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Constructing a defined contribution investment lineup: Four best practices

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- Target-date funds (TDFs) are changing the dynamics of participant decision-making in defined contribution (DC) plan menus. They are dominating investment choices through a pronounced default effect in automatic enrollment plans, and through a streamlined choice effect in voluntary enrollment plans. In this environment, the goal of menu design thus shifts away from traditional concerns about "choice overload" and toward framing investment choices for participants who are looking beyond the target-date series.

- A plan's investment lineup, or menu, is not the sole determinant of retirement readiness. The level of investor and employee plan contributions (assuming they are properly diversified) is the most influential factor in determining the overall adequacy of retirement assets, and these contributions should preferably reach double-digit savings rates for the "typical" DC participant.

- In terms of investment outcomes, the ultimate deciding factors are market returns, asset allocation, and costs. As this paper discusses, sponsors can encourage diversified participant allocations through the use of target-date funds, a tiered investment lineup, and a managed-account advisory service.

- Vanguard proposes four best practices for constructing a plan lineup: (1) identifying plan objectives; (2) focusing on the fundamentals of investing; (3) creating a tiered lineup that reflects plan objectives; and (4) ensuring active, ongoing oversight.

Over the last decade, the dynamics governing investment decision-making in DC plans have changed dramatically. Today, in plans using automatic enrollment, typically with a target-date fund as the default, investment choices by participants are dominated by a powerful default effect. In plans offering voluntary enrollment with a TDF series in the lineup, participants are drawn to the simplified "shortcut" strategy embedded in the TDFs—namely, the ability to choose a portfolio based on expected retirement age. Furthermore, the growing availability of managed-account advisory services means that participants can opt to fully delegate portfolio construction to a third-party advisor.

Together, these three behavioral developments—dictated by behavioral design elements like default options, streamlined choice, and embedded advice—also mean that DC plan sponsors no longer have to worry about "choice overload" (excessive fund choice leading to portfolio construction errors by participants) and the attendant nondiversified outcomes.[1] Indeed, the past decade has seen a material improvement in portfolio diversification among participants due to these developments.

In this environment, the DC investment menu is no longer the centerpiece of investment decision-making for all plan participants. Instead, it is a structure to guide participants who seek options beyond the designated default option or an all-in-one TDF. Sponsors designing a menu are now creating a "choice architecture" for that subset of motivated participants who want to make their own investment choices. As "choice architects" (Thaler and Sunstein, 2009), sponsors can use strategies such as target-date funds, a tiered investment menu (the grouping of investments into logical categories), and a managed-account advisory service to promote adequate diversification and improve outcomes. Tiering of menus is an especially critical tool in menu design, as these tiers reflect both a plan's objectives and the sponsor's investment philosophy.

This paper proposes four steps for designing DC investment menus in this new environment:

1. Identifying plan objectives;
2. Focusing on the fundamentals of investing;
3. Creating a tiered lineup that reflects plan objectives; and
4. Ensuring active, ongoing oversight.

Notes on risk

All investing is subject to risk, including the possible loss of the money you invest. Investments in bond funds are subject to interest rate, credit, and inflation risk. Foreign investing involves additional risks, including currency fluctuations and political uncertainty. Currency hedging transactions may not perfectly offset a fund's foreign currency exposures and may eliminate any chance for a fund to benefit from favorable fluctuations in those currencies. The fund will incur expenses to hedge its currency exposures. Diversification does not ensure a profit or protect against a loss. There is no guarantee that any particular asset allocation or mix of funds will meet your investment objectives or provide you with a given level of income. Past performance is no guarantee of future returns. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

Investments in target-date funds are subject to the risks of their underlying funds. The year in the fund name refers to the approximate year (the target date) when an investor in the fund would retire and leave the workforce. The fund will gradually shift its emphasis from more aggressive investments to more conservative ones based on its target date. An investment in the target-date fund is not guaranteed at any time, including on or after the target date.

1 For more information on the behavioral effects of default and simplified choice, see Pagliaro and Utkus (2015).

1. Identifying plan objectives

At the highest level, plan sponsors and participants have similar goals for a DC retirement plan, although their stated objectives may sound quite different in focus or investing sophistication (see **Figure 1**). Sponsors seek to provide a valuable benefit to plan participants and are duty-bound to put participants' interests first in selecting and monitoring investments for their retirement plan. Participants are ultimately the end users of the plan and want to maximize the plan's value for their individual circumstances.

Plan participants' choices are made within the scope of decisions set by the plan sponsor and are strongly influenced by those decisions. In their role as "choice architects," sponsors not only provide participants with the means to make their own choices, but they also fundamentally influence participant decisions through the plan's design. For example, plan contributions are materially affected by whether or not the employer uses automatic enrollment, as well as by the type and amount of employer contributions. From an investment perspective, participants can only invest in the funds that the sponsor selects for the lineup. A participant's own investment choices are also influenced by the presence of TDFs in the lineup, a default fund designation, a tiered menu, and managed-account advice. Thus, the plan sponsor exercises meaningful influence—not only in his or her explicit selections for the lineup but in the individual choices ultimately made by participants by virtue of the plan design.

