

Selecting a Default Fund for a Defined Contribution Plan

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Executive summary. Most plan sponsors choose a fixed-dollar fund as the default investment option for their defined contribution plan. This decision seems inconsistent with the long-term nature of retirement savings plans and with the “prudent investor” principles underlying participant education.

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Default fund use. In 2004, about 80% of Vanguard-administered plans used a money market or investment contract fund as the plan’s default investment option. Since 2000 there has been a small movement toward balanced and equity options in the choice of a default fund.

investor” principles underlying current participant education programs: (1) the existence of a positive equity-risk premium and (2) the variation of an individual’s risk-taking ability with age. These principles also underlie the construction of many committee-directed portfolios for defined benefit plans, endowments, and foundations.

Legal framework. Under ERISA, a plan sponsor retains full fiduciary responsibility for investing plan assets for which participants have not provided investment instructions. The standard for such decisions is ERISA’s “prudent investor” rule. Sponsors are expected to invest as a prudent and experienced investor would—not as an inexperienced participant might. ERISA retirement plans are not required to invest in “safe” assets, and the law permits fiduciaries to invest in assets that may experience losses.

Sponsor decision-making. Investment committees selecting a default fund should: (1) evaluate the objectives of their retirement savings plan; (2) determine which investment principles underlie their notion of a “prudent investor”; (3) select a fund or funds consistent with this analysis; and (4) document their decision-making process and conclusions. Sponsors seeking to reconcile the investment principles of their participant education programs with their own choice of a default fund may choose some level of equity exposure for the plan default option. Choices include: a single balanced fund, a series of balanced funds, or possibly a managed account.

Investment considerations. Selecting a fixed-dollar investment fund as a default option is inconsistent with two “prudent

Background

In the aftermath of the 2000–2002 bear market and with the recent focus on corporate governance, employers are reviewing a wide range of corporate risk exposures, including their fiduciary duties under ERISA. Within defined contribution (DC) savings plans, employers are examining all aspects of plan administration—from complex fiduciary issues, such as the role of company stock within the plan, to more mundane questions, such as the plan’s default investment option.

A default option is typically used when participants fail to make an investment choice—either for their own contributions or for employer contributions they have the right to direct. For many plans, the default fund may have been selected years ago, perhaps with little scrutiny. In the past, a typical choice was a fixed-dollar money market or stable value investment option.

Increasingly, however, sponsors are rethinking this decision, and a growing number are instead adopting balanced funds as default options.¹ Driving this trend are three factors:

- DC plans are now the dominant type of retirement plan in the United States, and employers recognize that plan participants in the default fund need to be directed to a balanced investment program to achieve long-term retirement security.
- Some employers are replacing a combined defined benefit (DB)/DC plan with an all-DC design, often by adding an employer profit-sharing contribution to an existing 401(k) plan. These employers want to ensure that DC plan assets are invested as effectively for the long term as the DB assets would have been, and they recognize that a balanced default fund is needed to generate sufficient capital for employees’ retirement needs.

- More employers are interested in automatic enrollment or in autopilot or automatic 401(k) plan designs, in which savings and investment decisions are made automatically for participants. In these designs, participants rely on their employers’ default decisions, rather than making active choices of their own.

Research has shown that getting the default option “right” from the outset is critical to long-term retirement security. Once placed in default savings and investment options, participants exhibit inertia and rarely revisit the elections made for them. In other words, many participants placed in a default fund are unlikely to take active control of their accounts, and instead remain in the default. If the default fund is a conservative fixed-dollar investment, these participants are at risk of not meeting their long-term retirement savings objectives.²

In this report, we:

- Provide data on the current default investment options chosen by plan sponsors.
- Consider the legal and investment aspects of the default choice.
- Provide a decision-making framework for plan fiduciaries when selecting a default, as well as recommendations for policymakers.

1 Feinberg (2004) documents the growing interest in balanced or life-cycle funds as a DC plan’s default fund.

2 See our report, *Lessons From Behavioral Finance and the Autopilot 401(k)*, (Vanguard, 2004a) and Mitchell and Utkus (2004).

Current default choices

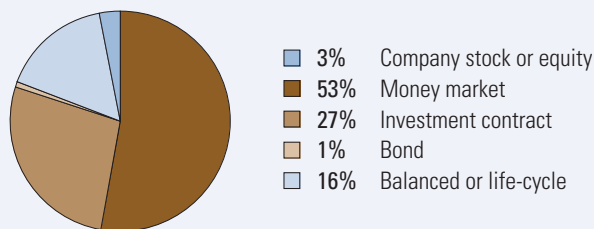
Today plan sponsors most frequently select a fixed-dollar investment option as the default fund. In a December 2004 sample of nearly 1,900 DC plans administered by Vanguard, 81% of plans had selected a money market fund or investment contract fund as their default option (Figure 1). Only 16% used a balanced fund, while 3% employed an equity or company stock fund.

Compared with a similar sample in 2000, there has been a small movement toward relying on balanced or equity options as default funds (Figure 2). One other difference is that reliance on money market funds has declined—no doubt because of the sharp decline in money market yields during the period.

