Charles Schwab Investment Management

Passive target date funds: Separating myth from reality

Many active decisions go into passive fund design

John Greves, CFA

Vice President,
Head of Multi-Asset Strategies,
Charles Schwab Investment Management, Inc.

Jake Gilliam, CFA

Director, Head Client Portfolio Strategist, Multi-Asset Strategies,
Charles Schwab & Co., Inc.

Natallia Yazhova

Senior Research Analyst,
Charles Schwab Investment Management, Inc.

Executive summary

The use of passive target date funds (TDFs) in defined contribution (DC) plans continues to grow, in part due to their low cost relative to other TDF options. While the cost advantages of these TDFs can be attractive, it is only one of the factors that plan sponsors and their advisors should consider when selecting a TDF on behalf of participants. The term "passive TDF" is also somewhat misleading. There is no such thing as a passive glide path design, and this, as well as the many other active decisions that go into the creation and management of a TDF, can translate into meaningful differences in investment risks and results, even among passive TDFs.

In this paper, we highlight three common myths about passive TDFs to help plan sponsors dig deeper in their due diligence and ensure they follow a prudent selection process based on their specific plan needs.

Key takeaways

- Passive TDFs can offer an effective retirement investment solution for many investors, but it is important to follow a TDF evaluation process that assesses how strategy choice aligns with investors' specific needs, rather than focusing solely on cost.
- Passive refers specifically to portfolio implementation, not overall TDF design.
- Just as with active TDFs, passive TDFs vary widely in risk/reward profile based on the many decisions that go into portfolio design.
- All passive, active, and blended TDFs offer pros and cons that plan sponsors should consider when deciding which TDF makes the most sense for their specific needs.

Passive remains massive, but is it the right choice?

It depends. Demand and investment for passively invested TDFs remains strong. Most all flows in 2018 went to funds with more than 80% of assets held in index funds.[1]

It is unsurprising that plans continue to be attracted by the fee advantages offered by low-cost passive TDFs, particularly given the important role TDFs play as qualified default investment alternatives (QDIAs) in the DC marketplace and the increased emphasis the Department of Labor (DOL) continues to place on effectively managing plan costs. However, it is important for plan sponsors and their advisors to be mindful that the most important TDF selection criteria should be whether a TDF is an appropriate fit for a specific plan, with a full understanding of how glide path, asset allocation, and implementation decisions collectively overlay with a participant population.

Is there such a thing as a passive TDF?

No. All TDFs have tremendous freedom in terms of design and portfolio construction. Glide path, slope, sub-asset class allocation, underlying index selection, investment vehicle, and use of security lending are all active decisions that can have a significant impact on a TDF's risk/reward profile. As such, the only things truly passive in a so-called passive TDF are the strategies used in implementation.

Myth 1: Passive TDFs are always a safer fiduciary choice.

Reality: Prudent TDF selection is about process, not just pricing.

Selecting the lowest-cost TDF should not lure plan fiduciaries into a false sense of security. There is no free pass when it comes to TDF evaluation—active, passive, or blended, the choice must be prudent.

Simply going passive and low cost may seem like the easy choice, but it does not absolve fiduciaries of their due diligence and ongoing monitoring responsibilities.

Fees are certainly an important consideration in this process but not the only one. Indeed, low fees alone are unlikely to be in the best interests of the plan fiduciary if the overall TDF design is a poor fit. A fiduciary must consider all aspects of TDF design to ensure the option is well suited for the plan.

Nowhere is this more evident than in the critical years leading up to and into retirement. This is the point when glide path differences, particularly in equity exposures, become most apparent. It is also when investors may be most likely to react emotionally in volatile or down markets and when fiduciary risk may be at its highest. Risk decisions around equity levels as well as allocations in more volatile sub-asset classes, such as emerging markets securities and high-yield bonds, should be conscious and deliberate. Even the slope of the glide path can lead to significant differences in risk and results over the multi-decade time horizon of TDFs. For example, overly steep "roll-downs" in retirement can expose investors to increased risks and potential poor actions at the worst times.