Although this paper focuses on plan investment objectives, it's important to recognize that a plan's investment lineup is not the sole determinant of retirement readiness. Rather, participant and employee plan contributions (assuming proper diversification) are the main determinants of the adequacy of retirement assets, and these contributions should preferably reach double-digit savings rates for the "typical" DC participant. To improve contribution rates, the evidence is clear: The most effective strategy is to use automatic enrollment, with an automatic contribution escalation feature.[2] In addition, plan sponsors should consider periodically sweeping non-savers and low-savers into the "autopilot" design.

Figure 1. Participant and sponsor goals may be expressed differently, but the objective is the same

Participants want to . . .	Plan sponsors want to . . .	Objective for both
Have a comfortable retirement.	Help participants achieve retirement readiness.	Ensure adequate plan contributions.
Have access to a reasonable set of investment choices.	Offer a range of investment choices consistent with the sponsor's investment philosophy.	Have access to competitive investments.
Want to make investment choices quickly and effortlessly.	Encourage well-diversified portfolios (e.g. through defaults, tiering, advice).	Simplify participant decision-making with a diversified, low-cost default option.
Not worry about excessive fees.	Offer investments at competitive, reasonable fees.	Minimize fees.

Source: Vanguard.

2 For more information on automatic enrollment, see Clark, Utkus, and Young (2015).

All told, encouraging investors to increase their plan contributions (that is, increase their savings rate) is much more important over time than how contributions are specifically allocated across asset classes (**Figure 2**). To illustrate this point, consider four different hypothetical scenarios involving a participant earning $35,000 per year who joins her DC retirement plan at age 32; she then contributes to the plan for 35 years until age 67. The participant earns real wage increases of 1% per year.

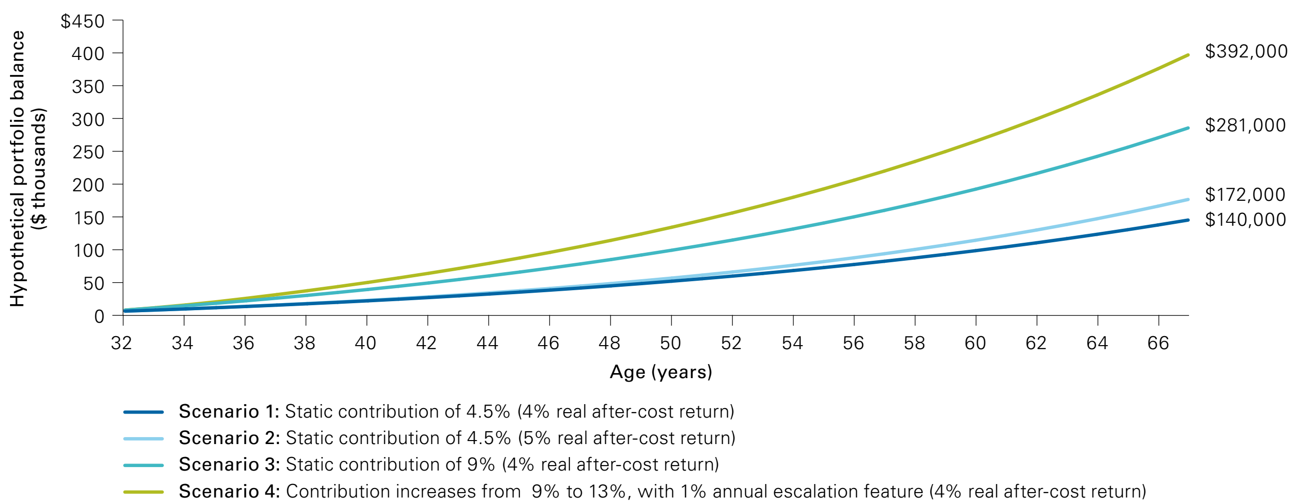
In the first two scenarios, the total plan contribution rate remains the same, but the after-cost investment return increases in scenario 2, as does the risk.

- In **scenario 1** in Figure 2, the participant is automatically enrolled at a savings rate of 3% and receives an employer match of 1.5%, for a total plan contribution rate of 4.5%. The participant earns a 4% real after-cost return. At age 67, the participant's retirement wealth is about $140,000, equivalent to an 11% replacement rate of total pre-retirement income.[3]
- In **Scenario 2** (Figure 2), the same contribution rate applies—but the real after-cost return assumption is higher, at 5%. The participant's retirement assets amount to about $172,000, yet replace only 14% of income. A 1% higher real return after fees requires taking substantially more investment risk, and may be difficult if not impossible to achieve.

In the next two scenarios, savings rates are increased meaningfully, but the investment return remains a real 4%.

- In **scenario 3** (Figure 2), the total contribution rate remains a static 9% from the start. Total plan assets reach about $281,000, replacing 23% of participant income at retirement.
- In **scenario 4** (Figure 2), the total plan contribution rate is increased from an initial 9% to 13%, with a 1% annual escalation feature. The participant accumulates about $392,000 at retirement, replacing 32% of pre-retirement income.

Figure 2. Savings rates have a large impact on a participant's ending balance: Hypothetical scenarios



Note: Chart illustrates four hypothetical scenarios as described in the figure legend here for a 32-year-old participant who has just joined her DC retirement plan and earns $35,000 per year (with real wage increases of 1% annually). See also the text description on this page.

Source: Vanguard.

3 Our replacement rate is based on a 4% drawdown from retirement assets, expressed as a fraction of pre-retirement income at age 67.

