What if there were a better way to build target date solutions?

From the Field
November 2024

Key Insights

- Our target date strategy leverages T. Rowe Price's decades of experience as a multi-asset manager and our access to impactful Canadian plan member data.
- Our glide path design offers plan sponsors and members a "through" retirement glide path that emphasizes growth and represents a holistic approach to risk.
- A "best of both worlds" approach seeks to combine the cost benefits of passive investing and the diversification and return potential of active management.

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We believe only outstanding is good enough. For us, that means developing effective target date solutions that reflect the behaviors and preferences of the specific populations they are meant to serve. We believe a less rigorous approach may fail to deliver satisfactory results.

In designing a target date strategy for the Canadian market, we leveraged the same rigorous process that we have steadily refined and enhanced since we launched our first target date strategy more than 20 years ago.

- **We put our clients first.** We leveraged our deep knowledge of retirement investing, and combined it with data on Canadian markets and demographics, to build a strategy that is customized for the needs of Canadians. This means that the retirement investment needs of Canadians are factored into every decision we make.
- **We are uncompromising on risk.** The same principles of design we use across all of our target date solutions are fully leveraged in our glide path for Canadian plan members. We are consistently focused on pursuing the best possible outcomes for retirement. As such, we have purposefully selected building blocks that are diversified and designed to complement each other, including select building blocks that are focused on the Canadian market to align with our end investors' needs.
- **Quality and innovation are part of everything we do, as standard.** The same dedicated team of highly skilled

experts oversees this solution and is committed to helping achieve retirement goals for Canadian plan members. We take the same hands-on approach that we use in all of our target date solutions to innovate and deliberately evolve as we anticipate and respond to changing needs of investors.

A design customized for Canadian investors

To feel retirement certain in today's world, it is vital to know you have a committed partner who puts your needs first; has a distinct understanding of retirement needs, behaviors, and markets; and offers a purposefully built target date solution to address a range of real-life retirement objectives. All while aiming to deliver the best possible value.

The T. Rowe Price Retirement Date Funds have been constructed specifically for the Canadian market. The result is a solution that reflects the unique needs of Canadian investors while providing access to T. Rowe Price's world-class investment capabilities and the full global investment opportunity set.

Our target date design is based on three key sets of inputs: the demographic characteristics of the member population being served, the nuances of capital markets, and behavioral preferences (Figure 1). Our modeling also incorporates the full range of these attributes, rather than relying on simple averages.

Accordingly, the first step in our design process was to assemble the key demographic inputs used in our glide path model, such as earnings growth, contribution rates, life expectancy, and public pension benefits.

- **Earnings:** We used individual-level data from the 2021 Census of Population to model a distribution of career earnings profiles that is representative of the population of Canadian plan members.
- **Contributions:** Looking at current data on how plan members save for retirement and employer matching enabled us to better understand their habits and retirement savings picture.
- **Public pension benefits:** We accounted for the spending replacement provided by public pension systems as an additional source of retirement income.
- **Longevity:** To obtain a more accurate measure of potential longevity risk, we used Canada-specific mortality tables.

Behavioral preferences and the utility function

Our real-world research and advanced analytics go beyond average to deliver deep insights and intelligence that are

Retirement is at the heart of what we do

- Pioneer in offering target date solutions since 2002, with a history of leadership in multi-asset solutions spanning over 30 years.
- Retirement assets represent almost two-thirds of total firm assets under management.
- Proprietary global investment platforms supported by research analysts and other investment professionals in North America, Europe, Asia, and Australia.
- Highly skilled portfolio management team with many years of investment experience and extended tenure with the firm.
- Serving Canadian clients from our Toronto-based office since 2007. We manage assets on behalf of many of Canada's leading corporations, provincial retirement plans, and financial intermediaries.

A consistent model for assessing potential outcomes

(Fig. 1) Key factors influencing glide path design

Source: T. Rowe Price.

instilled into everything we do. We pay careful attention to retirement savings and spending preferences and how they may change over time to inform our decisions.

A key element in our glide path design methodology relates to how plan sponsors and individual target date investors make investment decisions. Detailed modeling of their preferences allows us to apply a consistent evaluation process across a variety of retirement goals.

