



DESIGNING THE FUTURE OF TARGET-DATE FUNDS

A NEW BLUEPRINT FOR IMPROVING
RETIREMENT OUTCOMES

Daniel Loewy, CFA
Chief Investment Officer and Co-Head—Multi-Asset Solutions

Christopher Nikolich
Head—Glide Path Strategies (US)—Multi-Asset Solutions

IN THIS PAPER: Target-date funds are becoming the most critical pool of assets for meeting the retirement needs of America's workers. But we fear that many of the current funds are managed as relics of the past and don't incorporate today's best practices and solutions. To better equip America's workers for the financial needs of retirement, we have researched and developed an improved glide path design—incorporating a broader set of asset classes with a multi-manager architecture that can potentially reduce risk and build more retirement income.

“Target date” in a fund’s name refers to the approximate year when a plan participant expects to retire and begin withdrawing from his or her account. Target-date funds gradually adjust their asset allocation, lowering risk as a participant nears retirement. Investments in target-date funds are not guaranteed against loss of principal at any time, and account values can be more or less than the original amount invested—including at the time of the fund’s target date. Also, investing in target-date funds does not guarantee sufficient income in retirement.

Markets have evolved. Has your target-date fund?

EXECUTIVE SUMMARY

Target-date funds are the key to the future of retirement savings for American workers. While these funds have seen tremendous asset growth over the past decade, their investment design hasn't kept pace with available innovations. The result: many target-date strategies may fail to guard against today's heightened retirement risks.

It's time to revisit target-date fund designs and single-manager structures. Most retirement plans still use traditional designs that were adopted years ago, but fiduciary standards have changed. In fact, the US Department of Labor (DOL) has issued "Target Date Retirement Funds: Tips for ERISA Plan Fiduciaries," which highlights the need for plan sponsors to have a solid process for selecting and monitoring their target-date choice.

The investment environment has changed, too. A broader range of strategies is now available and time-tested, beyond traditional equity and fixed income. These strategies can help reduce sensitivity to market, interest-rate and inflation risks at different points in the glide path. And diversifying against these risks can improve overall outcomes versus a traditional glide path roughly 80% of the time.

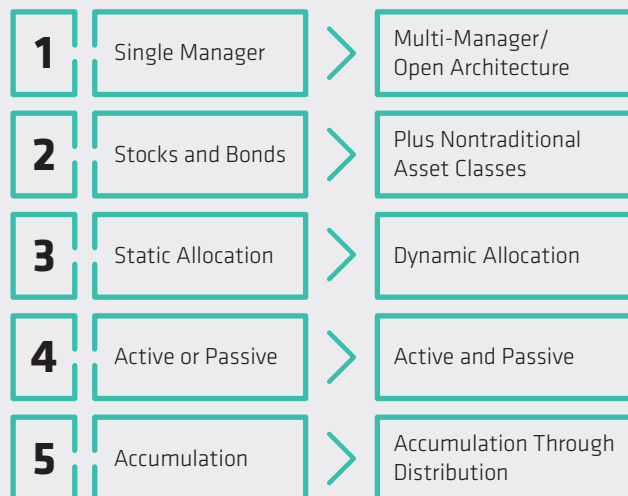
We see five key areas (*Display 1*) for evolving the state of target-date design:

- + Moving from a single investment manager to a multi-manager or open-architecture format to access best-of-breed managers and reduce concentration risk
- + Diversifying the underlying investment mix from a traditional stock/bond glide path to incorporate nontraditional asset classes, too
- + Providing greater flexibility to respond to short-term market fluctuations with a dynamic, rather than static, approach
- + Mixing active and passive investing strategies to enhance risk-adjusted returns and manage costs
- + Calibrating the glide path to deliver better results in the distribution phase of a retirement plan—a critical but often overlooked component of any retirement solution

AB has already applied these research insights to create better target-date solutions for large institutional retirement plans. We believe that this design will be the future of target-date funds for plans of all sizes.

DISPLAY 1: WHAT WILL THE NEXT-GENERATION TARGET-DATE FUNDS LOOK LIKE?

The Evolution of Target-Date Design



UPDATING RETIREMENT REALITY

Ten years ago, we published our first blueprint for target-date design. It was based on thorough research and a detailed analysis of what we found to be best practices for constructing a sensible glide path. A lot has changed since then. There are new tools available—new asset classes, new approaches to handling volatile market conditions and new interest in open-architecture structures that accommodate multiple investment managers. Most importantly, the Pension Protection Act of 2006 and regulations from the DOL gave new support to three types of all-in-one portfolios—target-date funds, balanced funds and managed accounts. These steps essentially blessed these asset-allocation investments as qualified default investment alternatives (QDIAs) with safe-harbor protections.¹

SELECTING THE RIGHT DEFAULT: THE CENTRAL DECISION FOR DC PLANS

QDIAs will increasingly define the retirement savings path for many workers—and the future of most companies' retirement plans. As older workers retire and companies automatically enroll new employees into a QDIA, defined contribution (DC) plan assets will increasingly move out of core menu options and into the default option. Just through this normal workforce turnover, within a decade the majority of many DC plans' assets will likely be invested in the plan's QDIA.

The projected dominance of QDIAs makes selecting or upgrading a DC plan's target-date offering more important because it is, by far, the most prevalent QDIA (*Display 2*). Of course, every addition to or deletion from the investment menu should be done carefully and thoughtfully, but the stakes are even higher in selecting a target-date offering. It's arguably the most important decision facing plan sponsors. A target-date fund will likely shape the retirement future of most employees in a plan—and the ultimate success of the retirement plan itself.

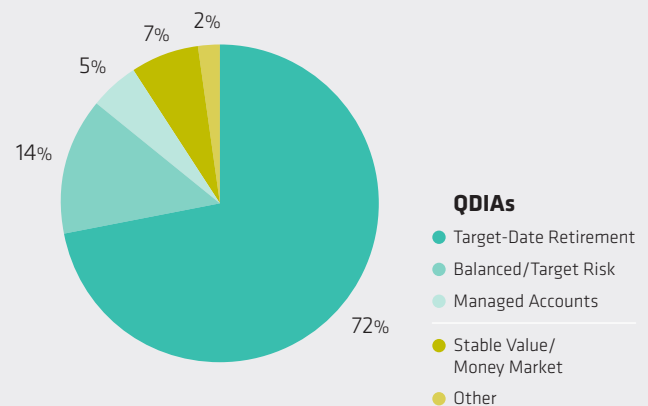
In the past, increasing plan-participation rates was the primary success measure for many DC plans. But that benchmark has changed. In our recent plan-sponsor survey, the most common measure of success is having employees feel confident about their

prospects for a comfortable retirement.² That means that plan sponsors need to put more energy into finding effective ways to help participants achieve that confidence. Essentially, plan sponsors need to use improved methods to provide a better, more reliable level of income replacement in retirement.

We feel it's time to revisit target-date funds and assess what we can do to make their glide paths and overall design work more effectively for the long-term retirement needs of workers. If the target-date fund isn't enhanced over time, it can't be best positioned to meet the needs of a growing number of participants who rely on it for their retirement confidence.

DISPLAY 2: TARGET-DATE FUNDS ARE THE MOST POPULAR PLAN DEFAULT

Current Plan Default Investment



Based on Callan Associate's 2014 *Defined Contribution Trends Survey* of 107 plan sponsors, primarily large and mega 401(k) plans as well as governmental and not-for-profit plans. Specific question posed to respondents was: "What is your current default investment alternative for nonparticipant-directed monies?"
Source: Callan Associates

¹ The DOL defined QDIAs as default investments that "include a mix of asset classes consistent with capital preservation or long-term capital appreciation or a blend of both." In 2007, the DOL specifically noted three types of diversified options: a target-date retirement fund product or model portfolio; a target-risk fund or model portfolio (such as a balanced fund); or an investment-management service that allocates a participant's assets among the plan's alternatives based on the participant's age, target retirement date or life expectancy.

² "Inside the Minds of Plan Sponsors," AB, 2014

Plan sponsors want more underlying manager and asset-class flexibility.

TARGET-DATE MARKET: QUICK TO GROW...SLOW TO INNOVATE

Target-date funds have grown sharply over the past decade—more DC plans offer them, more participants use them, and asset totals reflect their popularity. During that same time, investing strategies and vehicles have continued to evolve.

Target-date design has not kept pace, failing to reflect best practices adopted by other big pools of assets overseen by fiduciaries, such as pensions and endowments. Those best practices include:

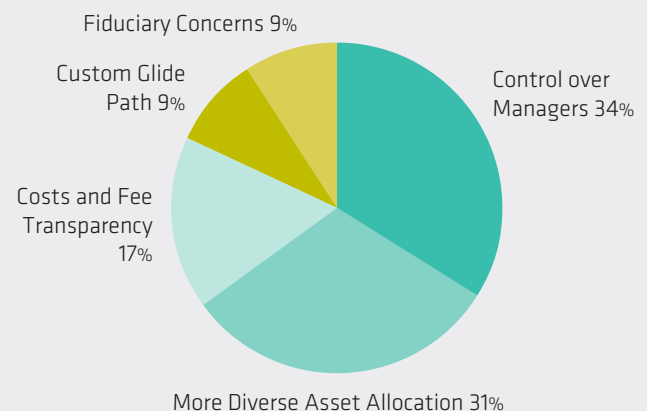
- + Using multiple investment managers to enhance diversification at several levels
- + Independent fund selection
- + Nontraditional investments, such as commodities, real estate and other liquid and illiquid alternatives
- + Dynamic methods for muting the most damaging effects of extreme market volatility

Why has the target-date landscape been slow to innovate? One factor may be that the top three target-date fund providers account for roughly three-fourths of the assets in the market—due in large part to their strong, historically bundled recordkeeping operations. No other large asset pool has such heavy concentration among so few providers—not retail mutual funds, high-net-worth investors, defined benefit (DB) plans, sovereign funds or endowments.

Another, perhaps bigger, concern is glide path diversification. The glide paths of these dominant providers aren't well diversified, by today's standards. A hypothetical average blend of the three dominant glide paths is composed almost entirely of stock and bond portfolios, with some cash and other short-term instruments in participants' later years. There's a nod to nontraditional investments, but it's only a minimal sliver of real assets such as commodities and real estate. It's also mostly limited to real estate investment trusts (REITs)—perhaps the most traditional investment in the nontraditional arena.

DISPLAY 3: WHY LARGE PLANS CUSTOMIZE TARGET-DATE FUNDS

Factors Mentioned by Sponsors in Selecting Custom Target Date



Source: Casey Quirk, *Target-Date Retirement Funds: The New Defined Contribution Battleground*, November 2009

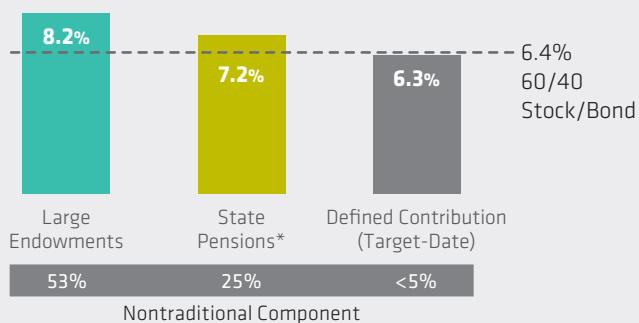
In sharp contrast, the largest DC plans have taken note of institutional best practices and gravitated toward customizing their target-date funds, tailoring the asset allocation to participant demographics. But DC plan sponsors have found that customization provides bigger benefits: control over underlying managers and a more diverse mix of asset classes (*Display 3*).