Sponsors of automatic enrollment programs take a somewhat different approach. In our 2001 survey of 15 automatic enrollment clients, 40% of plans chose a balanced or equity fund as their default option, while 60% continued to rely on a money market or investment contract fund.³

Figure 1. Default Funds for Defined Contribution Plans 2004

n=1,694 plans



Source: The Vanguard Group, 2005.

Figure 2. Change in Default Option 2000–2004

	2004	2000	Change
n=number of plans	1,889	1,309	
Money market	53%	65%	-12%
Investment contract	27%	19%	8%
Bond	1%	1%	0%
Total fixed income	81%	85%	-4%
Balanced or life-cycle	16%	14%	2%
Company stock or equity	3%	1%	2%
Total balanced or equity	19%	15%	4%
Total	100%	100%	

Source: The Vanguard Group, 2005.

Today plan sponsors most frequently select a fixed-dollar option as the default fund.

³ Vanguard (2001).

ERISA duties

Under the Employee Retirement Income Security Act of 1974 (ERISA), it is generally the plan sponsor (or the sponsor's administrative committee) who assumes full fiduciary responsibility for the investment of plan assets when a participant fails to select their individual account's investments. A plan sponsor generally cannot delegate the essential fiduciary duties of oversight and control of plan assets to participants. One exception is ERISA Section 404(c). Under 404(c), if the participant exercises affirmative control over his or her account, and the plan complies with the relevant regulations, the plan fiduciaries are able to limit (but not eliminate) their fiduciary exposure.⁴

Of course, when a participant fails to make investment choices for his or her own contributions or an employer's contributions, a default fund is automatically used and the exemption provided by Section 404(c) does not apply. A default fund also is used when the plan design specifies certain investment choices, as in the case of automatic enrollment or autopilot 401(k) plans. Under these circumstances, the participant is not making an affirmative investment decision, and so the plan fiduciaries retain their full investment oversight and control duties under ERISA.⁵

Prudent investor standard. In exercising their ERISA duties, sponsors are expected to act under the "prudent investor" standard. According to the statute, a plan fiduciary must act "with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use..."⁶

Plan fiduciaries are supposed to act as an expert would, not as a layperson or man on the street. Hence the term "prudent investor" or "prudent expert" is sometimes used. ERISA's standard of prudence for fiduciaries "is not that of a prudent layperson but rather that of a prudent fiduciary with experience dealing with a similar enterprise."⁷

Thus fiduciaries are expected to be knowledgeable and informed about relevant investment information. They are expected to act as experienced or knowledgeable investors might, and they are called to a much higher standard of care, duty, and knowledge. "A trustee's lack of familiarity with investments is no excuse..."⁸ According to some court opinions, if fiduciaries are unsure of what to do, they are expected to seek out professional help.⁹

No requirement to invest in conservative investments. Under ERISA, plan fiduciaries are under no obligation to invest exclusively in safe or guaranteed investments with a fixed-dollar value, such as a money market fund or investment contract fund.

4 In *Herman v. NationsBank of Georgia, N.A.*, 126 F.3d 1354, 1361 (11th Cir. 1997), the court noted that plan trustees cannot delegate their duties of management and control of plan assets except to: an investment manager under Section 403(a)(2) of ERISA; a participant under Section 404(c) of ERISA; or a named fiduciary not otherwise a trustee.

5 Preamble to the final regulations under section 404(c) of ERISA (29 CFR 2550.404c-1). 57 Fed. Reg. 46906 (Oct. 13, 1992).

6 ERISA §404(a)(1)(B).

7 *Reich v. Mason Tenders District Council of Greater New York*, 909 F. Supp. 882, 886 (S.D.N.Y. 1995).

8 *Katsaros v. Cody*, 744 F.2d 270, 279 (2nd Cir. 1984).

9 *Donovan v. Bierwirth*, 680 F.2d 263, 273-4 (2nd Cir. 1982).

Indeed, in drafting its regulations on prudent investments, the Department of Labor (DOL) specifically went out of its way *not* to prescribe a list of approved investments. Instead it sought to distinguish the ERISA concept of investment prudence from common law trust definitions by adopting a modern portfolio theory approach. In the DOL's view, the risk and return of an investment should be judged in relationship to the plan, its objectives, and the facts and circumstances surrounding the plan. A specific investment is not *per se* prudent or imprudent, but it must be judged from a total portfolio perspective.¹⁰

According to the DOL's regulations, fiduciaries should select investments "reasonably designed . . . to further the purposes of the plan, taking into consideration the risk of loss and the opportunity for gain (or other return) . . ." Specifically, the DOL notes that fiduciaries should take into account the diversification of plan assets, the plan's liquidity and current income needs, as well as "the projected rate of return on the portfolio relative to the funding objectives of the plan."¹¹

Although this regulation was drafted within the context of the management of a DB trust, it is nevertheless a helpful framework for sponsors of individual-account DC plans. In the end, each DC participant's funding objective is to accumulate adequate savings for retirement, and fiduciary decisions should be made in light of this goal.

Balancing portfolio risk and return. The principle of balancing risk and return provides the basis for fiduciaries to invest in assets, such as common stocks or bonds, which may experience short-term losses but also offer the prospect for higher long-term returns. Under the statute, investment fiduciaries are justified in pursuing long-term investment strategies that may entail short-term losses, as long as they are suitable to the plan's objectives and goals.