Our primary metric for evaluating retirement outcomes is a proprietary economic utility score that balances multiple financial and behavioral objectives: having adequate spending in retirement, maintaining a balance throughout retirement, and comfortably staying the investment course.

- **Retirement income:** Investors enjoy the goods and services they purchase that are paid for out of their retirement savings.
- **Maintaining a balance:** Investors derive satisfaction simply from having a pool of assets available to them, for example, as protection against unexpected expenses.
- **Balance stability:** Investors prefer not to experience portfolio volatility and significant drawdown events.

Pursuing these goals requires trade-offs. Higher retirement spending directly depletes assets, while seeking higher returns to support spending and accumulate higher balances can require investors to accept increased risk and the discomfort of a sizable asset drawdown.

Our glide path methodology seeks to balance these goals based on the preferences expressed by plan sponsors and/or plan members. As with the demographic characteristics mentioned above, our design is based on the full range of behavioral preferences within a population, not simple averages.

Why we believe in a "through" glide path

Relative to our major Canadian competitors, T. Rowe Price's glide path features above-average levels of equity exposure both before and after the retirement date (Figure 2). However, our glide path continues to evolve in the later years of retirement compared with the static approach taken by many Canadian providers. This reflects our "through" approach to glide path design, which seeks to extend asset growth during retirement to manage longevity risk.

While most providers in Canada offer a "to" glide path design, our "through" design extends for 30 years past the target date.

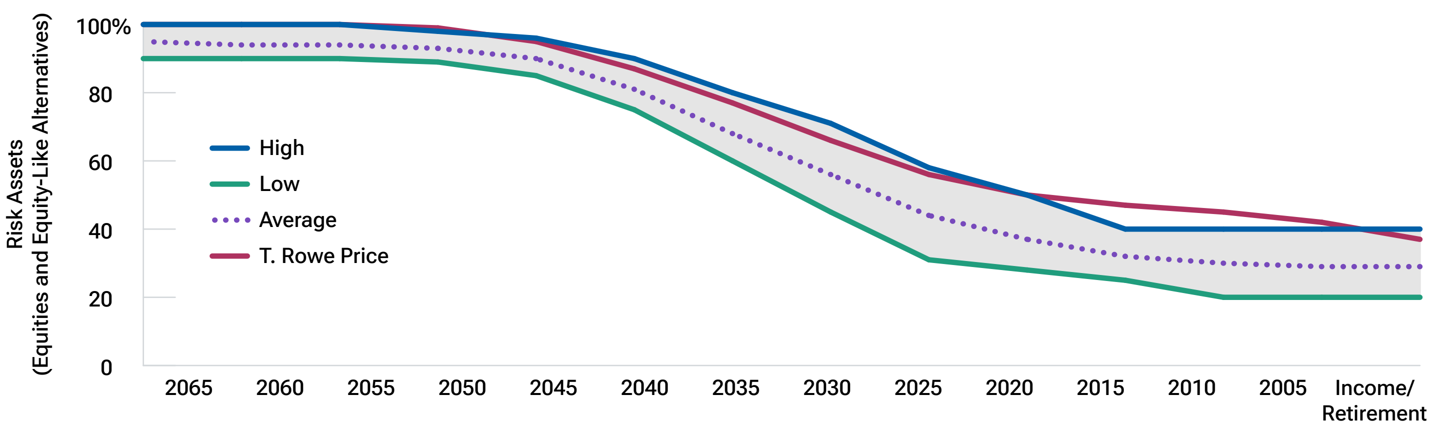
- "To" glide paths are designed to carry investors up to but not beyond their targeted retirement date. They tend to be more conservative to guard against the risk of large market downturns close to retirement.
- "Through" glide paths are generally intended to guide portfolio allocations throughout the withdrawal phase. They typically maintain relatively higher equity exposure deeper into retirement.

Investors face powerful headwinds to achieving a comfortable retirement. As a result, we factored longevity risks into our glide path design in an effort to better meet the needs of our clients.

