American Century Investments®

Suitability Matters: BALANCING RISKS IN GLIDE PATH DESIGN

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MULTI-ASSET STRATEGIES

Executive Summary

The central defining characteristic of a target-date solution is, arguably, its glide path—the level, slope and landing point of the equity allocation over the life of the target-date series.

In this paper, we describe the process and philosophy that underlie the creation of our target-date solutions, including One Choice® Target Date Portfolios, One Choice® Blend+ Portfolios and related target-date collective investment trusts. To explain how we construct a glide path, we lay out the "balance-of-risks" framework informing our approach to target-date fund (TDF) evaluation and construction. We present our glide path philosophy that seeks to provide the highest likelihood of a fully funded retirement for the greatest number of plan participants. Next, we revisit the "to" versus "through" debate and discuss the relationship of glide path slope to risk management, particularly in the crucial years surrounding retirement. We then take the reader through our analysis and third-party research suggesting that retirees in TDFs fare better when the glide path reaches its most conservative allocation around the retirement date and how changing retirement trends may require updated thinking around a "one and done" retirement date.

We conclude there is no single "best" glide path or target-date strategy—no "one ring to rule them all." Rather, the best fit for a given plan is largely a function of participant savings rates, wealth levels, risk tolerance and a host of other plan-specific needs or objectives. Indeed, we offer plan sponsors and retirement advisors a range of tools to address these questions. Whatever the glide path decision, we believe an approach that recognizes and addresses multiple risks over the investor life cycle is preferable to glide paths attuned only to one type of risk or market environment.

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American Century's Glide Path Philosophy

Suitability matters. We believe variations in risk tolerance, savings patterns and other demographic factors can lead to subtle differences in suitable glide path risk levels over a participant's life cycle.

Our glide path philosophy is built around our balance-of-risks framework. The American Century framework seeks to address the multiple retirement risks that can alternate in relative importance during an investor's life cycle. We believe by emphasizing this balanced approach, we'll also address behavioral risks important to investor success.

Our guiding principle is to seek to increase the likelihood of success for the greatest number of participants. We show that a balance-of-risks approach has generated attractive risk-adjusted returns and greater wealth accumulation over a full market cycle. We find this approach results in less dispersion in retirement wealth among simulated long-run outcomes of participant scenarios versus competing approaches.

We prefer flatter glide paths. Our research indicates flat glide paths are superior to those that continue to de-risk during retirement because they best calibrate equity risk to account balances. This approach also conforms with human capital arguments about retirement allocations, with the glide path remaining flat beyond the point at which an investor's future earnings reach zero.

Sequence-of-returns risk may likely be reduced with flatter glide paths. We demonstrate that a flatter glide path before retirement is preferable for managing sequence-of-returns risk relative to glide paths that de-risk more rapidly.*

Flat slope in retirement may improve distribution of outcomes. Not only are there benefits to a flatter glide path before retirement, but also afterwards by contributing to greater certainty around retiree outcomes.

Appropriate risk levels may generate more attractive risk-adjusted returns. We believe it's important to manage downside risks along the glide path with the intention of minimizing large losses and providing better risk-adjusted returns for participants.

*The risk of market conditions affecting the overall returns of an investment portfolio during the period when a retiree is first starting to withdraw money from investments as income. For example, if a retiree has to withdraw income from their portfolio after market prices have fallen, the portfolio may lose out on the potential returns that income could have made once market prices recovered.

Balancing Risks in Glide Path Design

Our Framework for Glide Path Construction and Evaluation

While academics and asset allocation managers may agree on the soft goal of a "successful retirement," no well-accepted theory quantifies this objective in a way that can be implemented practically. Leaving the more esoteric questions of utility functions and two-stage optimizations aside, we sought practical solutions. An analysis of the various elements of life-cycle investing theory led us to develop several intuitive, easy-to-compute metrics that we believe represent the component goals and risks of the life-cycle investment problem. The construction (and evaluation) of a target-date strategy can be calibrated by the measurements taken from these various risk metrics. See **Figure 1** for a description of these various risks. We describe this work in an article titled "How to Evaluate Target-Date Funds: A Practical Guide," *The Journal of Retirement*, Spring 2019.

It's not enough, however, to consider these risks in the abstract or in terms of a hypothetical average investor. We believe incorporating specific investor characteristics, objectives and preferences is crucial to constructing or evaluating a target-date strategy—essentially, the hand that tunes the setting of each risk metric "dial" for a target investor population. It then follows that there's no "best" TDF, only "better" or "worse" options from the target population's viewpoint and/or the fiduciary charged with acting in its best interest. We don't assert that one investment policy may be applied to all types of investors. But experience, intuition and analysis tell us that a broad risk-aware approach should be preferable to a glide path that's attuned only to one type of participant demographic, one kind of market environment or one source of risk. This philosophy informs our balance-of-risks approach.

FIGURE **1**

Longevity Risk Requires Balancing Competing Risks

Growth Risk	Market Risk	Macro-Scenario Risks
Risk of **not meeting an expected return goal**	Dispersion in outcomes caused by the **variability and timing of returns**	Dispersion in outcomes caused by **unanticipated changes in macroeconomic conditions**

Income Horizon Risk	Behavioral Risks
Risk of investment policy **failing to sustain income** over a specified horizon in retirement	Dispersion in outcomes caused by **savings shortfall, abandonment, returns-chasing** or other behavioral aspects

Many plan participants are concerned about outliving their savings in retirement (aka the "life-cycle investment problem"). While this issue may compete with plan participants' other objectives—e.g., pursuit of income, direction of spending on current consumption—during their working lives, the risk of running out of money in retirement often becomes a dominant concern. We call this "longevity risk," the foundation of the investment balancing act. To lessen longevity risk, the investment solution must seek a balance of the subordinate risks prevalent throughout an investor's life.

We group these risks into several categories—growth risk, market risk, macro-scenario risk, income horizon risk and behavioral risk. These categories contain the various risk metrics that together represent the dials in the investment solution.[1] These metrics are defined in **Figure 2**.

FIGURE **2**

Retirement Risk Metrics Defined

	Growth	% Equity
Market	**Long-Run Volatility**	Average Volatility Over 40 Years
Market	**Sequence-of-Returns**	Glide Path Slope and Equity Near Retirement
Market	**Tail**	Max Drawdown Over 3 Years
Macro Scenario	**Inflation**	Exposure to Realized Inflation
Macro Scenario	**Interest Rate**	Fixed-Income Duration
Macro Scenario	**Currency**	Exposure to Foreign Currency Declines
	Income Horizon	Max. Withdrawal for 30 Years With 90% Probability of Success

While "minimizing longevity risk" is a simple enough goal, there is simply no single optimal solution or approach to the life-cycle investment problem for everyone. The appropriate solution depends on a variety of idiosyncratic investor/plan-related inputs, capital market assumptions and participant risk preferences. Different approaches to balancing these risks—of trying to solve for longevity risk—have created the wide range of practitioner asset allocation glide paths available today. Our belief in the importance of glide path suitability led us to create a second glide path in 2021—our One Choice® Blend+ series.

[1] Note that while behavioral risks, including abandonment, returns-chasing and savings shortfall, are critical components to the life-cycle investment problem, we can't interpret those risk measures at the investment strategy level. However, ample evidence suggests behavioral risks, especially abandoning one's investment strategy, are linked to investment policy decisions around levels of volatility, diversification and other elements that can be measured across investment strategies.

Success is defined as increasing the certainty of a fully funded retirement for the broadest number of participants.

Charting Our Course: The Guiding Philosophy Behind American Century's Target-Date Portfolios

Before deciding how to "set the dials" of our target-date approach, we set out our guiding philosophy: How do we tailor our mission statement to guide our target-date solutions?

Our guiding philosophy is to help grow the ranks of successful retirees. Our view is that a target-date solution should seek the greatest likelihood of a fully funded retirement for the broadest number of participants. We measure success not by maximizing a wealth objective for the median investor but by minimizing the number of participants who end up in the "left tail" of the wealth distribution—i.e., failing to meet income needs over a simulated retirement horizon.

Again, we're not arguing that an investment policy can eliminate all risks or guarantee retirement success for all. But holding out this broad definition of success does suggest that a more balanced investment solution should be preferable to an approach more narrowly attuned to only one type of participant, market environment or source of risk.

Strategic Glide Path Design: Implementing Our Philosophy

We believe three key elements that differentiate our portfolios and help align results with our goal of "more success stories" include our risk-aware glide path, broad and effective diversification, and disciplined active management of the underlying stock and bond portfolios.