That diverse mix often incorporates a range of alternatives and nontraditional investments to further diversify traditional stock/bond allocations. For some investors, alternatives carry an undesired stigma of outsize risk, but nontraditional investments (beyond simple stocks and bonds) are helpful in a comprehensive, long-horizon retirement investment. They help reduce risk and generate return, which is important, given the more challenging return environment

Endowments and pensions have outperformed target-date funds. Why?

DISPLAY 4: DIVERSIFICATION HELPS BOOST RETURNS

Median 10-Year Returns for Large Endowments, State Pensions and Target-Date Funds (Ended June 30, 2013)



Large endowment sample consists of 78 endowments with assets greater than \$1 billion and totaling \$310 billion in assets; target-date sample consists of 17 target-date funds with 10-year track records totaling \$475 billion in assets and spanning 2020/30/40 vintages.

*Cliffwater 2014 Report on State Pension Asset Allocation and Performance, Cliffwater, August 4, 2014

Source: Cliffwater, eVestment, National Association of College and University Business Officers/Commonfund and AB

expected over the next couple of decades. In the recent past, the enhanced use of diversifying asset classes has been highlighted as a key reason that both large endowments and state pension plans outperformed target-date funds (*Display 4*).

We may see an acceleration in the gradual migration toward customized and multi-manager solutions in the next few years, partly due to the DOL's suggestion that fiduciaries look into custom or nonproprietary target-date funds (see "US Department of Labor: Focused on Target-Date Oversight," page 6). The DOL's recommendation is significant, given the heavy asset concentration among the major traditional target-date fund providers.

HURDLES AHEAD FOR TRADITIONAL GLIDE PATHS

There is a growing investment rationale for updating target-date designs. As we see it, traditional glide paths that rely exclusively on traditional stock and bond allocations will be less likely to deliver enough investment growth. On their own, they're not able to combat the four key risks that can derail an individual's retirement prospects:

1. Subpar investment growth
2. Market risk
3. Inflation risk
4. Increasing longevity

1. SUBPAR INVESTMENT GROWTH: THE LONG-TERM SAVINGS RISK

Below-normal investment growth is usually the first risk that investors confront—and the longest-lasting one. The failure to generate enough performance in the accumulation years has always shaped investment decisions and will likely become an even bigger challenge in the next decade. Investors will face relatively unfavorable market conditions for both stocks and bonds because quantitative easing by developed-market central banks has pushed down yields on both asset classes toward historical lows.

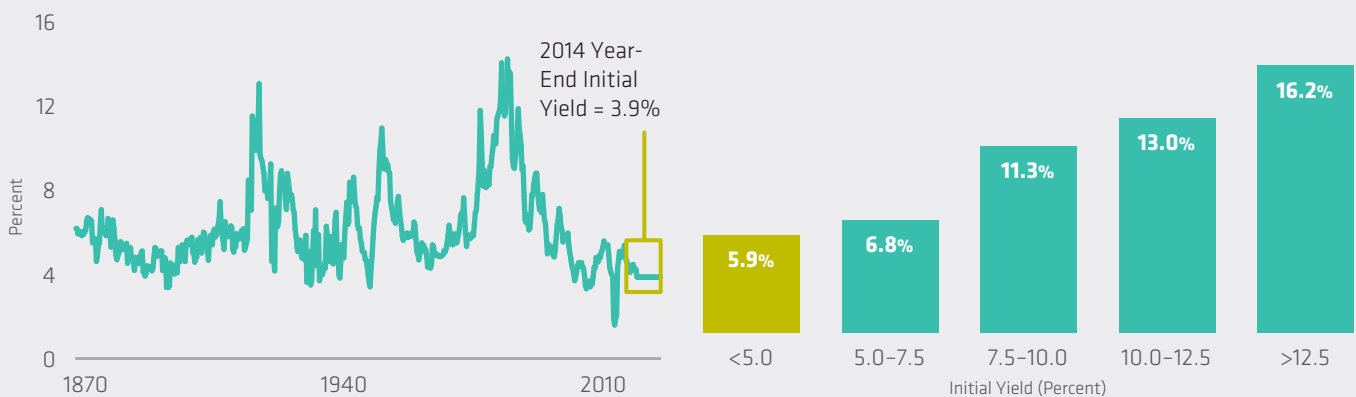
If we look at a hypothetical portfolio of 60% stocks (as represented by the S&P 500 Index) and 40% bonds (the 10-year US Treasury yield) over the past 150 years, initial yields of 3.9% (as of December 31, 2014) are about as low as they've ever been. That's not a good sign because those current yields may paint a dismal picture for returns ahead. Historically, when the initial yield has been under 5%, the forward 10-year return on a 60%/40% stock/bond portfolio has been well below historical averages (*Display 5, next page*).

To illustrate the impact that subpar investment growth can have on retirement savings, we can study the hypothetical experience of retirees through history. For example, let's turn to the early 1960s—when yields were comparable with today's.

DISPLAY 5: TODAY'S LOW INITIAL YIELDS HAVE HISTORICALLY RESULTED IN SUBPAR LONG-TERM INVESTMENT GROWTH

60/40 Stock/Bond Initial Yields 1871-2014

60/40 10-Year Returns vs. Initial Yield* 1871-2014



Historical analysis does not guarantee future results.

*Initial yield = 60% S&P 500 E/P and 40% 10-year US Treasury yield
Source: Bloomberg and Global Financial Data (GFD)

A participant who was 55 years old in 1962 would have had 22% less savings at retirement than the median 10-year outcome for participants aged 55 during the 1926–2004 period (*Display 6*). These lower savings would have been depleted within just 10 years after retirement. As we've noted, current market conditions mean that future growth rates are likely to be challenged. So we believe that while growth risk may always be an issue for investors, it's likely to be on the rise today.

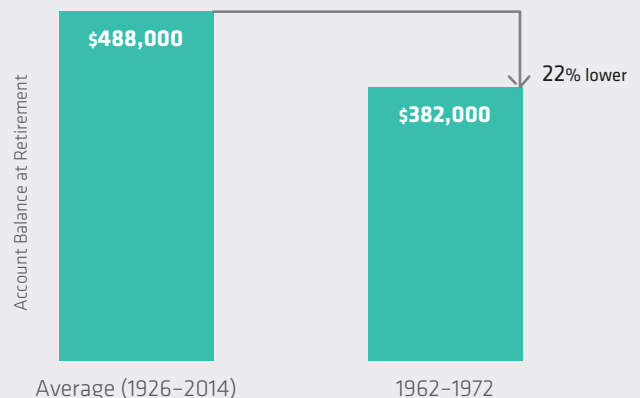
2. MARKET RISK: NOT ENOUGH RISK REDUCTION

Most individual investors want to avoid drastic short-term equity market plunges—especially in the period right before retirement, when they're about to start withdrawing income from their retirement accounts. If new retirees start drawing down funds even as markets are falling, that one-two punch could prevent their remaining capital from recovering enough to meet their long-term retirement needs.

Typically, bonds are the classic offset to equity risk, so it can be effective to reduce a glide path's equity exposure toward more of an even balance between stocks and bonds as an investor nears retirement. In fact, that approach has worked well during the last two decades, when the correlation between bonds and equities was sharply negative. For example, in the aftermath of the tech bubble and

DISPLAY 6: DIFFICULT MARKETS NEAR RETIREMENT CAN SEVERELY IMPACT SAVINGS

1962–1972 Is About 22% Lower than Average



Source: AB

US DEPARTMENT OF LABOR: FOCUSED ON TARGET-DATE OVERSIGHT

The DOL is the primary regulator in the retirement plan space. In 2013, it issued “Target Date Retirement Funds: Tips for ERISA Plan Fiduciaries,” which included helpful best-practices ideas. Because of the DOL’s stature, many plan sponsors take the hint and follow the guidance as fiduciary best practices.

These tips, combined with the DOL’s recommendations for DC plans in the Pension Protection Act of 2006 and subsequent guidance, have boosted the growth in target-date assets. The tips are also the DOL’s further recognition of the important role that target-date funds play in the future of American workers’ ability to retire comfortably—and when they want to retire.


It’s likely that many plan sponsors didn’t do a lot of due diligence when they selected the original target-date funds for their plans. In many cases, it may have been the only target-date choice recommended—or even allowed—by the recordkeeper. With new target-date fund designs and solutions available in the marketplace, the DOL is suggesting that plan sponsors have a solid process for selecting and monitoring their target-date choice.

Most of the DOL’s tips focus on process and review—a list of commonsense practices that a plan investment committee should go through:

- + Establish a process for comparing and selecting target-date funds
- + Establish a process for periodically reviewing them
- + Understand the fund’s investments and the glide path
 - + The strategy of the fund and underlying investments
 - + Does the glide path reach its most conservative allocation at target retirement date or later
- + Review the fund’s fees and investment expenses
- + Develop effective employee communications
- + Take advantage of the growing body of commercially available information on target-date funds
- + Document the selection and review process, including how fiduciaries reached decisions about individual investment options.

None of those tips were unexpected. But the DOL included one other tip that was more forward-looking: *Inquire about whether a custom or nonproprietary target-date fund would be a better fit for your plan.*

We find it interesting—and encouraging—that the DOL voiced its support for open-architecture, or at least independent, target-date fund design.



**“INQUIRE ABOUT WHETHER A CUSTOM OR
NONPROPRIETARY TARGET-DATE FUND WOULD
BE A BETTER FIT FOR YOUR PLAN.”**

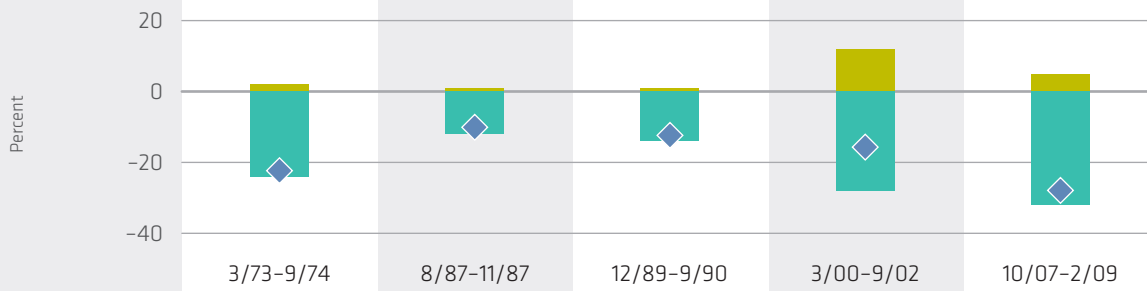
Will bonds provide effective diversification from stocks?

DISPLAY 7: BONDS HAVEN'T ALWAYS OFFSET MARKET RISK WHEN EQUITIES PLUNGED

Government Bond Yields

	Nifty Fifty Collapse	Black Monday	Savings & Loan Crisis	Tech Bubble Bursts	Global Financial Crisis	December 31, 2014
Start Yield	6.8%	8.5%	8.0%	6.3%	4.3%	1.4%
End Yield	8.1%	8.5%	8.5%	3.2%	2.1%	–

Peak-to-Trough Performance



● MSCI World Performance Contribution ● US Government Bond Performance Contribution ● 60/40 Total Return

Past performance does not guarantee future results.

60–40% total return comprises 60% stocks and 40% bonds; stocks are represented by MSCI World Index and bonds by AB data through 1987 and Bloomberg Barclays US Treasury Index thereafter.

