Manulife

Analyzing the merits of *through* versus *to* glide paths

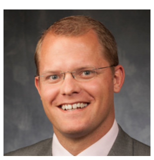
The Manufacturers Life Insurance Company

Nathan W. Thooft, CFA
Chief Investment Officer,
Senior Portfolio Manager
Multi-Asset Solutions Team
Manulife Investment Management

Geoffrey Kelley, CFA
Senior Portfolio Manager,
Global Head of Strategic Asset Allocation,
Systematic Equity Beta
Multi-Asset Solutions Team
Manulife Investment Management

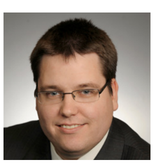
James Robertson, CIM
Senior Portfolio Manager,
Head of Asset Allocation—Canada
Global Head of Tactical Asset Allocation,
Multi-Asset Solutions Team
Manulife Investment Management

Emilie Paquet, FSA
Head of Strategic Initiatives
and Innovation,
Multi-Asset Solutions Team
Manulife Investment Management



Benjamin W. Forssell, CFA
Managing Director,
Global Multi-Asset Client Portfolio Manager
Multi-Asset Solutions Team
Manulife Investment Management

Misbah Lalani, CFA
Senior Investment Analyst
Multi-Asset Solutions Team
Manulife Investment Management



Alexandre M. Richard, CFA
Portfolio Manager
Multi-Asset Solutions Team
Manulife Investment Management

Key takeaways

- *Through* glide paths provide potential benefits in helping members address a broader range of risks that they face, including longevity risk that leads to higher income shortfall risk.
- With the objective of helping members achieve greater wealth accumulation in their peak earning years, *through* glide paths provide the potential for greater cumulative wealth postretirement.
- More gradual derisking versus *to* glide paths aims to protect members against market downturns in the critical years leading up to retirement.
- During the decumulation phase postretirement, *through* glide paths typically continue to derisk, which aims to deliver a less volatile risk profile for members.

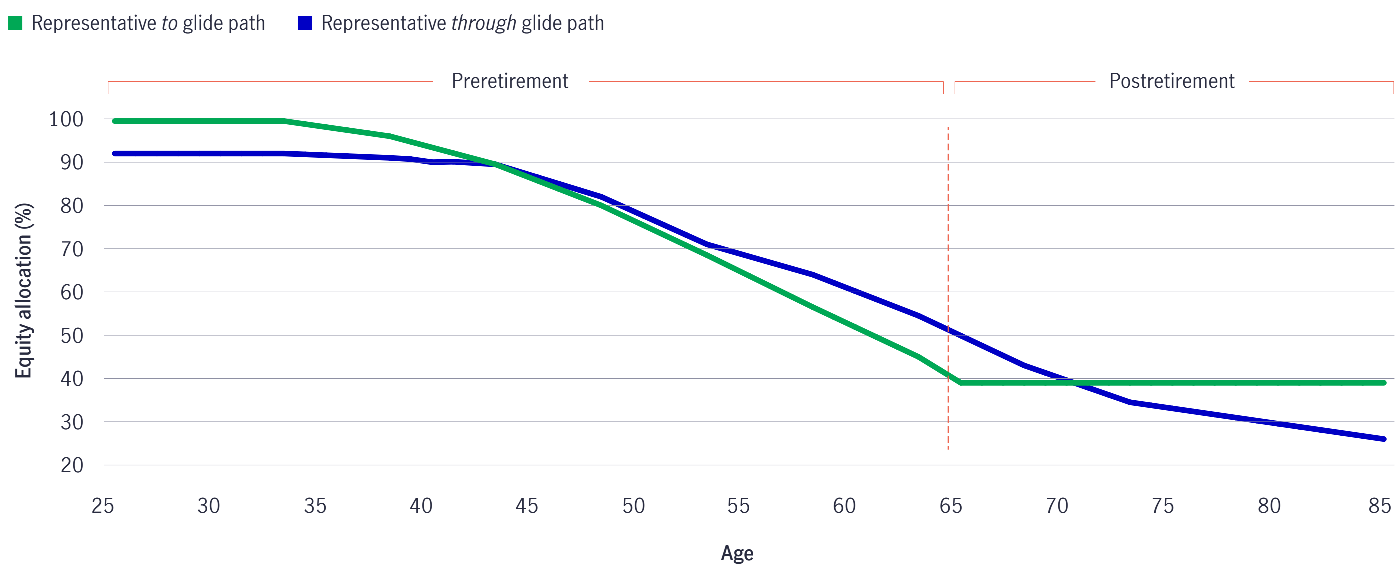
Why glide path design is important

Target-date funds are regularly selected by plan fiduciaries as the default investment option within retirement plans and offer a diversified, professionally managed investment strategy that aligns to a member's long-term retirement saving horizon. A key distinction between target-date funds is glide path design—the asset allocation adjustments that a strategy makes to balance growth potential with risk management over a fund's time horizon. Target-date funds typically follow one of two glide path approaches:

A *through* retirement approach *(through)* glide path maintains a higher allocation to growth assets over a longer time period and typically derisks more gradually leading up to retirement, reaching the most conservative allocation to growth assets postretirement.

To retirement *(to)* glide paths are typically characterized by an earlier and steeper derisking profile that aims to reach the most conservative allocation to growth assets at a strategy's target retirement date.

Contrasting *through* and *to* glide path design



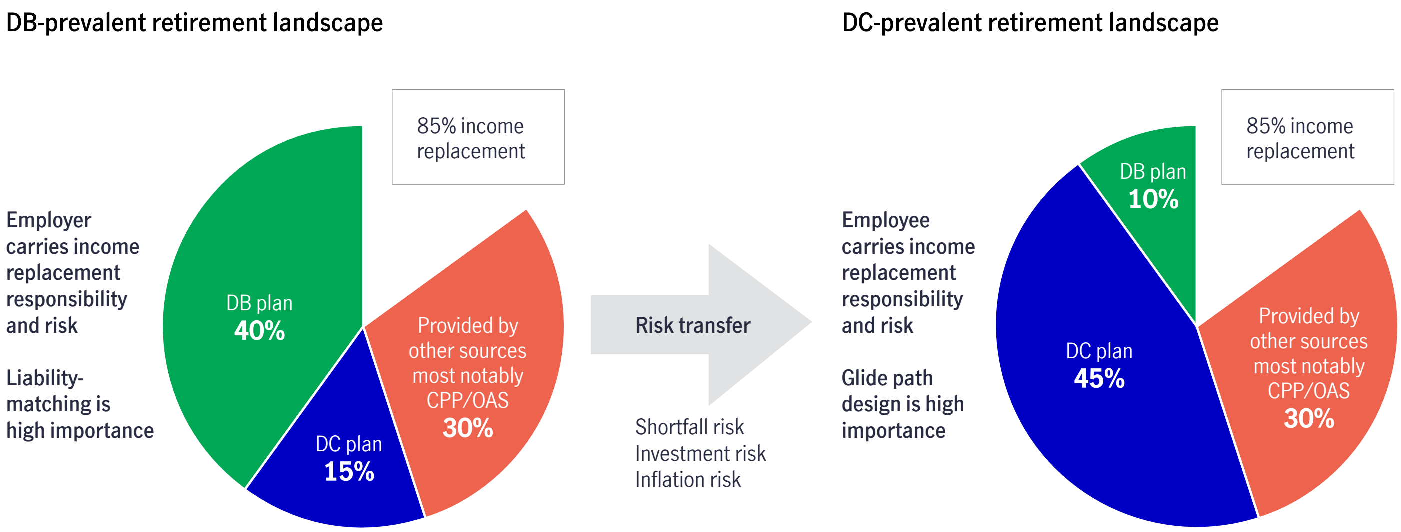
Source: Morningstar, Manulife Investment Management, December 2023. Target-date fund suites in the Canadian Investment Funds Standards Committee (CIFSC) categories were classified as *to* or *through*. The *through* glide path is an asset-weighted average of glide paths from CI Investments, Fidelity, Franklin Templeton, Industrial Alliance, and Manulife Investment Management. The *to* glide path is an asset-weighted average of glide paths from Assumption Life, BlackRock, Canada Life, Evermore Capital, MFS, Sun Life, and TD. The asset mix and total fund market values were obtained from Morningstar to compute the representative glide path using an asset-weighted average of the target-date funds. Manual updates were made to ensure the glide paths accurately reflect industry practice, such as updating the *to* glide path to ensure asset mix consistency postretirement. For illustrative purposes only. Not reflective of any fund.

