

A guide to managed account evaluation in practice

Russell Investments Research



In today's defined contribution (DC) plan marketplace, we are seeing significant increased use of managed accounts as an engine for investment advice and implementation. As these products gain prominence in many DC plans, a detailed framework is necessary to examine all pertinent aspects of the program and the potential impact on participant outcomes.

Introduction

Target date funds are the most popular default option today, but managed accounts are increasingly offered by DC plans as a supplemental investment option. As of 2018, 39% of plans offer managed accounts to their participants, but only 9% offer managed accounts as a default.¹ While it is true that target date funds may well serve the average participant, managed accounts provide a valuable service, namely an individualized asset allocation for each participant. However, in the past, less scrutiny has been placed on managed accounts than target date funds because most managed accounts are not being used as the default investment option, and plan sponsors were often limited to a single provider made available to them by their recordkeeper. Moreover, unlike the guidance that the Department of Labor provided for target date funds, there is no guidance from regulators as to the necessary steps for a similar evaluation of managed accounts.²

This paper will first discuss the mechanics of a managed account. We will discuss a three-step process for understanding how participants' portfolios are constructed and individualized, managed and monitored. We will conclude by discussing how plan sponsors can benchmark the success of a managed account program, including an analysis of the fees paid by participants and whether those fees are currently reasonable.

In the past, less scrutiny has been placed on managed accounts and plan sponsors were often limited to a single provider made available to them by their recordkeeper.

¹ Source: PSCA's 61st Annual Survey of Defined Contribution Plans. 2019

² Target Date Retirement Funds – Tips for ERISA Plan Fiduciaries, US Department of Labor Employee Benefits Security Administration, February 2013 <https://www.dol.gov/sites/default/files/ebsa/about-ebsa/our-activities/resource-center/fact-sheets/target-date-retirement-funds.pdf>

Background: What is a managed account and how does it work?

On its surface, the idea of a managed account sounds simple. Participants enroll in the managed account either through an opt-in option or through auto-enrollment if it is the Qualified Default Investment Alternative (QDIA), and then decide whether or not to enter additional information into a questionnaire that helps assess risk tolerance. Information such as a participant's balance, contribution rate, age and gender may be automatically populated and may be used by the managed account provider to inform the individual's asset allocation. Participants are also able to input some additional information about outside accounts and spousal assets. In some cases, the participants will be asked to identify their willingness to take investment risk. The managed account provider takes this information and combines it with its own views about the capital markets in order to come up with a personalized asset allocation, based on pre-determined objectives. In return for this service, the participants pay the managed account provider a fee, usually as a percentage of their account balance. A portion of this fee is for the service of managing the investment allocation, and another portion goes directly to the recordkeeper for access to participant accounts.

In each of these steps, there are large differences in how each managed account provider works in practice, and key differences exist among providers. Although it is not our intention to call out the benefits or shortcomings of any one provider, we will examine the relative strengths and weaknesses of approaches we have seen in the marketplace. With a simple, straightforward approach, this paper can be used as a guide to evaluating the components of a managed account program and to draw comparisons among different providers' approaches.

We acknowledge that plan sponsors have limited choices today depending on what is available on their recordkeeping platform; however, many recordkeepers have more than one choice available, and we see the number of choices increasing.

Our framework for managed account due diligence revolves around four key elements:

1. **Inputs:** What drives the process
2. **Outputs:** The portfolios that participants receive
3. **Results:** Measurement of participant success
4. **Fees:** Value for fees

We then compare generalized examples of managed account programs in use today.

Although the plan sponsor's task of evaluating managed accounts may be difficult to grasp at first, the act of following a due diligence process can help provide committees with the comfort that they have made an educated decision to offer, or not to offer, managed accounts.



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Inputs: What drives the process

Beginning with the factors that drive investment allocation, it makes sense to examine how a managed account provider derives its inputs. These can be broken down into three main categories: capital market inputs, plan inputs and participant inputs. Each provider has a unique methodology for how these inputs are used, but let's start with the inputs themselves and compare across providers.

Capital market inputs

Though transparency is often an issue in the evaluation of capital markets assumptions, plan sponsors should seek to understand how core asset classes are modeled and how relationships of these core asset classes are modeled in other asset classes. This may be a difficult step for some plan sponsors to start with, but when evaluating a managed account program, plan sponsors should have a basic understanding of how assumptions are formed and what that might mean for participant portfolios. Assumptions should be supported by a robust framework and sound rationale, while also aligning with other 'professionally managed' investments in the plan, such as target date funds.