Source: Bloomberg Barclays, Bloomberg and AB

global financial crisis, bond yields fell significantly, resulting in very strong bond returns, giving a balanced portfolio a meaningful cushion against equity market declines. Yields dropped over 300 basis points (from 6.3% to 3.2%) between 2000 and 2002 and 200 basis points (from 4.3% to 2.1%) through the 2007–2009 period (*Display 7*).

But bonds haven't always provided a large risk-reduction benefit when stocks have suffered steep declines. That was true for three earlier equity bear markets: the collapse of the "Nifty Fifty" large-cap US stocks in 1973, Black Monday in 1987, and the savings and loan crisis in late 1989. During the aftermath of those three, bond yields either stayed the same or rose, so they delivered returns that hardly made a dent in the severely negative equity returns.

How bonds may respond in the next bear market is very difficult to predict. But one thing is certain: With yields near historical lows

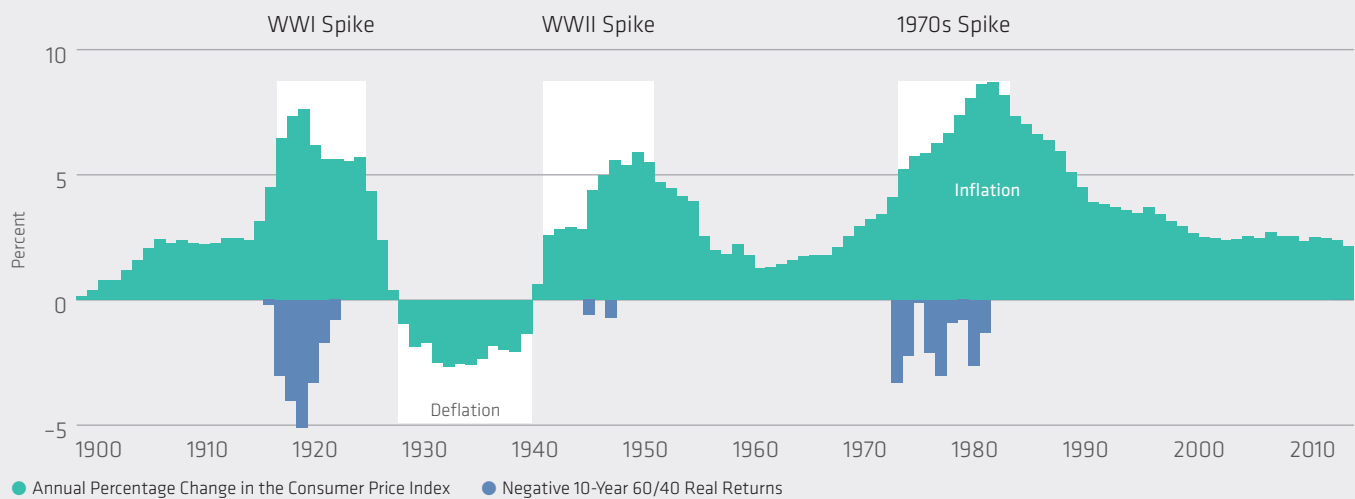
(1.4%, as of December 31, 2014), they would have little or no room to fall before hitting a 0% floor. So bonds aren't likely to return much during an equity market plunge and be as effective a shock absorber as they've been in the recent past. It's prudent for glide path managers to explore additional ways of reducing the potential losses from another equity market plunge.

3. INFLATION RISK: THE BANE OF RETIREES

We've had a remarkable 30-year run of declining interest rates and modest inflation. As a result, most of today's investors have little or no experience with the damaging effects of rising inflation on a portfolio. But even though extremely accommodative monetary policy hasn't ignited inflation yet, it does raise the odds of inflation picking up in the not-too-distant future. When inflation—or even concern about inflation—starts to rise, traditional stock/bond portfolios can turn on investors.

DISPLAY 8: ONLY DURING PERIODS OF HIGH INFLATION HAS A TRADITIONAL 60/40 PORTFOLIO DELIVERED NEGATIVE 10-YEAR REAL RETURNS

US Inflation and Negative 60/40 Real Returns, Rolling 10-Year Annualized



Through December 31, 2014.

Past performance does not guarantee future results.

This hypothetical portfolio comprises 60% stocks and 40% bonds; stocks are represented by the S&P 500 (with Global Financial Data extension) and bonds by 10-year Treasuries through 2009 and Bloomberg Barclays US Treasury 7–10 Year Total Return Index thereafter. Inflation is measured by the US consumer price index, US city average; all items, not seasonally adjusted, through December 2014.

Source: Bloomberg Barclays, GFD, US Bureau of Labor Statistics and AB

The last time US inflation surged was during the 1970s and 1980s (*Display 8*). Many investors fled bonds to avoid being tied to fixed-income payments when interest rates were rising and inflation was eating away their spending power. But they also demanded a bigger discount rate on equities, so both asset classes declined. This produced an extended period of negative returns for a traditional 60/40 portfolio. When inflation rises, the benefits of traditional diversification can break down, exposing participants to potential larger-than-expected downside risks.

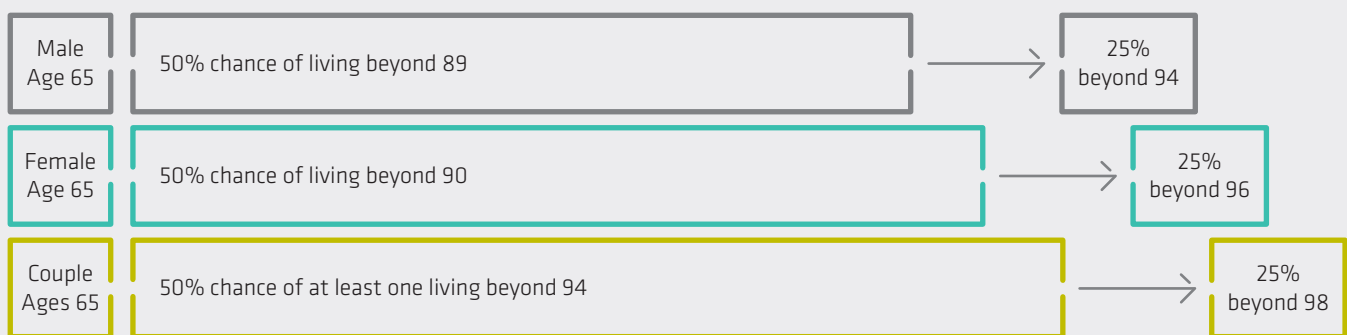
That's why inflation breakouts have historically been among the most destructive influences on a traditional stock/bond portfolio's returns. In *Display 8*, we look at that influence over time. The green bars show the annual percentage change in the Consumer Price Index

(CPI)—a general inflation gauge. The purple bars indicate periods when the rolling 10-year annualized return for a traditional stock/bond portfolio was negative in real (inflation-adjusted) terms. Those periods happened only when inflation was rising, making inflation a crucial risk that any glide path design should consider. But glide paths haven't paid much attention to this issue. However, inflation protection is cheap today, so its inclusion is both appealing and compelling.

4. INCREASING LONGEVITY: A LIFE BENEFIT, A PORTFOLIO RISK

The last risk on our list is a problem that most people would like to have: a long life. In the past century, the average life span in the US has increased by nearly 50%—from 55 years in 1900 to 79 in 2000 for females, and from 54 to 74 for males. Those are just the averages.

DISPLAY 9: FINANCING LONGER LIVING IS A GROWING PORTFOLIO RISK FOR INVESTORS



Source: *Risks and Process of Retirement Survey Report*, Society of Actuaries, 2012

Few participants realize that half of today's 65-year-old men will live beyond age 89 and that half of 65-year-old women will live past 90. For a couple reaching age 65, there's a 50% chance that at least one of them will live beyond age 94—and a 25% chance that one of them will live past age 98 (*Display 9*).

And the longevity trend keeps rising: one estimate suggests that half the children in the developed world born after 2000 will likely live to 100.³

Despite the clear evidence of rising longevity statistics, the possibility of outliving retirement assets still feels remote to many participants. Because of that, the severe impact that outliving assets can have on later retirement years doesn't get enough serious attention until it's about to happen—when there are few, if any, options to offset that risk.

Earlier planning for longevity risk might cause participants to save more, but they frequently underestimate how long they may live and overestimate how high a withdrawal rate they can afford. Our recent DC plan-participant survey found that nearly one quarter of respondents believe that they could withdraw a whopping 10% or

more annually from their DC plan savings without depleting their assets before they die. Four in 10 of our respondents believe that they could withdraw 7% or more annually.⁴

NOT NEW RISKS BUT BIGGER RISKS

None of these four risks are new. In fact, we examined them extensively in research we published a decade ago.⁵ The issue today is that these risks are all rising, putting retirement security out of reach for most workers.

As a starting point, we looked at how well today's traditional target-date design would have met the spending needs of a participant retiring at age 65 in 1973—the last time participants faced a market environment where all four key risks were heightened.

We started with a hypothetical stand-in for an industry average glide path: the average of the top three target-date fund providers' allocations. We then used historical indices to calculate market performance. And we combined that with the assumption that employee retirement spending would be 50% of their final year's salary. Assuming that the participant had \$500,000 (in today's

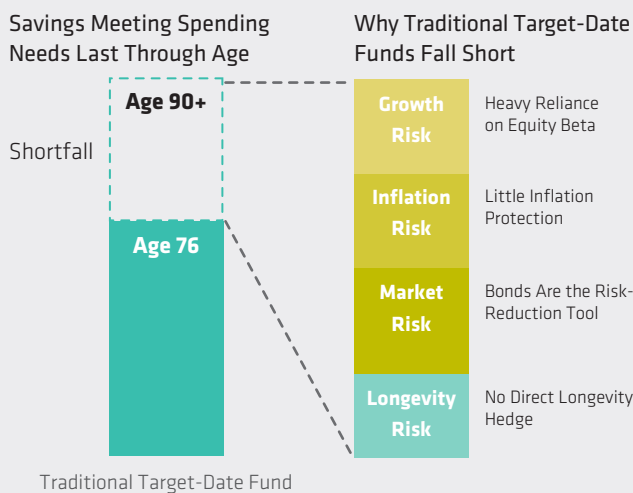
³ Alina Tugend, "Fears, and Opportunities, on the Road to Retirement," *The New York Times*, June 3, 2011

⁴ "Inside the Minds of Plan Participants," AB, 2014

⁵ "Target-Date Retirement Funds: A Blueprint for Effective Portfolio Construction," AB, 2005

A traditional target-date fund approach may lead to poor outcomes.

DISPLAY 10: TRADITIONAL TARGET-DATE FUNDS ARE FALLING SHORT



Since 1973, starting with \$500,000 at age 65, spending of 50% as replacement ratio, hypothetical target-date fund created by averaging the top three target-date mutual fund provider offerings

dollars) at retirement in 1973, he or she would have run out of money by age 76, only 11 years after retirement (*Display 10*).

So the four key risks would have eroded a participant’s savings in the hypothetical average target-date strategy. Equities—the key driver of portfolio returns—failed to deliver on their long-term promise. Second, market risk was a major contributor to shortfall probabilities because of large market plunges in retirement that left the portfolio unable to recover sufficiently. Third, inflation rose at an above-average rate during retirement, and the traditional portfolio doesn’t have enough inflation protection.

Lastly, anyone who lived past age 76 would have run out of savings in retirement—or been forced to drastically reduce spending. With half of the retirees expected to live past 90, this is a cautionary tale for anyone forming a retirement plan that tries to be successful only for the average life expectancy. And traditional retirement plans don’t have direct longevity protections.