Clearly, the strongest influence on retirement outcomes is that of total plan contribution rates by employer and employee. These can be influenced by using automatic enrollment with an automatic escalation feature for employee elective deferral amounts, as well as by meaningful employer contributions to the plan, for both new hires and existing nonparticipants.

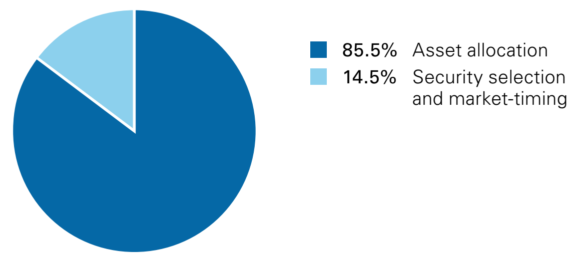
2. Focusing on the fundamentals of investing

Three elements that influence long-term investment success form a logical foundation for portfolio construction decisions: asset allocation, diversification, and cost. As such, they should also serve as the foundation for an effective plan lineup.

Asset allocation. When developing a portfolio to meet an identified objective, it's critical to enable participants to select a combination of assets that offers the best chance of meeting their objective, subject to their individual circumstances. As is well documented, this "top-down" asset allocation decision largely determines the long-term success or failure of meeting the investor's objective. In fact, assuming investors use broadly diversified investments, the vast majority of an investor's return over time is derived from asset allocation, as opposed to either fund/security selection or market-timing, according to a landmark study on the determinants of portfolio performance (Brinson, Hood, and Beebower, 1986). Vanguard's research (Wallick et al., 2012) has suggested that about 85% of a portfolio's return variability is attributable to asset mix (see **Figure 3**).

Figure 3. Investment success is largely determined by long-term asset mix

Percentage of portfolio return variability attributable to:



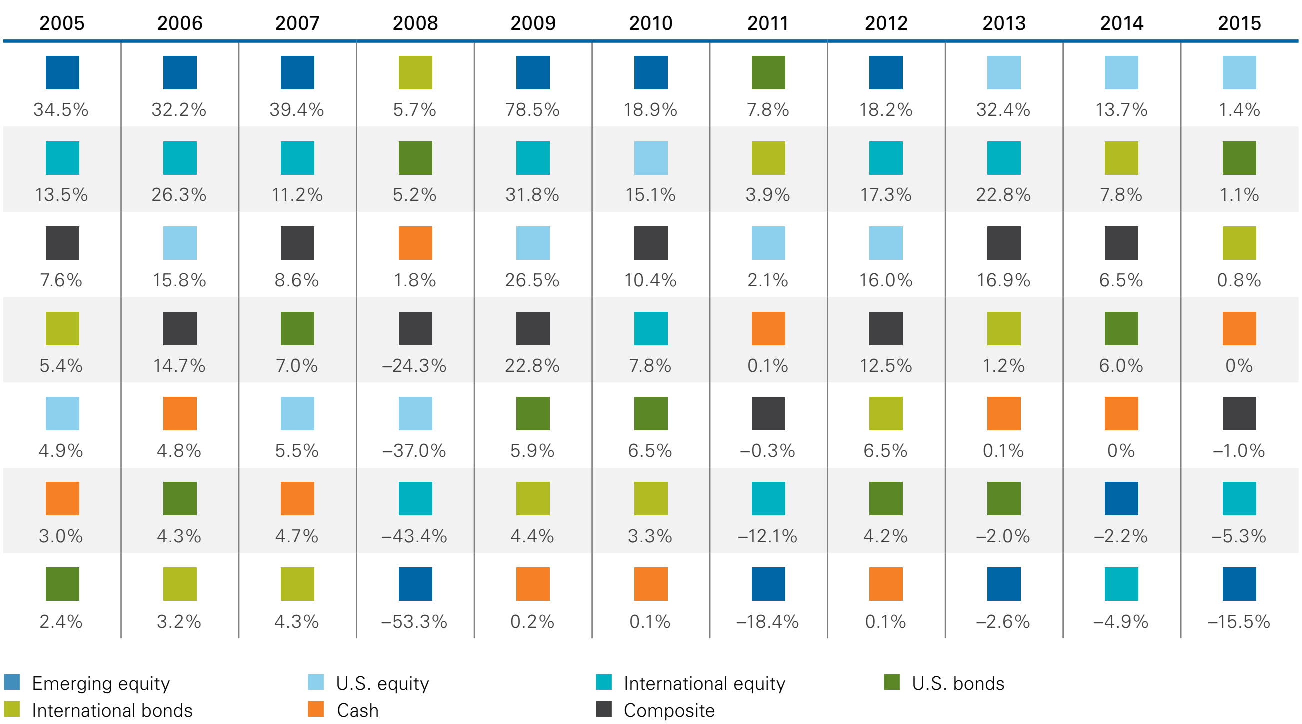
Source: Vanguard research paper titled *The Asset Allocation Debate: Provocative Questions, Enduring Realities* (Davis, Kinniry, and Sheay, 2007).

Diversification. Diversification is an effective strategy for managing investment risks. For example, diversification across asset classes (stocks, bonds, and short-term reserves) reduces a portfolio's exposure to the risks common to a single asset class. Diversification within an asset class (U.S. and international stocks; market capitalization and style within stocks; U.S. and currency-hedged international bonds; credit quality and maturities within bonds) reduces a portfolio's exposure to risks associated with a particular company, sector, or segment.