This type of thorough TDF vetting comes down to "knowing what you own." Table 1 highlights examples of practical questions for evaluating any TDF regardless of choice of implementation. Documenting this analysis can help plan fiduciaries prudently evaluate and compare various TDFs, as well as more effectively defend their selection should the need arise. Overreliance on fees as the primary selection driver without these sorts of considerations fails to offer the same degree of protection.

Table 1: Digging deeper into TDF design

Ask these questions to help evaluate management approach and portfolio risk/return characteristics.

Glide path diversification and approach	Active/passive implementation
What are the TDF's asset class and sub-asset class allocations, and how do they shift throughout the glide path?	Is the TDF implementation all active, all passive, or a blend of both? Why?
How steep is the equity slope, and when does it begin its descent?	Does the TDF use third-party managers, proprietary funds, or a mix?
What is the equity allocation at the target date and end date?	How are underlying strategies selected and monitored, and have any ever been removed/replaced? Why, and what was the process?
What is the allocation to international and emerging market equities near and in retirement?	How much security overlap is there among holdings?
Are there other riskier exposures to consider?	What are the portfolio management tenure and assets of underlying strategies?
How many years of roll-down does the TDF provide after the target date?	
What is the manager's reasoning for these decisions?	
How have they affected drawdown risk (particularly near retirement), returns in various market cycles, and long-term retirement outcome potential?	

Myth 2: Passive TDFs are always a better choice for investors.

Reality: Just as with active TDFs, passive TDFs vary widely in risk/reward profile based on the many decisions that go into portfolio design.

As mentioned earlier, not all passive TDFs are structured the same, with notable variances in key areas such as asset allocation, index selection, and glide path that can all affect portfolio performance in both the short and the long term. The resultant investment experience can also be vastly different. Figure 1 illustrates how three passive TDFs in the marketplace offer very different glide paths based on the number of asset classes, the allocation mix between these assets, the exposure to alternative or traditional assets, and the size of risk-asset allocations at retirement.

Fiduciaries need to understand what they are exposing investors to in both up and down market cycles, especially with older investors. The largest determinants of that are usually the active portfolio design decisions that all TDF managers must make in their offerings.