MANY NEW TOOLS FOR MANAGING THE FOUR RISKS

We don’t think that plan sponsors and participants need to accept these rather depressing outcomes. In our original research, we highlighted how the four key retirement risks trump the traditional investment-risk metrics, which largely focused on portfolio volatility. These traditional measures don’t capture the true dangers that

DISPLAY 11: CORE GLIDE PATH PHILOSOPHY

	Accumulation		Decumulation	
	Young Saver (20-45)	Midlife Saver (45-65)	New Retiree (65-80)	Senior Retiree (80+)
Participant Savings Profile	Modest accumulated savings	Substantial savings	Highest savings	Possible savings depletion
Investment Objectives	Maximize savings growth Diversify to reduce risk without sacrificing return	Seek strong growth Reduce volatility over time	Well-diversified growth Avoid sharp market declines	Preserve purchasing power Minimize risk of loss
Traditional Asset-Class Solutions	Equities	REITs High-income bonds	Core bonds TIPS	Short duration bonds/cash
Key Risks Faced by Participant	Growth risk	Growth risk Market risk	Market risk Inflation risk Longevity risk	Inflation risk Longevity risk Market risk

participants face at different life stages. Ultimately, we estimated that a broader array of traditional asset-class exposures and good portfolio implementation could better guard against retirement risks (*Display 11, previous page*).

Over the years, we've evolved our blueprint as new investment strategies and vehicles have become available. Some of today's tools are already familiar to institutional investors and are increasingly gaining use more broadly across the investment community (*Display 12*). But to date, these tools haven't made their way into general use for target-date funds.

Some strategies, such as commodities and market-neutral funds,⁶ have been around for decades. Others, such as long-short credit⁷ and unconstrained bonds, have only recently come on the scene. New or old, nontraditional diversifying asset classes can help create portfolios that are better able to capitalize on market opportunities and combat the four major risks. Those characteristics explain why the expanded menu of risk-management tools is growing—and the innovation will continue. For example, Treasury Inflation-Protected Securities (TIPS) were a somewhat provocative asset class when they were included in target-date funds 10 years ago, partly because they appeared only in the late 1990s.

But which new tools are worth using in target-date funds, and which are too cumbersome or costly?

We provide DC plan sponsors and participants with a framework that analyzes key risks, evaluates the role of traditional and nontraditional diversifiers in combating them, and builds an enhanced glide path solution that we believe will improve retirement outcomes (*Display 13, next page*).

DISPLAY 12: USING TRADITIONAL ASSET CLASSES AND NEW TOOLS TO HELP MANAGE RISK

Traditional target-date fund asset classes

Large-Cap Equities	Small-Cap Equities	Non-US Equities	Emerging-Market Equities
Core Bonds	High-Yield Bonds	TIPS	Short-Duration Bonds

New tools

Defensive Equities	L/S Equities	Market-Neutral	Factor Investing
Unconstrained Bonds	L/S Credit	Commodities	Real Estate
Tactical Allocation	Tail Hedging	Risk Parity	Income Guarantees

⁶ Market-neutral funds are strategies that take long and short positions with minimal market exposure.

⁷ Long-short credits are strategies that take long and short positions in credit securities in order to mitigate market risk and interest-rate risk.

Incorporating a framework to enhance diversification.

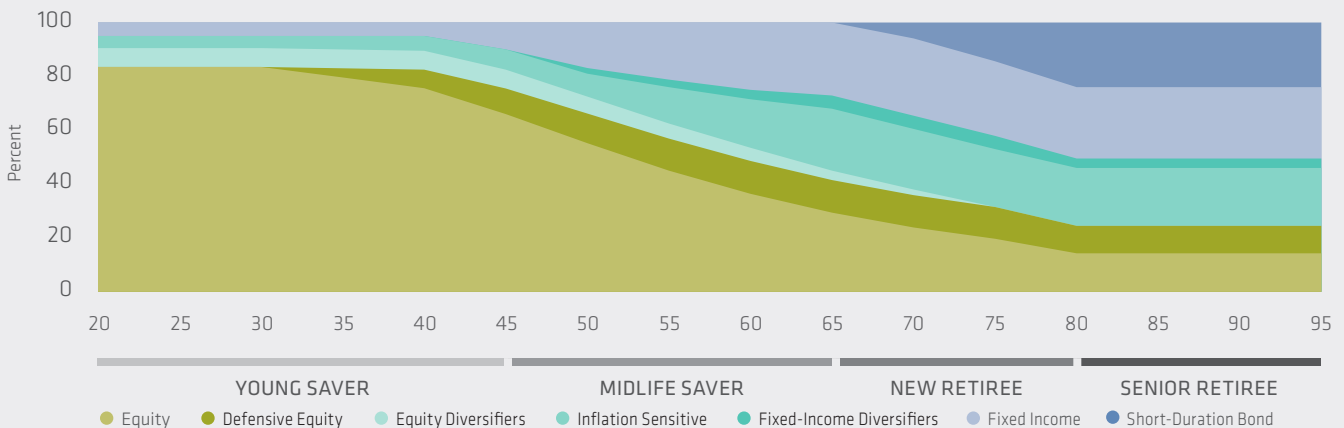
DISPLAY 13: ADVANCING TARGET-DATE DIVERSIFICATION TO MUTE HEIGHTENED RISKS THAT PARTICIPANTS FACE TODAY

	Growth Risk	Inflation Risk	Market Risk	Longevity Risk
How It Happens	Equities fail to deliver long-term growth	Inflation raises spending needs and leads to poor stock/bond returns	Large drawdowns near retirement permanently deplete capital	People are living longer and outliving their savings
Strategies to Reduce Risk	Strong returns with modest correlation to equity market	Strong growth in periods of rising inflation	Reduced sensitivity to market and interest-rate risk	Provide a reliable stream of income throughout retirement
Diversification Solutions	Equity Diversifiers L/S equity Risk parity	Inflation Diversifiers Real estate Commodities TIPS	Equity Risk Management Defensive equities Dynamic allocation Fixed-Income Diversifiers Market-neutral Unconstrained bond L/S credit	Guaranteed Income Component
	←————— Dynamic Asset Allocation —————→ ←————— Multi-Manager Design —————→			

Diversification does not guarantee a profit or eliminate risk.

DISPLAY 14: A NEW BLUEPRINT FOR TOMORROW'S TARGET-DATE FUND

High-Level Glide Path



For illustrative purposes only

DISPLAY 15: BRIDGING TRADITIONAL AND NONTRADITIONAL ASSET-CLASS EXPOSURES IN EFFORTS TO IMPROVE RESULTS

Equities	Growth	US, non-US developed & emerging market Large-, small- and mid-cap Defensive Style-factor-oriented
Equity Diversifiers	Growth with low correlation to equity market	Long/short equity Risk parity
Inflation-Sensitive	Strong performance during periods of rising inflation	Real estate Commodities Real bonds (TIPS)
Fixed-Income Diversifiers	Stable return with little interest-rate or market sensitivity	Unconstrained bonds Market-neutral
Fixed Income	Stability and income	Core High income Long duration Short duration US, global, currency-hedged

ADVANCING TARGET-DATE DIVERSIFICATION

Our new blueprint includes both equities and “equity diversifiers” to manage the growth risk that young savers face in the early part of the glide path. Equities still command the lion’s share of the allocation because they remain the most reliable engine for investment growth. But we believe that prudent diversification is possible without sacrificing returns. The role of equity diversifiers is to access other strategies that demonstrate strong growth potential but that have a more modest correlation to equity markets. So while it’s important to diversify the equity allocation by geography, capitalization and style, effective diversification doesn’t stop there (*Display 14, previous page, and Display 15*).

A number of good candidates exist to take it further—long-short equity strategies, for example. They reduce equity exposure by taking long positions in stocks that may rise and hedging the portfolio with

short positions in stocks that appear set to underperform. They’re designed to profit as much from a manager’s security-selection skill as from broad market performance. Risk-parity strategies also diversify away equity exposure, allocating portfolio risk across a very broad collection of asset classes like commodities, corporate bonds and government bonds, as well as stocks.

Later in the glide path, participants need more inflation protection. This element calls for strategies that generate strong growth in periods of rising inflation, such as real estate, commodities and inflation-protected bonds. We believe that these “inflation-sensitive diversifiers” are underused in most target-date offerings today, but they would be helpful additions in the middle to later stages of the glide path.

Reducing market risk becomes crucial as participants glide toward retirement, since large market losses can no longer be recouped through future income and savings. We think that lower-volatility “defensive equities” can be employed more extensively to manage stock market drawdowns.

In the retirement years, the glide path should diversify interest-rate risk. One way to do that is reducing the duration of the bond portfolio—but that will likely sacrifice income. “Fixed-income diversifiers” should be included, too, as a way of reducing the risk of rising interest rates without sacrificing the return that investors would give up with a large cash position.

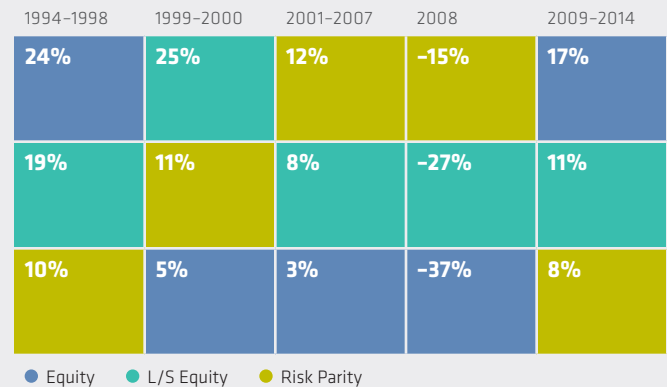
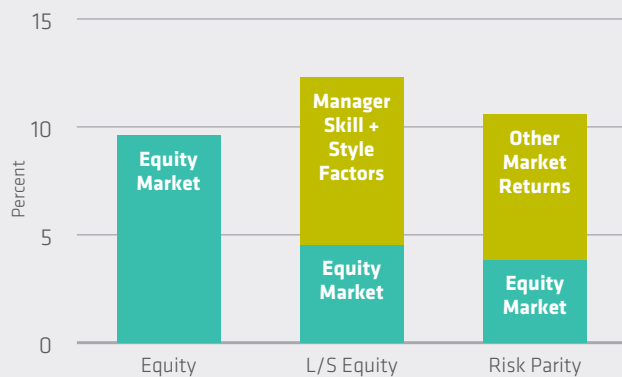
For senior retirees, there are ways to hedge against longevity risk that can be directly incorporated into a target-date design (see “Transforming Target-Date Results with Lifetime Guarantees,” page 21). But the critical issue is to make sure that the glide path manages the portfolio’s growth risk through retirement, not simply to retirement. That way, participants can keep enough growth assets in their portfolios to satisfy spending needs well beyond the average life expectancy.

And as we’ll describe, a dynamic allocation and multi-manager process of diversifying risk should be considered across the entire glide path, as a way to manage changes in market risks and allow participants to gain “best-of-breed” access to managers across the asset spectrum.

DISPLAY 16: LONG-SHORT EQUITY AND RISK PARITY HELP CREATE MORE CONSISTENT RETURNS WHILE MUTING GROWTH RISK

Historically Strong Returns with Modest Correlation to Equity Market

Equity Diversifier Performance over Time



For the period January 31, 1990–December 31, 2014

Past performance does not guarantee future results.

US equities are based on S&P 500; total equity hedge is based on HFRI Equity Hedge (Total) Index; risk parity is based on Salient Risk Parity Index returns. Down market is defined as a month where return is less than zero. Down-market return is calculated by taking the average of the returns of down-market months.