Risk-aware glide path. We seek a balance across the multiple risks participants face, minimizing the potential for any one type of risk to become a source of significant dispersion in outcomes for any participant or cohort. Our focus on increasing certainty around participant outcomes leads us to emphasize downside risk protection at the crucial stage near retirement.

Effective diversification. A well-specified target-date strategy should generate enough return to meet the capital growth objectives of the investor while limiting volatility and downside risk. By considering the interplay of risk/reward characteristics, correlations, liquidity and transparency, in addition to cost, an effective asset mix can seek to achieve the highest return for risk taken at each point in the glide path. Strong risk-adjusted performance may provide a steadier, more consistent pattern of gains, which will help to keep the target-date investor on track and reduce the likelihood of the investor abandoning the strategy.

Disciplined active management. The benefits of beta diversification are well known and widely accepted elements of portfolio construction processes, but manager selection to fill those asset allocations can often devolve into a quixotic search for an "all-star, five-star" lineup. We believe that carefully analyzing and selecting underlying managers who work well in concert can improve a multi-asset portfolio's hit ratio. Greater consistency of alpha can add value by smoothing out the overall payoff pattern, reducing tracking error and risk, and enhancing longer-term return and wealth accumulation. For these reasons, we believe active management serves not only as a source of excess return but as an element of risk control. We discuss the implications of alpha diversification and manager selection for TDF portfolios in Donner, Pilotte and Weiss, "The Importance of Alpha Diversification: Increasing "Hit Ratios," *"Multi-Asset/Multi-Manager Portfolios,"* May 2017.

These design elements lead to three distinctive characteristics of American Century Investments' glide path offerings relative to industry peers: 1) a more moderate range of equity allocations in the accumulation years; 2) a flatter glide path during the critical "transition risk zone," the 15 years leading to retirement; and 3) a higher-than-most average equity allocation in retirement. As we examine each of these elements, we'll address the decisions we made using our balance-of-risks framework.

"To" Versus "Through" Debate

We begin with the most critical balance-of-risk decision in the target-date glide path, and one that's been the source of debate since the advent of target-date portfolios: At what point in the investor's life cycle should equity allocation reach its lowest point, at retirement or at some point thereafter? Our conclusion, supported by our own and third-party research (detailed in Pilotte and Weiss, "Revisiting the "To" versus "Through" Debate: Our Approach to the Target-Date Glide Path," June 2013), has always been that the highest likelihood for successful outcomes is achieved when the portfolio reaches its most conservative asset allocation at retirement (i.e., a "to" retirement glide path), as opposed to a gradually decreasing equity exposure throughout the decumulation phase (a "through" retirement glide path). Next, we provide four main arguments for why we believe in the "to" glide path approach.

1 A conservative allocation at retirement aligns with peak market risk.

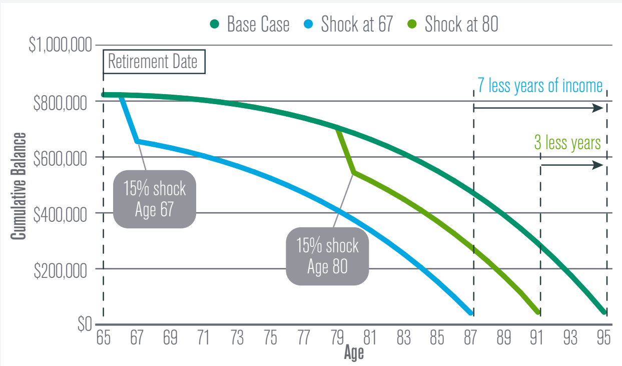
Market risk creates uncertainty in outcomes due to the variability and timing of asset returns. Because the potential for capital loss increases along with rising wealth levels, we believe market risk in the portfolio should be calibrated to wealth level, not just age.

Investors typically accumulate up to 50% of at-retirement wealth in the last seven to 10 years before retirement. At the end of this period of rapid wealth accumulation comes the riskiest day of an investor's life from a purely financial perspective: retirement day. Their balance is at its highest level, and they have the longest period ahead for that money to last. As a result, the future ability to fund a long retirement is more affected by a significant shock to the portfolio at or near retirement than at any other point along the glide path. As the scenarios in **Figure 3** illustrate, the greater shortfall in retirement funding is created by a 15% loss in wealth at age 67, causing the retiree to run out of money seven years earlier than in the base case. The same percentage loss at age 80 has a smaller impact, leading to a shortfall only three years before the base case.

The "to" approach recognizes the key role the transformation of human capital into financial capital plays in asset allocation.

FIGURE 3

Market Shocks Near Retirement Can Harm Participant Success Down the Road



Base-case scenario assumptions: Annual portfolio returns of 6% to age 65, 5% thereafter. First-year withdrawal of 5% capital, increased by 2% annually. Shock: A single year -15% event. This information is for illustrative purposes only and is not intended to represent any particular investment product.

2 A "to" glide path offsets the rolldown of human capital.

The "to" approach recognizes the key role the transformation of human capital into financial capital plays in asset allocation. A participant in the early stage of her career has an abundance of human capital, or a large present value of future expected income, and little financial capital (savings from earned or accumulated wealth). Human capital essentially acts like fixed income in a young person's portfolio by providing a long-term, predictable stream of future payments. The present value of these future payments acts as a hedge against potential losses in the smaller pool of financial capital, allowing the investment policy to access the growth expectations of a higher equity allocation.

Throughout the participant's working years, human capital is steadily transformed into financial capital (and/or consumption and debt reduction), until it has been fully depleted at retirement (or the date when future expected income is zero). Logically, the allocation of financial capital should adjust with the reduction of the human capital "hedge" portfolio by rebalancing more and more into less volatile investments, such as fixed income and cash equivalents. On the day that human capital is fully depleted, therefore, the asset allocation of the financial portfolio should be at its most conservative level, to be determined by the needs of the participant at that point (capital preservation, income in retirement, etc.).

Trends such as one spouse working longer, later Social Security retirement age and more generous delayed-retirement benefits, and the growing popularity of "bridge" jobs all suggest that labor income may wind down slowly over time. This is consistent with the data we've seen showing ever-later retirements on average in recent decades. Mirroring this gradual rolldown of human capital, the One Choice Blend+ glide path de-risks another five years from age 65 to 70, reaching a terminal allocation of 40% at age 70 and remaining constant thereafter. This later and lower landing point recognizes the possibility of a phased retirement over several years, as the old model of receiving your pension on your 65th birthday has become a distant memory. In any event, the original analysis holds—the day you *completely* stop working is the riskiest day of your financial life.

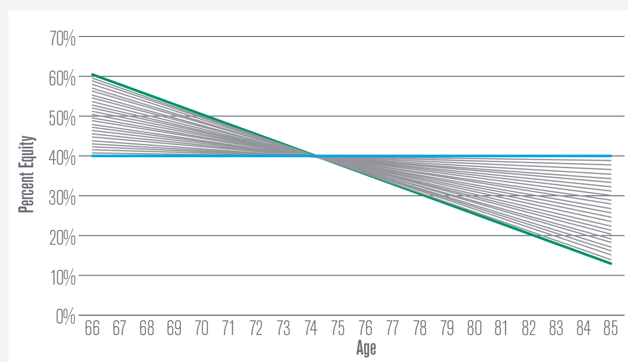
In addition, the human capital argument provides no rationale for a continued reduction of equity after labor income ceases, such as in the "through" glide path approach. The "to" glide path, however, reduces risk in proportion to the rolldown of human capital, matching the declining value of the hedge. This theoretical explanation also dovetails with the wealth argument above because the peak wealth level generally coincides with the retirement date, just before portfolio distributions commence.

3 A flat glide path in retirement is better than a sloping one.

We tested various glide path slopes in retirement to determine which types—flat or sloped—provided better outcomes over a simulated pool of retirees. For the results shown in **Figures 4** and **5**, we assumed an investor beginning with $100k at age 65, withdrawing 5% of the beginning balance every year (or $5k/year). We then ran various simulations with different rates of equity allocation decline, ranging from 0% (a flat slope) to a 2.5% slope (2.5% reduction in equity per year). The constant equity allocation for the perfectly flat slope was 40%, with the sloping glide paths designed around that flat slope so that the median wealth outcome at age 85 was the same for every glide path we constructed. The steepest glide path begins at 60% equity at retirement or at age 65 and reaches 12% equity by age 85.

FIGURE 4

Glide Path Slopes in Retirement Can Range From Steep to Flat



Source: American Century Investments.