Exhibit 1: Capital market inputs

PROVIDER	DESCRIPTION	PROS	CONS
A	<ul style="list-style-type: none"> Building block approach using stocks, bonds, and cash as a starting point Uses a risk premium approach for each asset class based on long term forecasted values Does not construct forecast for assets outside of these main asset classes. Does not adjust its forecasts based on market valuations in their investment process. 	<ul style="list-style-type: none"> Simplistic and easy to understand inputs 	<ul style="list-style-type: none"> Does not forecast additional asset classes and relationships beyond stocks, bonds, and cash Does not consider whether particular markets are under or over valued in optimization
B	<ul style="list-style-type: none"> Uses an approach similar to Provider A but also incorporates market conditional scenarios for equities and different spread models for fixed income 	<ul style="list-style-type: none"> Simplistic and easy to understand inputs 	<ul style="list-style-type: none"> Does not forecast additional asset classes and relationships beyond stocks, bonds, and cash
C	<ul style="list-style-type: none"> Derives long term asset class assumptions based solely on historical return data 	<ul style="list-style-type: none"> Simplistic and easy to understand inputs 	<ul style="list-style-type: none"> History may not repeat itself, and market valuations are not considered
D	<ul style="list-style-type: none"> Constructs forecasts for any asset class under consideration an Takes into account market valuations and historical relationships among asset classes 	<ul style="list-style-type: none"> May be a more robust approach to asset class determinations 	<ul style="list-style-type: none"> May be more difficult to explain than other approaches

In Exhibit 1, a simplistic approach like what Provider A outlines might serve the needs of the masses, but it does not adjust its forecasts or asset allocation based on market valuations. Provider C uses only historical market data and relationships. This might be an issue if historical data does not repeat itself. Provider D has the most flexibility in its implementation but may require more explanation to investment committees and decision-makers.

Note that participants will likely not have access to these specifics, so it falls to the investment committee to evaluate which approach is right for them.

Participant inputs

At a minimum, Russell Investments believes that participants' inputs should extend beyond those types of inputs referenced in other retirement planning tools (i.e. age and/or expected retirement age will not allow a solution to sufficiently customize advice). Russell Investments also prefers automatic data collection methods, limiting reliance on participant engagement in order to collect and periodically update input data. Based on our experience, participants may not take the time to input their outside assets and other details that could impact their asset allocation. Plan sponsors may also need to consider how proxy data is used if participant-specific information is not available.

Exhibit 2: Participant inputs

PROVIDER	AUTOMATICALLY INCORPORATED FROM RECORDKEEPER	ADDITIONAL MODELING DONE IF SUPPLIED BY PARTICIPANTS	PROS	CONS
A	Age, savings, gender, contribution rate	Risk tolerance, outside accounts	<ul style="list-style-type: none"> Simplistic and easy to understand inputs 	<ul style="list-style-type: none"> Does not allow for easy input of non-401(k) assets Participants may misstate risk tolerance
B	Age, savings, gender, contribution rate, non-401(k) assets held at recordkeeper	Risk tolerance, spousal age, outside accounts, emergency spending needs, investment experience	<ul style="list-style-type: none"> Additional complexity in inputs are additive to the investment allocation decision 	<ul style="list-style-type: none"> Additional inputs may cloud the investment allocation decision, requiring more evaluation points Participants may misstate their investment risk tolerance
C	Age, savings, gender, contribution rate, salary, DB assets (if available), Social Security income, state of residence	Risk tolerance, outside assets	<ul style="list-style-type: none"> More inputs available automatically through the recordkeeper 	<ul style="list-style-type: none"> Participants may misstate their investment risk tolerance
D	Age, savings, gender, contribution rate, salary, DB plan (if applicable)	Outside accounts	<ul style="list-style-type: none"> More inputs available automatically through the recordkeeper 	<ul style="list-style-type: none"> Plan sponsors need to be comfortable that the primary drivers of participant inputs are captured

In Exhibit 2, Providers A, B, and C all allow for participants to state their risk tolerance. Provider C uses a detailed questionnaire to help participants assess their willingness to accept losses, but it has been our observation that many participants are poor judges of their ability to take risk. In a 2002 paper by Benartzi and Thaler, titled "How Much is Investor Autonomy Worth?" the authors demonstrate that the participants reviewed had poorly defined preferences and as such the selection of a risk preference is as arbitrary as the way the questions are framed.³ Provider D allows for more automatic collection of data related to participants and does not include participants' risk preferences as an input. However, with increased automation, a plan sponsor should be comfortable that the relevant data points are being collected, which will ultimately drive the asset allocation decision.