Market and asset-class returns will often behave differently from each other (sometimes marginally, sometimes greatly) at any given time. Diversification seems to benefit from these uncorrelated and unpredictable returns. Performance leadership for asset classes changes quickly over time (see **Figure 4**). A portfolio that is well-diversified (represented by the black composite portfolio box in Figure 4) would have been less prone to extreme performance swings.

Cost. Minimizing investment cost is critical to improving investment outcomes for participants. Contrary to the typical economic relationship between price and quality, higher costs don't necessarily lead to higher returns (see Philips et al., 2012; and Wallick, Wimmer, and Balsamo, 2015). Every dollar paid for management fees or trading commissions is a dollar less of potential return.

Figure 4. Annual returns for asset classes are difficult to predict: 2005–2015

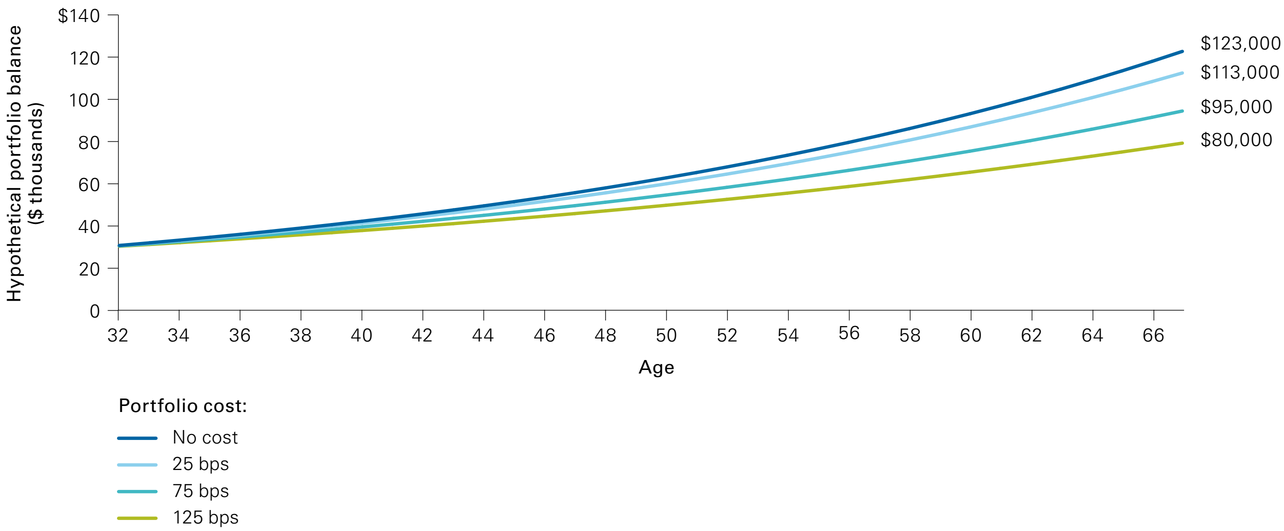


Notes: Past performance is not a guarantee of future returns. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index. Last observation: December 31, 2015. U.S. equity represented by Standard & Poor's 500 Index; international equity represented by MSCI EAFE Index; emerging equity represented by MSCI Emerging Markets Index; U.S. bonds represented by Barclays U.S. Aggregate Bond Index; international bonds represented by Barclays Global Aggregate ex-USD Bond Index (hedged); cash represented by Citigroup 3-Month T-Bill Index; composite portfolio represented 39% by S&P 500 Index, 21% by MSCI EAFE Index, 5% by MSCI Emerging Index, 24.5% by Barclays U.S. Aggregate Bond Index, and 10.5% by Barclays Global Aggregate ex-USD Bond Index (hedged), and is rebalanced annually.

Sources: Vanguard, based on data from Standard & Poor's, MSCI, Barclays, and Citigroup.

Higher costs can act as a headwind to investment success. To see how costs can significantly reduce total returns over time, consider a scenario in which a 32-year-old investor invests $30,000 in each of four hypothetical portfolios of varying cost, each with an average annual return of 4% over a 35-year time period. **Figure 5** illustrates a range of subsequent hypothetical portfolio balances at retirement for this investor, first assuming no costs and then adjusting for annual investment costs of 0.25%, 0.75%, and 1.25%, respectively. Over a 35-year savings period, costs for this investor have a striking potential impact on the portfolio's respective balances at retirement. For instance, as the figure shows, the difference in the ending balance for a high-cost portfolio with expenses of 1.25% versus a low-cost portfolio with expenses of 0.25% would be close to $33,000, or a loss of roughly 30% in the high-cost portfolio's value.

Figure 5. Long-term impact of investment costs on portfolio balances



Note: Chart reflects hypothetical results of a 32-year-old investor who invests $30,000 in each of four portfolios of varying cost, each with an average annual return of 4% over a 35-year time period. Bps = basis points (1 basis point = 1/100 of 1%).

Source: Vanguard.

Furthermore, individual investment strategies with lower costs have generally outperformed their higher-cost counterparts. As an illustration, Vanguard has shown that mutual funds with fees in the lowest quartile have outperformed funds with fees in the top quartile (see **Figure 6**). This has occurred across a wide range of investment categories. Evidence such as this has encouraged retirement regulators around the globe to introduce policies for lower fees, such as plan sponsor and participant fee disclosure in the United States.