By continuing to provide substantial yet gradually declining exposure to equity and other growth assets after retirement, we believe a "through" approach strikes a better balance between the competing goals of extending lifetime income and seeking to limit variability of accumulated wealth.

A "through" glide path enhances long-term growth potential

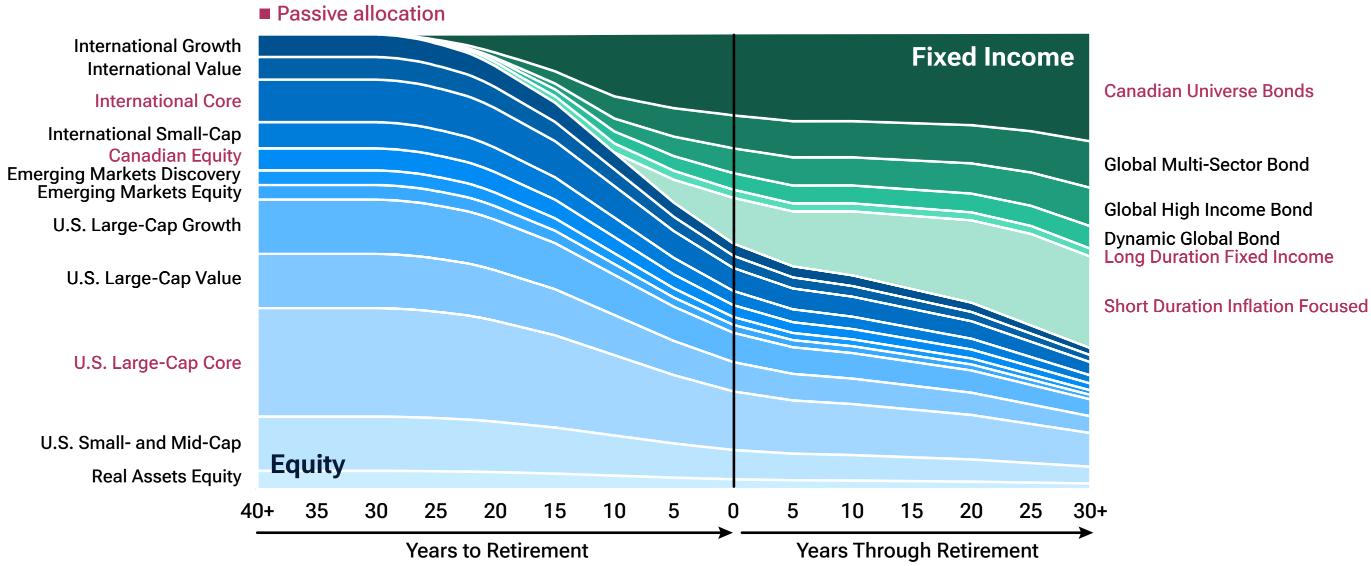
(Fig. 2) Exposure to equities and other risk assets in the Canadian marketplace



High, low and average glide paths as of February 29, 2024. T. Rowe Price glide path as of November 20, 2024.
Sources: Morningstar (see Additional Disclosures) and T. Rowe Price.

An emphasis on diversification and growth

(Fig. 3) Strategic asset class weights in the T. Rowe Price Retirement Date Funds



As of November 20, 2024.
Source: T. Rowe Price.

Diversified growth exposure

Our outcomes-based glide path is designed to address a range of retirement objectives. It features purposeful diversification, with building blocks intentionally selected to play a specific role at different stages along the retirement journey (Figure 3).

The equity component of our target date portfolio includes allocations to Canadian, U.S., and international stocks (Figure 4).

Canadian stocks are assigned roughly the same weight that they have within the MSCI All Country World Index, as are U.S. and global ex-U.S. stocks. These relative shares remain constant across the glide path.

Our U.S. and international allocations are style neutral between growth and value exposures, and include both style-based (growth, value, and core) and size-based (large- and small/mid-cap) allocations. A dedicated allocation to real assets equities provides a tool to mitigate inflation risk.