³ Benartzi, Shlomo and Thaler, Richard H., "How Much is Investor Autonomy Worth?" Journal of Finance, Vol 57, pp1593-1616, 2002.

Investment option inputs

During the evaluation process, providers may often use returns-based analysis and/or holdings-based analysis to model investment options in order to assign each fund to a specific asset class or “bucket.” Using only returns-based, quantitative analysis may lead to more passive management and less asset class and manager diversity. We believe using holdings-based analysis in conjunction with returns-based analysis leads to a more robust understanding of how different strategies can complement each other and may increase portfolio diversity. Russell Investments prefers solutions that evaluate investment options thoroughly using quantitative and qualitative processes, such as robust manager research. Plan sponsors should be aware of assumptions or other nuances of the investment option evaluation process that may bias a provider’s views.

Exhibit 3: Investment option inputs

PROVIDER	DESCRIPTION	PROS	CONS
A	<ul style="list-style-type: none"> Uses a “best fit” process, also known as returns-based style analysis to select funds for participant accounts 	<ul style="list-style-type: none"> Allows for economies of scale for managed account provider 	<ul style="list-style-type: none"> Backward looking and biased against active management
B	<ul style="list-style-type: none"> Uses proprietary research and returns-based style analysis to select funds for participant accounts 	<ul style="list-style-type: none"> Supplements returns-based analysis with proprietary research to select funds 	<ul style="list-style-type: none"> Quality of research on actively managed funds needs to be evaluated Limited evaluation of non-mutual fund vehicles
C	<ul style="list-style-type: none"> Uses returns-based style analysis and internal alpha assumptions to select funds for participant accounts 	<ul style="list-style-type: none"> Supplements returns-based analysis with proprietary research to select funds 	<ul style="list-style-type: none"> Alpha assumptions can be biased toward proprietary funds or toward well-known funds Limited evaluation of non-mutual fund vehicles
D	<ul style="list-style-type: none"> Uses proprietary manager research for manager analysis and fund selection 	<ul style="list-style-type: none"> Supplements returns-based analysis with proprietary research to select funds 	<ul style="list-style-type: none"> Quality of research on actively managed funds needs to be evaluated

In Exhibit 3, Provider A relies solely on returns-based style analysis, while Provider B uses a combination of returns-based and holdings-based analysis in fund selection, and Provider C generates expected alpha targets for each fund. Providers B and C rely mainly on mutual fund data and thus rely on their manager research processes to drive their qualitative evaluation of available funds. Provider D conducts more traditional manager research, looking beyond the vehicle or past performance to assess manager quality and fit.

Outputs: The portfolios participants receive

After taking in the three main components of data (i.e., participant inputs), the managed account provider must then construct a portfolio or set of portfolios for each participant. Most providers follow a similar approach to target date funds, namely allocating more risky assets to a portfolio for younger participants or more to those with higher balances. Participants nearing retirement or who have lower balances might receive a more conservative portfolio. The strategic asset allocation and default investment glide path reflect the baseline views of a provider. Though not all providers will develop strategic asset allocations, these portfolios help plan sponsors understand how the capital markets assumptions, participant data, and other assumptions translate to actual portfolios. Plan sponsors can also begin to understand the asset allocation over time that they may expect to see participants follow as they approach retirement. As has been seen in the target date fund industry, the range of strategic asset allocations and default investment glide paths can differ significantly.

Strategic asset allocation

Each provider's process could potentially lead to hundreds of different portfolios, but it is the managed account provider's job to ensure that the asset allocation across participants is consistent. The plan sponsor's job is then to understand how the managed account provider comes up with those portfolios, and what the participant might ultimately receive in terms of portfolio risk and return. Managed account providers usually define their baseline strategic asset allocation by participant age based on a few key asset classes and conduct a mean-variance optimization, or Monte Carlo simulation, to come up with the right mix of asset classes for each risk level or age. However, the way in which these simulations may be used to generate portfolios is not always the same across providers. For instance, some providers do not necessarily construct single strategic asset allocations or default investment glide paths, while others tend to have static investment advice across portfolios.