Source: Hedge Fund Research, Salient Partners and S&P

EQUITY DIVERSIFICATION SEEKS TO DELIVER CONSISTENT GROWTH

In evaluating various equity-diversifying strategies (Display 15, previous page), we’re looking for the ones with strong return potential but less correlation to the equity market—and we’re evaluating the best way to incorporate them into the glide path. The objective isn’t to give up growth but to find strategies that grow at different paces and at different times in an economic cycle.

We looked at average annual returns over the last 25 years for long-only equities, long-short equities and risk-parity strategies. Returns for the three categories have been essentially comparable over the long term—but they’ve generated their returns from different sources (*Display 16*).

Long-short equity generates more than half its returns from factors outside the benchmark movements of the equity market. What’s important in long-short equity strategies is manager skill (think “alpha diversification”). That means selecting securities, exposing the strategy to different factors that offer attractive returns within the market and tactically adjusting across factors to increase returns.

Those factors could be value or growth styles, quality, profitability or momentum strategies.

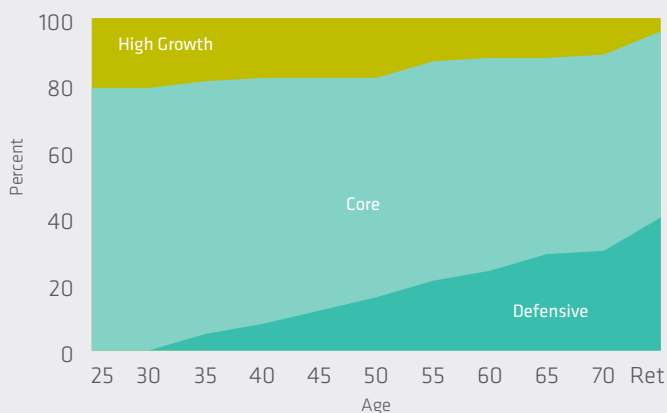
Risk-parity strategies generate diversification not by selecting individual securities but by diversifying across broad asset markets (think “beta diversification”). They don’t rely on equity market returns alone. They diversify their exposure across interest rates, commodities, credit and other asset classes. And they use some leverage to deliver a more consistent return pattern, structuring this part of the portfolio so that there’s an equal risk contribution from multiple asset classes.

There’s a clear benefit in using both long-short equities and risk-parity strategies, which typically surfaces during sharp market plunges such as in 2008. But it’s even more worthwhile during lengthy periods of underperformance from equities—the traditional growth engine for portfolios. That was the case for the 10-year period from 1999 through 2008: equities delivered an average annualized return of –1.4%, while long-short equity and risk parity actually delivered stable, more consistent return patterns of 6.9% and 9.0%, respectively.

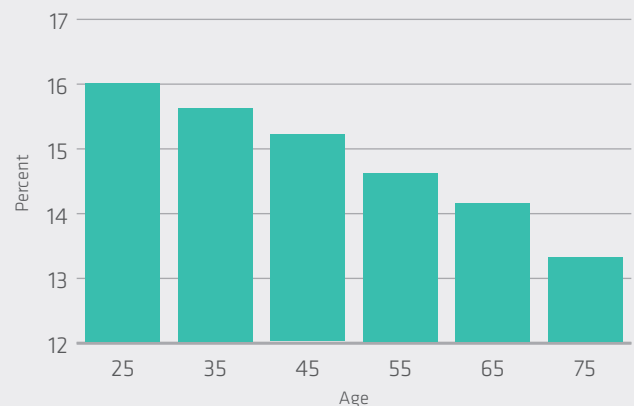
All equities
do not perform
similarly.

DISPLAY 17: DEFENSIVE EQUITY STRATEGIES HAVE REDUCED SENSITIVITY TO MARKET RISK IN RETIREMENT

Equity Glide Path



Volatility of Equity Glide Path



As of December 31, 2014

Volatility is based on historical simulated monthly returns of the equity sleeve from January 1999 to December 2014. The allocation is based on the equity portion of AB Multi-Manager Select Retirement Funds. Performance of underlying strategies is represented by monthly returns of asset-class benchmarks: US large-cap is by Russell 1000 Index; US small- and mid-cap by Russell 2500 Index; international developed by MSCI EAFE Index; emerging market by MSCI Emerging Market Index; defensive by MSCI World Minimum Volatility Index. The simulated portfolio is rebalanced monthly without fee or transaction cost.

Source: MSCI, Russell Investments and AB

The fundamental reason for diversification holds true here: no one asset class or strategy outperforms all the time. Those divergent returns for long-short equities and risk-parity strategies won't happen over all periods. If we diversify away from equities when they're the best-performing asset class, the other strategies will lag. That was the case during the bull market of the late 1990s—and that has also happened since the end of the recent financial crisis. But better diversification—in this case, incorporating equity diversifiers—helps create a more consistent level of growth over the long term. And we believe that adding equity diversifiers won't sacrifice long-term portfolio growth; it will actually enhance it.

DEFENSIVE EQUITIES TO MODERATE MARKET RISK

Besides diversifying the equity portion of a portfolio to find more consistent growth, we can also diversify to help reduce market risk, especially near or in retirement. We can use different types of equity strategies—ones with higher or lower volatility and performance patterns—to different degrees along the glide path (*Display 17*).

Early on, participants' risk tolerance is very high, and most of their financial assets reside in their future income. They can take on much more market risk in those early years because they have more time to absorb a short-term market plunge—and they have fewer portfolio assets to be impacted by those downturns.

This risk profile allows us to include larger weightings in higher-risk, higher-growth strategies such as emerging markets and small-cap equities. We can also include "frontier" emerging markets that have even higher potential (and risk) than the more established, traditional emerging markets. And it's not just the geographical and capitalization makeup that might vary. The equity component should have specific allocations to actively managed long-term strategic styles such as value and growth investing, which may require longer time horizons to realize their alpha potential.

As participants move toward retirement, the equity part of the glide path should adjust to include more defensive strategies that cushion against downside scenarios and typically fall less than the overall market in periods of stress. These strategies may include low-volatility

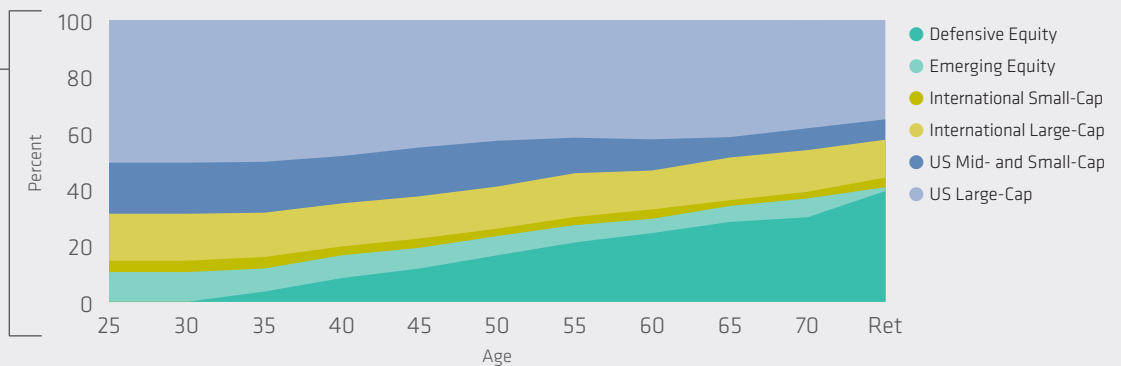
GLIDE PATHS WITHIN THE GLIDE PATH

Within each of the glide path's three major asset categories—equities, diversifiers and fixed income—our research guides the

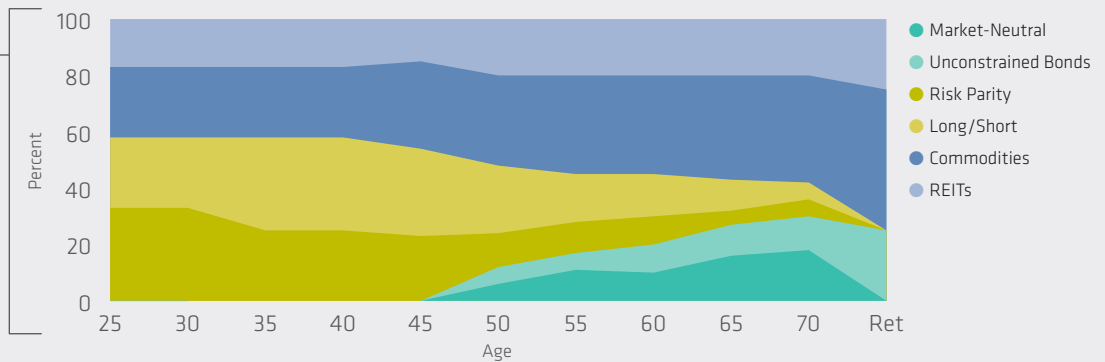
calibration of the various underlying components, essentially constructing glide paths within the overall target-date framework.

A CLOSER LOOK AT:

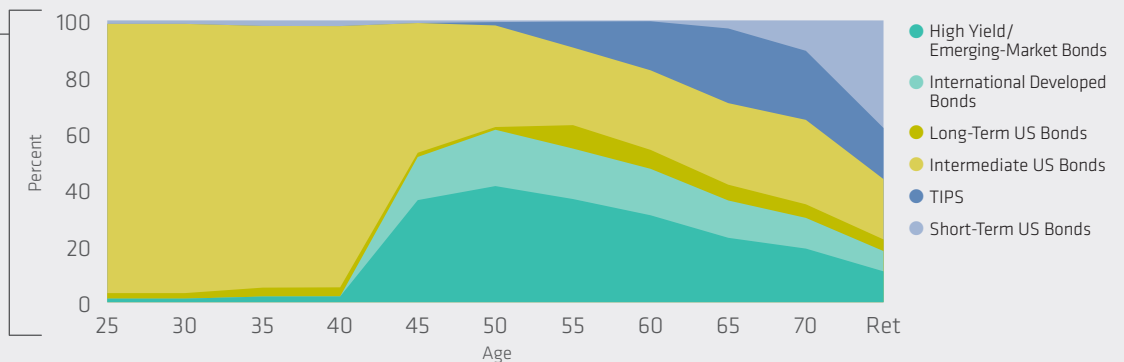
EQUITIES



DIVERSIFIERS



FIXED INCOME

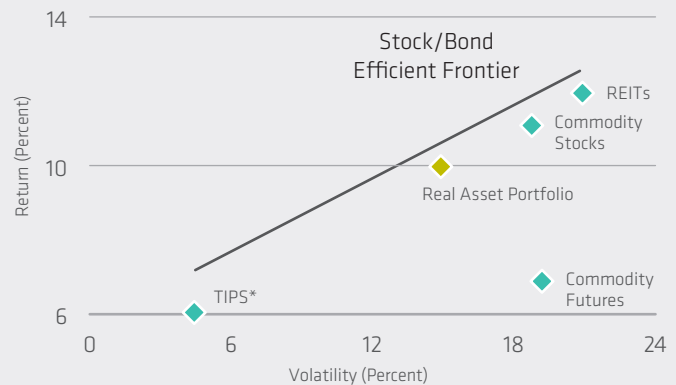
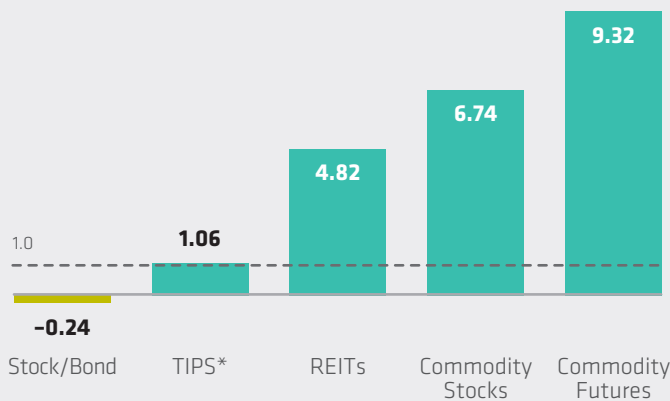


For illustrative purposes only

DISPLAY 18: A MIX OF INFLATION-SENSITIVE ASSETS HAS POTENTIAL TO OFFSET INFLATION SHOCKS IN A COST-EFFECTIVE WAY

Average Annualized Performance for 1% Rise in Inflation, 1Q:90–2Q:14

Return and Volatility, 1Q:90–2Q:14



Through June 30, 2014

Past performance does not guarantee future results.