Even if an account experiences an actual loss over time, the loss itself is not evidence that the fiduciaries failed in their duty. The decision-making process "requires prudence, not prescience [and] the ultimate outcome of an investment is not proof of imprudence."¹² Thus the fact that a fiduciary acted prudently is the standard to be applied. Moreover, the legal focus is on how fiduciaries approached the investment decision-making process prospectively—not on whether an investment experienced a loss after the fact.¹³

In the end, absent participant instructions, plan fiduciaries retain full legal responsibility for the investment of plan assets. As a result, their aim should be to invest the participant's assets in a prudent, diversified manner, for the exclusive benefit of the participant—in keeping with the core fiduciary duties of ERISA.¹⁴

10 29 CFR 2550.404a-1(b)(1). See also *Laborers National Pension Fund v. Northern Trust Quantitative Advisors, Inc.*, 173 F.3d 313, 317–318 (5th Cir. 1999), *cert denied sub nom.*, *Laborers National Pension Fund v. American National Bank & Trust Co.*, 528 U.S. 967 (1999). Also Hutchinson and Ondrasik (1984), pp. 749–750.

11 29 CFR 2550.404a-1(b)(2).

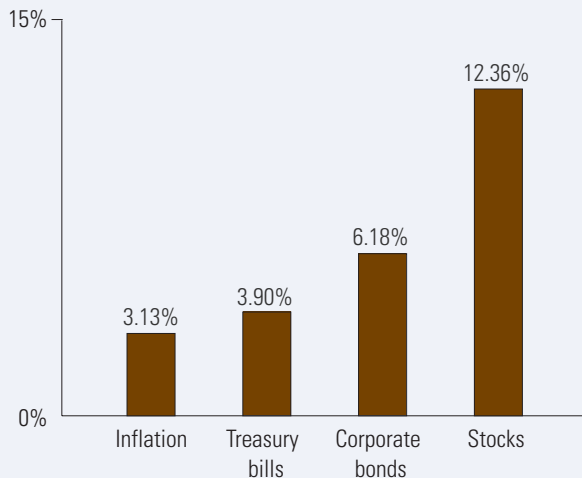
12 *DeBruyne v. Equitable Life Assurance Society of the United States*, 720 F. Supp. 1342, 1349 (N.D. Ill. 1989), *aff'd* 920 F.2d 457 (7th Cir. 1990).

13 *Laborers*, 173 F.3d at 317–318. See also *Meinhardt v. Unisys Corp. (In re Unisys Savings Plan Litigation)*, 74 F.3d 420, 434–435 (3rd Cir. 1996).

14 For an overview of the duties of fiduciaries with respect to plan assets, see *Laborers*, 173 F.3d at 316.

Figure 3. Long-Term Asset Class Returns and Risks 1926–2004

Average percentage increase per year



Standard deviation

Inflation	Treasury bills	Corporate bonds	Stocks
4.32%	3.20%	8.70%	20.25%

Sharpe ratio

Inflation	Treasury bills	Corporate bonds	Stocks
—	—	0.26	0.42

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.

Note: Standard deviation and the Sharpe ratio are widely applied in modern portfolio theory. Standard deviation uses the past performance of securities to determine the range of possible future outcomes and a probability is attached to each outcome; the greater the degree of dispersion, the greater the risk. The Sharpe ratio, developed by William F. Sharpe, is a risk-to-reward ratio that measures the risk-adjusted return of an investment. It uses standard deviation and excess return to determine the reward per unit of risk for an investment.

Source: The Vanguard Group, 2005.

Investment principles

In choosing a default fund, what investment principles might fiduciaries use to satisfy ERISA’s prudent investor standard? Our recommendation is to consider the principles underlying the plan’s participant education program.

Two investment principles anchor most participant education programs in the United States and could be the reasoning behind a plan sponsor’s choice of a default option. The first is the idea of a positive equity risk premium. Most, if not all, participant education programs include an illustration of the long-term returns on various asset classes, demonstrating that common stocks have historically provided higher returns than fixed income and short-term reserves (Figure 3).

Implicit in this historical data is an expectation that the positive equity premium will continue in the future, if not over the short run then for the long holding periods typical of retirement investors. Also implicit is the notion that the risks of investing in stocks are worth taking—that the premium is adequate compensation for the higher volatility of common stocks.

Of course, no investor can be certain that equities will realize higher long-term returns than bonds, or that the risk-adjusted returns of stocks will be sufficient to warrant the higher volatility that stocks entail. Historically, there have been long periods when stocks have performed poorly. The future also could be dramatically different from the past.