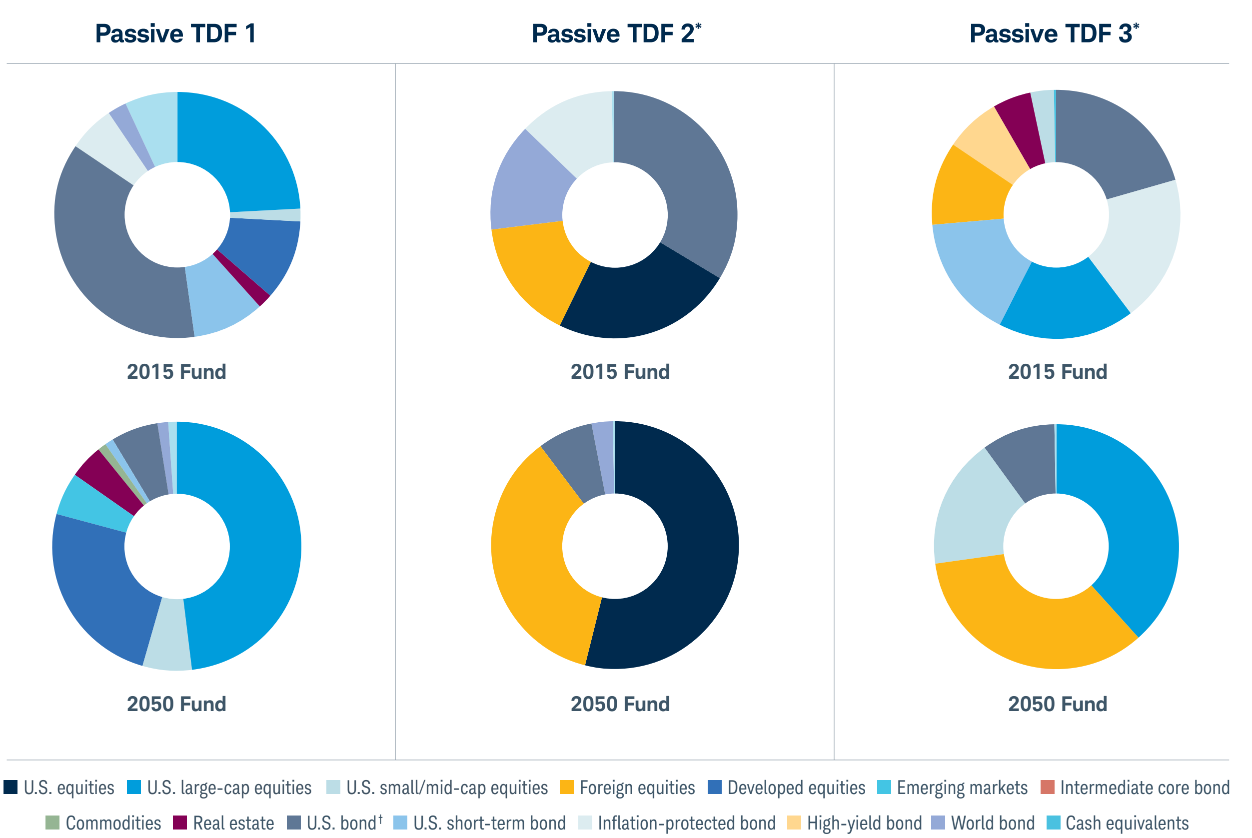
Table 2 shows how these variations start with asset class diversification. Each of the passive TDFs uses a different mix of asset classes, in terms of both the number of different categories included in the portfolio as well as the sub-asset classes used in each segment. For example, passive TDF 3 includes a high-yield bond allocation, but both passive TDFs 1 and 2 do not. Passive TDFs 1 and 3 include distinct allocations to U.S. large-cap equities and U.S. small/mid-cap equities to better manage risk/reward exposures, while passive TDF 2 uses a broad market index that covers both segments.

These types of active design decisions translate directly into risk and return variances for investors. Table 3 highlights a range of performance differences that might surprise investors expecting a more standardized passive TDF investment experience.

Figure 1: Not all passive TDFs are alike

The three passive TDFs below offer very different asset class exposures in their conservative (2015) and longer time horizon (2050) portfolios.

Portfolio allocation



Source: Morningstar, as of March 31, 2019.

*Represents indirect exposure to asset class through broad base index funds.

†U.S. bond includes intermediate-term, long-term, corporate, and government bonds.

Table 2: Varying levels of asset class diversification

Differences include number of asset classes as well as the degree of diversification within each asset class, with some providers using broad market indexes and others more targeted exposures.

<table>
<tr><th>Asset class exposure</th><th>Passive TDF 1</th><th>Passive TDF 2</th><th>Passive TDF 3</th></tr>
<tr><td>U.S. large-cap</td><td>Included</td><td rowspan="2">Combined*</td><td>Included</td></tr>
<tr><td>U.S. small/mid-cap</td><td>Included</td><td>Included</td></tr>
<tr><td>Foreign large-cap equity</td><td>Included</td><td rowspan="3">Combined*</td><td rowspan="3">Combined*</td></tr>
<tr><td>Foreign small/mid-cap equity</td><td>Excluded</td></tr>
<tr><td>Diversified emerging markets equity</td><td>Included</td></tr>
<tr><td>Real estate</td><td>Included</td><td>Excluded</td><td>Included</td></tr>
<tr><td>Commodities</td><td>Included</td><td>Excluded</td><td>Excluded</td></tr>
<tr><td>U.S. short-term bond</td><td>Included</td><td>Excluded</td><td>Included</td></tr>
<tr><td>U.S. bond[†]</td><td>Included</td><td>Included</td><td>Included</td></tr>
<tr><td>Inflation-protected bond</td><td>Included</td><td>Included</td><td>Included</td></tr>
<tr><td>High-yield bond</td><td>Excluded</td><td>Excluded</td><td>Included</td></tr>
<tr><td>World bond</td><td>Included</td><td>Included</td><td>Excluded</td></tr>
<tr><td>Cash equivalents</td><td>Included</td><td>Excluded</td><td>Included</td></tr>
</table>

○ Included ● Excluded ● Combined

Source: Morningstar, Inc., as of March 31, 2019.