*TIPS data from 1Q:98

Source: BCOM, Bloomberg, Federal Reserve Bank of Philadelphia, FTSE EPRA/NAREIT, GSCI, S&P and S&P Dow Jones

equities and strategies focused on companies with higher-quality cash flows and dividends. Essentially, we can think of this evolution of equity exposure as a glide path within the glide path.

With a graduated approach to adjusting from aggressive to more moderate equity strategies, we can rein in the volatility of the glide path's equity component. This tempering of exposure to potential volatility means that every dollar that a participant has in equities becomes less volatile in later years (Display 17, page 15). It provides a bit more downside protection during short-term market drops, which is important during retirement. It will likely give up a small amount of upside growth, but we think that's a trade that participants are willing to make—especially during the period right before they retire.

INFLATION DIVERSIFIERS: THE DELICATE BALANCE

Rising inflation poses a big investment problem: The benefits of traditional stock/bond diversification can break down, which could expose participants to larger-than-expected downside risks. With enough time during the accumulation phase, a portfolio can absorb the shocks of inflation. But inflation risk becomes acutely important for participants near or in retirement. That's when the portfolio really

needs tools to offset the impact of a traditional portfolio's decline in value just as spending needs rise due to an inflationary environment.

Several asset classes shine when inflation is rising, but traditional stocks and bonds aren't among them. TIPS will absorb the upward movement of inflation, and they're very important in protecting a bond portfolio against inflation. But they don't actually provide any further upside to guard against poor stock performance during inflationary periods.

However, various real assets—such as REITs, commodity stocks and commodity futures—respond quite positively when inflation is rising, or even when expectations for future inflation rise. Also, given their higher inflation beta (how much performance tends to move for every 1% change in the CPI), they can offer inflation-risk protection to the growth portion of the portfolio (Display 18, left). We can think of these asset classes as a form of insurance that pays off when inflation and/or inflation expectations rise. That's because these assets either cause the inflation (like certain commodities) or they're quickly able to pass through rises in inflation by hiking rent prices (like real estate).

How will your target-date fund perform when interest rates rise?

Exposure to inflation-sensitive assets sounds good and worthwhile to many people. As a result, inflation protection can be priced at a premium to traditional stocks and bonds. For example, when we place REITs, commodity stocks, commodity futures and TIPS on the stock/bond efficient frontier for risk and return, they each fall below it—some quite far below (Display 18, previous page, right). So investors have to sacrifice some return or take on substantially more volatility in exchange for the inflation protection that any one of these asset classes provides on its own.

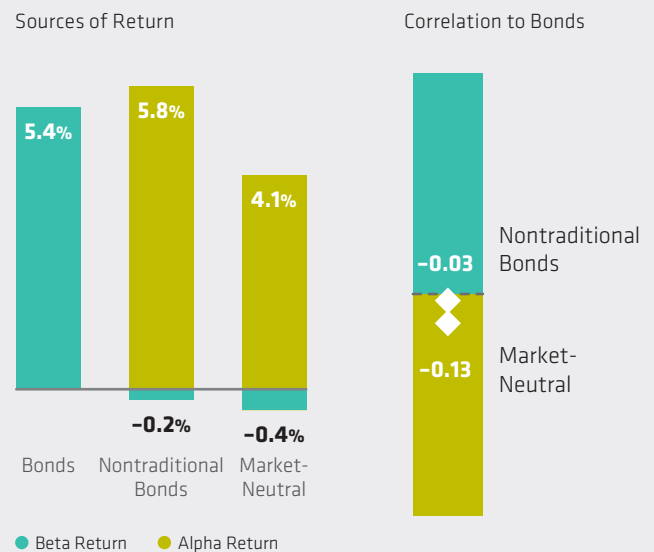
But we can minimize some of that return sacrifice by blending various real assets together. Commodity stocks, commodity futures and real estate have low correlations to one another, and they respond differently depending on the inflationary regime. So they're well suited to one another for diversification purposes. When we combine them, we can deliver a significant "inflation beta" while still maintaining an efficient risk-adjusted return.

SEEKING TO REDUCE INTEREST-RATE SENSITIVITY OF BONDS

Another key risk that can be reduced with an expanded tool set is interest-rate risk, which increases in a glide path as investors move into their retirement years. We see several ways to include greater diversification to the glide path's bond allocation to achieve that goal.

- 1. High-Income Strategies**, like high-yield and emerging-market bonds, are effective diversifiers for participants in the midlife stage because these strategies offer higher returns than traditional bonds. They also have less interest-rate sensitivity than a core bond allocation.
- 2. Global Bond Strategies** hedged to the US dollar can diversify interest-rate risk across many geographies and lessen the impact of a sharp rise in US interest rates.
- 3. Low-Duration Strategies** added later in life help reduce interest-rate sensitivity and volatility, but they do so at a cost to long-term returns.
- 4. Fixed-Income Diversifiers** are another underused alternative. These active strategies are designed to generate stable returns without being sensitive to the interest-rate environment, as their returns are driven predominantly by manager skill rather than broad market exposure—an appealing trait as we enter a period that's likely to see rising rates. Nontraditional bonds and market-neutral strategies are two examples (*Display 19*).

DISPLAY 19: FIXED-INCOME DIVERSIFIERS HELP REDUCE INTEREST-RATE RISK FOR RETIREES



For the period January 31, 2000–December 31, 2014
Past performance does not guarantee future results
 Down market is defined as a month where return is negative.
 Source: Bonds are Bloomberg Barclays US Treasuries; nontraditional bonds are mean return of Morningstar nontraditional bond universe; market-neutral is HFRI EH: Equity Market Neutral Index.

Nontraditional bonds, focusing on absolute returns, tend to be more unconstrained than traditional bond funds. Some nontraditional bond strategies use various ways to manage interest-rate sensitivity. They may include high-yield bonds, securitized loans, foreign sovereign bonds and corporate debt. Equity market-neutral strategies generally take long and short equity positions and attempt to hedge out all market exposure. These funds work to provide small but steady returns in all market conditions.

These two categories—nontraditional bonds and market-neutral equities—generate returns from alternative approaches to the markets. They're uncorrelated to the typical long-only bond market and provide important diversification during periods of rising interest rates. Display 19 shows that the correlation of these strategies to US Treasury bonds (or interest-rate risk) has been virtually zero for the past 15 years.

Before incorporating these strategies into a target-date glide path, it's important to determine when and where they best fit as an allocation. We believe that they work best as a substitute for some part of fixed-income exposure late in the glide path. But the "who" is just as important as the "when" and "where." These are active strategies that don't depend on market movement (beta) as much as they depend on individual manager skill (alpha). So they need careful manager selection—a filtering process for sifting through the universe of managers with widely variable approaches and strategies and making sure that the return source will last.

RISK MANAGEMENT ACROSS THE GLIDE PATH

Using the broader set of asset-class and strategy tools helps the strategic allocation do a better job of managing retirement risks. But prudent glide path management also requires the use of two other risk-management strategies: dynamic asset allocation and multiple managers across the glide path.

Dynamic asset allocation. The best target-date structures should incorporate a certain amount of flexibility; like trees and tall buildings,

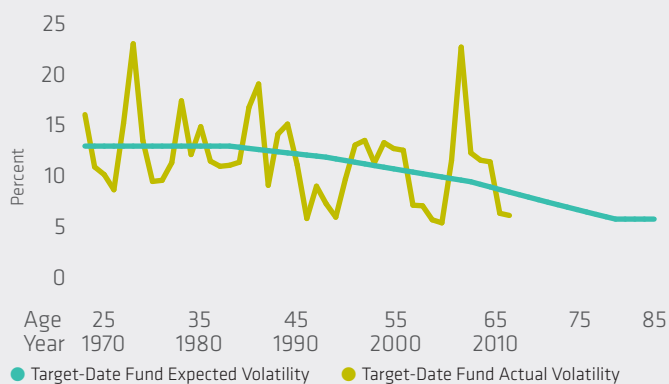
target-date funds need to bend with the wind. That's because even the most thoughtful views on asset-class risk and return will need to be constantly revisited as market conditions change.

For example, there can be a significant disconnect between the volatility of a glide path that's expected, based on the overall stock/bond mix, and the volatility that's realized in extraordinarily volatile market environments. We've witnessed multiple periods of elevated risk, but it would have been particularly evident to someone who was approaching retirement in 2008, when realized volatility was double the long-run expectations (*Display 20, left*). Volatility this high can produce a large portfolio drawdown right before a participant is about to retire and start withdrawing cash—it can permanently damage their capital and feeling of retirement security.

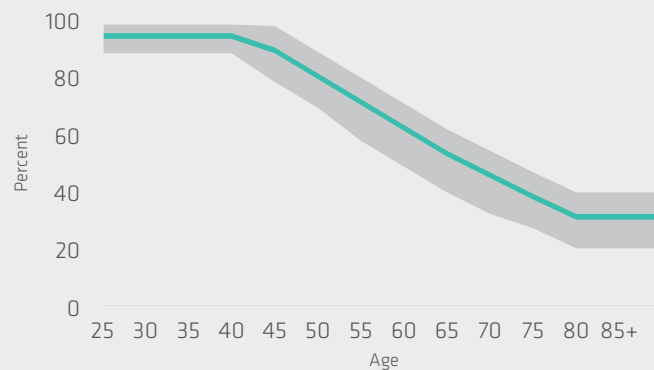
Dynamic asset allocation provides the ability to monitor and adjust the glide path, responding to meaningful changes in market conditions. If there's a big increase in market volatility or a sharp change in the correlation characteristics of different diversifying asset classes,

DISPLAY 20: SHORT-TERM RISK CAN BE MITIGATED WITH A DYNAMIC APPROACH

In the Short Term, Portfolio Volatility Varies Substantially from Long-Term Expectations



Moderate-Growth Glide Path Typical Range



Through December 31, 2014

Past performance does not guarantee future results.

