T. ROWE PRICE INSIGHTS

ON RETIREMENT



Considerations for Plan Sponsors

Constructing More Effective Defined Contribution Investment Lineups

In-depth analysis and insights to inform your decision-making.

July 2022

EXECUTIVE SUMMARY

With defined contribution (DC) plans serving as the primary vehicle for retirement savings in the U.S. and concerns continuing about workers' ability to reach their retirement goals, the structure of investment lineups has never been more important.

Here we explore three key areas of consideration DC plan sponsors face: regulatory and fiduciary issues, cultural and employee demographics, and research and industry trends. In addition, we present a road map to help guide decision-makers in evaluating and structuring an effective investment lineup for their plans.



Craig Keim, CFA
Head of Investment Platforms,
Retirement Plan Services

This paper discusses seven key best practice considerations:

- 1. Offer asset allocation products such as target date options as the default option.
- 2. Offer either a stable value or a money market investment option.
- 3. Consider expanding the fixed income offerings beyond U.S. investment grade.
- Provide the full opportunity set of U.S. equities, but keep the number of options low and minimize any overlap.
- 5. Offer a diversified international equities option.
- 6. Minimize sector and other specialty investment options.
- 7. Consider a self-directed brokerage approach to appeal to highly engaged participants.

Needs Have Changed, and So Have the Tools and Thinking

As defined contribution (DC) plans continue to grow in prominence as the sole retirement income source for many participants, plan sponsors are facing important decisions about how to construct lineups. Sponsors must keep in mind that their decisions can significantly affect the interests of

the employee population, while also executing their fiduciary responsibilities.

Any review of a lineup should consider regulatory and fiduciary issues, cultural and employee demographics, and research and industry trends. This paper addresses each of these areas and offers seven key best practice considerations.

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"The greater the number and scope of investment offerings, the greater the time and resources needed to monitor them."

Regulatory and Fiduciary Issues Are Playing a Major Role

Of all the considerations for plan lineup design, fiduciary considerations are some of the most prominent. For example, even if participants are directing their own investments, the plan fiduciary may still be liable for these participant decisions unless the plan is a designated 404(c) plan and satisfies the applicable requirements for fiduciary protection. To qualify for protection under Section 404(c) of the Employee Retirement Income Security Act of 1974 (ERISA), the plan is generally required to:

- Offer at least three different, internally diversified investment options with materially different risk and return characteristics.
- 2. Allow participants to transfer assets among the options at least quarterly.
- Provide certain disclosures, including those required under ERISA Section 404(a)(5), and access to sufficient information to make informed investment decisions.

Offering a qualified default investment alternative (QDIA) may relieve some concerns

Under the Pension Protection Act of 2006, fiduciaries are provided certain protections if they default participants into a QDIA. If plan sponsors wish to receive this limited protection, they should consider offering an investment option that qualifies as a QDIA using U.S. Department of Labor guidelines. Balanced funds, target date funds, and managed accounts¹ are types of investment options eligible for QDIA status.

Every investment option comes with monitoring obligations

As fiduciaries, plan sponsors are tasked with selecting and monitoring the investment options available under the plan.

The greater the number and scope of investment offerings, the greater the time and resources needed to monitor them. This is particularly true with more esoteric asset classes, which

can be more difficult to monitor due to their complexity. These monitoring obligations should be kept in mind when deciding the number and types of investment options offered in a plan.

Culture and Employee Demographics Should Guide Objectives

Plan sponsors should have a clear understanding of their plan's objective when determining its investment lineup. Each of the following factors plays a role in determining objectives:

Demographics can influence number and variety of options

Demographic factors such as age and level of education are factors that often determine a participant's level of investment knowledge or willingness to access outside sources of investment knowledge and expertise. For plans with participants who may lack the knowledge or interest in researching investment option information, sponsors may consider limiting the number and variety of investment options.

Availability of a defined benefit (DB) plan may affect a sponsor's view on risk tolerance and breadth of investment needs in the DC plan

If an employer does not offer a DB plan or the DB plan is closed to new participants, the DC plan likely serves as the primary source of retirement income for many of the participants. This may lead some plan sponsors to decide that the amount of risk and variety of options in the DC plan should be limited to guard against market risk. Conversely, some plan sponsors might conclude that as the sole retirement income source. the DC plan should offer a full range of investment options and possibilities for participants to have a robust choice of options with which to design their own portfolios. Viewing the DC plan through the lens of the total retirement package available to employees can lead to varying perspectives on what an appropriate DC lineup should include.