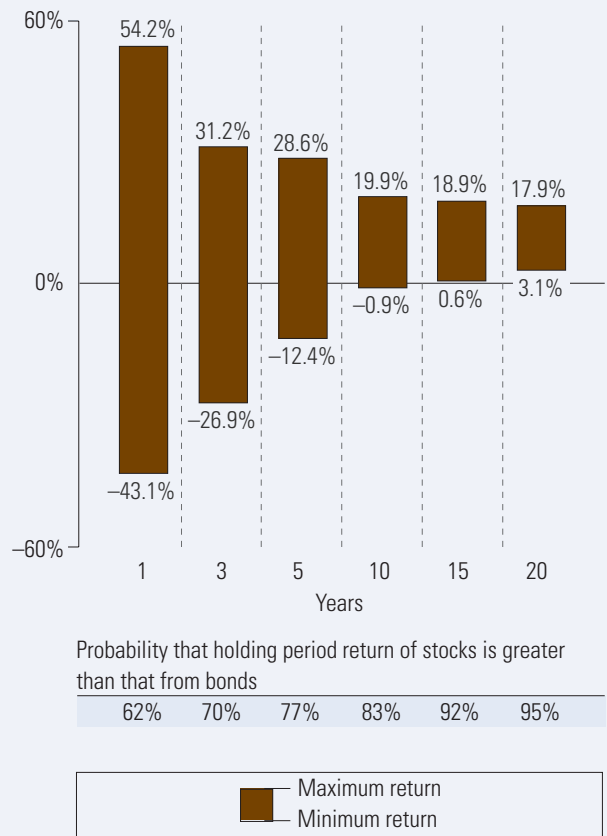
But, as ERISA case law underscores, plan fiduciaries are not held to a standard of certainty in the future outcomes of their investment decisions. Rather, ERISA requires that fiduciaries have a well-reasoned and thoughtful process for evaluating potential risks and returns and for pursuing an investment program that is both diversified and prudent *ex ante*, not *ex post*.

A second principle underlying most education programs is the belief that younger individuals are able to assume greater equity market risk than older individuals. One reason is that younger individuals have a longer period of work ahead of them and can recoup early investment losses with higher savings rates later in life. Another reason is that the longer an investor's holding period, the better the odds are that equity investments will provide higher returns than fixed income investments (Figure 4).

Both of these principles are widely accepted and used in investor education curriculums.¹⁵ That said, the concept of the interrelationship between risk and age is not without debate. One criticism is that while the probability of equities earning a higher return than fixed income investments increases with longer holding periods, the cumulative wealth that investors may accumulate over time becomes more uncertain. In this sense, the suggestion that time "reduces" or "eliminates" risk is flawed. From this perspective, an investor should have a fixed percentage of equity exposure over his or her lifetime—not an age-varying one.¹⁶

Nonetheless, the idea that risk tolerance varies with age remains a common investment planning principle. This is especially true when based on the notion of a younger person's ability to recoup losses later in life, not on the notion that risk is lessened with time. A younger person who encounters a long period of poor stock market returns still has the ability to offset those losses with higher savings later in his or her work career.

Figure 4. Range of Holding Period Returns for U.S. Stocks 1926–2004



Source: The Vanguard Group, 2005.

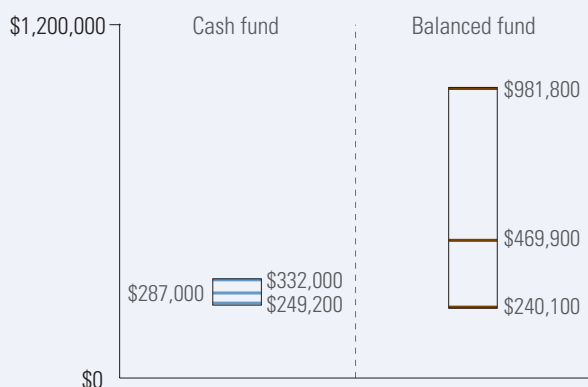
15 In their well-known textbook on investments, *Essentials of Investments*, Bodie, Kane, and Marcus (2002), p. 883, discuss how an individual's risk tolerance and ability to recover from losses declines with age, suggesting a shift toward conservative assets over time. *Planning for Retirement Needs* by Tacchino and Littell (1999), pp. 440–441, which is part of the Certified Financial Planner™ (CFP®) curriculum, describes the importance of time and risk in investment decision-making. Within the Chartered Financial Analyst (CFA) curriculum, Bronson, Scanlan, and Squires (forthcoming) and Maginn et. al. (forthcoming) document the importance of life stage and time horizon in an individual's ability to take risk. *Straight Talk on Investing* by Brennan (2002), p. 73, summarizes the age-based principle and its impact on equity exposure for retail mutual fund investors. Evensky's *Wealth Management* (1997) describes how time factors into the risk assessment process (pp. 86–88) as well as the pros and cons of the "time diversification" argument (pp. 201–204). He also attributes the original time diversification argument to Peter Bernstein.

16 Kritzman (1995), pp. 79–89, and Bernstein (1995), pp. 48–55, provide a good summary of the argument for and against age variations in commitment to equities. Bodie, Kane, and Marcus (2002), pp. 254–256, also provide a critique.