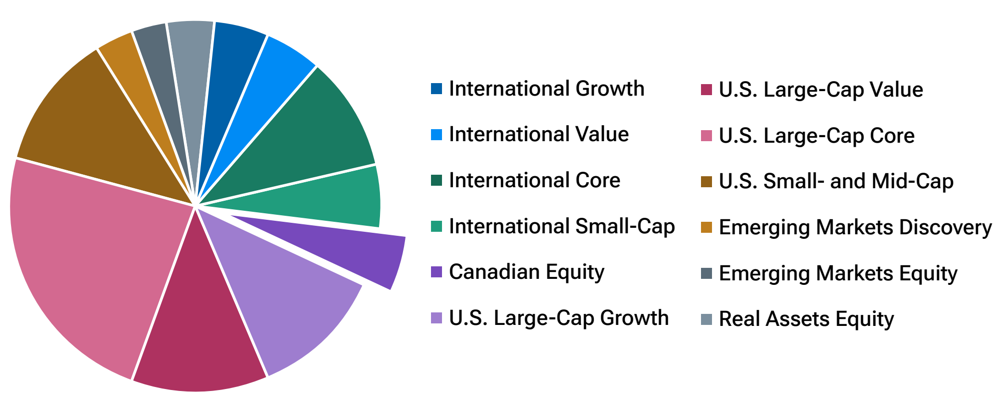
Benefits of a broad fixed income opportunity set

The fixed income allocations in our target date design reflect the nuanced roles that we believe the asset class should play within a multi-asset portfolio.

- A core component consisting primarily of investment-grade bonds sets a lower-volatility foundation for the fixed income allocation.

A global equity approach that includes Canadian stocks

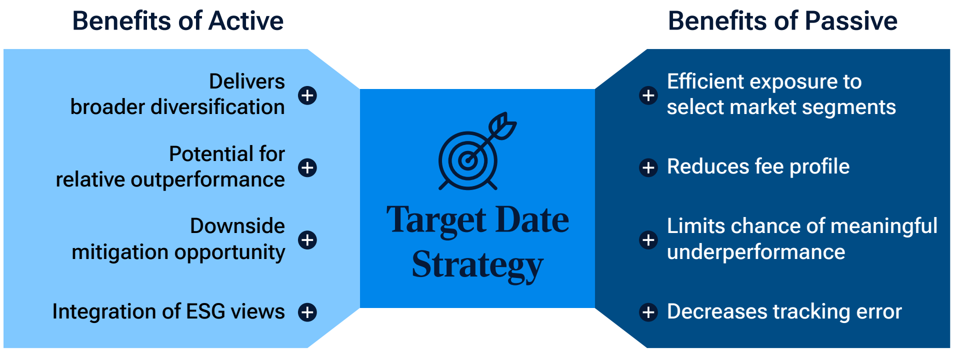
(Fig. 4) Equity allocations in the T. Rowe Price Retirement Date Funds



As of November 20, 2024.
Source: T. Rowe Price.

Finding the right active/passive mix

(Fig. 5) The advantages of a blended approach



Source: T. Rowe Price. For illustrative purposes only.

- A diversifying component includes exposure to global high income bonds, such as high yield and emerging markets debt, and to long duration bonds.

The core component in our design primarily consists of Canadian domestic bonds. This is enhanced with global multisector and dynamic global bond allocations hedged to the Canadian dollar (CAD).

Diversifying building blocks include allocations to global high income bonds (also hedged to CAD) and long-term U.S. Treasuries. The Treasury allocation is more heavily weighted in the early years to seek diversification against equity risk and declines over time as equity exposure decreases. The global high income allocation, on the other hand, rises as equity exposure declines in order to preserve return-seeking potential.

A fixed income hedge against inflation is provided by an allocation to short duration U.S. Treasury inflation protected securities (TIPS), hedged to CAD.

The logic of U.S. Treasuries

Some investors may wonder why we employ U.S. Treasuries, rather than Canadian securities, in our fixed income allocations. For TIPS, the answer is simple: The Canadian federal government stopped issuing real return bonds in 2022. But our research indicates that returns on U.S. TIPS have been meaningfully correlated with the Canadian inflation rate.

Our research also suggests that long duration U.S. Treasuries can provide a more effective equity hedge than comparable Canadian bonds. From a Canadian perspective, long U.S. Treasuries are additionally defensive because, historically, global equity downturns have been closely associated with U.S. dollar appreciation, further boosting U.S. Treasury returns in CAD terms.