¹A professionally managed account service that allocates contributions among existing plan options to provide an asset mix that takes into account a plan participant's age or retirement date is a type of QDIA.

Is the company "paternalistic" or "individualistic"?

Whether an employer promotes a paternalistic or individualistic culture often determines how limited or expansive plan sponsors choose to make a plan's investment lineup. Paternalistic employers may choose to limit the number of options to help avoid overwhelming employees with too many options. On the other hand, employers that are focused on individual choice may believe participants should not be restricted in their investment choices and may offer greater choice and variety.

Research and Industry Trends Are Shedding New Light on Issues

A great deal of research in the field of behavioral finance continues to be conducted on participant behavior and should be considered when evaluating investment lineups.

Too many choices could have undesirable consequences

Recent findings show that higher numbers of investment choices may reduce participation rates or encourage participants to simply choose the safest option, which may not always be in their best interest. In addition, studies have shown that some participants tend to overallocate to certain asset classes when more than one choice in the category is offered.² Plan sponsors are responding by limiting the number of choices and by offering options such as target date or other asset allocation

funds that allow participants to diversify their retirement savings without having to select individual funds that invest in specific asset classes.

Diversification doesn't come easy

According to research by behavioral finance researchers Shlomo Benartzi and Richard Thaler, many investors engage in what is referred to as "naive diversification," where they allocate assets evenly across each of the investment offerings in the plan.³ Depending on the number and types of offerings in a plan, this can lead to overly concentrated portfolios or ones with a great deal of overlap in similar assets and securities.

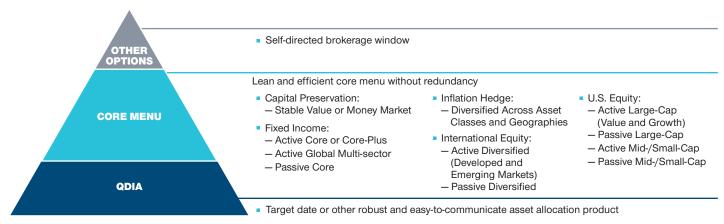
Thoughtful structuring of the investment lineup may be the most effective action

By streamlining the choices and eliminating asset class overlaps, a plan sponsor can significantly reduce confusion for employees and, consequently, improve participation and savings rates while helping them make more appropriate allocation decisions.

Best Practice Considerations: Sound Solutions for Effective Investment Lineups

Given the issues discussed in the preceding sections, plan sponsors may want to consider using a "building block" approach to lineup construction (Figure 1). Start with a QDIA, such as

(Fig. 1) Sample Best Practice Lineup



²Benartzi, Shlomo, and Thaler, Richard, "Heuristics and Biases in Retirement Savings Behavior," *Journal of Economic Perspectives*, Summer 2007, Vol. 21.3. ³Ibid.

"Target date investments offer access to certain investments— emerging markets, real estate, commodities, and TIPS—that may not be appropriate as standalone options in a lineup due to their complexity and volatility."

target date options and a limited number of core options, and then potentially add a brokerage window if the plan wants to provide access to additional options. The goal of the core options block is to provide a sufficient number of choices to enable participants to construct a well-diversified portfolio while limiting overlap and unintended risk concentration.

When evaluating the following best practice considerations, keep in mind that no two plans are exactly alike. Employee demographics and sponsor goals vary, and circumstances may evolve over time.

Offer target date options as the default option

Target date investment options can help satisfy the needs of participants who prefer not to make their own investment allocation decisions.

They allow participants access to diversified portfolios in which professional managers make strategic and tactical asset allocation decisions.

They also provide broad diversification and periodic rebalancing. Of course, diversification cannot assure a profit or protect against loss in a declining market.

The asset allocation strategy and underlying investments vary among target date investment managers, and plan sponsors should be aware of their target date investment option's approach and ensure that it matches their goals for the plan.

Within equities, the majority of target date investment options have dedicated allocations to U.S. large-, mid-, and small-capitalization stocks; developed international markets; and emerging markets. Within fixed income, most have allocations to U.S. investment-grade bonds, and some have allocations to U.S. high yield and international bonds. Additionally, many target date investment managers have been adding allocations to alternative, or nontraditional, asset classes, such as real estate, commodities, and Treasury inflation protected securities (TIPS).