Our research revealed that flatter glide path slopes created more certainty in ending wealth across the simulated population of retirees. With the same median result across all glide paths, a rational investor would be indifferent at the median and would likely want to increase the utility of all outcomes across the distribution to justify choosing one glide path over another. **Figure 5** shows that the 75th percentile outcome for the steepest glide path (2.5% slope) was 3.1% higher than the flat glide path (0% slope)

Our balance-of-risk framework provides a basic template for determining how to increase success across the broadest set of participants.

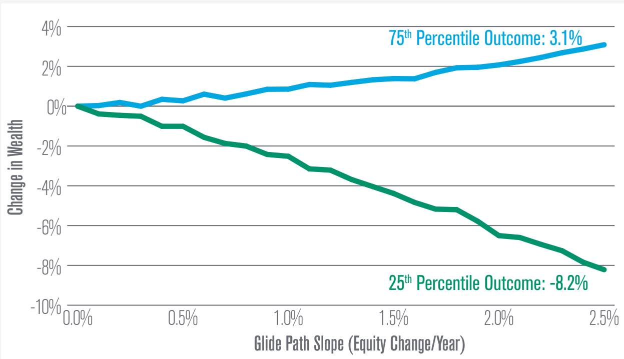
result, while the 25th percentile outcome for the steepest glide path was 8.2% lower than the flat glide path result. With an equal probability (1 in 4) of being in either the upper or lower quartile, the greater downside risk of the steep glide path is not sufficiently compensated by the higher upside from the standpoint of a typical risk-averse investor. Said differently, you might earn slightly higher returns with a steeper glide path in retirement, but you are just as likely to do significantly worse than you would with a flat glide path.

Figure 5 also validates what we suspected to be true—the flatter the glide path, the tighter the range of outcomes. The lowest dispersion in outcomes (75th – 25th percentile variance) was achieved with the completely flat glide path (0% slope), while dispersion in percentile outcomes steadily increased with the glide path slope. That is, moving from left to right on the X-axis, or going from a flat to steep glide path in retirement, can lead directly to a wider range of outcomes for retirees. Choosing a flat glide path in retirement is then consistent with our risk-managed approach, seeking to provide better risk-adjusted returns and reduce exposure to sequence-of-returns risk.

FIGURE **5**

Flatter Glide Paths in Retirement Help Increase Certainty Around Outcomes Relative to Steeper Variants

Dispersion in Wealth at Age 85



Source: American Century Investments.

Complementing our independent research, multiple industry and academic papers provide additional support for a flat glide path in retirement. Most notably, Cohen, Fan and Gardner of Russell Investments looked at the rationale for a flat glide path in retirement. They found that "a flat glide path in retirement always makes sense relative to a sloping one" without regard to the level of aggressiveness. "In fact," the authors state, "there is not a clear investment rationale for the glide path to slope." Moreover, they conclude that "for each downward-sloping glide path there is a corresponding flat glide path that gives a higher expected ending wealth for the same amount of risk. Also, there is a flat glide path that provides the same expected ending wealth for a lower level of risk." Gardner and Knowles subsequently revisited this topic in 2015 and again in 2018, reiterating the findings of the original paper. See Cohen, Fan and Gardner, "The date debate: Should target-date fund glide paths be managed 'to' or 'through' retirement?" Russell Investments Research, April 2010, and Gardner and Knowles, "The date debate revisited: Evidence continues to support a flat glide path in retirement," Russell Investments Research, April 2018.

4 At retirement, there's increased potential for abandonment.

Some proponents of the "through" approach argue that risk tolerance continues to decline as a retiree ages, thus providing the rationale for a continual reduction of equity allocation past the retirement date. This argument generally conforms to the age-old "100 minus your age" approach to equity allocation. We think it's a fallacy to assume that risk tolerance is always equivalent to age. Some investors are simply more risk averse than others, regardless of age, wealth or education. While the variety of individual risk tolerances does pose a challenge for asset allocators designing portfolios for "the masses," our balance-of-risk framework provides a basic template for determining how to increase success across the broadest set of participants.

Behavioral finance research has confirmed that investors are generally more unhappy about losses than happy with gains of the same size (losing \$100 stings more sharply than the joy of gaining \$100). This is particularly true when losses are large in dollar terms, and investors have a sense they have little time to recover from those losses—as is true in the years just before and after retirement. (Thaler, Tversky, Kahneman, and Schwartz; "The Effect of Myopia and Loss Aversion on Risk Taking: An Experimental Test"; *Quarterly Journal of Economics*; Vol. 112, Issue 2, 1997).

Other behavioral studies have shown that investors who check their balances frequently tend to reduce their allocations to equities, while investors who check their balances infrequently tend to allocate more to equities. As the tendency to monitor balances increases as retirement nears, these behavioral biases could help explain why the category of 2000-2010 target-date funds experienced "sizeable net redemptions in the 2008 market slide," according to Morningstar, with many investors locking in losses that averaged -22% for 2008. (Morningstar Fund Analysts; "Target-Date Investors Stick Around, Earn Better Returns"; March 16, 2010). As these studies and evidence from the financial crisis make clear, the potential for participants to abandon their investment strategy at the wrong time—just after a large loss—is heightened around retirement, and the consequences for retirement success may be dire.

To minimize the potential damage that could be caused by an overly aggressive allocation at retirement and provide the best outcomes for income replacement in retirement, our glide path philosophy favors a more conservative allocation around the target retirement date.

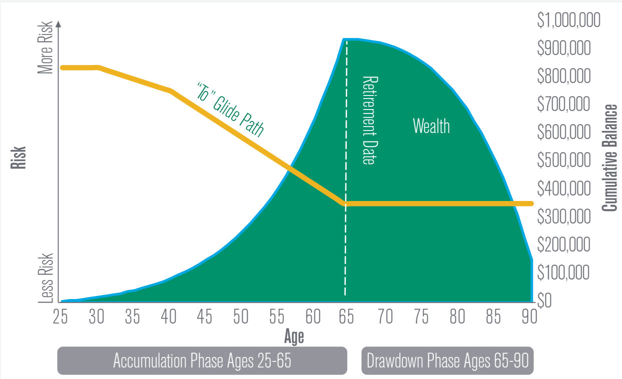
Consistent with this philosophy and recognizing that retirement today is less reflective of a single "date" and more a gradually unfolding process for many either side of age 65, we have launched a new TDF lineup. Our latest TDF offering has a glide path shape that continues to de-risk from 45% to 40% equity at age 70, five years past the target retirement age of 65.

While this design may not meet the definition of a "to" glide path in the strictest sense, this slightly extended de-risking path is well attuned to the trend toward later retirements, as well as the growing popularity of "phased" retirements that may include a spouse retiring, non-profit or consulting work, or a part-time "bridge" job. With the ongoing demise of the DB pension plan, the once-assumed age 65 retirement date has been replaced by a widening dispersion of actual retirement dates, both earlier and later.

While the pursuit of growth is a sound principle in a target-date strategy, glide paths that take on outsized risks for small marginal expected gains aren't aligned with an objective of increasing certainty of outcomes for more participants.

FIGURE 6

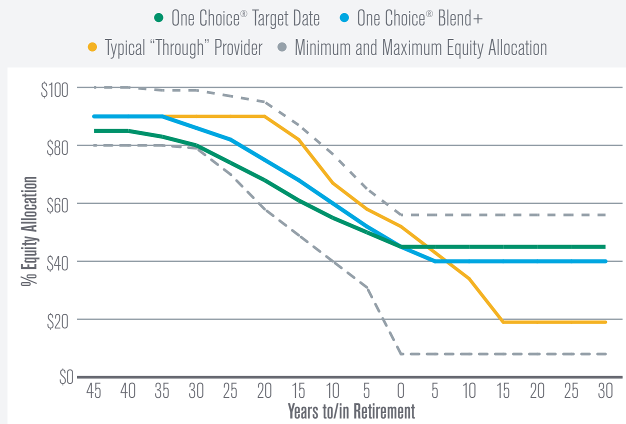
"To" Glide Path Calibrates Equity Exposure to Wealth Level



Source: American Century Investments.
Accumulation phase: assumes a $2,000 contribution starting at age 25, increased 6% annually, and returning 7% annually until age 64. Drawdown stage: assumes annual return of 5.5%, first year withdrawal at age 65 of 5.5% capital, inflation-adjusted annually by 2.5%. This information is for illustrative purposes only and is not intended to represent any particular investment.

FIGURE 7

Comparison of Equity Allocations of Various Target-Date Providers



Data as of 3/31/2021.
Source: Fund prospectuses and websites, Morningstar Direct.

Figure 6 shows the relationship between glide path slope and wealth level, demonstrating that for "to" glide paths, risk levels are calibrated to wealth, not just age. In addition, we clearly see that participants face their maximum risk exposure on the day they retire: They have the most to lose and the longest period ahead to fund from their savings.

