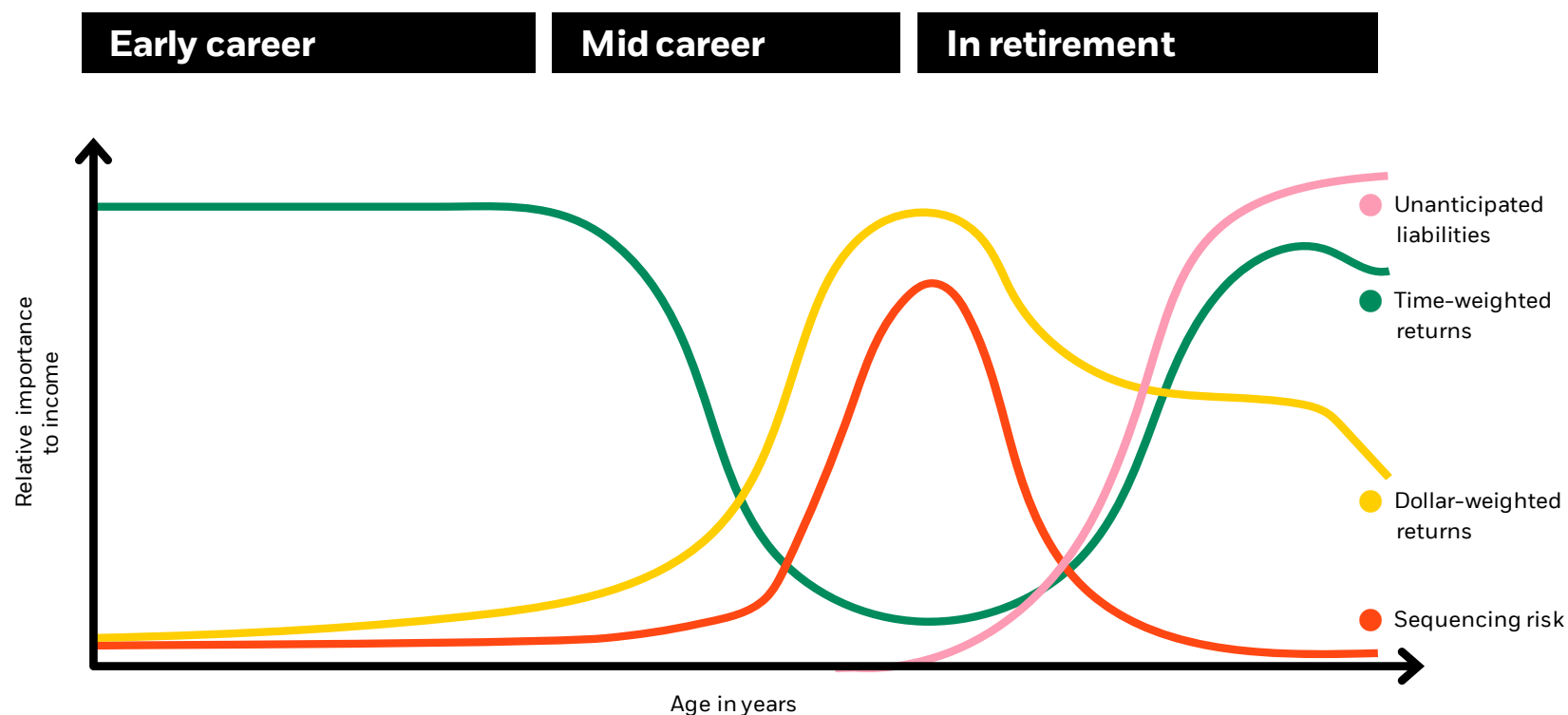


BlackRock LifePath

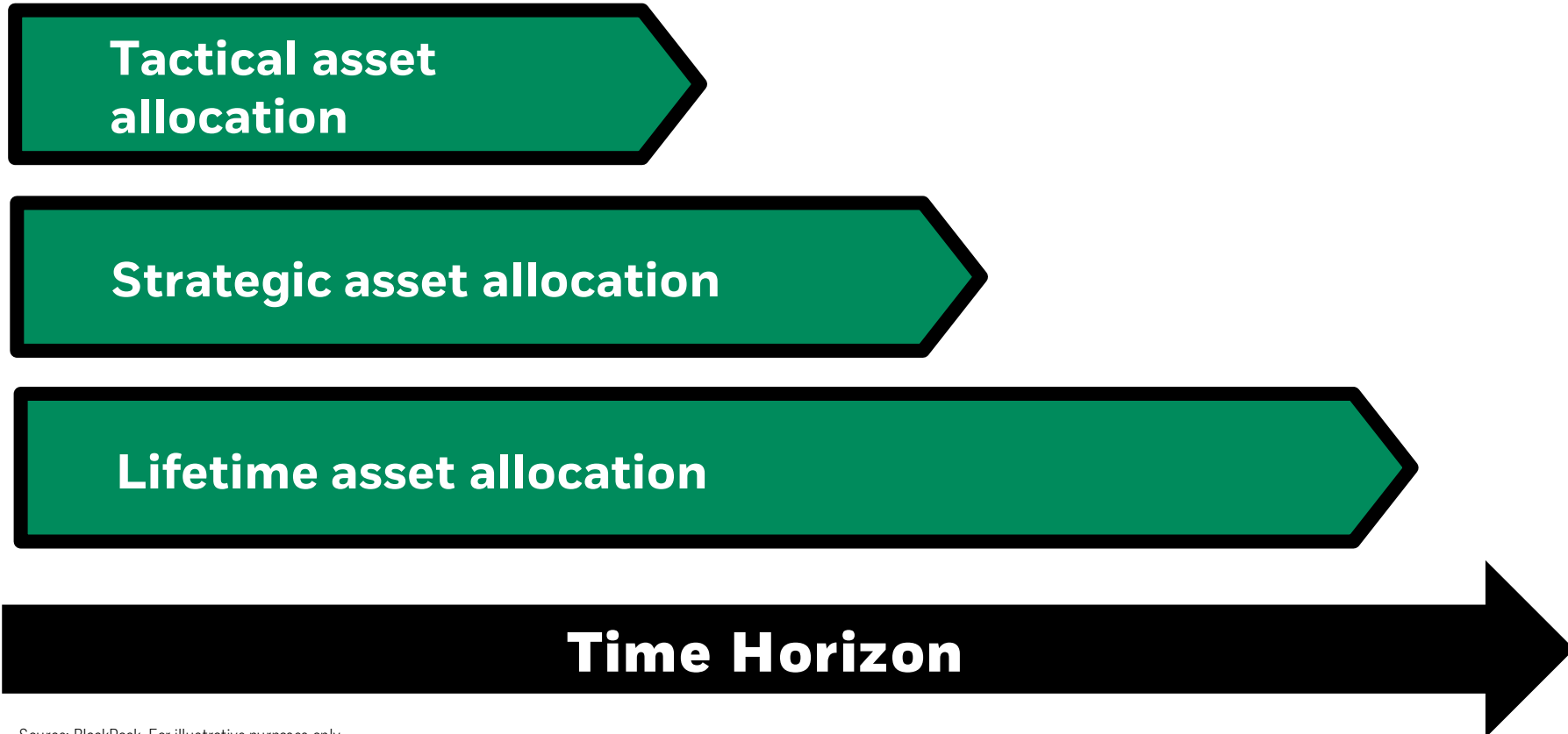
Nick Nefouse

Markets are just one factor driving balances over a lifetime



Source: Drew, M, Walk A and West J 2015, The Role of Asset Allocation in Navigating the Retirement Risk Zone, Finsia (Financial Services Institute of Australasia), Sydney.

Lifecycle research driven investment design



**Tactical asset
allocation**

Strategic asset allocation

Lifetime asset allocation

Time Horizon

Source: BlackRock. For illustrative purposes only.