Target date investments offer access to certain investments—emerging markets,

real estate, commodities, and TIPS—that may not be appropriate as standalone options in a lineup due to their complexity and volatility. The advantage of gaining exposure to these types of investments via a target date investment option is that a professional manager makes the allocation decision. Most managers have target allocations that restrict the amount that may be allocated to an asset class. This generally prevents the type of performance chasing and overallocating to "hot" asset classes that can be seen in participant-directed portfolios.⁴

2. Offer either a stable value or a money market investment option.

Stable value and money market portfolios are the most conservative options offered in DC plans, as these portfolios are managed to maintain stable share prices, typically with a net asset value (NAV) of one dollar per share.

While money market and stable value portfolios share the goal of capital preservation, their underlying investments are different. Money market funds invest in short-term instruments, such as Treasury bills, negotiable certificates of deposit, municipal obligations, and both unsecured and asset-backed commercial paper. They can also encompass more complex instruments, such as repurchase agreements (repos) and dollardenominated foreign bonds. Stable value funds, on the other hand, typically invest in short- to intermediate-term fixed income securities that are insulated from interest rate movements by contracts from banks and insurance companies. The contracts generally allow price fluctuations in the underlying securities to be amortized over the duration of the contract, helping to stabilize overall returns and maintain an NAV of one dollar per share.

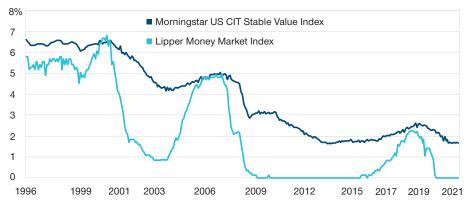
The difference in underlying investments for the two types of funds results in different risk and return profiles. Even though both seek to maintain a stable NAV of one dollar, money market funds are generally considered less risky than stable value funds. This is due to the shorter duration (sensitivity to interest rate changes) of their underlying investments.⁵

⁴Liersch, Michael, "Choice in Retirement Plans: How participant behavior differs in plans offering advice, managed accounts, and target date investments," 2011. ⁵A measure of the sensitivity of the price (the value of principal) of a fixed income investment to a change in interest rates. Duration is expressed as a number of years. Rising interest rates mean falling bond prices, while declining interest rates mean rising bond prices. Source: Investopedia.com.

Larger yield premiums for stable value funds over yields on money market funds are typically associated with low- and declining-rate environments for short-term securities. As those rates rise, however, the premium may diminish. For the yield advantage on stable value funds to actually turn negative would require an exceptionally harsh monetary climate, one in which short-term rates move higher than longer-term rates quickly and stay that way over a prolonged period. Such yield curve inversions have occurred but have been rare, short-lived, and only slightly negative.

(Fig. 2) Annualized Yields for Stable Value and Money Market Products

Through December 31, 2021



Sources: Morningstar and Lipper Inc. See additional disclosures on page 9 about this Morningstar and Lipper information.

Past performance is not a reliable indicator of future performance. Index performance is for illustrative purposes only and is not indicative of any specific investment. Investors cannot invest directly in an index. Actual investment results may differ.

The return difference is primarily driven by the interest rate environment.

Both the level and direction of interest rates will affect the return differential.

Stable value funds are less interest rate responsive, but their longer duration provides return advantages in low or declining interest rate environments.

Money market funds are more interest rate sensitive, allowing them to respond more quickly to changing short-term rates (Figure 2).

Plan sponsors should consider offering either a stable value or a money market investment. Since the primary goal of each is capital preservation, there is little to no diversification benefit by offering both options. Also, equity wash rules, which are contractual provisions applicable to stable value, typically require transfers that are directed to a competing option (such as a money market fund) to first be directed to a noncompeting option for a set period of time.

3. Consider expanding the fixed income offerings beyond U.S. investment grade.

While fixed income strategies play a vital role in the portfolios of millions of DC participants, a survey conducted by T. Rowe Price shows that DC plan sponsors tend to devote more attention to other aspects of their investment lineups, with equity composing the largest asset class by a notable margin.

T. Rowe Price believes strongly that both DC plan sponsors and participants could benefit from a more intensive focus on fixed income investing. The growth and development of the U.S. and global bond markets over the past two decades has produced many attractive opportunities to enhance portfolio diversification and improve yield, as well as the risk/reward profile. Yet many of these strategies remain underutilized in DC plans.

U.S. investment-grade products like
U.S. Treasury and government-related
securities, mortgage-backed securities
(MBS), investment-grade corporate bonds,
commercial mortgage-backed securities
(CMBS), and asset-backed securities
(ABS) typically compose what is referred
to as the "core" fixed income market.