Having determined the broad strokes of our target-date glide path shape, we turn to the remaining questions at hand: The beginning equity allocation, the ending equity allocation (at retirement and beyond), and the shape of the glide path between these terminal points.

Glide Path Equity Allocation for Younger Participants: Addressing Growth Risk

In the context of our target-date risk framework (or "dashboard" of risks), one major risk is not having enough growth in one's investment strategy to help overcome longevity risk. Thus, a key question becomes "How much growth can I expect from one TDF relative to another?" Evaluating asset classes in this framework, for example, cash would contain the highest growth risk (lowest expected return) while emerging markets equity would have among the lowest levels of growth risk because of its higher expected long-term returns.

Equity allocation does a good job predicting the average or expected growth; that is, the mean of the distribution. However, the mean of the distribution describes only one aspect of that distribution of outcomes, the central tendency. Dispersion around that mean is what market risk describes. In other words, the same average return can hide a wide range of very different outcomes.

While the pursuit of growth is a sound principle in a target-date strategy, glide paths that take on outsized risks for small marginal expected gains aren't aligned with an objective of increasing certainty of outcomes for more participants. With this in mind, you can see the One Choice and One Choice Blend+ glide paths in relation to the minimum and maximum equity allocations of other target-date providers, as well as a typical "through" manager glide path, in **Figure 7**.

Taking the starting point of equity allocation for our portfolios, we find a blended portfolio of stocks and bonds at the 85% equity level provided approximately 95% of the gains of an all-equity portfolio with 15% less volatility over the past 20 years. A 90% equity starting point achieved 96% of the return of the all-equity portfolio, with a commensurate 10% reduction in risk. Reflecting bonds' excellent performance in this period, a 60/40 stock/bond mix earned 84% of the gains of the all-equity index, requiring just 60% of the risk to get there. If we look back further, we see over the last 40 years that the return comparisons are all marginally better, with a fractional increase in risk across the blended portfolios. These return and risk measures are displayed in **Figures 8** and **9**.

We believe TDF managers are hired to manage risk for participants, not simply to outperform their peers in strong bull markets.

FIGURE 8

Stock and Bond Market Risk and Return Over a 20-Year Horizon

	Total Return	Standard Deviation	Sharpe Ratio
Russell 1000	8.78%	15.08%	0.49
Bloomberg Barclays U.S. Aggregate Bond	4.50%	3.44%	0.91
60% Russell 1000/40% Bloomberg Barclays U.S. Aggregate Bond	7.37%	9.03%	0.67
85% Russell 1000/15% Bloomberg Barclays U.S. Aggregate Bond	8.31%	12.78%	0.54
90% Russell 1000/10% Bloomberg Barclays U.S. Aggregate Bond	8.47%	13.54%	0.53

Annnualized data from 4/1/2000 - 3/31/2021.
Source: FactSet.

FIGURE 9

Stock and Bond Market Risk and Return Over a 40-Year Horizon

	Total Return	Standard Deviation	Sharpe Ratio
Russell 1000	11.62%	15.18%	0.50
Bloomberg Barclays U.S. Aggregate Bond	7.52%	4.75%	0.74
60% Russell 1000/40% Bloomberg Barclays U.S. Aggregate Bond	10.27%	9.64%	0.65
85% Russell 1000/15% Bloomberg Barclays U.S. Aggregate Bond	11.16%	13.06%	0.55
90% Russell 1000/10% Bloomberg Barclays U.S. Aggregate Bond	11.32%	13.76%	0.53

Annnualized data from 4/1/1980 - 3/31/2021.
Source: FactSet.

To paraphrase Shakespeare, past may indeed be prologue, but it isn't predictive. We would caution investors about expecting such superb risk-adjusted returns going forward. These 40- and 20-year windows neatly capture the secular decline in interest rates and inflation that began in the early 1980s. Instead, our strategic glide path allocations are based on a continuous evaluation of forward-looking expectations for asset class risks, returns and correlations over a long-term horizon. We detail the methodology and forecasts in the paper by Gabudean, Pilotte and Weiss, "Long-Term Capital Market Assumptions: Methodology and Models Underpinning Asset Allocation Solutions," 2019.

Our capital market return assumptions are based on multiple fundamental models of expected return in which historical return data are one input. Given current yields, relative valuations and risk premia, we don't expect the same robust results going forward for U.S. bonds relative to U.S. stocks as experienced over the prior 20 years. In addition, it's worth pointing out that our glide path allocations are broadly diversified across global stocks and bonds with different expectations across various regions, styles and market-cap ranges. Moreover, a sizable portion of our fixed-income strategic exposures are allocated to emerging markets and high-yield securities at this stage, adding additional sources of return/risk to the glide path.

Behavioral Aspects of Equity Allocation for Younger Participants

There's another, perhaps underappreciated, behavioral consideration that argues for less than 100% equity for younger savers. We know that younger employees tend to change jobs more frequently than those further along in their careers and closer to retirement. This results in younger participants rotating in and out of qualified retirement plan investments. As a result, we should consider that short-tenured employees may be negatively influenced in terms of their future saving and investing decisions if they're exposed to an overly aggressive investment policy in their current plans. For example, a sharp, short-term loss incurred during a period of market drawdowns could reinforce a behavioral bias to "never try that again" when moving to a new employer, preventing future elections to target-date funds or similar savings vehicles. We think this is another valid concern that militates against 100% equity exposure and in favor of the more attractive risk/reward trade-off offered by a blended allocation as shown in **Figures 8** and **9**.

Mid-Career and Near-Retirement Glide Path: Balancing Act and Timing Risks

Between the decisions of where to start and where to end the rolldown of equity allocation lie the middle years of the target-date glide path. Capital preservation becomes more important during the years from ages 35 to 65, when most of a participant's wealth is accumulated. It's during these middle years when managing against the various risks becomes a delicate balancing act. A goal of simply maximizing returns with little regard for risk management now comes with a higher potential penalty: As wealth increases, the potential for loss of capital weighs more heavily in the equation. It's in this period where American Century's glide path philosophy provides its greatest point of differentiation from other target-date providers. Where others seek to be aggressively allocated for as long as possible, we recommend a flattening of the glide path between the two endpoints. In our view, two decisions factor equally into the future probability of successful retirement outcomes: Both the *level* of equity and *slope* of the glide path carry major consequences for participants.

Principle 1: Appropriate Risk Levels May Help Generate Better Risk-Adjusted Returns Over a Full Market Cycle

We believe TDF managers are hired to manage risk for participants, not simply to outperform their peers in strong bull markets. A "win by not losing" approach, which emphasizes outperformance on the downside, may lead to better risk-adjusted performance and the potential for a more stable return pattern over time.

As proof of concept, in **Figure 10** we show cumulative results of the One Choice 2015 Portfolio (merged with In Retirement as of March 2015) compared with several major competitor funds through the global financial crisis period to Dec. 31, 2019, marking the beginning and end of a full market cycle. Assuming a portfolio with $100,000 at the peak of the equity market before the downturn, we show the losses that would have accrued to an investor in each portfolio. The American Century portfolio provided better downside protection over this trough period, registering

No matter how well one saves and invests up to retirement, a negative sequence of returns near the retirement date can significantly undermine the chances of reaching a retirement wealth objective.

a smaller loss than any of the competitors shown. As markets recovered beginning in March 2009, gains accrued to all portfolios. In the strong bull market of the past 10 years, gains were higher in portfolios that continued to allocate more heavily to equities. But over the full time period, incorporating both up and down markets, the American Century portfolio provided the highest wealth accumulation versus the peers shown.

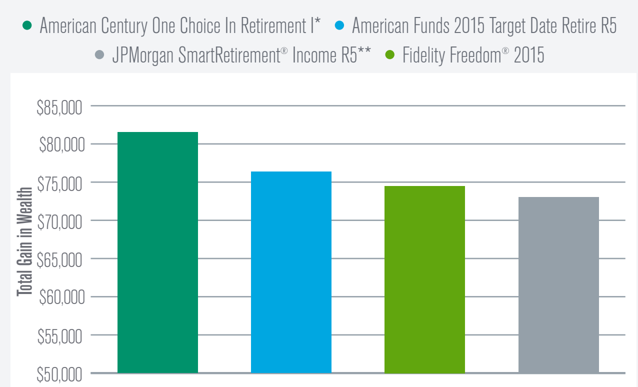
We believe this example supports our philosophy of emphasizing downside protection to minimize losses near retirement. It also demonstrates the ability of our flatter glide path to participate meaningfully in upside gains and to provide better long-term wealth accumulation than some competing approaches have achieved.