When assessing different target-date strategies for an investment lineup, plan fiduciaries often need to consider the merits—and appropriateness—of different glide path approaches based on member demographics. While derisking an investment to achieve the most conservative asset allocation at retirement seems intuitive because members don't want undue investment risk at the point of retirement, it's an approach that predominantly considers risk as investment-only risk. In practice, members face a multitude of risks due to the increased prevalence of defined contribution (DC) retirement plans. Within DC plans, the responsibility for lifelong retirement income rests solely on individuals who aren't always adequately equipped to navigate the complex financial decisions required to achieve long-term retirement readiness. We believe glide path design should be considered within this broader context and should aim to address the broader risks members face of which investment risk is an important component. In this paper, we review some of the predominant risks members face and how *through* glide paths may present a more optimal option in helping members achieve long-term retirement readiness.

Increasing income uncertainty

Income uncertainty for individuals in Canada is increasing as the growth of DC plans shifts retirement risk from employers to employees. As defined benefit (DB) plans become less prevalent, individuals' income replacement certainty is diminishing, and member retirement readiness is becoming increasingly dependent on the investment strategy they adopt and the choices they make in how much to contribute toward retirement savings. We believe that these factors place greater importance on the objectives that glide path design aims to achieve, especially within the context of longevity risk.

Evolution of income replacement sources



Source: Manulife Investment Management, April 2024. For illustrative purposes only. Not reflective of any fund. CPP refers to Canada Pension Plan. OAS refers to Old Age Security.

Longevity risk and its effect on shortfall risk

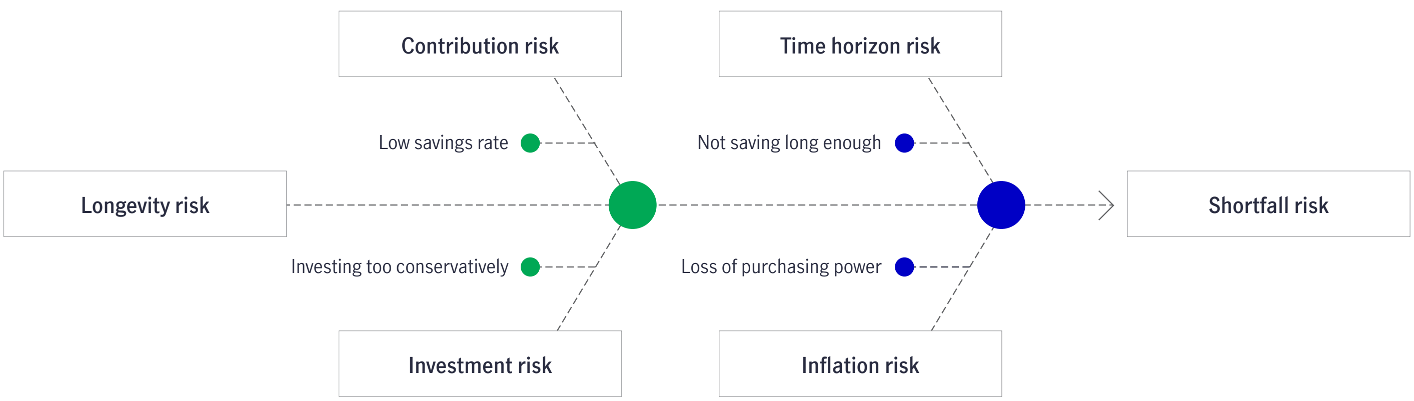
Longevity risk is the possibility of retirees living longer than expected, leading to a higher probability of shortfall risk—falling short of an income replacement target.

Based on life expectancy today, Canadian women and men with a secondary education could live between 17 and 21 years on average in retirement, based on a retirement age of 65.[1]

65-year-old Canadian	Today's average life expectancy (years)	Average time in retirement (years)
Women	86.3	21.3
Men	82.2	17.2

Accumulating enough savings to achieve a targeted income replacement rate—such as the often targeted 85% income replacement—for around 20 years, possibly longer, can be a formidable challenge. The factors contributing to shortfall risk are multifaceted and include contribution, time horizon, inflation, investment, and longevity risk, all of which can contribute to heightened shortfall risk.

Factors contributing to shortfall risk



Source: Manulife Investment Management, April 2024. For illustrative purposes only.

For example, a member may have an optimal savings time horizon, such as 40 years, but if the contribution rate or investment growth is too low, the probability of income shortfall increases. Similarly, a member may have a high contribution rate but a short time horizon, which may also increase shortfall probability.

We believe that helping members achieve retirement readiness requires a glide path approach that factors in the multiple risks members face. We cover several core aspects that we believe plan fiduciaries should consider when evaluating glide path design, including shortfall probability, optimal derisking in accumulation and decumulation, and the importance of maximizing wealth accumulation over the investment time horizon.