A "best of both worlds" approach to active and passive

By including both active and passive building blocks in our portfolio, we seek to provide Canadian plan members with the best of both worlds: the lower costs and reduced tracking error of passive but also the potential benefits of active management backed by world-class fundamental research (Figure 5).

In selecting building blocks, our portfolio team carefully evaluated the trade-offs between active and passive approaches in each asset class or sector.

- Active components are used in asset categories where we believe we have the ability to add value, or where a purely passive approach might have difficulty replicating the designated benchmark, creating unintended risk exposures.

A “best of both worlds” approach to portfolio construction

(Fig. 6) Passive and active building blocks in the T. Rowe Price Retirement Date Funds

Pool	Equity	Fixed Income
Global ex-U.S. Equity Macro Pool	International Stock*	FTSE Canada Universe Bond Index‡
	MSCI EAFE Index	Global Multi-Sector Bond§
	International Value†	Global High Income Bond§
	International Small-Cap	Dynamic Global Bond§
	S&P/TSX Capped Composite Index	U.S. Long Treasury
	Emerging Markets Discovery†	U.S. Short Duration TIPS§
	Emerging Markets Equity*	
U.S. Equity Macro Pool	U.S. Large-Cap Growth*	
	S&P 500 Index	
	U.S. Large-Cap Value†	
	Integrated U.S. Small-Mid Core	
	Real Assets Equity	

Key:
- Active Equity
- Active Fixed Income
- Passive Equity
- Passive Fixed Income

As of November 20, 2024.
Source. T. Rowe Price.
* Growth-style strategy.
† Value-style strategy.
‡ Externally managed.
§ Hedged to CAD.

On average across the glide path, **51% active and 49% passive.**

- Passive components are employed where we believe they are most cost-effective. This includes the core equity allocations, the Canadian bond universe, long U.S. Treasuries, and short-term U.S. TIPS (Figure 6).

As part of our commitment to planning for the long term but managing for the short term, strategic portfolio weights may be tactically adjusted to capture potential relative valuation opportunities.

Quality and innovation, as standard

A well-structured multi-asset effort, a keen understanding of the retirement ecosystem, and investment management expertise have served T. Rowe Price’s target date clients well for more than two decades.

In a constantly evolving world, knowing is the key to a good retirement. Plan sponsors and members want to feel assured that their target date partner puts them first. That they are uncompromising on how they manage the many risks and opportunities at every step along a retirement journey. And that they have embedded quality and innovation, as standard, into everything they do.

Our active approach means we are always looking to ensure we are meeting client needs. While we embrace the fact that retirement journeys can last decades, we are able to monitor and make pragmatic adjustments along the way in an effort to stay ahead of change.

Through our unwavering commitment to delivering strong retirement outcomes, we want you to feel retirement certain. Because when it comes to retirement investing, we believe only outstanding is good enough.

Risks: The principal value of the Retirement Date Funds is not guaranteed at any time, including at or after the target date, which is the approximate year an investor plans to retire (assumed to be age 65) and likely stop making new investments in the fund. If an investor plans to retire significantly earlier or later than age 65, the funds may not be an appropriate investment even if the investor is retiring on or near the target date. The funds’ allocations among a broad range of underlying stock and bond funds and derivatives will change over time. The funds emphasize potential capital appreciation during the early phases of retirement asset accumulation, balance the need for appreciation with the need for income as retirement approaches, and focus on supporting an income stream over a long-term post-retirement withdrawal horizon. The funds are not designed for a lump-sum redemption at the target date and do not guarantee a particular level of income. The funds maintain a substantial allocation to equities both prior to and after the target date, which can result in greater volatility over shorter time horizons. Derivatives may be riskier or more volatile than other types of investments because they are generally more sensitive to changes in market or economic conditions.

INVEST WITH CONFIDENCE®

T. Rowe Price identifies and actively invests in opportunities to help people thrive in an evolving world, bringing our dynamic perspective and meaningful partnership to clients so they can feel more confident.

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