The LifePath objective

Consistent Spending

**Help participants maintain their lifestyle
spending habits in retirement**

Early career

Mid career + Retirement

Grow

Protect

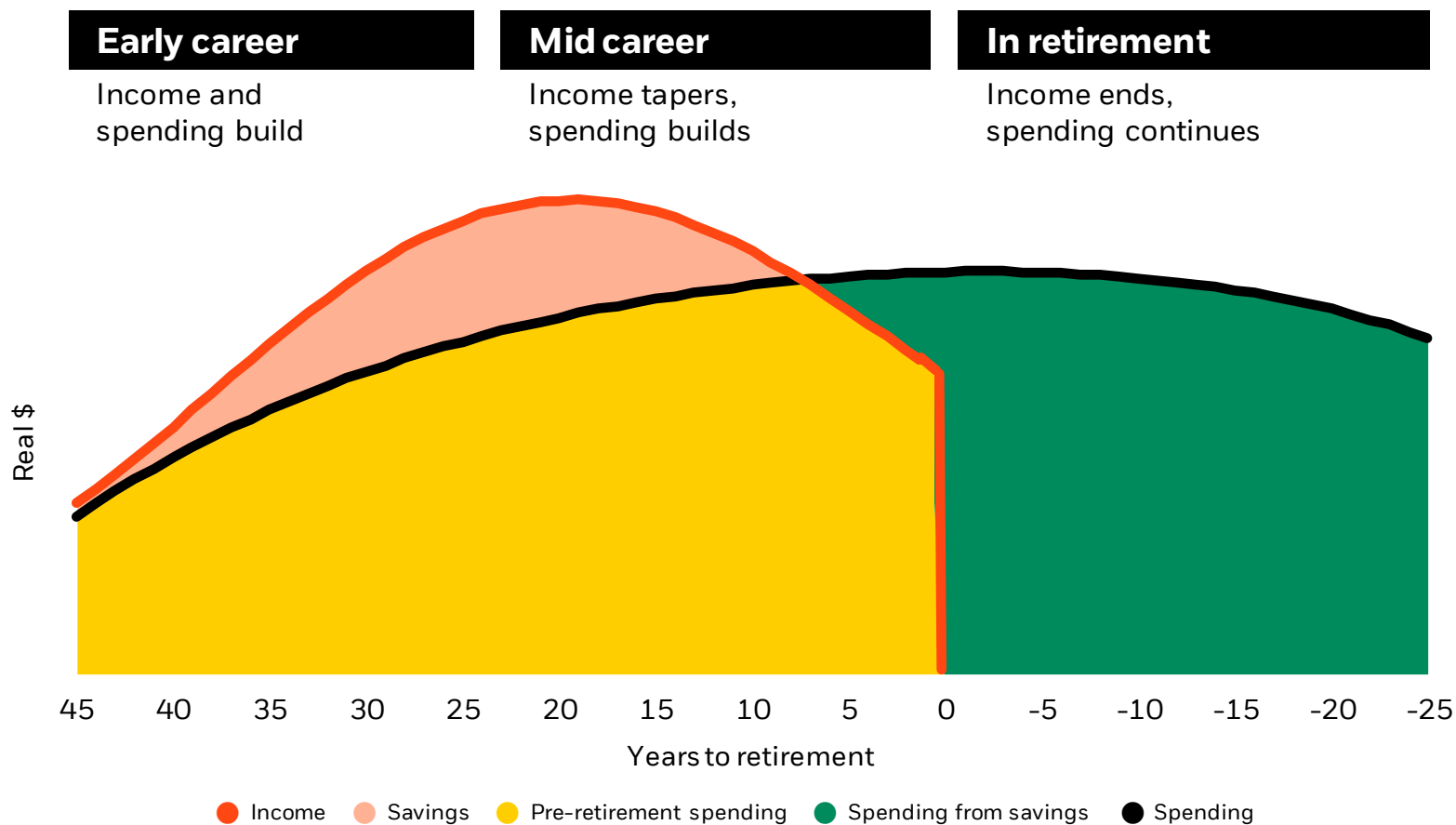
Spend

▼
**Maximize
growth potential**

▼
**Minimize
uncertainty**

▼
**Address
longevity**

LifePath seeks consistent spending across a lifetime



Source: University of Michigan Panel Study of Income Dynamics (PSID) dataset, BlackRock.

Why have target-date funds been successful?