Exhibit 4: Strategic asset allocation

PROVIDER	CORE ASSET CLASSES	DEFAULT INVESTMENT GLIDE PATH	OPTIMAL PORTFOLIO	PROS	CONS
A	Stocks, bonds, cash	Based upon observable inputs from raw participant data to inform risk tolerance	Is designed based on a set of 'glide paths' rather than individual needs	<ul style="list-style-type: none"> Provides broad asset allocation advice consistent with observable risk tolerances made by other investors Increased diversification vs. DIY participants 	<ul style="list-style-type: none"> Not tied to an actual objective (e.g. replacement income) May not adjust to participants' experience over time.
B	Stocks, bonds, cash, inflation	Not standardized but based on an optimal total portfolio made up of human and financial capital	Is based on an understanding that the "Market Portfolio" is properly defined	<ul style="list-style-type: none"> Objectives based approach to asset allocation Objective is to hold constant the market portfolio 	<ul style="list-style-type: none"> Optimal "Total Wealth" function is subjective and not applicable to individuals
C	Unspecified	Based on proprietary target date funds offered by same provider	Derived using a Monte Carlo simulation and mean-variance optimization	<ul style="list-style-type: none"> Allows for harmonization of plan if proprietary TDFs are used 	<ul style="list-style-type: none"> Lack of definition of required asset classes The proprietary target date funds offered by the provider may be at odds with participant-specific objectives
D	All asset classes are given consideration	Specified based on participants' funded ratio	Defined by simulation or participant outcomes, scenario analysis, and stress testing	<ul style="list-style-type: none"> Allows for more flexibility in funds offered Asset allocation more closely tied to a participant's needs in retirement 	<ul style="list-style-type: none"> More subjective evaluation of provider required by the plan sponsor May be more complicated to explain to investment committees

In Exhibit 4, Provider A starts with a pre-defined set of glide paths, based on risk tolerances observed by participants making their own investment allocations for which they have data. The provider's rationale for this framework is that risk tolerance is largely subjective and difficult to evaluate. The glide paths provided represent a constrained version of those observed risk preferences.

Provider B has a different objective. It attempts to define the optimal mix of human and financial capital throughout the participants' career (human capital is defined as the present value of future earnings and is treated as an asset similar to a corporate bond). The premise of this approach is that participants should hold the market portfolio, which consists of a mix of stocks and bonds, throughout one's lifetime. The result is that there is no 'glide path' but rather a replacement of stocks with bonds in the participant's investment portfolio as they progress toward retirement. Implicit is the understanding that the 'market' portfolio is properly defined and that the optimal mix in the target portfolio is accurate and prudent.

Provider C starts with the asset allocation of its off-the-shelf target date fund and adjusts the asset allocation of individuals up or down based on the stated risk preferences defined in their investor questionnaire. Although limited information is available on the mechanics, we find this approach to be simplistic and dependent on the assumptions of the target date fund, which requires an additional step of due diligence on the plan sponsor's part.

Provider D bases its asset allocation on a framework of retirement readiness. Participants are explicitly modeled to their income replacement needs, and the asset allocation reflects how much risk the portfolio needs to take in order to achieve that objective. While this approach is more complex, it does tie to the overall goal of participants: to fund their retirement.

Investment option utilization

Lastly, we turn to the evaluation of investment options utilized by the managed account provider. Providers do not blindly allocate within an asset class, but instead may choose to allocate to a single option, balance an allocation between multiple options or not allocate at all depending on an assessment of investment options. In this process, other assumptions/views may become apparent such as preferences for active versus passive management, real assets, alternatives, annuities or company stock. Still, others may defer to the investment committee or consultants for advice on which asset classes to use actively or passively. Investment option utilization is key to understanding the process that providers employ, and to identifying the assumptions/views that may bias participant advice. Generally, Russell Investments prefers those providers that implement portfolios with balance of active and passive management, a market weighted regional equity allocation (i.e. does not support a home-bias) and inclusion of real assets.