3. Creating a tiered lineup that reflects plan objectives

The cornerstone of investment decision-making for a DC plan is the investment lineup, or menu. As noted earlier, the behavioral dynamics in DC plans have changed as a result of the growing use of TDFs in plan menus. Previously, in plans with voluntary enrollment, the menu was the centerpiece of decision-making for all participants. Today, however, with TDFs dominating participants' decision-making—either as a default or as the first option in a set of streamlined choices—lineups are more oriented to participants who see TDFs as just one of the available investment choices.

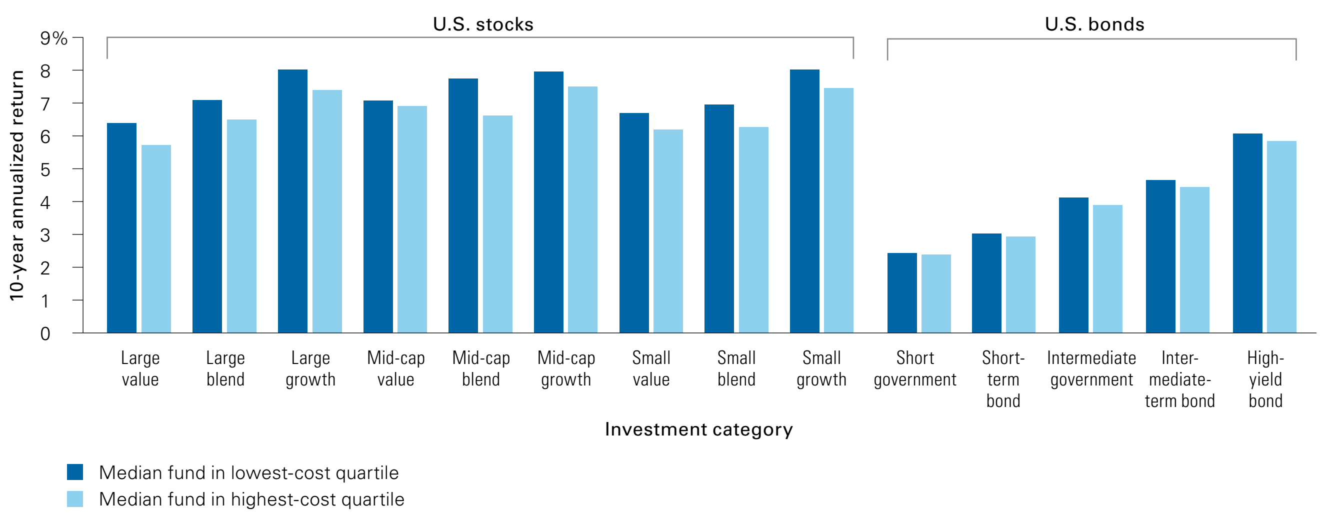
In helping participants navigate the choices offered, we recommend that sponsors incorporate the behavioral principle of framing through a "tiered" menu format (see **Figure 7**). In a tiered structure, a plan's investment options are organized into logical groupings. This arrangement helps participants better manage the complexity of choices offered, while also reflecting the sponsor's own investment philosophy on best practices in retirement investing.

As Figure 7 shows, the tiers are arranged as follows:

- **Tier I:** Single-fund solutions (which should include the plan's qualified default investment alternative—QDIA).
- **Tier II:** Building blocks—broadly diversified options.
- **Tier III:** Supplemental investments.

Figure 6. Lower costs have meant higher net returns

Ten-year annualized return by lowest- and highest-cost quartiles: As of December 31, 2015



Notes: Past performance is not a guarantee of future returns. This analysis included only funds that were in existence in their respective Morningstar category during the ten years ended December 31, 2015; "dead" funds (i.e., funds that were merged or liquidated during the period) were excluded.

Sources: Vanguard, using data from Morningstar, Inc.

Figure 7. A basic framework for structuring a tiered plan lineup

	Tiering options	Critical elements	Option: A	Option: B	Option: C	Option: D
Tier I	Single-fund solution	Appropriate QDIA for all investors in a plan.	Target-date fund (TDF): index or active.	Target-risk fund.	Balanced fund: index or active.	
Tier II	Building blocks: broadly diversified options	Straightforward portfolio building blocks.	Underlying TDF funds.	Core index.	Active/index mix.	White-label funds.
Tier III	Supplemental choices	Broaden access to investment options.	Supplemental styles.	Supplemental asset classes.	Brokerage window.	

Notes: QDIA = qualified default investment alternative. "White-label" funds are generically packaged fund options that may be offered in DC plans. For more on white-labeling, see the box, "A note on 'white-label' solutions," on page 11.

Source: Vanguard.

Tiers I and II reflect, most fundamentally, a plan sponsor's beliefs about life-cycle investing. Tier I represents an integrated portfolio solution of single-fund options; Tier II offers building blocks essential to a broadly diversified portfolio. In many ways, the first two tiers reflect the sponsor's beliefs about components that are essential to adequate diversification of plan assets in terms of broad asset classes and manager strategies. Tier III, although not a critical component to enable participants to create fully diversified portfolios, can provide additional investment strategies and asset classes for those who want more specialized options.