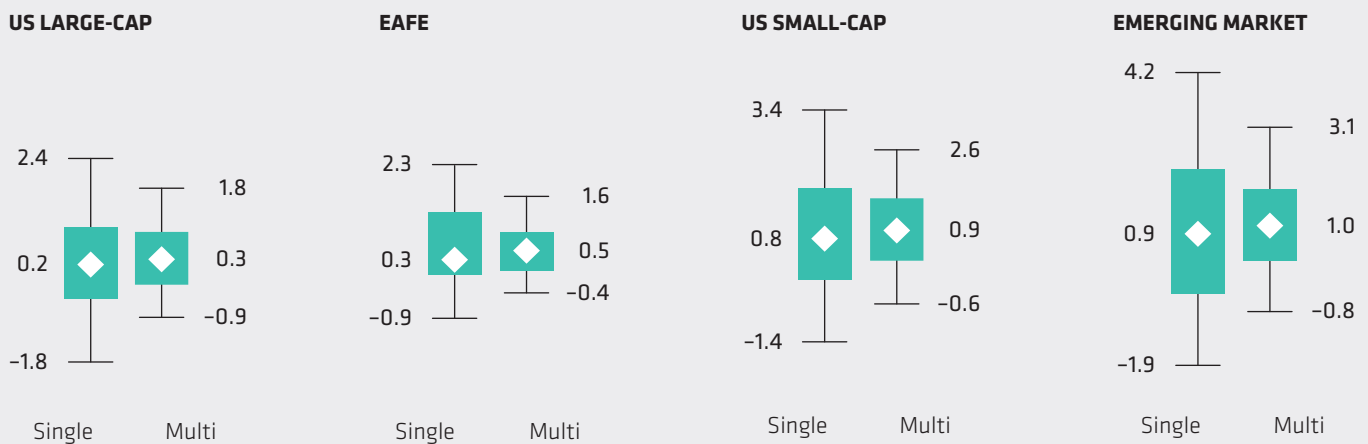
Individuals cannot invest directly in an index. Index volatility is not representative of the volatility of any AB product or fund. Target-date fund average volatility based on one-year average 1970–2014. Actual volatility based on average 12-month trailing realized volatility for a simulated 2010 Target-Date Fund. These target-date funds are not representative of any AB target-date product.

Source: Bank of America Merrill Lynch, Bloomberg Barclays, FTSE, MSCI, Russell Investments and AB

A multi-manager approach can provide tangible benefits.

DISPLAY 21: A MULTI-MANAGER ALLOCATION HAS HISTORICALLY PRODUCED MORE STABLE RETURNS AND IMPROVED MEDIAN ALPHA VERSUS A SINGLE-MANAGER ALLOCATION

Percentage average annualized outperformance versus benchmark, 2004–2014



Past performance does not guarantee future results.

Single takes the percentile of all funds in each category. Multi takes the percentile of all possible combinations of three funds within each category. Annual excess returns from 2004–2014. Benchmark for Core US Large-Cap Equity is S&P 500 Index; Core US Small-Cap Equity is Russell 2000 Index; Core EAFE Equity is MSCI EAFE; Core Emerging Market Equity is MSCI Emerging Market. Subtracted an estimate of 63 basis points for survivorship bias based on academic papers
Source: eVestment, MSCI and Russell Investments

adjustments to the glide path may be able to mute the effect of those risks, providing significant benefits to participants.

We think that this type of strategy should focus primarily on risk moderation—not alpha generation. So the band (or range of flexibility) within which the overall equity allocation can be adjusted during extreme market conditions should typically be tilted toward the downside (Display 20, previous page). Target-date funds may be long-horizon strategies, but they’re more likely to function better if they include some capacity for flexible adjustments and aren’t simply set on autopilot. When market conditions change, the investment manager can adapt the glide path to reduce the risk to participants. The flexibility of additional volatility management is especially worthwhile just before retirement—a critical savings period for a participant’s portfolio to generate income throughout retirement.

Multi-manager approach. Implementing the glide path through a multi-manager structure is another prudent risk-management strategy. This approach is actually common across most of the investment-management industry—but not yet in the target-date fund arena. Single-manager structures may compromise plan sponsors’ fiduciary prudence and have an adverse economic impact on participants. After all, it’s highly unlikely that any one investment-management firm can be best-of-class in all asset classes.

We calculated the performance of multi-manager portfolios by using funds from multiple combinations of three managers and compared these with the performance of individual managers’ funds. We looked at all possible three-manager combinations that had performance figures available from 2004 through 2014. Our research shows that using multi-manager funds has historically produced more stable

returns with improved median alpha compared with single-manager actively managed funds.

For example, in four major equity categories—US large-cap, international (Europe, Australasia and Far East, or EAFE), US small-cap and emerging-market equities—the median returns for multi-manager portfolios in each category do better than the single-manager median result (*Display 21, previous page*). Also, the range of returns for the multi-manager results is tighter, which could provide greater consistency—and contain loss potential better.

Currently, single-manager, proprietary target-date funds still dominate the market. But the status quo may soon change, now that the DOL has encouraged plan sponsors to consider customized and nonproprietary offerings.

TRANSFORMING TARGET-DATE RESULTS WITH LIFETIME GUARANTEES

Typically, DC plans focus on accumulating assets, not translating them into income during retirement. As a result, very few plan participants have a clear idea of how much retirement income their accounts are likely to provide—or how long they will provide it. Many participants are also unaware of how much more they'd need to contribute to achieve the retirement income they want.

The glide path enhancements described in this research can help improve asset accumulation and moderate economic and market risks faced by participants in retirement. But glide path improvements alone can't provide participants with complete certainty that they won't run out of money in retirement. Investors are still at the mercy of the market's trajectory—as well as their own life expectancy.

The only way to provide income certainty is to incorporate secure income provided through insurance products—a relatively new frontier for DC plans, and target-date funds in particular. Without income certainty, many retirees will either run out of money or be forced to curtail their spending.

For an income solution to have wide appeal among DC plan participants, an ideal secure income solution should incorporate the following desirable characteristics:

- + **Income certainty:** Most participants want a steady income stream in retirement, with a retirement withdrawal amount that will never go down, even if the market does.⁸
- + **Access to the retirement account:** Participants rarely purchase a traditional annuity at retirement because they're afraid to make an irrevocable decision. They want access to their assets at any time for any reason, without penalty.
- + **Ability to capture market upside:** While the focus is on a steady income, retirement can be a long period, of 30 or more years. The ability to capture the upside of growth in the market can potentially grow the account value as well as increase the income.
- + **Known fee and benefit rate:** The benefit rate and any applicable fee should be known ahead of time and not change with the market environment.
- + **Bequest to beneficiaries:** After the participant's death, any remaining assets in the account should go to the participant's beneficiaries without penalty—not to an insurance company.
- + **Multiple insurers:** Being backed by multiple top-rated life-insurance companies provides competition in obtaining the best rates and sustainability of the solution.
- + **Personalization:** Participants have diverse life goals, and their investment strategy should have some flexibility to accommodate those differences. The secure income feature should allow participants to choose when they want to retire and how much secure income they need.

This combined wish list of secure income features can serve as the template for a suitable solution. Our recent participant survey found strong appeal for such a solution among participants. Surprisingly, we also found that 74% of non-plan participants said that they would be interested in such an investment and that it would enhance their desire to take part in their employer's DC plan. For plan sponsors committed to increasing plan-participation levels, this is noteworthy.

But for such a solution to be successful, plans need to effortlessly connect participants to it. In other words, it needs to be the default investment for the DC plan.

⁸ Among current target-date users in our recent survey "Inside the Minds of Plan Participants" 74% find a target-date fund offering a guaranteed income stream appealing or extremely appealing. Further, 53% of nonusers and 69% of non-plan participants also found it appealing or extremely appealing. The survey was conducted in early 2014 and consisted of a demographically diverse sampling of more than 1,000 US workers either in a DC plan or eligible to participate in such a plan.

ONE SOLUTION FOR LIFETIME INCOME: UNITED TECHNOLOGIES CORPORATION

In 2012, United Technologies Corporation (UTC) became the first large US DC plan to partner with AB on a secure lifetime income default option within its DC plan. Lifetime Income Strategy (LIS) combines the simplicity of a target-date fund with the security of lifetime income, guaranteed by multiple insurance companies.⁹ It's also an individualized, next-generation target-date solution because each participant's portfolio is based on his or her birth date, and he or she has the opportunity to indicate the portion of the account to be converted into guaranteed income. LIS is designed to protect participants from the risk of outliving their money and the impact of market volatility on retirement income—while providing the opportunity for growth.

First Steps: UTC had closed its DB plan, and company leaders decided that their DC plan should function more like a pension plan. In a series of meetings with the benefits group, treasury, investments and legal, they drafted three principles that informed the entire design process: keep it simple, flexible and cost-effective. The overarching objective: Do more than give workers the opportunity to save and invest for retirement. Help them be confident that they'll have adequate income in retirement.

That constituted a shift in framing—away from simply the savings and investments framework to incorporating steady retirement income as an explicit objective. For UTC, the importance of retirement income was manifold: security and certainty for participants; and the ability to attract and retain top talent for the company.

To keep it simple for employees, UTC's fiduciaries made LIS the plan default.

Choosing an Insurance Structure: The key issue that UTC had to resolve was the structure or vehicle that it would use for the guarantee. The company leaders compared many potential alternatives—from annuities to systematic withdrawal plans. They weighed the pros and cons, such as level of income and liquidity (or lack thereof). The plan could get the highest income out of an immediate fixed annuity and the greatest flexibility from systematic withdrawal plans. But it was the guaranteed lifetime withdrawal benefit (GLWB) that proved most appealing in addressing each aspect and option that UTC thought was critical to include.¹⁰

For example, liquidity was a must. They considered the possibility that a participant or an employee might lock into an immediate annuity one day, and go to a doctor the next day and get bad news. Employees in that situation would “lose the mortality lottery.” UTC didn't want to provide such a limited solution.

UTC wanted a fixed price up front on the benefits that it purchased. That means that as a participant's assets get folded into the portfolio's secure income allocation, the pricing and income rate for that portion is fixed at the time of that purchase. Ultimately, the value of the overall insured component's benefits can change in the future, but anything that has already been purchased is fixed at that time.

In terms of fees, UTC looked at market rates for very similar benefits in the retail market. It also looked at what alternatives cost in the institutional market. In terms of UTC's three basic principles, the GLWB solution managed to address simplicity and flexibility, while keeping cost dramatically lower than what was available in virtually any other form.

Multiple Insurers: One critical—and unique—ingredient of the LIS was not being beholden to any one particular insurance company. Having multiple insurers on the LIS platform was attractive from at least two different perspectives: competition (and therefore pricing power) and sustainability (minimizing insurer and capacity risks). A structure was implemented where, on a regular basis, participating insurance companies compete for capacity within the program, and UTC's LIS platform buys from them based on competitive bids. Importantly, this all happens under the hood, to keep things simple for participants.

Default Necessity: UTC's plan sponsors recognized that even if they made annuities available to people through the DC plan, participants simply don't choose to buy them. By making lifetime income the default, UTC communicated to employees that it had spent a lot of time, care and effort to come up with what the company leaders saw as the best solution. It also communicated that they believe that it's the right solution for the vast majority of their employees and participants. But UTC has also included the freedom and control that people need to opt out if they decide that LIS isn't for them.

⁹ Guarantees are based on the financial strength and claims-paying ability of each insurance company.

¹⁰ Guaranteed Lifetime Withdrawal Benefit (GLWB) is a type of annuity that sets a withdrawal amount that will last throughout a participant's retirement, even if the market falls or the account's assets run out. The insurers will continue the withdrawal payments, if needed. Guarantees are based on the financial strength and claims-paying ability of each insurance company.

Some large DC plans have already adopted secure income target-date fund solutions. Cost-effective scalability, however, still has a way to go for midsize and smaller plans. Innovations for DC plans typically occur at the large end of the plan-size spectrum, and we believe that it's only a matter of time before secure income target-date solutions become available to most plans.

TOMORROW'S TARGET-DATE FUND...TODAY

The quest for retirement confidence and income security seems to recede further into the distance with each year. But better target-date fund design can make a big difference for the increasing number of workers who rely on this prominent DC solution.