1 Office of the Chief Actuary, Government of Canada, December 14, 2022. Latest published information.

Income shortfall probability

Income shortfall probability is measured as the likelihood of members not meeting their income replacement target at retirement, which may lead to a lower standard of living and increased hardship throughout retirement. Income replacement is typically measured in two ways: as a dollar-income replacement target, for example, 85% of final salary, and, alternatively, as a fixed percentage of accumulated assets.

To glide paths generally target a fixed percentage of assets—for example 4%—as an achievable income year over year. In theory, a member can draw down 4% of accumulated assets as income and never run out of money; however, in reality, the actual dollar value of income reduces as accumulated assets diminish.

Income replacement presented as a percentage of assets doesn't convey a member's actual dollar-income experience. This may come as a surprise to members who assume that a drawdown percentage of assets represents a consistent and sustainable dollar income over time.

Where *to* glide paths typically target a percentage replacement rate, *through* glide paths generally target a dollar replacement rate, which provides a realistic indication of a member's income in retirement. Measuring shortfall probability of *to* versus *through* glide paths for target-date fund suites in Canada shows that shortfall probability is up to 5% higher for *to* glide paths and increases as members age.[2]

Preretirement and postretirement derisking

The derisking phase within glide paths is one of the main distinctions of glide path design and has historically received much attention in the discussion of *through* and *to* glide paths. Both types of glide paths derisk leading up to retirement. But *to* glide paths derisk earlier and at a more rapid pace as they target the most conservative asset allocation at retirement date. The theory behind this approach is based on several factors, such as members may withdraw all of their capital at retirement to annuitize income and as such will want to be in the most conservative asset allocation on retirement date. Or individuals at retirement no longer add financial capital to their target-date fund and, as such, need to be in the most conservative investment allocation.

However, based on the other types of risk that members face—notably longevity risk—maximizing risk-adjusted capital growth opportunities is increasingly important. To achieve the goal of reaching the most conservative asset allocation by retirement date, *to* glide paths start rapidly derisking portfolios at a time when members are reaching their peak earnings years—age 40 to 55—a period when members have the ability to tolerate higher levels of risk to maximize wealth accumulation.

We conducted regression analysis to measure the magnitude of derisking between glide path approaches. A *through* glide path derisks by approximately 1.5% every year while a *to* glide path derisks by approximately 2.0%. This may not seem significant, but put in another context, this is 33.0% faster than the *through* glide paths—a potentially significant opportunity cost for members aiming to accumulate wealth in peak earning years, which could affect members' wealth by as much as 10.0% over time.

A further constraint of a *to* glide path, in our opinion, is that it implicitly assumes static absolute risk tolerance for members postretirement. In other words, *to* glide paths are based on the assumption that a member's risk tolerance doesn't change postretirement. This fails to account for the growing likelihood that members may need to continue generating growth postretirement for a time to support a potentially longer lifespan. Moreover, by maintaining static asset allocation postretirement, *to* glide paths may effectively increase risk for members when an active asset allocation approach, typically experienced in *through* glide paths, would derisk at an appropriate time through retirement.

Preretirement derisking gathers a lot of attention, for good reason: Members want to maximize their wealth accumulation prior to retiring and avoid undue investment risk. However, postretirement risk exposure is increasingly gaining attention as an important phase in a member's overall retirement journey. As lifespans grow longer, managing risk in decumulation will likely become ever more important.

2 As of December 31, 2023. Based on target-date fund suites in the Canadian Investment Funds Standards Committee (CIFSC) categories classified as to or through.