We explore each tier in more detail next.

Tier I: Single-fund solutions

Tier 1 is a group of funds representing a professionally managed, all-in-one option for participants. In automatic enrollment situations, the plan's QDIA is based on Tier I options.

Sponsors have several Tier I options: target-date funds, a static risk allocation series (such as high-, medium-, and low-risk options), or a traditional balanced fund. Overwhelmingly, sponsors have shifted Tier I options to target-date series, for one major reason: TDFs provide automatic risk reduction as a participant ages—leading to broader and more appropriate age variation in equity exposure, compared to static risk funds or a single balanced option.

A note on customized TDFs

According to the U.S. Department of Labor's (2013) guidance on adoption and use of TDFs within a DC plan, sponsors are encouraged to "inquire about whether a custom or non-proprietary target date fund would be a better fit for your plan." Discussion of the advantages or disadvantages of a customized TDF solution is beyond the scope of this paper, but a simple criterion sponsors can use for evaluating customized TDFs relative to other options is to analyze the incremental benefits relative to incremental costs of a customized TDF versus a low-cost traditional TDF. The relatively low adoption figures for customized TDFs suggest that most plan sponsors find that the incremental costs—which can be 40–50 basis points higher than the cost of an "off the shelf" TDF, along with the additional oversight and administrative complexity—provide high hurdles. A Vanguard research paper (Brancato et al., 2014) addresses this topic in more detail.

As **Figure 8a** and **8b** illustrate, professionally managed allocation portfolios such as TDFs provide a more appropriate set of investment outcomes than when participants choose their own set of funds. Participants who are invested exclusively in a single TDF, whether through automatic enrollment or voluntary choice, will have risk–return characteristics identical to those of the fund in which they invest. "Do it yourself" participants, however, tend to have extreme asset allocations and idiosyncratic strategy and manager exposures, leading to a much wider variation in risk–return characteristics.

With TDFs now the predominant vehicle of choice for professionally managed solutions, a wide range of TDF market options have become available that may meet plan sponsors' objectives to varying degrees. A logical outgrowth of this trend is the projected percentage of DC contributions going to TDFs, which is expected to increase from 38% in 2013 to 87.9% by 2019, according to Cerulli Associates (2015). In addition, plan sponsors should consider whether or not a customized TDF would be appropriate for their plan (see the box, "A note on customized TDFs," on page 9).

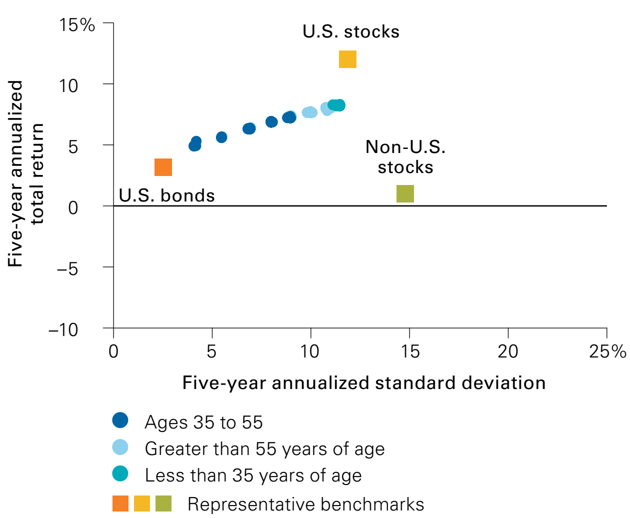
By offering single-fund solutions in Tier I, plan sponsors are helping their participants build sound portfolios.

Tier II: Building blocks

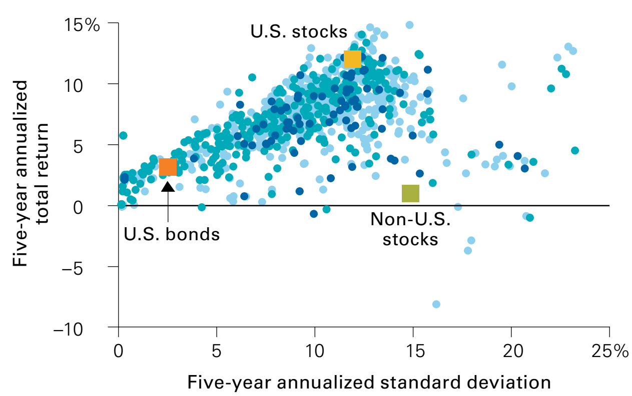
Some participants want to build more personalized portfolios that reflect their own independent financial circumstances, risk tolerance, and personal views on the markets. In automatic enrollment plans, these participants will choose to "opt out" of the designated default. In voluntary enrollment plans, they will select options beyond that of a streamlined TDF in Tier I.

Figure 8. Risk–return characteristics for DC plan participants: 2010–2015

a. Single target-date fund participants have consistent risk–return characteristics



b. "Do it yourself" investors who make their own investment choices have a much wider variation in risk–return characteristics



Notes: Charts *a.* and *b.* are based on 1,000 random samples of respective participant accounts and exclude 0.50% highest and 0.50% lowest outliers for both risk and return, for a net sample of 980 observations for each chart. U.S. stocks represented by MSCI US Broad Market Index through June 2, 2013, and CRSP US Total Market Index thereafter; non-U.S. stocks represented by MSCI ACWI ex USA IMI Index through June 2, 2013, and FTSE Global All Cap ex US Index thereafter; U.S. bonds represented by Barclays U.S. Aggregate Float Adjusted Bond Index.