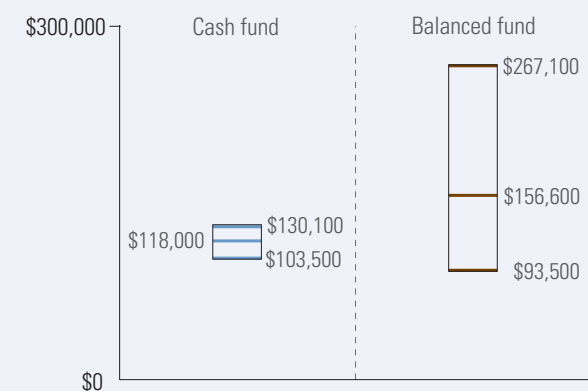
Figure 5. Long-Term Retirement Wealth Accumulations

For a 401(k) investor initially earning \$25,000

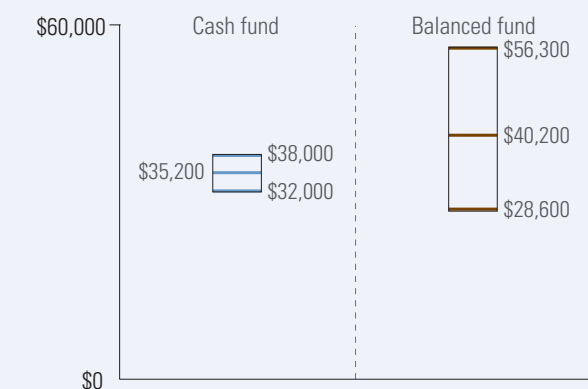
30-year time horizon



20-year time horizon



10-year time horizon



Median 95th Percentile
5th Percentile

Note: These results are hypothetical and not intended to guarantee the results of any particular investment. Assumptions are described in the accompanying text.

Source: The Vanguard Group, 2004.

Impact on retirement wealth

In the end, what financial impact would the choice of a default fund have on a participant's retirement? To answer this question, we forecast the retirement wealth of a typical 401(k) investor under two scenarios—one investing in a fixed-dollar cash investment and the other investing in a traditional balanced fund, consisting of 60% equity and 40% fixed income assets.

In these scenarios, we initially assume that the participant earns a \$25,000 annual salary, with wages growing over time with inflation. Plan contributions are 9% of wages (6% employee plus 3% employer match). Investment returns, risks, and inflation are based on historical averages from the 1960–2004 period. (See the Appendix for an explanation of our assumptions.)

The results illustrate the dramatic impact that a default fund can have on a portfolio (Figure 5). Over 30 years, our hypothetical participant accumulates wealth with a median value of \$469,900 in the balanced option—compared with \$287,000 in the fixed-dollar cash fund. The cash account balance represents four times the participant's salary of \$59,000 after 30 years. By comparison, the balanced option median value is equal to eight times the participant's salary at retirement.

Reflecting the different volatility of a cash investment versus a balanced option, the wealth outcomes range from \$249,200 to \$332,000 for the cash fund (for a two-standard deviation confidence interval from 5% to 95%). By comparison, for the balanced option, wealth accumulations range from \$240,100 to \$981,800.

Over 30 years, the expected wealth accumulation from a balanced fund exceeds that from a cash fund in an overwhelming majority of cases. For 20 and 10 years, the same principle holds, though the chance that the balanced fund will generate a higher wealth level than the cash fund falls somewhat.

Over all investment periods, there is some probability that the balanced fund will perform less well than the cash option. Committees must therefore evaluate this risk against the long-term benefit of a balanced option—namely, that over most long-term periods, participants will accumulate significantly higher retirement savings by investing in a balanced investment program rather than a fixed-dollar or cash option.

Fiduciary decision-making

In light of the legal and investment background, we recommend several steps for investment committees to take in selecting an appropriate default fund.

Step 1: Evaluate the plan’s objective. The first question for an investment committee to consider is, “What is the principal objective of the retirement savings plan?” According to ERISA, the risk and return of investments must be evaluated in relationship to the plan’s overall goals and objectives. For most, if not all, qualified DC plans, the principal objective is long-term retirement savings for plan participants.

In assessing the plan’s objectives, plan fiduciaries should observe the language they have used in plan documents, the summary plan description, the plan’s investment policy statement, and participant enrollment materials. The committee also might wish to note that Congress has granted tax preferences to qualified savings plans for the purpose of promoting retirement savings among American workers—a long-term, not a short-term, investment objective.

Assuming that the plan is exclusively or principally oriented toward retirement savings, the principal investment objective for such a plan will be the long-term accumulation of capital to meet individual participants’ retirement funding goals. Such objectives, as we describe below, would suggest a meaningful commitment to higher-return assets such as equities. If the plan also is promoted to participants for short-term investment objectives (e.g., through the use of loans), plan fiduciaries may consider a higher proportion of conservative, short-term assets in the default option. But as we describe below, because loans are not widely used and are capped at 50% of account balances, the use of the plan as a short-term savings vehicle does not necessarily lead to an all-fixed-income default option.

Step 2: Determine “prudent investor” principles.

The second question for an investment committee to consider is, “What prudent investor principles are relevant to the investment of plan assets?” As noted above, we recommend that plan sponsors use the same principles that are incorporated into participant education programs—that is, the ideas of a positive equity risk premium and the inverse relationship between age and risk-taking.

It is true that some committees may be skeptical of these investment assumptions and will choose a conservative default fund based on concerns about the long-term outlook for equities. Yet, if they choose a fixed-dollar fund, the ramifications are much broader than simply the selection of the default fund. The belief that equities should play an important role in retirement portfolios is evident in the design of the plan’s investment menu—most options within DC plans are equity funds—and in the design of participant communication materials. Committees that are uncomfortable with the long-term case for equities will need to reconsider more than just the choice of the plan’s default option.