*Represents indirect exposure to asset class through broad base index funds.

[†]U.S. bond includes intermediate-term, long-term, corporate and government bonds.

Table 3: Delivering different risk and return experiences for investors

These design differences resulted in a sizable range of return, risk, and portfolio efficiency characteristics, particularly for funds closest to retirement, such as the 2015 portfolios shown below, based on three-year performance.

	2015 portfolio			2050 portfolio		
	Three-year return %	**Three-year risk**	**Sharpe ratio[‡]**	**Three-year return %**	**Three-year risk**	**Sharpe ratio[‡]**
Passive TDF 1	5.65	4.21	1.02	10.42	9.18	0.99
Passive TDF 2	6.28	4.39	1.11	10.43	9.15	0.99
Passive TDF 3	6.01	4.37	1.06	10.51	9.32	0.98

Source: Morningstar, Inc., as of March 31, 2019. Past performance cannot guarantee future results.

[‡]The Sharpe ratio is a risk-adjusted performance measure, representing the return earned in excess of the risk-free rate of return for a given unit of risk.

With this in mind, a specific passive TDF can be a highly appropriate choice for a particular plan's participants, but the evaluation process to reach this decision should include numerous inputs, of which cost is only one. Table 4 presents some of the major points to consider in TDF evaluation, whether the manager uses passive or active underlying strategies in portfolio construction. Different plans can have different needs, and reviewing these types of questions can help build a deeper understanding of how different passive TDF families may align with specific plan participant demographics.

Selecting a TDF purely on the label of "passive" is an incomplete action, given all the active decisions embedded in portfolio designs. Evaluate all portfolio decisions, and confirm the TDF construction is aligned with plan needs, such as demographics, time horizon, consistency with plan design, and investor risk tolerance.

Table 4: Identifying active decisions in passive TDFs

Below is a list of some of the active decisions that exist in all TDFs—even those considered passive—that may significantly affect performance and risk exposures.

Active decisions	Considerations
Asset class diversification and allocation strategy	What asset classes are included in the TDF, and what are the allocation starting and end points?
Slope and speed of glide path progression	How quickly does the TDF dial down risk, and is the glide path managed to or through retirement?
Sub-asset class shifts	How does the TDF manage exposure to sub-asset classes? Are these allocations static, or do they evolve through the glide path?
Underlying index selection	Which indexes are used to gain market exposure, and how does this affect the underlying risk/reward profile?
Investment vehicles	Does the TDF use mutual funds, separate accounts, collective investment trusts, or exchange-traded funds?
Securities lending	If allowed, what are the risks involved, and does the generated revenue help offset fees?
Portfolio rebalancing	How are cash flows managed, and what are the bands allowed around policy allocations?

Myth 3: Active or passive is an either/ or choice.

Reality: Today implementation can be fully passive, fully active, or a blend of both—with pros and cons for all three approaches.

All things being equal, lower fees will translate into higher returns. However, all things are not equal across TDFs, given the flexibility providers have in portfolio design. As a result, there are compelling reasons why a plan may select a passive TDF or an active TDF. Additionally, there is a growing segment of blended active and passive TDFs that can help bridge the best of both of these worlds. Consider the high-level pros and cons of each approach.