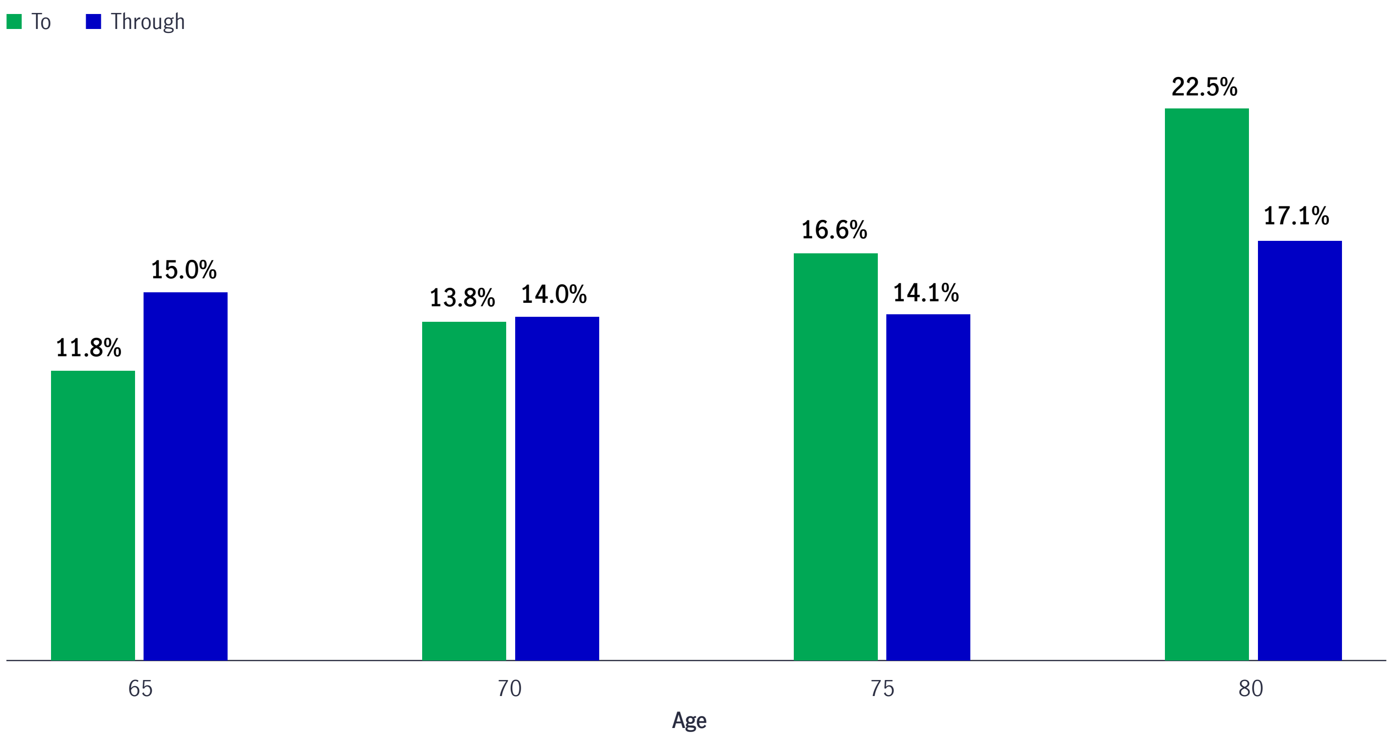
Managing decumulation risk

Maintaining consistent risk exposure during the decumulation phase postretirement is an important consideration when evaluating glide path design. Stable risk exposure may help to ensure a predictable income stream—an important criteria for retirees.

We examined forward-looking risk exposure in the decumulation phase by accounting for the weight in growth assets between *through* and *to* glide paths, and factoring in the changing time horizon as a member approaches the end of decumulation.

In our analysis, *through* glide paths present more stable risk parameters, while *to* glide paths show increasing risk exposure. This occurs because *through* glide paths continue to derisk during decumulation, whereas *to* glide paths maintain static asset allocation from age 65 onward. By maintaining a static allocation, not only does risk exposure increase relative to the remaining time horizon, but it's exacerbated by a member's decreasing risk tolerance. From age 65, *to* glide paths increase risk exposure for members, which is counter to what most members expect—members typically expect that a glide path becomes less risky over time.