FIGURE **10**

Wealth Accumulation and Volatility Comparison Across a Single Vintage

	American Century One Choice In Retirement I*	Fidelity Freedom® 2015	American Funds 2015 Target Date Retire R5	JPMorgan Smart Retirement® Income R5**
Beginning Wealth 11/1/2007	$100,000	$100,000	$100,000	$100,000
Financial Crisis Loss 11/1/2007-2/28/2009	(28,813)	(39,269)	(36,240)	(35,509)
Bull Market Gains 3/1/2009-12/31/2019	110,327	115,634	110,745	108,573
Total Ending Wealth 11/1/2007-12/31/2019	**$181,514**	**$176,365**	**$174,505**	**$173,065**
Annualized Standard Deviation 11/1/2007-12/31/2019	8.05%	9.38%	9.36%	9.21%

Data as of 12/31/2019.
Source: FactSet, Morningstar. Performance in USD, net of fees.
Past performance is no guarantee of future results.
*One Choice 2015 merged with One Choice In Retirement effective 3/27/2015.
**JPMorgan merged SmartRetirement 2015 with SmartRetirement Income effective 6/24/2017.



Results calculated from 10/31/2007 - 12/31/2019.
Source: FactSet SPAR.
Past performance is no guarantee of future results.

Principle 2: Slope of Glide Path Is Crucial—Flatter Is Better

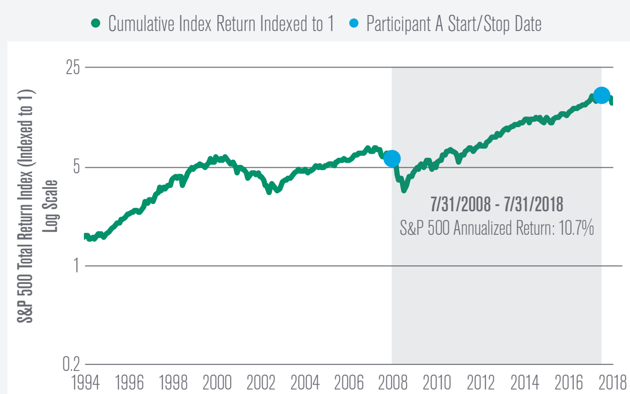
Many providers offer target-date products with high equity allocations throughout the investment horizon of the portfolios, even in the years just before and after retirement. Providers of aggressive "through" funds justify these higher equity allocations by arguing that many people will have 20 to 30 years or more ahead of them at retirement. They assert that time is still on their side and therefore the glide path can be thought of as extending well beyond retirement. On the flip side, many "to" target-date providers maintain an aggressive allocation until 10-15 years before retirement, only to rapidly de-risk over the next few years to reach a more conservative landing point at the retirement date.

Yet, it turns out that our research suggests a flatter glide path is preferable to a more steeply sloped one in terms of addressing sequence-of-returns risk—alleviating the potentially detrimental effects of a poorly timed string of negative market returns. No matter how well one saves and invests up to retirement, a negative sequence of returns near the retirement date can significantly undermine the chances of reaching a retirement wealth objective. This can be seen clearly in **Figures 11** and **12**, which depict wealth at retirement for two investors with identical contributions and average returns; only the pattern, or sequence, of those returns is different. We think it is important to show two periods of actual, rather than hypothetical, stock market performance. We chose these particular periods to illustrate the importance of the sequence of returns to performance.

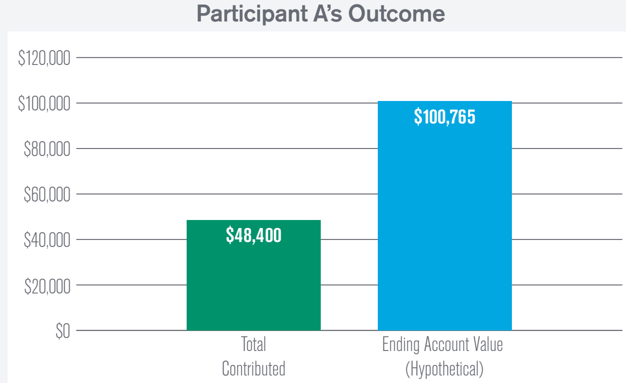
FIGURE **11**

Sequence-of-Returns Risk

Participant A Invests $400/Month for 10 Years



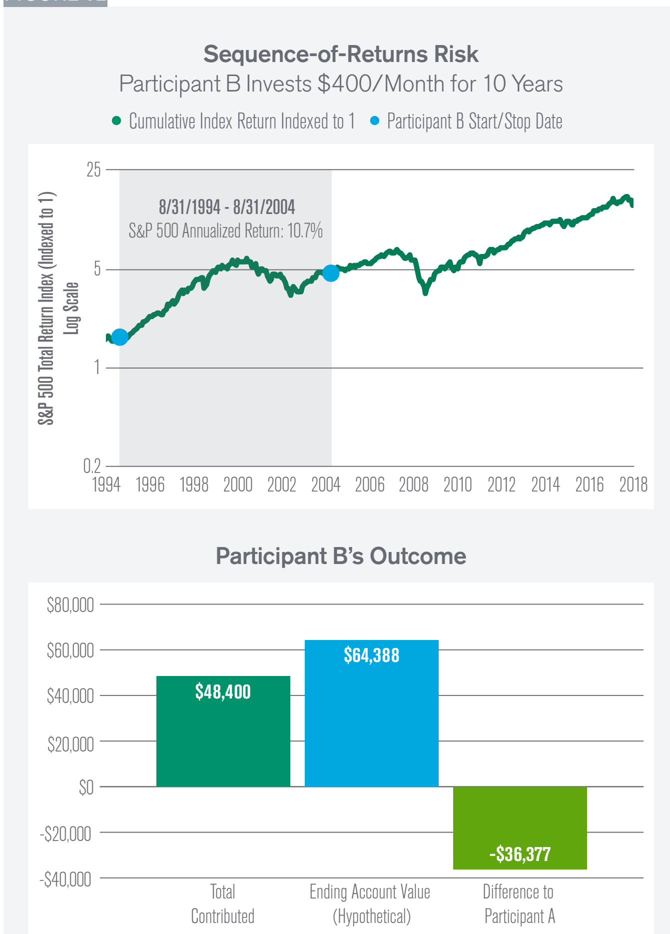
Participant A's Outcome



Data from 1/31/1990 - 12/31/2018.
Source: FactSet. Note: Hypothetical illustration. Results not intended to represent any actual investment strategy. Past performance is no guarantee of future results. Figures 11 and 12 depict two actual, historical periods where the average return is the same, only the sequence of returns is different. This is meant to illustrate the importance of the path one's portfolio takes and, therefore, the need to mitigate sequence-of-returns risk.

In fact, steeper glide paths introduced up to 75% more uncertainty in outcomes at retirement.

FIGURE 12

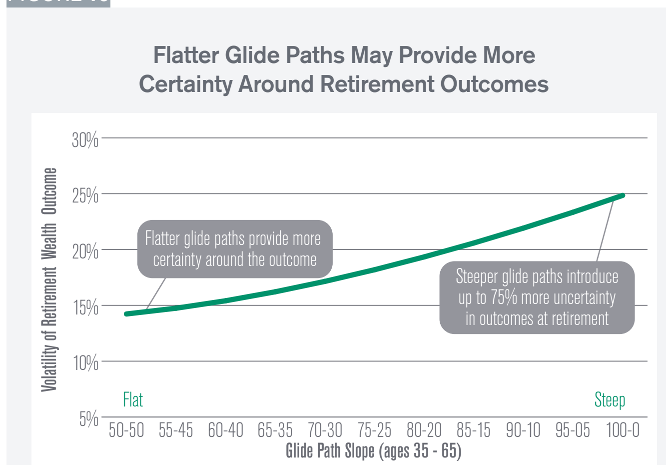


Data from 1/31/1990 - 12/31/2018.
Source: FactSet. Note: Hypothetical illustration. Results not intended to represent any actual investment strategy. Past performance is no guarantee of future results.

To make matters worse, a steeply sloping glide path can amplify a bad sequence of returns in two ways. First, the more aggressive allocation would suffer larger losses when equities sell off. Second, the rapid reduction in equity could potentially "lock in" those losses by selling out of equity as the market recovers. Flatter, less-sloped glide path structures are less sensitive to the timing of market returns and, therefore, may reduce the potentially harmful, if not disastrous, effects of sequence-of-returns risk on retirement success.