Core funds are typically benchmarked to the Bloomberg U.S. Aggregate Bond Index, which includes investment-grade, U.S.-denominated bonds in each of these sectors (Figure 3).

Most core fixed income investments employ relative value strategies to identify the cheapest sectors and bottom-up security selection to identify securities within each sector. Other drivers of performance may include duration management (adjusting the portfolio's sensitivity to changes in interest rates) and yield curve positioning (forecasting moves in particular parts of the yield curve).

In addition to the core sectors described previously, the fixed income market includes out-of-benchmark sectors, such as nondollar bonds, leveraged loans, TIPS, emerging markets bonds, and high yield securities. These "plus" sectors are more volatile than "core" sectors and will have periods of extreme outperformance and underperformance, which could make them problematic as standalone options.

However, after taking a careful look at plan demographics, as well as changes in participant behavior, risk preferences, and engagement, plan sponsors may want to consider offering a few select core-plus options.

For example, the plan lineup might include a supplemental "plus" investment that provides broad exposure to domestic bond markets along with select exposure to high yield, nondollar, and emerging markets bonds on an opportunistic basis.

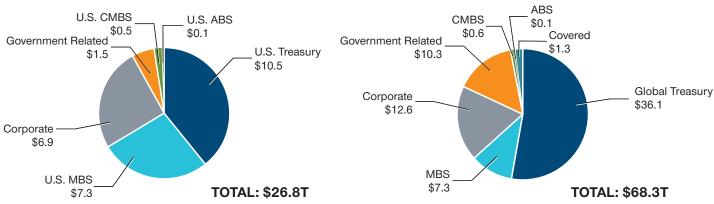
Alternatively, sponsors may want to consider adding a diversified

(Fig. 3) Global Investment-Grade Bond Universe Is \$68.3 Trillion

As of December 31, 2021



BLOOMBERG GLOBAL AGGREGATE INDEX



Source: Bloomberg Index Services Limited. Please see additional disclosures on page 9 about this Bloomberg information.

global multi-sector bond option as a complement to a core offering. This would allow participants to gain exposure to broader fixed income sectors without adding standalone niche offerings such as individual international bond or high yield options.

Key Plan Sponsor Findings

A T. Rowe Price survey of plan sponsors on fixed income⁶ showed the following:

- About half of sponsors reported a demographic shift toward an older participant base compared with 10 years ago.
- Two-thirds (66%) agreed that it is important to offer a range of fixed income options based on differing risk, return, and income preferences.
- Almost 20% of sponsors perceived a gap in their fixed income offerings in terms of meeting the needs of preretirees and retired participants.

An Emerging Trend

DC plan sponsors appear to be shifting their time and attention to less traditional fixed income segments, indicating an emerging trend. Multi-strategy/white-label fixed income was the most widely cited candidate for consideration, followed by global bond strategies and other fixed income strategies (e.g., emerging market debt, high yield, and hybrid capital preservation).

4. Provide the full opportunity set of U.S. equities, keeping the number of options low and minimizing overlap.

The U.S. equity market is typically the largest segment of DC participant portfolios and therefore poses a larger set of decisions for plan sponsors. U.S. equities are commonly divided into nine subcategories based on market capitalization and investment style (Figure 4). Each subcategory has its own risk/return profile and generally can be expected to perform differently during various market and business cycles. The goal is to provide participants adequate exposure to the full opportunity set. How a sponsor chooses to accomplish this will vary.

Covering Market Capitalizations

At a minimum, a plan sponsor should provide one broadly diversified large-cap option that tracks an index like the Russell 1000 or the S&P 500. Since these large-cap options make up 90% to 95% of the total value of the U.S. equity markets, depending on the index, this one option can provide participants reasonably adequate exposure to the U.S. equities market. However, due to diversification benefits and risk/return variation, participants may benefit from exposure to mid- and small-cap options as well.

Providing exposure across all capitalizations may be best accomplished with an option for each capitalization. This would allow participants additional choice and control of their equity allocation without greatly increasing the number of options. It also allows the plan to choose options that specialize in their particular market cap segments and to reduce the risk that one option might not perform well.

Covering Equity Styles

(Fig. 4) Equities Style Box⁷

Large-Cap	Large-Cap	Large-Cap
Value	Blend	Growth
Mid-Cap	Mid-Cap	Mid-Cap
Value	Blend	Growth
Small-Cap	Small-Cap	Small-Cap
Value	Blend	Growth

A plan sponsor may use core (blend) options, style-specific options, or a mix of options. Here are some pros and cons of each:

Core (blend) option. By offering only a core option for each capitalization, sponsors are keeping with the theme of limiting the number of options while still allowing access to equities from each market capitalization. This limits

⁶Source: T. Rowe Price Future of Fixed Income in DC Plans Survey, 2017.