Forecasted risk premium exposure



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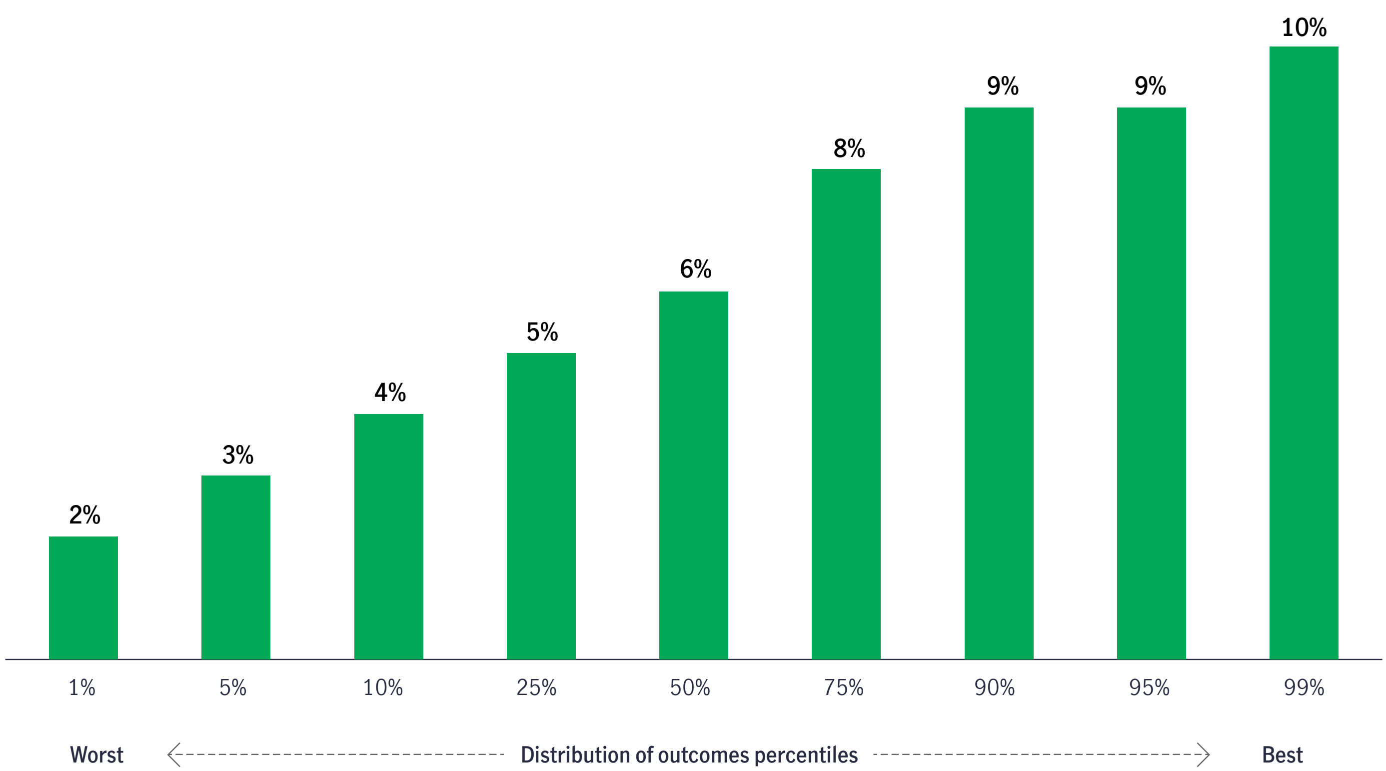
Preretirement and postretirement wealth accumulation

Wealth accumulation is a critical component of long-term retirement readiness, particularly in the context of increasing lifespans. As individuals live longer, the risk of outliving their savings becomes a significant concern. A *through* glide path, which continues to adjust asset allocation even after the target retirement date, is designed to support sustained growth and mitigate longevity risk while also managing investment risk. Unlike *to* glide paths that adopt static asset allocation at retirement, which has the effect of increasing the overall risk profile of target-date strategy postretirement, a *through* glide path provides stable exposure to growth assets that gradually decreases over time. This has the effect of allowing for the potential for continued wealth accumulation without adding undue investment risk to a portfolio. This approach aims to help retirees maintain their standard of living by focusing on higher allocations to growth assets in the accumulation phase, including during members' peak earning years when they're typically able to tolerate more risk, and providing stable lower risk through decumulation. Our analysis highlights that *through* glide paths can generate anywhere from 2% to 10% more wealth for members at retirement.