Figure 6. Default Fund Alternatives

Rank	Options	Characteristics
Good	One balanced fund	A single fund for investors in the “accumulation” phase; rebalancing to that target allocation
Better	Various balanced funds by age group—e.g., more aggressive option if under age 50; more conservative option if age 50 or older	A more granular implementation of age-based investing; rebalancing to given allocation of each fund
Best	Target maturity funds, mapped by age, or a managed account option	Full implementation of age-based investing; daily rebalancing to target allocation, as well as gradual reduction of risk exposure over time

Note: All of the options shown are suitable choices for a default fund. These options are ranked according to the extent to which they implement the principle of age-based investing.

Source: The Vanguard Group, 2004.

Step 3. Select funds consistent with plan objectives and “prudent investor” principles. The third step for an investment committee is to select a default option based on its findings regarding the plan’s objectives and investment principles. A balanced investment strategy, consisting of both equity and fixed income securities, appears to be consistent with the long-term retirement objective for most plans, and the common investment principles underlying participant communication programs.

A committee has an array of choices depending on how strongly it adheres to the principle of age-based investing (Figure 6). The simplest strategy would be a single balanced fund for all plan participants—under the assumption that most are in the “accumulation” phase of retirement savings, and that, once they retire, they will make more conservative allocations outside the plan.

An extension of this approach would be to select a more aggressive default option for younger participants and a less aggressive one for older participants. Arguably, all participants are still in the accumulation phase, but with more graduated risk levels by age.

One drawback to these solutions is that portfolio risk does not change as an individual ages. A possible solution would be to have a series of balanced funds based on a participant’s expected time horizon until retirement, with automatic rebalancing over time—so-called target maturity lifestyle or life-cycle funds. Another possibility is the new managed account option within DC plans—in which portfolio investment decisions, both investment selection and ongoing rebalancing, are delegated to a third-party advisor.

Step 4. Document all decisions. As with all fiduciary decisions, sponsors will want to document their reasoning in selecting a particular default fund. Committees should ensure that their decisions are not only substantively prudent—complying with the best thinking in investment and legal terms—but are also procedurally prudent, meaning that they have been actively discussed by the committee and are well-documented.

TIPS as a default fund

Treasury inflation-protected securities (TIPS) are another candidate for a default fund within a DC savings plan. TIPS are a government-guaranteed fixed income security providing some current income and inflation-adjusted growth of principal over time.¹⁷

Unlike equities, TIPS provide a near-contemporaneous hedge against inflation. Adjustments are made regularly to the value of TIPS to reflect actual inflation. By comparison, equities offer an inflation hedge subject to a considerable time lag. For example, during periods of high inflation and correspondingly high interest rates, such as the mid- to late 1970s, equities performed poorly, as high discount rates drove down the present value of stocks' future earnings, reducing stock multiples and stock prices. It was only after high inflation and high interest rates declined during the 1980s that stock multiples and prices improved dramatically when compared with inflation.

TIPS have only been issued in the United States since 1997, so there is no long-term domestic data on their price behavior in a variety of macroeconomic conditions. There are only a limited number of TIPS issues, and the market is less liquid than the regular U.S. Treasury market.

Some critics are skeptical of the case for equities and suggest that TIPS should play a dominant role in retirement plans.¹⁸ Yet from a retirement funding perspective, the main drawback of TIPS is their expected return relative to equities. Equities are likely to offer higher returns than TIPS in the future, especially over long periods. If this holds true, then retirement savings will grow more rapidly with some meaningful exposure to common stocks, not a portfolio predominantly or exclusively invested in TIPS.

Other experience

It is worth noting that selecting a balanced investment strategy for a default fund would be consistent with common investment practices in DB plans, endowments and foundations, as well as participant decisions in DC plans.

Greenwich Associates reports that in 2003, 61% of corporate DB assets were invested in domestic and international equities, and another 9% in long-term growth assets such as real estate equity, private equity, and hedge funds. Thus, in total, 70% of corporate DB plan assets were invested in equities and other long-term growth assets. Similarly, Greenwich Associates reports that among endowments, 49% of assets were invested in domestic and international stocks, and another 22% of assets in real estate, private equity, and hedge funds—for a total of 71% in equities and other long-term growth assets.¹⁹

Among DC plans, the Employee Benefits Research Institute (EBRI) and the Investment Company Institute indicate that in 2002, 62% of participant assets were invested in equities, including diversified equities, company stock, and the equity component of balanced options.²⁰ Greenwich Associates found similar results for DC plans in 2003. And among Vanguard® plans, 69% of DC assets were invested in equities at the end of 2003.²¹

17 Vanguard (2004b).

18 Bodie and Clowes (2003).

19 Greenwich Associates (2003).

20 EBRI (2003) and Holden and VanDerhei (2003).

21 Vanguard (2003).

Common concerns

Several concerns typically surface during an investment committee's evaluation of a default fund. We comment on a number of them below.