⁷Source: Morningstar. See additional disclosure on page 9 about this Morningstar information.

participants' need to make decisions and allows professional managers to decide whether to over- or underweight certain investment styles. One disadvantage is that managers may drift to one style for an extended period, thus limiting the participants' exposure to other styles.

Style-specific option. By using style-specific options, plan sponsors are allowing participants to make tactical allocation decisions between value and growth. When adding these options, sponsors need to pay particular attention to the strategies and provide education to participants on the differences. This is particularly important with small-cap equities, as these value and growth strategies tend to have significant sector concentrations that increase their volatility.

Mix of core and style-specific options. Sponsors do not have to take the same approach for each market capitalization. For example, a sponsor may want to offer style-specific options for large-cap and mid-cap exposures but a core option for small-cap. The key is to avoid offering both style-specific and core options in the same market capitalization, which can lead to more confusion and chances for overlap within participant portfolios.

5. Offer a diversified international equities option.

International equity markets have grown over time and now compose about 40% of the world's market capitalization. This means that the asset class is becoming an increasingly important part of a well-diversified participant portfolio.

Recognizing the growing opportunity set outside the U.S., the 401(k) industry has increased its attention on international options. A number of plan sponsors have expanded their international offerings beyond the typical broad-based options to include those that are style-specific (growth and value), market cap focused, or dedicated to emerging markets.

While these offerings have investment merits, plan sponsors need to balance the benefits with the potential difficulties. Will participants have the ability to utilize

the options appropriately? Will they understand the risks? Will the increased number of options cause confusion?

Plan sponsors who determine that the benefits outweigh the difficulties and decide to offer multiple international options should:

- **1.** Avoid overlap with the plan's other international options.
- **2.** Provide additional education on the options' differing risk/reward profiles.

Education is crucial when adding dedicated emerging markets and small-cap options, which are traditionally more volatile.

Plan sponsors who are not comfortable with the difficulties of adding more international choices should consider offering a single diversified international option. Preferably, the option would have a dedicated portion of its portfolio in emerging markets as those markets continue to grow and become a larger part of the global capital markets. Through this one international option, participants will have sufficient access to the benefits of international equities but without the confusion of multiple choices.

6. Minimize sector and other specialty investment options.

The objective of a sector fund is to invest the majority of assets in a single sector of the economy, such as technology, energy, or real estate. While these sectors can have high return potential, they are generally more volatile than the broad market due to their concentrations. Many have wide swings in performance that can result in large participant flows in and out. The same is true of specialty strategies like gold and precious metals.

A number of plans have recently added inflation-hedging options that focus on real estate, commodities, infrastructure, and TIPS. While these investments—as well as other sectors and specialties—have merits, providing them as standalone options may not be the best way to provide access in a retirement plan.

The concern is that participants will misjudge the risks associated with these funds and overallocate to them, resulting in undiversified portfolios with large unintended levels of risk. It is better to allow participants exposure to the various sectors of the economy through diversified funds. This way, professional managers are deciding the sector and specialty allocations and generally limiting sector concentrations.

Consider a self-directed brokerage approach to appeal to highly engaged participants.

The final block of the plan lineup is the self-directed brokerage option. This provides access to additional investments for more sophisticated investors while reducing the number of options that might confuse or increase allocation risks for less sophisticated investors. Those participants who want dedicated allocations to sector or regional funds can find those via the brokerage option.

Plan sponsors may want to limit the brokerage window to only mutual funds, since individual securities introduce new levels of risk for participants. This capability to limit the access may not be available through every service provider. Offering a brokerage window may result in additional fiduciary oversight obligations, and so, as with all potential lineup enhancements, the pros and cons must be thoughtfully considered.

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Data provided in Figure 2 include historical information of the Hueler Pooled Fund Index through December 2020 and the Morningstar US CIT Stable Value Index from January 2021.

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PROVIDING ACTIVE AND PASSIVE CHOICES

The financial industry has long debated the merits of active versus passive management. As the debate will undoubtedly continue, it's important to keep in mind that advocates on each side have valid arguments and supportive data—and most plans are likely to have believers on both sides. This being the case, plan sponsors may want to consider providing index choices to complement certain actively managed options, and vice versa.