We believe that tomorrow's target-date fund should incorporate a broader collection of different strategies than they do now. Our first blueprint identified a broader set of retirement risks that an array of traditional asset classes needed to guard against. This new glide path takes another important step forward: It identifies the critical outcomes needed at various life stages and how combinations of traditional and nontraditional strategies can work in tandem to improve retirement security—particularly important in today's environment, as expected returns for traditional asset classes are depressed versus historical norms. In our view, target-date funds that incorporate a broader set of asset classes with a multi-manager architecture can reduce risk and build more retirement income. They do it by enhancing diversification and the effectiveness of risk management for participants at different stages in their lifecycle.

The final frontier for target-date design—for the real retirement objective of DC plan participants—is incorporating a lifetime income guarantee.

IMPROVING OUTCOMES

The enhancements we've discussed in our updated target-date strategy make meaningful improvements toward the goal of attaining sufficient income replacement in retirement through at least age 90. As we noted earlier, traditional target-date funds would have run out

of money just 11 years after retirement for participants retiring in 1973, when the four key risks were heightened. But we don't have to look too far back in our history to find another period where low growth and market risk ravaged participants' savings.

Consider a participant who turned 55 years old in January 2000. That was the start of what can be considered "the lost decade"—stocks, represented by the S&P 500, actually delivered a negative return: -0.95% between 2000 and 2009. Just when their portfolios could have benefited most from robust returns, these participants experienced low growth and high risk to their sequence of returns—large market crashes twice over the decade just prior to retirement.

Over this short period of a decade, let's compare the outcomes of the traditional target-date fund and one that uses only our enhanced asset-allocation design (without any insurance component or guarantees). Starting with \$500,000 at age 55 in January 2000 and using the same assumptions that we did before for contributions, the new glide path would have resulted in 13% higher savings when participants turned 65 in 2009.

There's a lack of historical index data prior to 1990 for all the asset classes we've discussed, so we used similar 10-year periods from 1990 to 2014 to calculate glide path performance for participants who were 55 at the start of the 10-year period. The new glide path would have done better than the traditional glide path about 80% of the time. We repeated a similar exercise for participants who had just retired (age 65) at the start of each of the 10 years, and the new glide path demonstrated better results in the vast majority of the periods. So we believe that this type of broad asset-class diversification could deliver a major improvement in retirement savings results.

Incorporating the use of dynamic strategies to mitigate short-term market risk and the use of multi-manager portfolios for diversification would, we believe, further improve these outcomes. We expect that adding these features would likely yield additional tangible benefits for DC plan participants.

A VIABLE FRAMEWORK FOR THE FUTURE OF RETIREMENT

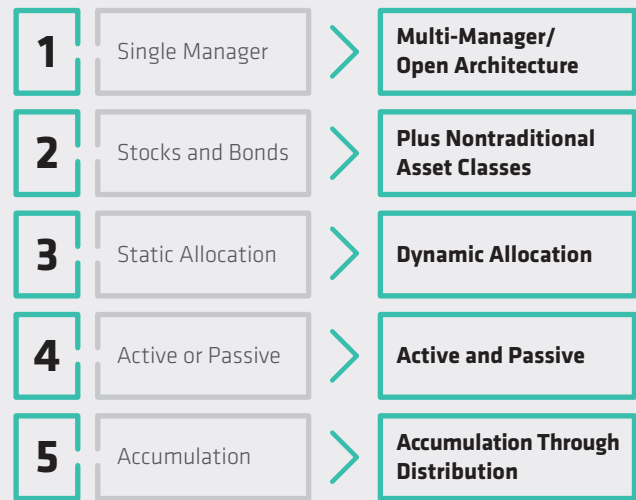
Target-date assets are a critically large pool of assets, one that will only increase in importance for the future of many workers, many companies and the economic well-being of the country. But as we noted earlier, the target-date industry lags behind the rest of the investment-management world.

Traditional, first-generation target-date solutions still dominate DC plans. These solutions typically use single managers, traditional stock and bond asset classes, and allocations that tend to be static. Usually, these early solutions stick to entirely active or entirely passive investing approaches, rather than mixing the best of both for the different asset classes where active or passive makes the most sense. Traditional target-date funds also focus nearly exclusively on the accumulation phase of the glide path—lacking any thoughtful solution for what happens during the 30 or more years without a paycheck that many participants will encounter.

We believe that target-date providers and DC plan sponsors need to push toward multi-manager, open-architecture mandates that incorporate a broader collection of diversifying assets, that can dynamically adjust the glide path when market conditions change, that can take the best of active and passive approaches, and that embrace better solutions for the distribution phase—not just accumulation (*Display 22*).

DISPLAY 22: BEST PRACTICES EVOLVE, AND SO SHOULD YOUR TARGET-DATE FUND

The Evolution of Target-Date Design





KEY ACTION POINTS FOR TARGET-DATE FUND SELECTION

FIDUCIARY CONSIDERATIONS

- + Document how the current target-date fund/QDIA was selected
- + Ensure that all the DOL's "Tips for ERISA Plan Fiduciaries" were followed as part of the initial selection and ongoing monitoring of the target-date fund
- + Revisit the target-date fund selection decision and ongoing monitoring process if unable to document that all the tips are satisfied

INVESTMENT CONSIDERATIONS

- + Ensure that the asset allocation is sufficiently diversified to mitigate key participant risks
- + Assess whether the manager employs a multi-manager process
 - + If so, determine if an independent fiduciary is responsible for manager selection

NEW YORK

1345 Avenue of the Americas
New York, NY 10105
(212) 969 1000

LONDON

50 Berkeley Street, London W1J 8HA
United Kingdom
+44 20 7470 0100

SYDNEY

Level 32, Aurora Place, 88 Phillip Street
Sydney NSW 2000, Australia
+61 2 9255 1200

TORONTO

Brookfield Place, 161 Bay Street, 27th Floor
Toronto, Ontario M5J 2S1
(416) 572 2534

TOKYO

Marunouchi Trust Tower Main 17F
1-8-3 Marunouchi, Chiyoda-ku
Tokyo 100-0005, Japan
+81 3 5962 9000

HONG KONG

Suite 3401, 34/F
One International Finance Centre
1 Harbour View Street, Central, Hong Kong
+852 2918 7888

SINGAPORE

One Raffles Quay
#27-11 South Tower
Singapore 048583
+65 6230 4600

A WORD ABOUT RISK

Allocation Risk: The allocation of investments among a fund's different investment styles, such as equity or debt securities, or US or non-US securities, may have a more significant effect on the Fund's net asset value ("NAV") when one of these investments is performing more poorly than the other. There is no assurance that allocation decisions will result in the desired effects. **Market Risk:** The value of a fund's investments will fluctuate as the stock or bond market fluctuates. The value of its investments may decline, sometimes rapidly and unpredictably, simply because of economic changes or other events that affect large portions of the market. It includes the risk that a particular style of investing may be underperforming the stock market generally. **Interest Rate Risk:** Changes in interest rates will affect the value of a fund's investments in fixed-income securities. When interest rates rise, the value of investments in fixed-income securities tends to fall and this decrease in value may not be offset by higher income from new investments. Interest-rate risk is generally greater for fixed-income securities with longer maturities or durations. **Credit Risk:** An issuer or guarantor of a fixed-income security, or the counterparty to a derivatives or other contract, may be unable or unwilling to make timely payments of interest or principal, or to otherwise honor its obligations. The issuer or guarantor may default, causing a loss of the full principal amount of a security. The degree of risk for a particular security may be reflected in its credit rating. There is the possibility that the credit rating of a fixed-income security may be downgraded after purchase, which may adversely affect the value of the security. Investments in fixed-income securities with lower ratings are subject to a higher probability that an issuer will default or fail to meet its payment obligations. **Inflation Risk:** This is the risk that the value of assets or income from a fund's investments will be less in the future as inflation decreases the value of money. As inflation increases, the value of a fund's assets can decline as can the value of that fund's distributions. **Foreign (Non-US) Risk:** Investments in non-US issuers may involve more risk than investments in US issuers. These securities may fluctuate more widely in price and may be less liquid due to adverse market, economic, political, regulatory or other factors. **Emerging Market Risk:** Investments in emerging market countries may involve more risk than investments in other foreign countries because the markets in emerging market countries are less developed and less liquid as well as subject to increased economic, political, regulatory and other uncertainties. **Currency Risk:** Fluctuations in currency exchange rates may negatively affect the value of a fund's investments or reduce its returns. **Capitalization Risk:** Investments in small- and mid-capitalization companies tend to be more volatile than investments in large-capitalization companies. Investments in small-capitalization companies may have additional risks because these companies often have limited product lines, markets, or financial resources. **Derivatives Risk:** Derivatives may be illiquid, difficult to price, and leveraged so that small changes may produce disproportionate losses, and may be subject to counterparty risk to a greater degree than more traditional investments. **Leverage Risk:** Borrowing money or other leverage may make a fund's investments more volatile because leverage tends to exaggerate the effect of any increase or decrease in the value of its investments. An investment may create leverage through the use of certain portfolio management techniques such as reverse repurchase agreements or forward commitments, or by borrowing money. **Diversification Risk:** A fund may have more risk because it is "non-diversified", meaning that it can invest more of its assets in a smaller number of issuers. **Real Estate Risk:** Funds that invest in real estate are subject to a variety of factors affecting the real estate market, such as economic conditions, mortgage rates and availability, which can cause the value of such investments to decline. REITs may have additional risks due to limited diversification and the impact of tax law changes. **Commodities Risk:** Commodities contain heightened risk including market, political, regulatory, and natural conditions, and may not be suitable for all investors. Commodity-linked derivative instruments may involve additional costs and risks such as changes in commodity index volatility or factors affecting a particular industry or commodity, such as drought, floods, weather, livestock disease, embargoes, tariffs and international economic, political and regulatory developments. **Short Sale Risk:** The risk that a portfolio will incur a loss by subsequently buying a security at a higher price than the price at which it sold the security short and the amount of such loss is theoretically unlimited. **Active Trading Risk:** A higher rate of portfolio turnover increases transaction costs, which may negatively affect portfolio returns and may also result in substantial short-term gains, which may result in adverse tax consequences for shareholders.

Note to All Readers: The information contained herein reflects, as of the date hereof, the views of AllianceBernstein L.P. (or its applicable affiliate providing this publication) ("AB") and sources believed by AB to be reliable. No representation or warranty is made concerning the accuracy of any data compiled herein. In addition, there can be no guarantee that any projection, forecast or opinion in these materials will be realized. Past performance is neither indicative of, nor a guarantee of, future results. The views expressed herein may change at any time subsequent to the date of issue hereof. These materials are provided for informational purposes only, and under no circumstances may any information contained herein be construed as investment advice. AB does not provide tax, legal or accounting advice. The information contained herein does not take into account your particular investment objectives, financial situation or needs, and you should, in considering this material, discuss your individual circumstances with professionals in those areas before making any decisions. Any information contained herein may not be construed as any sales or marketing materials in respect of, or an offer or solicitation for the purchase or sale of, any financial instrument, product or service sponsored or provided by AllianceBernstein L.P. or any affiliate or agent thereof. References to specific securities are presented solely in the context of industry analysis and are not to be considered recommendations by AB. This is not intended to be legal advice (and should not be relied upon as such) but just a discussion of issues. Plan sponsors should consult with their legal advisors for advice regarding their particular circumstances.

The [A/B] logo is a service mark of AllianceBernstein, and AllianceBernstein® is a registered trademark used by permission of the owner, AllianceBernstein L.P.

© 2017 AllianceBernstein L.P., 1345 Avenue of the Americas, New York, NY 10105