- **Passive implementation** can provide a plan with an effective, low-cost QDIA, but it is important to understand how this approach might affect performance and force certain glide path decisions. For example, it may eliminate certain potentially additive asset classes that are difficult or costly to replicate in terms of passive performance. Underlying indexes used in portfolio construction may also shape allocation decisions, at both the stock and bond levels, and in sub-asset class exposures. Notable differences in portfolio characteristics can appear when using a broad market index to gain equity exposure versus market capitalization equity indexes that may allow further refinement in a glide path's risk/reward profile.
- **Active implementation** typically strives to add portfolio value for a higher fee. These TDFs generally seek to adapt portfolios through time for return-seeking opportunities or for risk management by investing in underlying securities at different weights than the benchmark. Of course, this approach also creates risk that the underlying strategy managers may make the wrong investment choices and underperform.
- **Blended implementation** combines these two approaches by investing in low-cost index funds and using active managers to gain select market exposures. Typically, active managers are used to expand asset class diversification or to boost return potential in more inefficient markets where active managers tend to outperform, for a generally modest fee increase over a pure passive implementation approach. Using both types of strategies can allow the TDF manager to refine active risk levels at different parts of the glide path and may also provide diversification as markets cycle.

In our opinion, open architecture processes with thorough institutional governance become increasingly important when a TDF utilizes more active exposures in implementation. Actively managed strategies have greater discretion around investment decisions, and it is crucial to select a skilled manager with a demonstrated ability to take appropriate investment actions as markets evolve.

Combining different active sub-advisors or strategies into a single solution creates a diversity of thought and intellectual capital that can be lacking in a proprietary active solution. Furthermore, it may reduce the headline risk or conflicts of interest associated with investing all assets with a single firm. For example, a proprietary active TDF experiencing significant performance problems and/or the firm experiencing difficulties or even lawsuits will typically require fiduciaries to consider taking some sort of action, the result of which may be disruptive to the plan and participants. It can also be difficult for one firm to excel across all asset classes and investment styles; therefore, limiting choice to an in-house solution may be less optimal than selecting the best of what is available in the marketplace. An institutional approach to selecting outside active managers can both improve outcome potential from expanded choice and help negotiate lower fees that are well below the typical perception of "high fee" active managers.

Table 5: Weighing pros and cons in portfolio implementation

Pure passive, pure active, and blended approaches to implementation each present specific considerations and implications.

Approach	Key attributes	Keep in mind
Passive	▪ Low cost ▪ Simple to understand ▪ Reduces underlying manager risk	▪ Glide path and other important design decisions are active. ▪ Choice of provider and index followed can be meaningful. ▪ Opportunity to adjust portfolio based on market conditions at the strategy level is removed. ▪ Does not relieve fiduciary duty—still requires careful oversight. ▪ Net cost, or the result after performance differences and other design factors, can outweigh cost alone.
Active	▪ Seeks to outperform or to better navigate difficult markets relative to passive implementation ▪ Ability for underlying strategies to adjust for market conditions ▪ Potential to add long-term value over fee	▪ Cost to implement is higher. ▪ Manager(s) may underperform market net of fees, especially in short-term horizons. ▪ Open architecture for active managers may be more important for diversification, reduced firm risk, and access to proven strategies. ▪ Careful oversight is required.
Blended	▪ Mitigates opportunity costs and combines benefits associated with pure passive or pure active ▪ Lower fees than pure active, with ability to adjust for market conditions ▪ Diversification benefits and potential to add long-term value over fee	▪ Considerations from the above two approaches are combined. ▪ An open architecture approach ensures that the TDF provider can select underlying active or passive strategies without constraint or bias.

Implementation choice may lead to differences in performance and overall risk, which can offset or overcome potential added costs.

Conclusion

Charles Schwab Investment Management has long been an advocate for offering a range of investment solutions that best serve the needs of our investors, with a focus on keeping investment fees as low as possible. We believe that passively implemented TDFs can be a very effective retirement investment solution for many investors. However, it is important to remember that when the term passive is applied to a TDF, it can be misleading as it refers specifically to portfolio implementation. Glide path design, including asset class exposure within the glide path, is the most important decision and is always the result of active choices by the manager.