Historically, most plans have included only one passive option in their lineup, typically a large-cap U.S. equity fund tracking the S&P 500 Index. The 401(k) industry has seen a trend of sponsors expanding the menu of index options to areas such as fixed income, international equities, and broader mid- and small-cap sectors of the U.S. equity market. Overall, 96% of T. Rowe Price plans have at least one passive option (up from 93% in 2015).

Sponsors should always be mindful, however, of potential problems caused by loading a plan with too many choices. On a per-plan basis, since 2015, the average number of overall passive options has increased from 2.80 to 3.94.

Participants may find the array of options confusing and, therefore, allocate in ways that create unintended or inappropriate weightings for their needs. Or worse, they find the investment decision overwhelming and may delay participating.

As with all options in the investment lineup, best practices would dictate avoiding overlap in any market areas and insuring that the investment menu is clearly and effectively communicated to participants. Specifically, identifying options as actively or passively managed is recommended so that participants can readily identify the differences in the management style and make informed decisions based on their unique needs and preferences.

Source: T. Rowe Price.

Conclusion

To help participants make the most of their 401(k) plans, a plan sponsor may want to reevaluate the plan's investment lineup and make changes aimed at encouraging better decision-making by participants.

Every plan has its own unique circumstances, so it is important to evaluate the investment lineup in a thorough and professional way, taking into consideration the needs of both the plan sponsor and the employee base.

The best practice considerations presented in this paper serve as a good starting point to identify structures that can increase plan effectiveness—and potentially improve retirement outcomes.

Appendix

ASSESSING A CURRENT LINEUP

The following questionnaire may help identify potential problem areas within a plan's investment lineup. It is important to understand that a "yes" or a "no" answer is not necessarily right or wrong. Any proposed plan change should be consistent with the needs of the plan's employee population, taking into account their long-term financial needs as well as their behavioral characteristics, and, if applicable, the plan's investment policy.

APPENDIX FIGURE 1: DC Investment Lineup Assessment

	Yes	No	Considerations
Does the plan provide a diversified QDIA option?			
Does the plan offer more than one "short- term" investment option (stable value or money market option)?			
Does the plan offer sufficient coverage of the global fixed income markets?			
Does the plan offer sufficient coverage of the international markets?			
Does the plan offer sufficient coverage of the U.S. equity markets?			
Does the plan offer more than one option in any specific asset class?			
Does the plan offer both active and passive options in the major market classes?			
Does the plan offer sector funds?			
Does the plan offer a brokerage window?			

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IMPORTANT INFORMATION

Past performance is not a reliable indicator of future performance. All investments are subject to market risk, including the possible loss of principal. Diversification cannot assure a profit or protect against loss in a declining market.

The principal value of target date strategies is not guaranteed at any time, including at or after the target date, which is the approximate year an investor plans to retire. These strategies typically invest in a broad range of underlying investments that include stocks, bonds, and short-term investments and are subject to the risks of different areas of the market. In addition, the objectives of target date strategies typically change over time to become more conservative.

Stable value and money market investments seek to preserve the value of an investment at \$1.00 per share, but it is not guaranteed. Investors are subject to possible loss of principal, and the investment is not guaranteed by any government agency.

Fixed-income securities are subject to credit risk, liquidity risk, call risk, and interest-rate risk. As interest rates rise, bond prices generally fall. Investments in high-yield bonds involve greater risk of price volatility, illiquidity, and default than higher-rated debt securities. In periods of no or low inflation, other types of bonds, such as U.S. Treasury Bonds, may perform better than Treasury Inflation Protected Securities.

Growth stocks are subject to the volatility inherent in common stock investing, and their share price may fluctuate more than that of a income-oriented stocks. As with all equity funds, a fund's share price can fall because of weakness in the broad market, a particular industry, or specific holdings. Small-cap and mid-cap stocks are generally more volatile than stocks of large, well-established companies. The value approach to investing carries the risk that the market will not recognize a security's intrinsic value for a long time or that a stock judged to be undervalued may actually be appropriately priced.

International investments can be riskier than U.S. investments due to the adverse effects of currency exchange rates, differences in market structure and liquidity, as well as specific country, regional, and economic developments. These risks are generally greater for investments in emerging markets.

Active investing may have higher costs than passive investing and may underperform the broad market or passive peers with similar objectives. Index investments are passively managed and seek to match the performance of their benchmark; therefore, holdings generally are not reallocated based on changes in market conditions. As a result, the investment's performance may lag the performance of actively managed investments.

All charts and tables are shown for illustrative purposes only.

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