“Give them time to make up their minds.” One conventional argument for selecting a conservative default fund is to give participants time to “make up their minds.” Thus sponsors invest participant accounts in a fixed-dollar fund under the expectation that at some point in the future, participants will make their own appropriate investment choices.

The drawback with this argument is based on the emerging body of research on inertia and procrastination among participants in retirement savings plans. In a wide range of plan decisions, research has shown that many plan participants are passive decision-makers.

In such circumstances, the default fund selected by the sponsor is the participant's decision. Many participants are unlikely to revisit the option chosen for them, and so sponsors need to ensure that they make an effective investment choice from the outset. From this perspective, it is hard to argue that participants will eventually make active choices—when the accumulating evidence suggests strongly that many will not.²²

401(k) loans. In 401(k) plans that offer loans, another argument for a conservative default fund is that a participant may use the plan for short-term savings objectives by borrowing from the plan. With a shorter time horizon for use of the plan's assets, there is a much lower chance that equities will yield higher returns than fixed-dollar investments. In such cases, a conservative default fund makes sense.

By law, however, loans are limited to half of a participant's account balance, and they are not a widely used feature in the typical plan. In 2003, 19% of participants in Vanguard-administered plans had an outstanding loan, representing 13% of the participant's account balance. Among participants with balances of less than \$10,000, 15% had a loan—but those individuals had borrowed 41% of their account balance.

Thus, even among low-balance participants, the overwhelming majority had not taken loans. So the use of loans is a much less important objective than the use of a DC plan for retirement purposes. In addition, sponsors concerned about loan use will note that, from an investment perspective, a loan is a fixed income investment. If default fund users make extensive use of loans in a given plan, this might suggest a higher equity exposure for the default fund, since the loan constitutes a fixed income asset in the participant's portfolio.

²² See our report, *Lessons From Behavioral Finance and the Autopilot 401(k)* (Vanguard, 2004a), for a summary of the research on inertia and procrastination.

Job changers. Some sponsors, particularly in high-turnover environments, observe that many participants in the default fund may be short-term employees. As a result, the plan chooses a conservative default fund because the participant may not be with the company for long and may want to use the plan assets when changing jobs.

Trustees should note, however, that throughout the legislative history of retirement plans, Congress has sought to encourage the preservation of account balances in employer retirement plans. It has done so through the 10% income tax penalty for early withdrawals, the retention rules on plan balances, and more recently through the requirement of automatic rollovers. In sum, the law is designed to encourage rollovers—not cashing out by participants.

Committees concerned about job changers need to consider this public policy objective for their plan—which suggests a focus on long-term investment of plan assets, not a conservative default fund.

Sophistication and risk tolerance of default fund participants. Many participants invested in a default fund are likely to be less knowledgeable or less sophisticated investors. After all, they have failed to make an investment decision. They also may be more risk-averse because of their lack of investment experience or education. Therefore, some sponsors suggest that the default fund should be conservative to reflect the risk tolerance of the actual default fund users.

However, this perspective fails to account for the role of the plan sponsor as an ERISA fiduciary. Under the “prudent investor” standard, investment committees are expected to make informed and knowledgeable decisions about the investment of plan assets. Relying on the lack of sophistication of the participant seems contrary to this fiduciary requirement. Investing in an appropriate long-term default fund also gives the sponsor the opportunity to educate the inexperienced participant about basic investment principles.

Knowing the participant's financial situation. In some instances, sponsors choose fixed-dollar investments because they feel they are unable to assess the full financial picture of participants in the default fund. From their retail investing experience, sponsors are often familiar with the "know the customer" rules, under which a broker-dealer or investment advisor must have detailed knowledge about a customer before making investment recommendations. However, in the case of selecting a default option for a DC plan, the relevant standard for sponsors to apply is the broad "prudent investor" rule of ERISA, not the retail "know the customer" rules.

Avoiding litigation. Some attorneys counsel their clients to choose a fixed-dollar investment fund in order to minimize the risk of participant lawsuits. According to this reasoning, a participant who experiences a decline in his or her account balance is more likely to sue. Even if the participant has no basis for the lawsuit, the employer will incur legal costs.

In evaluating this issue, committees need to consider another litigation risk—the risk that participants may sue because of a failure of a plan sponsor to invest assets appropriately for the long term. If assets are not prudently invested over long periods, participant balances may fall short of what is needed to achieve adequate retirement savings. So, while there is some chance of litigation risk over "lost dollars" today, it must be balanced against the litigation risk arising from "lost dollars" tomorrow. The case for focusing on the long term is even more compelling in light of the sponsor's ERISA duty to act as a prudent investor would.

The DOL's automatic rollover regulations. In its regulation on the automatic rollover of small plan balances to individual retirement accounts, the DOL identified a money market fund as a default investment choice. Taking a cue from these regulations, some sponsors have suggested that a suitable default fund for a DC plan participant must also be a money market fund.