Because of this, a passive TDF approach does not necessarily reduce risk or offer more reliable performance on its own. Nor does it automatically offer a safer fiduciary choice. Instead, passive TDFs are as varied in glide path structure and other design choices—and by extension the resulting risk/reward exposures—as any other type of TDF.

There is no question that the relative fee advantages in passive implementation are compelling, but plan sponsors and their advisors should consider first and foremost how a TDF's overall portfolio design aligns with the demographic needs of their participants. Fees, while important, should not be the most important consideration in this process. From a fiduciary perspective, it is more critical to evaluate how the multiple factors and considerations that go into developing and delivering a glide path, including expenses, collectively work together to shape participant outcome potential, whether applying a pure passive, pure active, or blended approach to portfolio implementation.

The DOL's TDF selection tips offer plan sponsors and their advisors useful guidance on important points to consider when choosing a TDF.

About the authors

John Greves, CFA

Vice President, Head of Multi-Asset Strategies,
Charles Schwab Investment Management, Inc.

John Greves is a Vice President and Head of Multi-Asset Strategies for CSIM. In this role, Mr. Greves is responsible for overseeing the Multi-Asset Portfolio Management, Sub-Advisor Oversight, and Quantitative Solutions teams. He maintains accountability for multi-asset investment processes including team research and implementation, and also contributes to the firm's efforts to continually enhance investment outcomes. The Multi-Asset Strategies team is responsible for management of all CSIM multi-asset portfolios, including target date, balanced, monthly income, and multi-manager funds. Mr. Greves earned a Bachelor of Science in computer science and business from the University of Puget Sound.

Natallia Yazhova

Senior Research Analyst,
Charles Schwab Investment Management, Inc.

Natallia Yazhova is a Senior Research Analyst for CSIM on the Quantitative Solutions Team. She is responsible for developing and maintaining quantitative models and software to support CSIM's multi-asset strategy funds.

Ms. Yazhova earned a Master of Science in computational finance from Carnegie Mellon University, Tepper School of Business, and a Bachelor of Technology in computer information systems from the Globe Institute of Technology.

Jake Gilliam, CFA

Director, Head Client Portfolio Strategist,
Multi-Asset Strategies, Charles Schwab & Co., Inc.

Jake Gilliam is a Director and Head Client Portfolio Strategist, Multi-Asset Strategies for Charles Schwab & Co., Inc., supporting CSIM. He provides strategic leadership for CSIM's multi-asset and sub-advised investment strategies, as well as for the firm's portfolio construction framework. Mr. Gilliam also participates in CSIM's Asset Allocation and Sub-Advisor Oversight Committees and represents CSIM's multi-asset class strategies and framework to the institutional marketplace, clients, and the media.

Mr. Gilliam earned a Bachelor of Business Administration in finance from Ohio University, and is a member of the Ohio University College of Business Finance Advisory Council. He is a CFA® charterholder and a member of the CFA Society of Cleveland. He holds Series 7 and 66 licenses.

Charles Schwab Investment Management

With a straightforward lineup of core products and solutions for building the foundation of a portfolio, Charles Schwab Investment Management advocates for investors of all sizes with a steadfast focus on lowering costs and reducing unnecessary complexity.

Past performance is no guarantee of future results.

1. *2019 Target-Date Fund Landscape: Simplifying the Complex*, Morningstar, May 9, 2019.

The values of target date funds will fluctuate up to and after the target dates. There is no guarantee the funds will provide adequate income at or through retirement.

Target date funds are built for investors who expect to start gradual withdrawals of fund assets on the target date, to begin covering expenses in retirement. The principal value of the funds is not guaranteed at any time and will continue to fluctuate up to and after the target date.

Target date funds asset allocations are subject to change over time in accordance with each fund's prospectus.

AHA (0619-9H2A) MKT101403-01 (08/19)

00231514

charles SCHWAB Investment Management

For more insights, visit us at schwabfunds.com.