Sources: Vanguard, based on data from MSCI, CRSP, FTSE, and Barclays.

A second tier thus enables plan sponsors to provide a comprehensive set of broadly diversified investment options, or "building blocks," to allow participants who do not use one of the professionally managed alternatives to create a well-diversified portfolio on his or her own. One way to construct the Tier II lineup is simply to include the underlying individual mutual funds in the plan's TDF offering. Another way is to offer broad and efficient access to all the major asset classes.

A minimalist approach to Tier II therefore would offer five investment options:

- A broadly diversified U.S. stock fund.
- A broadly diversified international stock fund.
- A broadly diversified U.S. bond fund.
- A broadly diversified international bond fund.[4]
- Cash/short-term reserves.

Such a "building block" tier, combined with strategic asset allocation and a long-term approach, can offer a straightforward, yet efficient approach to portfolio construction. The investment options should be broadly diversified and low cost. Although the options do not need to be indexed based, several key attributes make index-based investments appealing for Tier II, including efficiency, transparency, diversification, and low cost.[5]

Although Tier II building blocks can provide diversification and low-cost options, it's important to note that participants who choose to construct a portfolio using these elements will need to rebalance and reevaluate their portfolio allocation over time on their own. (See the box in the next column, for another building-block approach to Tier II.)

A note on 'white-label' solutions

An alternative approach to Tier II's "building blocks" is to create single investment options, often referred to as "white-label" funds, which are made up of different underlying funds. A plan sponsor, for instance, might offer "U.S. equity" as an investment option. Underlying this option could be three separate funds made up of U.S. large-capitalization equity, U.S. mid-cap equity, and U.S. small-cap equity, respectively. Underlying funds can be actively managed funds, index funds, or a combination of the two.

The purpose of a white-label approach is not only to allow participants to create their own generic (white-label) asset allocations but also to ensure that the investor is properly diversified within each asset class. White-label funds may benefit investors both because a fund's name can provide immediate clarity as to its specific purpose, but also because the fund may provide better diversification than if the participant selected only one fund for a particular asset class. However, white-label funds represent just one of many options for dealing with these issues. For example, plan lineup tiering by itself can clarify the purpose of various funds. And in terms of adequate diversification, stand-alone funds that have several underlying investment managers are available in the marketplace that can serve the same purpose as white-label solutions.

4 Vanguard believes that if international bonds are to play an enduring role in a diversified portfolio, the currency exposure should be hedged. For additional perspective, including an analysis of the impact of currency on the return characteristics of foreign bonds, see Philips et al. (2012).

5 For more information on the benefits of indexing, see Philips et al. (2015).

Tier III: Supplemental investments

Not all participants agree with a plan sponsor's views. And plan sponsors, for their part, may recognize that there are legitimate disagreements about the suitability of certain asset classes or strategies for certain types of investors. Adding a Tier III, including supplemental strategies, is a way to address these participant concerns.

A Tier III reflects the sponsor's fiduciary judgment about what other asset classes or manager approaches may be appropriate for participants—but are not essential to retirement investing as is the case for Tiers I and II. Tier III can be constructed in several ways: It can include a range of other active managers that complement index or active managers in Tier II; it can emphasize less traditional or specialized asset classes, such as commodity or real estate strategies; and it can include specialized index strategies. Further, some sponsors may opt for a mutual fund or brokerage window in addition to, or in lieu of, Tier III, to provide participants access to broader choices. In building a Tier III, sponsors need to balance several factors: the desire, both of the sponsor and of investors, to expand the plan's available choices; the added fiduciary oversight associated with a more complex Tier III; and the degree of anticipated interest from participants.

For plans that provide Tier III options, sponsors can evaluate these offerings through a traditional approach—that is, focusing on the style-box coverage within the asset classes—to help identify gaps, overlaps, and suitability concerns. For example, this can mean offering diversified, low-cost, actively managed funds; funds that cover certain style boxes (such as large-cap value and large-cap growth within U.S. stocks); or narrower index funds. For plan sponsors who offer a more complex set of offerings within Tier III, this can mean identifying—and removing—unnecessary fund overlaps to streamline the plan lineup.

A note on reenrollment

Reenrollment is a plan design strategy in which participants' account balances are transferred automatically to the plan's qualified default investment alternative (QDIA). Reenrollment can be highly effective in changing participant behaviors, for several reasons. First, inertia often dominates financial decision-making. Similar to the role of inertia in automatic enrollment and savings decisions, many participants will choose not to take action in response to the reenrollment event and their portfolio holdings. Second, many participants may lack strong convictions about their original portfolio choices. They may be unsure about the appropriate level of risk to take or how to adequately diversify their portfolios. For more information about reenrollment, see recent Vanguard research by Pagliaro and Utkus (2016).

In the end, a plan's overall tiering structure reflects the sponsor's investment philosophy; thus, tiers will vary in design from sponsor to sponsor, and across both DC and defined benefit (DB) plans for a company that has both (see **Figure 9**). The tiering concept lends itself to a wide range of investment options and approaches. Given the multiple investment options that can potentially fit into each tier, many different combinations of menu tiering can likely meet various objectives.