Exhibit 5: Investment option utilization

PROVIDER	ACTIVE VS. PASSIVE	REAL ASSETS / ALTERNATIVES	ANNUITIES	COMPANY STOCK	OTHER	PROS	CONS
A	Primarily allocate to passive investments	Does not allocate to either	Does not allocate	Allows up to 20% in company stock	U.S. bias in all portfolios	<ul style="list-style-type: none"> Simplistic and straightforward approach to stock and bond asset classes 	<ul style="list-style-type: none"> Lack of diversification Primarily allocated toward passive investments
B	Considers both active and passive	Considers liquid real assets but not alternatives	Considers annuities	Will sell down company stock in increments	U.S. bias for participants closer to retirement, small cap and value tilt for all participants	<ul style="list-style-type: none"> Increased diversification to account for liquid real assets 	<ul style="list-style-type: none"> U.S. bias and value tilt are additional areas for plan sponsor evaluation
C	Considers both active and passive	Considers both real assets and alternatives	Does not allocate	Plan sponsor discretion	U.S. bias in all portfolios	<ul style="list-style-type: none"> Increased diversification to account for liquid real assets 	<ul style="list-style-type: none"> Ambiguous approach to company stock investments U.S. bias in portfolios may mitigate diversification
D	Considers both active and passive	Considers both real assets and alternatives	Considers annuities	Will sell down company stock in increments	Limited bias toward factors or market capitalizations	<ul style="list-style-type: none"> Maximum diversification 	<ul style="list-style-type: none"> May be more difficult to explain to investment committees

In Exhibit 5, Provider A, because of its use of returns-based analysis, provides the basic building blocks to a diversified portfolio. However, the reliance on these building blocks and returns-based analysis leaves out diversification opportunities offered by some active managers and asset classes that are difficult to model using returns-based analysis, like real assets. Providers B, C and D all allow for greater flexibility and diversification. Each provider handles company stock a bit differently and may be of concern if your participants already hold a lot of company stock. For instance, Provider A will allow up to a certain percentage of the allocation to remain in company stock, whereas Providers B and D will systematically sell down the stock position. Provider C allows for company stock to be treated as a separate asset but will sell down if participants elect this as their option. With the prevalence of company stock litigation, plan sponsors should be aware of these differences.

Results: The measurement of participants' success

This category for evaluation requires an understanding of what success means for the managed account provider and what success ultimately means for the participants. We further break this down into how plan sponsors should measure the effectiveness of a managed account program and how participants can measure their own performance. As noted in the U.S. Government Accountability Office (GAO) report on managed accounts⁴ from 2014, "Sponsors are challenged by insufficient guidance and inconsistent performance information when selecting and overseeing managed account providers." We attempt to address this by comparing various approaches in practice today.

Exhibit 6: Sponsor evaluation support

PROVIDER	PRIMARY BENCHMARK	CONSIDERATIONS
A	Managed account users vs. non-managed account users' investment returns and fees	Savings rates, investment diversification, risk appropriateness, retirement preparedness
B	Managed account users vs. non-managed account users' investment returns and fees	Savings rates, investment diversification, risk appropriateness, retirement preparedness
C	Managed account users vs. non-managed account users' investment returns	Savings rates, investment diversification, risk appropriateness, rates of return (individuals and model portfolios)
D	Income replacement rate objective, target date funds used by the plan	Savings rates, investment allocation, funded ratio improvement, projected funded ratio improvement

Key in this analysis is an acknowledgement that not all providers have the same objectives. For instance, some providers have income replacement (funded ratio) improvement as a clear goal, while others are simply addressing income replacement as an output from their process. Russell Investments views positively those providers whose specific objective of income replacement drives portfolios and thus, outcomes. Measurement by this standard should give the plan sponsor a clear metric of whether or not the managed account provider is delivering value to its participants.

Additionally, how participants are kept informed about their managed account investment is equally important. Managed account providers must be careful to guide the retirement planning process and provide additional resources in areas that participants may need support. Various educational resources are available to participants with most providers, including online support, call centers and in-person representatives. Additional tools or services may be available through managed account providers that help participants manage other aspects of retirement planning, such as decumulation tools that model spending in retirement. While it is difficult to quantify the various approaches, we believe that participants should be informed about how their investments are being managed, and about the progress towards their retirement goals.

⁴ United States Government Accountability Office, "401(k) plans, Improvements can be made to better protect participants in managed accounts," June 2014

Value for fees

Managed account fees are generally provided as an “all-in fee.” To more accurately assess the value for this fee, we break it down into three component parts: Fees for management of the assets; fees for asset allocation advice; fees for recordkeeper access, connectivity and trading; and fees for participant communication and education. The participant only sees one bundled fee that incorporates all three components. The GAO found that overall fees ranged from 0.08% to 1.00%, with the average cost closer to 45 basis points. However, we’ve observed that the average cost among top providers has been likely closer to 60 basis points for a participant with less than \$100,000 in assets.⁵

Investment management fees

This component will vary depending on what options are made available by the plan sponsor. This component should be evaluated separately from asset allocation advice, since the managed account provider can manipulate this figure by allocating more toward passive investments than active ones.

