered by large mutual fund companies (e.g., Fidelity, T. Rowe, and Vanguard) and are composed exclusively of proprietary funds. Customized options exist, however, and record-keepers with open architecture platforms have increasingly allowed plan sponsors to build customized TDFs, which can be composed of the underlying mutual funds of their choice.

Most 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 1.02% in 2010, on an asset weighted basis.[8] 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 worthwhile.

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 investor's. Second, TDFs allocations evolve over time, 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 make poor investment decisions resulting from a myriad of cognitive biases, including: we chase returns,[9] underestimate risk, exercise naive diversification,[10] become anchored to inappropriate reference points,[11] and will hold "losing" investments stubbornly.[12] Not surprisingly, depending on an investor's personality and behavior, vastly different decisions and investment outcomes are likely.

[8] Morningstar, 2011.
[9] Karceski, Jason, "Returns-Chasing Behavior, Mutual Funds, and Beta's Death," 2002.
[10] "Naive Diversification Strategies in Defined Contribution Saving Plans." Shlomo Benartzi and Richard H. Thaler; American Economic Review, 2001.
[11] "Judgment under Uncertainty: Heuristics and Biases" Tversky and Kahneman, 1974.
[12] Barber, B., and T. Odean, 1999. "The Courage of Misguided Convictions." Financial Analysts Journal.

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. They do this because they assume each fund is equally suitable (i.e., it is endorsed); otherwise it would not be 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 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.

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 focus on time-horizon asset allocation. As discussed previously, the TDFs asset allocation will adjust "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 many 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 managers. 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. Not surprisingly, it is unusual to find an "off the shelf" TDF fund 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 strategy offered by the financial institution is 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 it can still generate revenues and its poor performance is less likely to be noticed.

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 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. Furthermore, the construction worker may have a higher tolerance for risk, given the cyclical nature of their income, and thus could be more agreeable to a relatively aggressive glide path. Alternatively, a construction worker may choose to balance their more risky "human capital" with less aggressive investments.[13]

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.

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

MONITORING TDFS

Effectively monitoring and evaluating target date funds has proven difficult. Most TDFs contain several distinct underlying investments. Monitoring actively these underlying components requires significant time and resources. Moreover, differing designs and methodologies across TDF managers complicate the ability to make useful peer comparisons. Properly "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 and 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 in fact responsible for outperformance.

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

CUSTOMIZED TARGET-DATE FUNDS

The most commonly used TDFs are offered by large mutual fund companies (e.g., Fidelity or T. Rowe Price) and are composed exclusively of proprietary funds. Given the conflicts that may exist with off-the-shelf proprietary target-date funds, many recordkeepers 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 an allocation that becomes more conservative at the retirement date. Additionally, actively managed funds can be combined with low cost index funds to target active management in more inefficient areas of the market and utilize low cost index funds where appropriate.

A customized approach also has the potential to bring greater continuity to a plan's investment lineup and to simplify monitoring. It is very common for a plan to have a hand-selected group of top tier mutual funds across several asset classes for its stand-alone options, but then use a TDF with underlying components managed exclusively by a single company. A customized approach could allow the plan sponsor to utilize its preferred managers and strategies within a TDF structure, 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 a fee for a process called "unitization," 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 a percentage of fund assets. For plans with small asset levels, these fees can make customization cost prohibitive.

An additional challenge for customized funds is the issue of revenue sharing. Revenue sharing is the process by which plan investments rebate a portion of their expense ratio back to the plan sponsor to cover qualified expenses. This rebate often pays a substantial portion of the record keepers' fees. Any customized approach must consider the potential revenue impact.

CONCLUSION

Defined contribution plan participants face a challenge for which few are prepared, and even fewer are likely to be successful. Successful asset allocation *and* manager selection are a daunting challenge for most individual investors.

Target-date funds, though still evolving, represent an important advance 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.