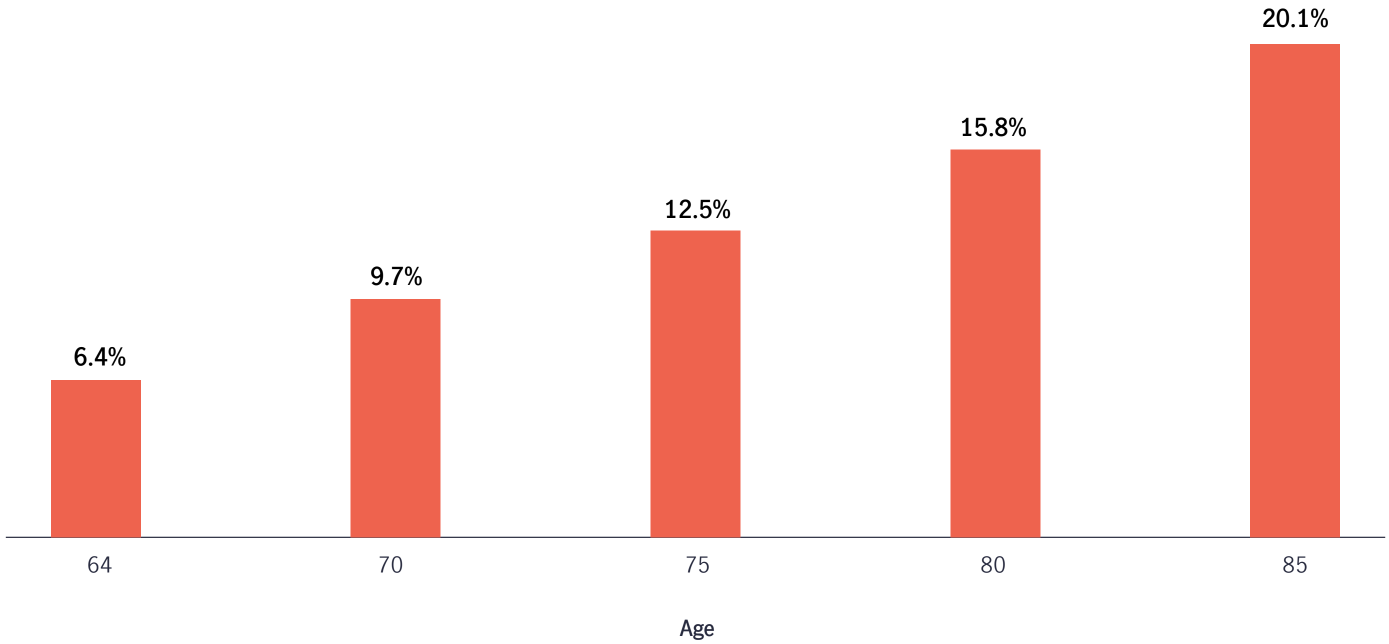
Relative wealth improvement at retirement using a *through* versus *to* glide path



Source: Morningstar, Manulife Investment Management, March 2023. Target-date fund suites in the Canadian Investment Funds Standards Committee (CIFSC) categories were classified as *to* or *through*. The *through* glide path is an asset-weighted average of glide paths from CI Investments, Fidelity, Franklin Templeton, Industrial Alliance, and Manulife Investment Management. The *to* glide path is an asset-weighted average of glide paths from Assumption Life, BlackRock, Canada Life, Evermore Capital, MFS, Sun Life, and TD. The asset mix and total fund market values were obtained from Morningstar to compute the representative glide path using an asset-weighted average of the target-date funds. Manual updates were made to ensure the glide paths accurately reflect industry practice, such as updating the *to* glide path to ensure asset mix consistency postretirement. For illustrative purposes only. See important disclosures for a list of indexes used. It is not possible to invest directly in an index. Not reflective of any fund.

In addition to higher wealth accumulation potential at retirement, *through* glide paths maintain higher equity allocations in the early stage of retirement. This plays an important role in helping members to potentially maintain higher wealth levels throughout decumulation. In our analysis, members at age 85 in a *through* glide path generated over 20% more cumulative wealth on average than members in a *to* glide path, representing a higher asset base from which to draw income in retirement.

The difference in cumulative median wealth accumulation in *through* versus *to* glide paths



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How *through* glide paths may help members achieve retirement readiness

Retirement plan members today face a broader range of risks due to the prevalence of DC plans when compared with fully funded DB plans. Investment choice, contribution rate, and, to some extent, savings time horizon are all decisions that rest with members. Each decision may have a significant effect on a member's retirement readiness and ability to sustain an appropriate income throughout retirement. In addition, longer average lifespans heighten these risks—and income shortfall probability—for members.

Through glide paths aim to help members address the broader set of risks that they face. Maximizing wealth accumulation on a risk-adjusted basis is a key tenet of *through* glide paths. To achieve this, derisking is implemented more gradually leading up to retirement and continues after retirement rather than maintaining a static asset allocation. Members' relative wealth improvement and wealth accumulation are higher in *through* glide paths as shown in our analysis, while risk in decumulation is more stable than is typically experienced in *to* glide paths.

Against this backdrop, plan fiduciaries have an important role in selecting default investment options for members. Assessing the merits of different glide path designs is an important aspect in choosing the most appropriate investment option for a retirement plan's member base. Plan fiduciaries considering different target-date options may want to carefully consider the broader set of risks that contribute to income shortfall and assess how glide path design and *through* glide paths can help to minimize these risks to help members achieve retirement readiness.