Asset allocation fees

This component looks at the cost to manage the assets within the plan. Although providers are typically unwilling to disclose this amount, we know from experience with other types of investments that the approximate costs are similar to a fee for passively managed target date funds or custom target date ‘glide path manager’ fees. We estimate that the cost for asset allocation should be between 8 and 15 basis points.⁶

Connectivity, access, and trading fees

This fee is paid directly by the managed account provider to the recordkeeper in return for having access to participant data, managing data feeds and allowing system compatibility. Although providers today are not required to disclose the amount or nature of the sharing arrangement, our own estimates indicate that this fee can make up as much as half of the overall managed account costs. This fee should theoretically be based on the number of participants enrolled in the managed account program, but it is incorporated into the basis point fee. Backing into the cost for providing connectivity and access is difficult and has been the subject of litigation over the past few years. We estimate the true cost of this component to be between \$40 and \$60 per participant (4 to 6 basis points on a \$100,000 balance).⁷

Participant communications/support

This fee theoretically is flat, based on the number of participants served and receiving advice, although currently this is embedded into a basis point fee. The rationale is that this service does not cost the managed account provider more if a participant has a higher balance, but the total dollar amount of fees currently increases depending on one’s account value. For purposes of this analysis, this component can be backed into after accounting for the investment component and connectivity fees. We estimate this component to be \$50 to \$60 per participant (5 to 6 basis points on a \$100,000 balance).⁸

The main question for plan sponsors is: Are these fees commensurate with the investment returns, guidance, and level of service participants receive from enrolling in a managed account program? With this framework in mind, we would advocate for changes to how participants are currently charged for managed accounts.

1. Asset allocation fees should be charged at a flat basis point level per participant rather than on a schedule that charges higher amounts for participants with fewer assets. In practice, most managed account providers charge a regressive fee scale, where low balance participants have a higher basis point fee than those with higher balances.

⁵ 401(K) PLANS: Improvements Can Be Made to Better Protect Participants in Managed Accounts GAO-14-310: Published: Jun 25, 2014. Publicly Released: Jul 29, 2014

⁶ Evestment Alliance: Passive CIT target date fund fees have a median of 0.15% for plans with \$250 Million in TDF assets.

⁷ Absent setup costs, for a \$100,000 balance we assume 4 trades per year (quarterly rebalancing) at \$10 per trade

⁸ NEPC 12th Annual Defined Contribution Survey. Assumes that recordkeeping fees are similar cost at \$59 per participant

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- Administration and connectivity fees should be a flat dollar amount per participant, and not based on assets under management. This structure better aligns the interests of the recordkeeper, the managed account provider, and the plan. This fee structure should also be an area of focus for plan participants. One might question the reason for a connectivity fee at all. In real economic terms, the recordkeeper should expect to be compensated for providing access to participant accounts, however, in practice, the cost to the recordkeeper once an initial onboarding takes place should be negligible.

Conclusion

Russell Investments believes that managed accounts provide benefits to participants if they are able to provide a more tailored approach to asset allocation and are able to help improve retirement readiness.

The key is to understand the four components of managed account evaluation:



1. Inputs

Capital market assumptions, participant inputs and fund level inputs.



2. Outputs

Strategic asset allocation decisions, participant demographic influences on allocations and fund implementation.



3. Results

Plan sponsor evaluation, participant communication and benchmarking.



4. Fees

Component fees and overall fees.

For plan sponsors seeking to help participants achieve better retirement outcomes, the framework we have provided can help plan sponsors understand the advantages and tradeoffs with different providers.

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Target date fund investing involves risk, principal loss is possible. The principal value of the fund is not guaranteed at any time, including the target date. The target date is the approximate date when investors plan to retire and would likely stop making new investments in the fund.

Investments that are allocated across multiple types of securities may be exposed to a variety of risks based on the asset classes, investment styles, market sectors and size of companies preferred by the advisors. Investors should consider how the combined risks impact their total investment portfolio and understand that different risks can lead to varying financial consequences, including loss of principal.

Target date funds are not intended to be a complete solution to investors retirement income needs. Investors must weigh many factors when considering to invest in these funds, including how much an investor will need, how long will the investor need it for, what other sources the investor will have and, if the investor is purchasing shares in an IRA account, whether the fund's target distributions will meet IRS minimum distribution requirements once age 70-1/2 is reached.

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