Figure 9. Tiering can be used to meet a variety of plan sponsor's goals

	1.	2.	3.	4.
Primary goal of plan sponsor	Simplify	Maximize returns by keeping costs low	Potential outperformance	Streamline fund oversight across DC and DB plan
Rationale	Minimize the chances for portfolio construction errors.	Investment costs are the primary driver of investor returns.	Low-cost active management can outperform.	Leverage existing knowledge and research about certain active managers.
Tier 1	**Index-based TDF.**	**Index-based TDF.**	**Actively managed TDF.**	**Hybrid index/active TDF.**
Tier 2	**Underlying TDF funds:** broad-based, low-cost options.	**Index tier:** broad-based, low-cost index options.	**White-label funds:** major asset classes.	**Index/active core funds.**
Tier 3	**Supplemental choices:** not necessary.	**Supplemental choices:** low-cost index funds covering all style boxes.	**Supplemental choices:** broad-based, low-cost active options and/or brokerage window.	**Supplemental choices:** broad-based, low-cost index and/or active options.

Notes: DC = defined contribution plan; DB = defined benefit plan.
Source: Vanguard.

4. Ensuring active, ongoing oversight

Under U.S. fiduciary law, plan sponsors are responsible for actively selecting and monitoring investments offered within a retirement plan. In practice, the due diligence on investment lineups can be manageable and straightforward.

A few key steps should be kept in mind:

- Ensure that the investment lineup facilitates the goals and objectives identified.
- Specify criteria by which funds will be selected and evaluated.
- Maintain a disciplined process for hiring, evaluating, and terminating investment managers for the plan.
- Confirm the plan's qualified default investment alternative (QDIA), and consider implementing a reenrollment if establishing a QDIA for the first time or changing an existing QDIA (see the box, "A note on reenrollment," on page 12).
- Document all of the preceding steps in an investment policy statement (IPS), and revisit the policy regularly with your investment committee.
- Stay abreast of new products as well as changes in the investment and regulatory landscape.

As mentioned earlier, reviewing a plan's lineup through a "tiering" lens can help structure a menu's oversight and management. The first step a plan sponsor should take is to ensure that Tiers I and II provide a sufficient variety of investment options focusing on both economy in cost and ease of use.

For plans that include actively managed funds in any of the three tiers, it is important to formulate, and document, a thorough process for evaluating those funds' managers. Vanguard research has shown that even top-performing managers experience periods of underperformance, so use of active management necessitates a high level of investor patience (Wallick et al., 2015).[6]

6 For additional Vanguard research on use of active managers, see *The Bumpy Road to Outperformance* (Wimmer, Chhabra, and Wallick, 2013).

Given the changing U.S. regulatory and investment landscape, sponsors need to be highly informed and up-to-date as new products and guidelines are introduced. For instance, we mentioned earlier (see the box on page 9) the U.S. Department of Labor's 2013 guidance for sponsors regarding possible use of customized TDFs. Such recommendations should be considered, acted upon (or not), and well documented as part of a formal checklist of items to be addressed during periodic investment committee meetings.

To support the need for plan sponsors' ongoing and rigorous evaluation of their investment menus, Vanguard has developed a "Company 401(k) Savings Plan DC Investment Lineup Checklist" (see this paper's appendix, on page 15). This checklist assists plan sponsors in ensuring that best practices are applied not only when constructing a plan lineup but also throughout the oversight of the lineup.

Conclusion

The best practices outlined in this paper provide a road map that plan sponsors can use to evaluate and improve the investment offerings in their DC plans. As fiduciaries, plan sponsors are called upon to put participants' interests foremost in selecting and monitoring investments for their retirement plan. This responsibility is just as important as using an effective plan design to promote participants' retirement readiness, and improving communications and education about the retirement program.

Vanguard's four best practices are rooted in proven investment principles, well-documented participant behavior, advances in plan design, and the evolving regulatory environment. By adopting these practices, plan sponsors can offer robust investment lineups that suit their organizations, and provide participants with the right tools to make sound retirement portfolio decisions.

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Appendix. Company 401(k) savings plan DC investment lineup checklist

✓ 1. A focus on fundamentals

☐	Asset allocation	Allocation offers exposure to primary asset classes.
☐	Low cost	Plan investment options are low cost.
☐	Automatic enrollment	Plan automatically enrolls new participants.
☐	Automatic increase	Plan uses automatic increase for new participants.
☐	Reenrollment	Plan has completed a reenrollment since last QDIA update.
☐	Savings rate	Plan meets Vanguard-suggested savings rate.

✓ 2. Participant friendly lineup

☐	Tiered lineup	Presence of tiered lineup.
☐	Tier I: Single fund solutions	Low-cost, transparent, risk-controlled options.
☐	Tier II: Building blocks	Straightforward and efficient exposure to portfolio construction.
☐	Tier III: Supplemental investments	Options are reasonable; usage is reviewed.
☐	Managed accounts	Low-cost complement to TDF suite.

✓ 3. Active, ongoing oversight

☐	Goals and objectives	Align investment lineup and plan objectives.
☐	QDIA review	Monitor industry trends and peer benchmarking.
☐	Active fund review	Maintain process for manager evaluation.
☐	Documentation	Document process through IPS (investment policy statement), regulatory updates.

Note: QDIA = qualified default investment alternative.
Source: Vanguard.

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