Next, let's look at the relationship of glide path slope to the variation in wealth outcomes, as plotted in **Figure 13**. Using rolling historical 30-year returns, we examined the degree to which slope is related to ending wealth variation. Beginning on the left side of the graph, we see that a perfectly flat glide path (i.e., one that remains equally balanced between stocks and bonds throughout the life cycle) can experience 14% variation in ending outcomes, depending on the exact sequence of returns assumed. As one steepens the glide path slope (moving up and to the right on the line plotted), the variation in ending wealth outcomes increases significantly. In fact, steeper glide paths introduced up to 75% more uncertainty in outcomes at retirement. This analysis of various glide path slopes supports the assertion that a flatter glide path is preferable to a more steeply sloped one with respect to alleviating the potentially detrimental effects of a bad string of market returns over time, other things equal.

FIGURE 13



Glide paths are divided between stocks (S&P 500) and bonds (Barclays U.S. Aggregate). Several glide paths are examined and are denoted by their beginning (year 0) and ending (year 30) stock allocation. For example, the "50-50" glide path is flat; it begins and ends with 50% stock allocation. The "100-0" glide path is steeply sloped, beginning with 100% stock allocation and ending with no stock allocation. Volatility of retirement wealth outcome for each set measured as the standard deviation of year-to-year change in 30-year cumulative return. Returns are simply compounded over 30-year rolling windows. This test was done for the overlapping 30-year windows from 1926 - 2018. IMPORTANT: This hypothetical situation contains assumptions that are intended for illustrative purposes only and are not representative of the performance of any security. There is no assurance similar results can be achieved, and this information should not be relied upon as a specific recommendation to buy or sell securities.
Source: American Century Investments.

Let's illustrate this concept using two extreme examples. First, consider a hypothetical investor who holds a constant 50/50 stock/bond mix throughout her lifetime. In effect, the investor is relatively indifferent to the exact sequence of equity and bond returns since her portfolio is always, by definition, equally weighted. (This investor's portfolio corresponds to the left endpoint of the line on **Figure 13**.) Next, imagine an investor who begins with an all-equity portfolio and systematically reduces that equity allocation over time, eventually ending with 0% equity and 100% fixed income (corresponding to the right most point on the line graphed in **Figure 13**). In these two examples, our second investor clearly prefers (i.e., needs) "good" equity returns early on, when he holds a high allocation to that asset class. "Poorer" equity returns later in life are much less relevant, given their reduced exposure. The exact sequence, or path, of equity returns will play a more influential role in the latter portfolio than in the former.

A glide path must be robust enough to account for a broad range of withdrawal assumptions, limiting market risk for those with large account balances, but providing enough equity exposure to limit growth risk for those with smaller balances.

Estimating Optimal Equity Exposure in Retirement

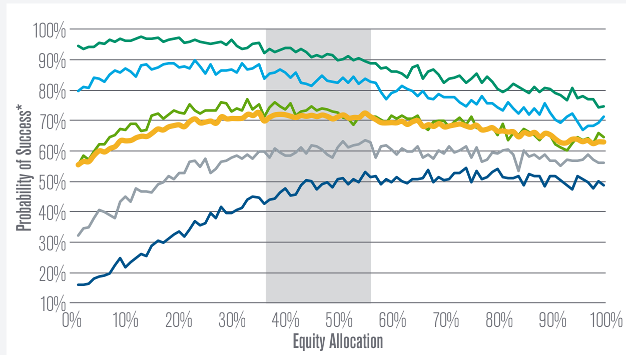
Determining the "right" amount of equity exposure in retirement requires some assumptions about the investors in the plan. These variables include time horizon (life expectancy), withdrawal rates, and future market returns. Of course, answers to these questions are likely to be as varied as the participants in the plan themselves. As a result, a glide path must be robust enough to account for a broad range of withdrawal assumptions, limiting market risk for those with large account balances, but providing enough equity exposure to limit growth risk for those with smaller balances.

The result of such an analysis is shown in **Figure 14**, which depicts the interaction effect of withdrawal rates and equity holdings on the likelihood of having enough money to fund retirement. At the top of the graphic, we see that "good" savers (those whose account balances are large enough to require a 4%-4.5% annual withdrawal rate) can do well with only 20-30% in equity or risky assets post-retirement—they don't require the extra return, and equity exposures beyond a certain level serve only to increase their market risk. On the other hand, "poorer" savers (those needing to withdraw a larger percentage of their nest egg each year) need at least 40-60% in equities to give them a potentially decent chance of succeeding in retirement, wherein "success" is defined as not running out of money. The thick orange line shows the average success probabilities for the withdrawal rates shown. The "sweet spot," which we've highlighted, falls in a range between about 35% and 55% equities in retirement.

From this example, it's clear that higher withdrawal rates in retirement require a significant amount of equity exposure to improve the retiree's likelihood of overcoming longevity risk. At a 40% to 45% allocation to stocks in the terminal allocations of our glide path suite, we're positioned in the heart of what we believe is the "equity sweet spot."

FIGURE 14

Optimal Risk (Equity) Exposure in Retirement Example



*Probability of success defined as not running out of money before age 95 in simulation testing. This hypothetical situation contains assumptions that are intended for illustrative purposes only and are not representative of the performance of any security. There is no assurance similar results can be achieved, and this information should not be relied upon as a specific recommendation to buy or sell securities.

Source: American Century Investments.

Measuring Success: Tangible Evidence of Our Approach

American Century's target-date portfolios have been designed to produce relatively attractive risk-adjusted returns over time. We believe performance should benefit from lower volatility and better downside protection, which together contribute to wealth accumulation by compounding at a higher rate than more volatile alternatives, all else equal. We looked at volatility, return and wealth comparisons for a single vintage for a single period in **Figure 10**. Here, we look at downside protection across the entire glide path (**Figure 15**), and at a single vintage versus competitors across multiple drawdown periods (**Figure 16**). What we find is that the One Choice Target Date Portfolios have consistently delivered strong relative performance during major market drawdowns. They do so by managing various sources of risk along the glide path and preserving more capital on the downside. Ultimately, this risk-aware approach has provided better wealth accumulation than many peers across multiple market environments.

FIGURE 15

Downside Protection Across the Glide Path

Peer Rank

● 1st-25th Percentile ● 26th-50th Percentile ● 51st-75th Percentile ● 76th-100th Percentile

Drawdown Date	S&P 500 - Total Return	American Century One Choice 2050 I % Rank/# Peers	American Century One Choice 2045 I % Rank/# Peers	American Century One Choice 2040 I % Rank/# Peers	American Century One Choice 2035 I % Rank/# Peers	American Century One Choice 2030 I % Rank/# Peers	American Century One Choice 2025 I % Rank/# Peers
12/11/2007 - 03/17/2008	-15.3	N/A	5/124	N/A	1/137	N/A	1/139
05/16/2008 - 11/20/2008	-46.5	N/A	1/138	N/A	1/152	N/A	1/167
01/03/2009 - 03/09/2009	-27.0	20/178	15/156	14/262	4/167	10/263	5/182
04/24/2010 - 07/02/2010	-15.6	22/183	4/174	15/244	2/180	17/243	7/195
07/23/2011 - 10/03/2011	-17.9	21/223	8/184	10/250	4/192	12/248	9/207
07/21/2015 - 08/25/2015	-12.0	18/277	3/249	11/291	3/249	16/287	14/258
12/30/2015 - 02/11/2016	-11.8	14/270	3/247	9/280	3/247	14/280	20/256
01/29/2018 - 02/08/2018	-10.1	13/254	12/230	11/257	7/230	10/257	18/238
09/21/2018 - 12/24/2018	-19.4	30/259	13/241	14/258	13/241	24/258	39/249
02/20/2020 - 03/23/2020	-33.8	18/245	10/233	13/245	11/233	20/251	34/240

One Choice Target Date Portfolios have consistently delivered strong performance during major market drawdowns.

By preserving more capital on the downside and managing the impacts of various sources of risk, One Choice Portfolios have delivered top-quartile performance versus peers since inception.

Data from 8/31/2004 - 3/31/2021. Morningstar Category: US Fund Target-Date I Class Mutual Fund.
Source: FactSet, Morningstar. The Morningstar percentile ranking is based on the fund's total-return relative to all funds in the category.
Past performance is no guarantee of future results.