The commentary in this publication is for general information only and should not be considered legal, financial, or tax advice to any party. Individuals should seek the advice of professionals to ensure that any action taken with respect to this information is appropriate to their specific situation.

Target-date fund analysis is sourced from Morningstar and Manulife Investment Management, as of December 31, 2024. Index data is sourced directly from index providers. Analysis is based on target-date fund suites in the Canadian Investment Funds Standards Committee (CIFSC) categories classified as to or through. The through glide path is an asset-weighted average of glide paths from CI Investments, Fidelity, Franklin Templeton, Industrial Alliance, and Manulife Investment Management. The to glide path is an asset-weighted average of glide paths from Assumption Life, BlackRock, Canada Life, Evermore Capital, MFS, Sun Life, and TD. The asset mix and total fund market values were obtained from Morningstar to compute the representative glide path using an asset-weighted average of the target-date funds. Manual updates were made to ensure the glide paths accurately reflect industry practice, such as updating the to glide path to ensure asset mix consistency post-retirement. For illustrative purposes only. Not reflective of any fund.

Proprietary methodology and demographic assumptions are based on an investor starting contribution age, 25; starting contribution rate, 5%; final contribution rate, 10%; company match, 4%; retirement date, age 65; starting annual salary, $40,000.

Index definitions

Canadian large-cap equity is represented by the S&P/TSX 60 Index, which tracks the performance of the large-cap segment of the Canadian equity market on the Toronto Stock Exchange (TSX). **Global large-cap equity** is represented by the MSCI World Index, which tracks the performance of large- and mid-cap stocks of developed-market companies. U.S. Core investment grade is represented by the Bloomberg U.S. Aggregate Bond Index, which tracks the performance of U.S. investment grade bonds in government, asset-backed, and corporate debt markets. **Canadian core fixed income** is represented by the FTSE Canada Universe Bond Index, which tracks the performance of marketable government and corporate bonds outstanding in the Canadian market. **Cash** in Canadian dollars is represented by the FTSE 3-Month U.S. Treasury Bill Index, which tracks the performance of the most recent three-month U.S. Treasury bill issues.

Neither asset allocation nor diversification guarantees a profit or protects against a loss. An asset allocation investment option may not be appropriate for all participants, particularly those interested in directing their own investments.

A target-date portfolio is an investment option comprising a fund of funds that allocates its investments among multiple asset classes that can include U.S. and foreign equity and fixed-income securities. The target date is the approximate date an investor plans to start withdrawing money. The portfolio's ability to achieve its investment objective will depend largely on the ability of the subadvisor to select the appropriate mix of underlying funds and on the underlying funds' ability to meet their investment objectives. The portfolio managers control security selection and asset allocation. There can be no assurance that either a fund or the underlying funds will achieve their investment objectives. Investors should examine the asset allocation of the fund to ensure it is consistent with their own risk tolerance. A fund is subject to the same risks as the underlying funds in which it invests. Because target-date funds are managed to specific retirement dates, investors may be taking on greater risk if the actual year of retirement differs dramatically from the original estimated date. Target-date funds generally shift to a more conservative investment mix over time. While this may help manage risk, it does not guarantee earnings growth. An investment in a target-date fund is not guaranteed, and you may experience losses, including principal value, at, or after, the target date. There is no guarantee that the fund will provide adequate income at and through retirement. Consider the investment objectives, risks, charges, and expenses of the fund carefully before investing. For a more complete description of these and other risks, please see the fund's prospectus.

The glide path is the asset allocation within a target-date strategy that adjusts over time as participants' age increases and their time horizon to retirement shortens. The basis of the glide path is to reduce the portfolio's chance of loss as the participants' time horizon decreases. The asset mix of each portfolio is based on a target date, which is the expected year in which participants in a portfolio plan to retire and no longer make contributions. A team of asset allocation professionals adjusts each portfolio's investments over time to ensure a noticeable and steady shift from equities to fixed income in the years leading to retirement or during retirement, if applicable. Investors should examine the asset allocation of the portfolio to ensure it is consistent with their own risk tolerance. In developing the glide path, it was assumed that participants would make ongoing contributions during the years leading up to retirement and stop making those contributions when the target date is reached. The principal value of your investment, as well as your potential rate of return, is not guaranteed at any time, including at, or after, the target retirement date.

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