However, in drafting its automatic rollover regulations, the DOL chose a money market fund because it expected most automatic rollovers to be small balances, with no ongoing contributions. It specifically distinguished its own reasoning from the investment choices that sponsors and participants would make with regard to the DC plan itself: "The Department does not believe that an investment strategy adopted by a participant while in a DC plan or chosen by a plan fiduciary at a particular point in time continues to be appropriate. . . for an automatic rollover. . ." ²³

Put another way, the DOL believed that automatic rollovers were distinct from the investment decisions made by participants and sponsors with respect to plan assets. For this reason, the automatic rollover regulations are not relevant to the choice of a default fund for a retirement savings plan. ²⁴

23 Proposed Labor Reg. 2550.404a-2. 69 Fed. Reg. 9900, 9902 (March 2, 2004). At <http://www.dol.gov/ebsa/regs/fedreg/proposed/2004004551.pdf>

24 The argument in favor of a money market fund in an automatic rollover is that most participants receiving small plan balances today cash out their funds. Given that the rollover assets are short-term, a money market fund, therefore, makes sense. However, there is a strong argument that because of inertia, the automatic rollover rules will lead more participants to retain their rollover accounts for the long term—suggesting that an appropriate default option for automatic rollovers should be a balanced fund. Today participants with a small balance receive a check, which encourages cashing out. Under the automatic rollover rules, participants will not receive a check and so are less likely to liquidate the IRA. Meanwhile, those participants who change jobs or retire and have an immediate financial need are likely to request a check from the plan, before the automatic rollover rules go into effect.

Policy recommendations

To improve the selection of default funds by plan sponsors, policymakers should take steps to encourage use of long-term investment options as a default fund. DOL regulations could offer some type of safe-harbor fiduciary relief in this area, just as 404(c) regulations offer fiduciary relief in the case of participant-directed investments.

It is important not only that employers adopt a suitable default option—but *that employers feel encouraged under the law to promote the default option to participants*. For participants who are unsure of how to make investment choices, often the simplest and lowest-cost solution is a balanced investment fund. Yet the law does not encourage employers and providers to communicate this simple fact.

In an ideal world, communication materials would actively promote the default option as an appropriate investment choice—while still describing the other investment options available to more knowledgeable investors. Sample materials might read: “Unsure of what to do? Do nothing—and the plan will make a prudent, diversified investment choice for you.”

The active use of default funds would meet the needs of participants unable or unwilling to make investment decisions. Moreover, it would be an easy way for sponsors to encourage long-term investment decision-making, whether through the mechanism of a traditional balanced fund, a life-cycle or target maturity fund, or a managed account option.

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Conclusion

Sponsors are revisiting a range of fiduciary duties in the current environment, including the question of the appropriate default fund for a DC plan. Today about 80% of plan sponsors choose a conservative fixed-dollar option suitable for short-term savings goals, rather than a portfolio suitable for long-term retirement investment goals.

As ERISA fiduciaries, sponsors are responsible for ensuring the appropriate investment of all plan assets when a participant fails to make a specific investment election. Any such investment decisions must conform to the “prudent investor” standard. The choice of a fixed-dollar fund seems inconsistent with the two main investment principles underlying participant education programs: the existence of a positive equity-risk premium and the inverse relationship between age and risk-taking ability.

In selecting a default fund, sponsors should evaluate the objective of their retirement savings plans as well as the investment principles they believe should govern prudent investment decisions. For those plans whose principal objective is retirement savings and whose participant communications rely on the equity risk premium and the age-based ability to assume risk, one or more balanced fund options is an appropriate default choice. Choices include: a single balanced fund, a series of balanced funds (either traditional, life-cycle, or target maturity), or possibly a managed account.

For those plans whose principal objective is retirement savings and whose participant communications rely on the equity risk premium and the age-based ability to assume risk, one or more balanced fund options is an appropriate default choice.

Appendix: wealth forecast assumptions

Our retirement wealth forecast is based on investment return, volatility, and inflation averages drawn from the 1960–2004 period (see table below). These assumptions provide a very conservative basis for comparing a cash investment with a balanced fund in two ways.

First, over this period, the equity risk premium is about 6%, with stocks returning about 12% and Treasury bills near 6% calculated on an arithmetic mean basis. This premium is substantially lower than the 7% to 8% typical of longer historical periods such as 1926–present. In this way, the retirement wealth forecast understates the potential benefits of the balanced fund option.

Second, real yields on fixed income investments during 1960–present are higher than over the typical 1926–present period. For example, the real yield on long-term investment-grade bonds is close to 400 basis points, while the real yield on cash is more than 160 basis points. Both of these assumptions are more reflective of the current bond market’s ability to demand significant risk premiums over inflation rather than the long-term historical data.

By comparison, if based on the common 1926–present period, our projections would show an even more favorable outcome for balanced fund investing.

Appendix Table. Returns, Volatility, and Inflation 1960–2004

	Arithmetic mean return	Geometric mean return	Standard deviation (σ)
Inflation (CPI)	4.28%	4.24%	3.07%
Treasury bills (cash)	5.82%	5.78%	2.87%
Long-term corporate bonds	8.12%	7.64%	10.53%
U.S. equities	11.77%	10.50%	16.54%
Real cash yields	1.54%	1.55%	
Real long-term bond yields	3.84%	3.40%	
Equity risk premium	5.95%	4.72%	

Note: Arithmetic mean returns are the simple average of yearly returns; they are used in the Monte Carlo simulation of projected returns. Geometric mean returns represent compound or cumulative investment results.

Source: The Vanguard Group, 2005.

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