FIGURE 16

Downside Protection at One Vintage on the Glide Path

Drawdown Date	S&P 500 - Total Return	American Century One Choice 2035 I	American Funds 2035 Target Date Retire R5	Fidelity Freedom® 2035	JPMorgan Smart Retirement® 2035 R5	Vanguard Target Retirement 2035 Inv	# of Funds in Morningstar Category
12/11/2007 - 03/17/2008	-15.3	1	6	39	24	34	137
05/16/2008 - 11/20/2008	-46.5	1	20	63	35	33	152
01/03/2009 - 03/09/2009	-27.0	4	13	27	37	79	167
04/24/2010 - 07/02/2010	-15.6	2	9	40	31	64	180
07/23/2011 - 10/03/2011	-17.9	4	23	54	94	47	192
07/21/2015 - 08/25/2015	-12.0	3	49	95	66	57	249
12/30/2015 - 02/11/2016	-11.8	3	54	99	81	37	247
01/29/2018 - 02/08/2018	-10.1	7	37	96	93	35	230
09/21/2018 - 12/24/2018	-19.4	13	44	98	49	41	241
02/20/2020 - 03/23/2020	-33.8	11	30	61	62	36	233

Given generally lower equity exposure than peers, One Choice 2035 Portfolio delivered top-quartile performance during major market drawdowns.

By preserving more capital on the downside and managing the impacts of various sources of risk, One Choice Portfolios have delivered top-quartile performance versus peers since inception.

Data from 8/31/2004 - 3/31/2021. Morningstar Category: US Fund Target-Date.
Source: FactSet, Morningstar. The Morningstar percentile ranking is based on the fund's total return relative to all funds in the category.
Past performance is no guarantee of future results.

We encourage consultants and plan fiduciaries to evaluate competing TDF offerings considering their own plan's unique risks and considerations.

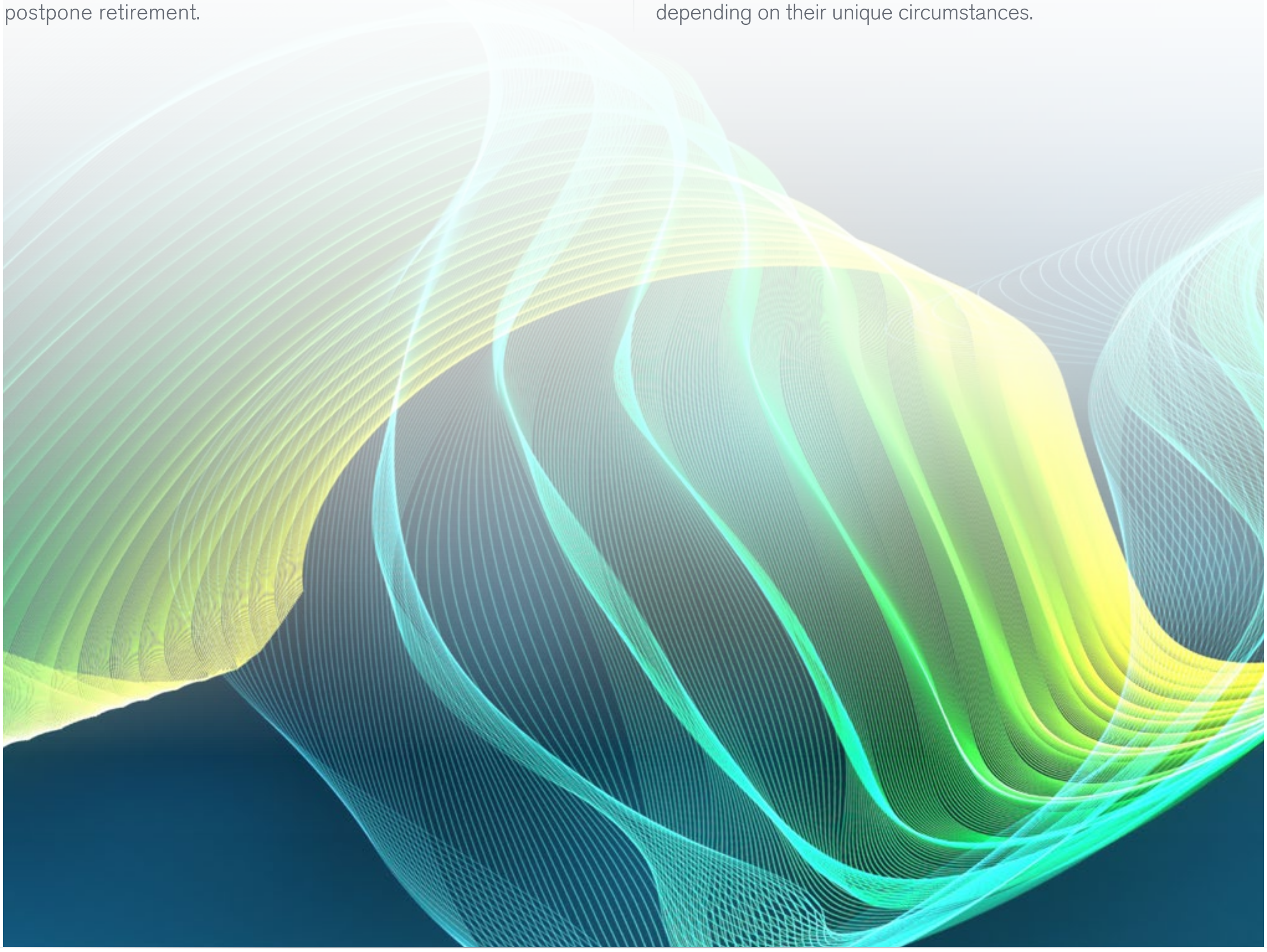
Our Risk-Aware Approach Is Designed to Generate Attractive Risk-Adjusted Returns

We began by explaining that we use a balance-of-risks framework to implement a consistent philosophy across our glide path suite. We believe the resulting return/risk profiles are well-suited to address the overriding retirement investment challenge of longevity risk as we define it. Further, we explained how this larger challenge can be broken down into several constituents—growth risk, market risk, macro-scenario risk, income horizon risk, and behavioral risk—which are prevalent to varying degrees at different points in an investor's lifetime. The American Century glide path philosophy isn't attuned to any one underlying risk, but instead seeks to address each of them when it's predominant in an investor's life cycle. We believe that by emphasizing this balanced approach, we'll also address behavioral risks key to investor success.

The "to" glide path is consistent with this approach because it calibrates equity risk with investor wealth, setting equity risk at its most conservative level while account balances peak. This approach also conforms with human capital arguments about financial wealth and asset allocation, with the glide path remaining flat beyond the point at which an investor's future earnings reach zero. Our glide path philosophy further recognizes the reality that retirement is increasingly less defined by a single "date" and more closely resembles a "zone" as more Americans postpone retirement.

We further explained the rationale for a flat glide path in retirement by appealing to the desire for potentially more predictable outcomes aimed at reducing sequence-of-returns risk relative to sloped glide paths. What's more, we argue that this risk-aware approach has generated attractive risk-adjusted returns across the glide path and relative to several major competitors at a given vintage. We find further evidence for the efficacy of our One Choice glide path in the ability to mitigate downside risk during market downturns.

Ultimately, we don't argue that any single glide path or approach is perfectly suited for all investors or markets or plans. On the contrary, we believe firmly that each TDF offering has defining characteristics that make it attractive under different market conditions and to different retirement plans. With that in mind, we encourage consultants and plan fiduciaries to evaluate competing TDF offerings considering their own plan's unique risks and considerations. To further this goal, we have created the Target Date Blueprint tool that allows users to weight and prioritize various risk metrics, combining them into one score to evaluate TDF suitability in a comprehensive way. We hope that investors use this tool to evaluate TDF choices based on their own unique criteria. Because the aggregation is user-specific, we believe different investors will arrive at different ratings for TDFs depending on their unique circumstances.



	Fund Ticker	Prospectus Net Expense Ratio	3-Year Standard Deviation	1-Year Return	5-Year Return	10-Year/Since Inception Return	Inception Date
American Century One Choice® In Retirement I	ATTIX	0.55	8.98	25.49	7.71	6.69	8/31/2004
American Century One Choice® 2035 I	ARLIX	0.62	12.10	35.66	9.94	8.43	8/31/2004
American Funds 2015 Target Date Retire R5	REJTX	0.35	7.89	23.11	7.88	7.33	2/1/2007
American Funds 2035 Target Date Retire R5	REFTX	0.42	14.10	44.25	13.01	10.65	2/1/2007
Fidelity Freedom 2015 (No-Load)	FFVFX	0.55	8.96	27.45	8.97	6.84	11/6/2003
Fidelity Freedom 2035 (No-Load)	FFTHX	0.72	15.71	51.68	13.22	9.40	11/6/2003
JPMorgan SmartRetirement® Income R5	JSIIX	0.50	8.15	22.15	6.85	5.64	5/15/2006
JPMorgan SmartRetirement® 2035 R5	SRJIX	0.55	14.84	45.28	11.30	9.12	7/31/2007

Data as of 3/31/2021.

Source: Morningstar. Returns and standard deviation over one year are annualized.

All funds: Investment objective is Asset Allocation. Daily Liquidity. Principal not guaranteed. The tax consequences of owning shares of the funds will vary depending on whether you own them through a taxable or tax-deferred account. Tax consequences result from distribution by the funds of dividend and interest income they have received or capital gains they have generated through their investment activities. Tax consequences also may result when investors sell fund shares after the net asset value has increased or decreased. The fund's prospectus contains this and other information, and should be read carefully before investing.

I Class	Quarter	YTD	1-Year	3-Year	5-Year	10-Year	Inception
One Choice® 2065 Portfolio	**4.15%**	**4.15%**	**-**	**-**	**-**	**-**	**21.51%**
Morningstar Target-Date 2060+ % Rank	89	89	-	-	-	-	87
Funds in Morningstar Category	344	344	-	-	-	-	321
One Choice® 2060 Portfolio	**4.10%**	**4.10%**	**51.36%**	**12.30%**	**12.72%**	**-**	**12.39%**
Morningstar Target-Date 2060+ % Rank	90	90	76	38	65	-	69
Funds in Morningstar Category	344	344	271	185	109	-	69
One Choice® 2055 Portfolio	**3.89%**	**3.89%**	**50.04%**	**12.09%**	**12.54%**	**10.09%**	**10.09%**
Morningstar Target-Date 2055 % Rank	93	93	76	41	59	15	15
Funds in Morningstar Category	215	215	204	188	145	48	48
One Choice® 2050 Portfolio	**3.66%**	**3.66%**	**48.25%**	**11.90%**	**12.25%**	**9.88%**	**7.91%**
Morningstar Target-Date 2050 % Rank	93	93	84	49	64	26	32
Funds in Morningstar Category	217	217	206	192	149	73	47
One Choice® 2045 Portfolio	**3.15%**	**3.15%**	**43.95%**	**11.20%**	**11.56%**	**9.51%**	**8.56%**
Morningstar Target-Date 2045 % Rank	97	97	88	65	88	35	25
Funds in Morningstar Category	215	215	204	188	148	82	5
One Choice® 2040 Portfolio	**2.66%**	**2.66%**	**39.73%**	**10.49%**	**10.75%**	**8.98%**	**7.42%**
Morningstar Target-Date 2040 % Rank	95	95	90	74	91	58	47
Funds in Morningstar Category	217	217	206	192	149	82	67
One Choice® 2035 Portfolio	**2.37%**	**2.37%**	**35.66%**	**9.77%**	**9.94%**	**8.42%**	**7.85%**
Morningstar Target-Date 2035 % Rank	90	90	90	83	93	60	63
Funds in Morningstar Category	215	215	204	188	148	83	11
One Choice® 2030 Portfolio	**2.09%**	**2.09%**	**31.76%**	**9.10%**	**9.19%**	**7.87%**	**6.59%**
Morningstar Target-Date 2030 % Rank	79	79	84	74	85	61	47
Funds in Morningstar Category	223	223	212	192	149	82	67
One Choice® 2025 Portfolio	**1.79%**	**1.79%**	**28.16%**	**8.43%**	**8.45%**	**7.35%**	**7.08%**
Morningstar Target-Date 2025 % Rank	56	56	75	72	84	61	63
Funds in Morningstar Category	222	222	211	191	151	86	11
One Choice® In Retirement Portfolio	**1.67%**	**1.67%**	**25.49%**	**8.04%**	**7.70%**	**6.68%**	**6.21%**
Morningstar Target-Date Retirement % Rank	6	6	6	9	6	1	1
Funds in Morningstar Category	167	167	156	139	116	75	25

Data as of 3/31/2021. Performance in USD, net of fees. Periods greater than one year have been annualized. Inception date: One Choice 2065, 9/23/2020; One Choice 2060, 9/30/2015; One Choice 2055; 3/31/2011; One Choice 2050, 2040 and 2030, 5/30/2008; One Choice 2045, 2035 and 2025, 8/31/2004; and One Choice In Retirement, 8/31/2004.

Source: Morningstar, Inc., FactSet.

Performance reflects I Class shares, unless otherwise indicated. Past performance does not guarantee future results and investment return and principal value will fluctuate, so redemption value may be worth more or less than original cost. Total return includes reinvestment of all dividends and capital gains. Returns less than one year are not annualized. Returns presented do not reflect recurring and nonrecurring fees. Fund performance may be subject to substantial short-term changes due to market volatility or other factors. For more current month end performance, please visit our website.

You should consider the fund's investment objectives, risks, and charges and expenses carefully before you invest. The fund's prospectus or summary prospectus which can be obtained by visiting americancentury.com contains this and other information about the fund and should be read carefully before investing or sending money.

The opinions expressed are those of American Century Investments and are no guarantee of the future performance of any American Century Investments fund. This information is for educational purposes only and is not intended as investment advice. The information is not intended as a personalized recommendation or fiduciary advice and should not be relied upon for investment, accounting, legal or tax advice.

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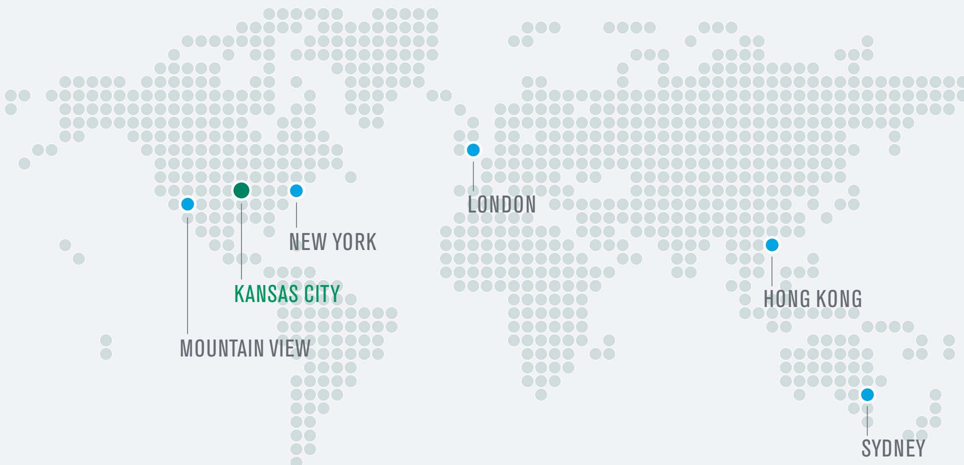

1958
BUSINESS FOUNDED

OUR SOLE FOCUS IS INVESTMENT MANAGEMENT

194 INVESTMENT PROFESSIONALS
TOTAL as of 3/31/2021.

19 YEARS OF EXPERIENCE
AVERAGE as of 3/31/2020.

INVESTMENT CAPABILITIES

Global Growth Equity	Global Value Equity	Disciplined Equity	Global Fixed Income	Multi-Asset Strategies	Alternatives

$220b
ASSETS UNDER MANAGEMENT
as of 3/31/2021.

Each One Choice Target Date Portfolio is a professionally managed asset allocation fund, designed to be a comprehensive investment solution. The portfolios all seek the highest total return, consistent with their asset mix. Over time the asset mix and weightings are adjusted to be more conservative. In general, as the target year approaches, the portfolio's allocation becomes more conservative by decreasing the allocation to stocks and increasing the allocation to stocks and increasing the allocation to bonds and money market instruments.

The One Choice Target Date Portfolio's target date is the approximate year when investors plan to retire or start withdrawing their money. The principal value of the fund is not guaranteed at any time, including at the target date. The fund is subject to the risks of the underlying funds in which it may invest.

The information is not intended as a personalized recommendation or fiduciary advice and should not be relied upon for investment, accounting, legal or tax advice. There is no guarantee that the investment objectives will be met.

Diversification does not ensure against a loss.

Managing Money, Making An Impact

American Century Investments® is a leading asset manager focused on delivering investment results and building long-term client relationships while supporting research that can improve human health and save lives. It's how we and our clients together **Prosper With Purpose**®.

Every day people are increasingly focused on investing to make the world a better place for themselves, their families, their organizations and the world at large. It is possible to live a more meaningful and impactful life and give back something that's more valuable than money.

When you invest with us, you can also invest in the future of others and have the potential to impact the lives of millions. That's possible because of the distinct relationship with the Stowers Institute for Medical Research, which owns more than 40% of American Century. Our dividend payments provide ongoing financial support for the Institute's work of uncovering the causes, treatments and prevention of life-threatening diseases, like cancer. Together we can become a powerful force for good.

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