Supportive Legislation

Pension Protection Act of 2006 gave employers a safe harbor to automatically enroll individuals into TDFs



Low cost

- 2008 to 2022, average expense ratios of target-date mutual funds **decreased by 52%**¹



Outcome versus alternatives

- Target-date funds can address market turbulence by **diversifying** investments over time with **systematic rebalancing** and **professional portfolio management**



Behavioral framing

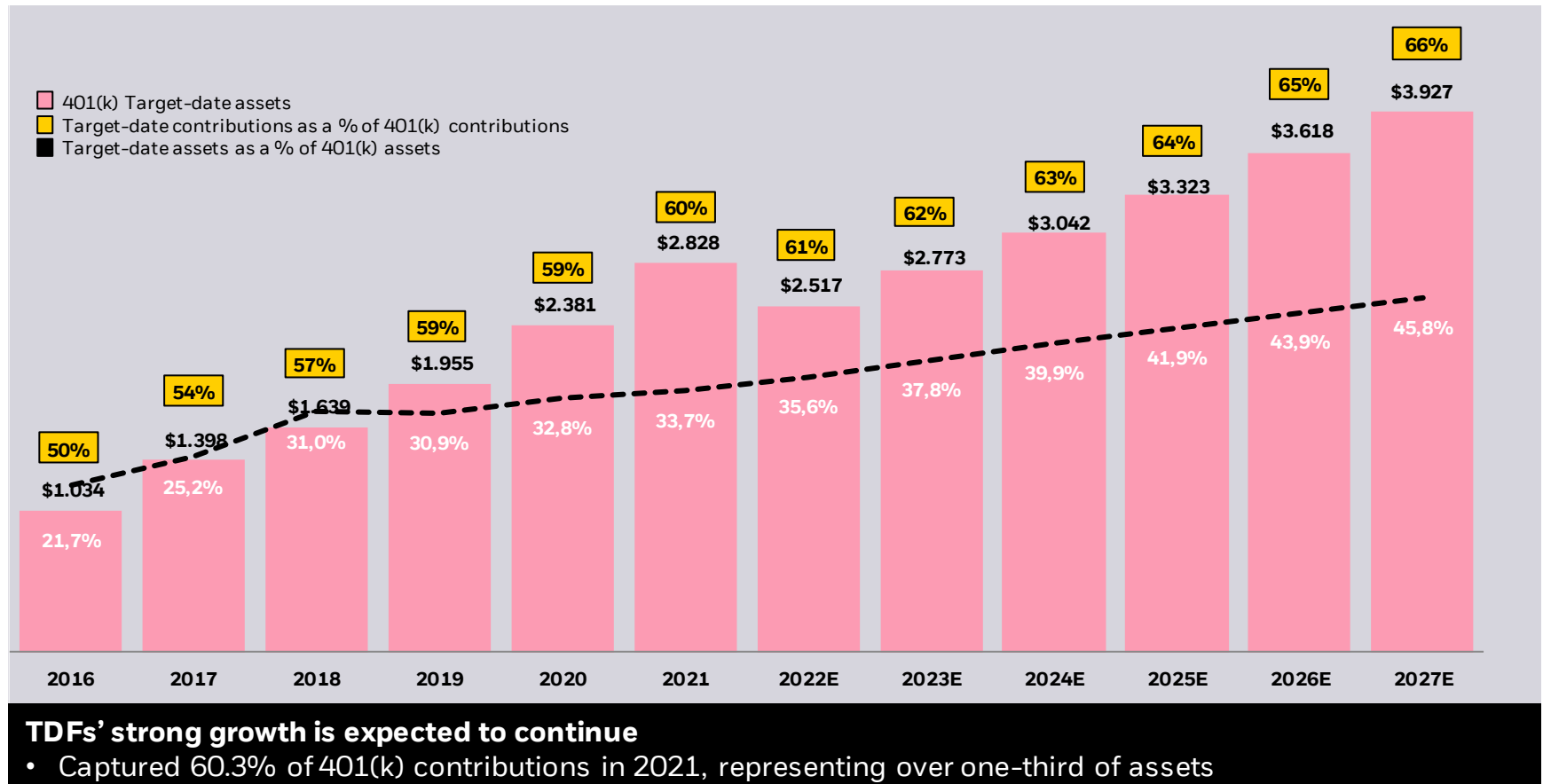
- Target-date funds utilize successful features of **behavioral economics (i.e. “nudges”)** studied by Richard Thaler such as defaults, auto-enrollments, and auto-escalations ²



Source: 1. Cerulli, US Defined Contribution Markets, 2022. 2. “Nudge: The Final Edition,” by Richard H. Thaler and Cass R. Sunstein.



Target-date funds have been the dominant product



Sources: Cerulli, US Defined Contribution Markets, 2022



Expense ratios for long-term mutual funds have fallen

Exhibit 1: Asset-weighted expense ratios of target-date mutual funds

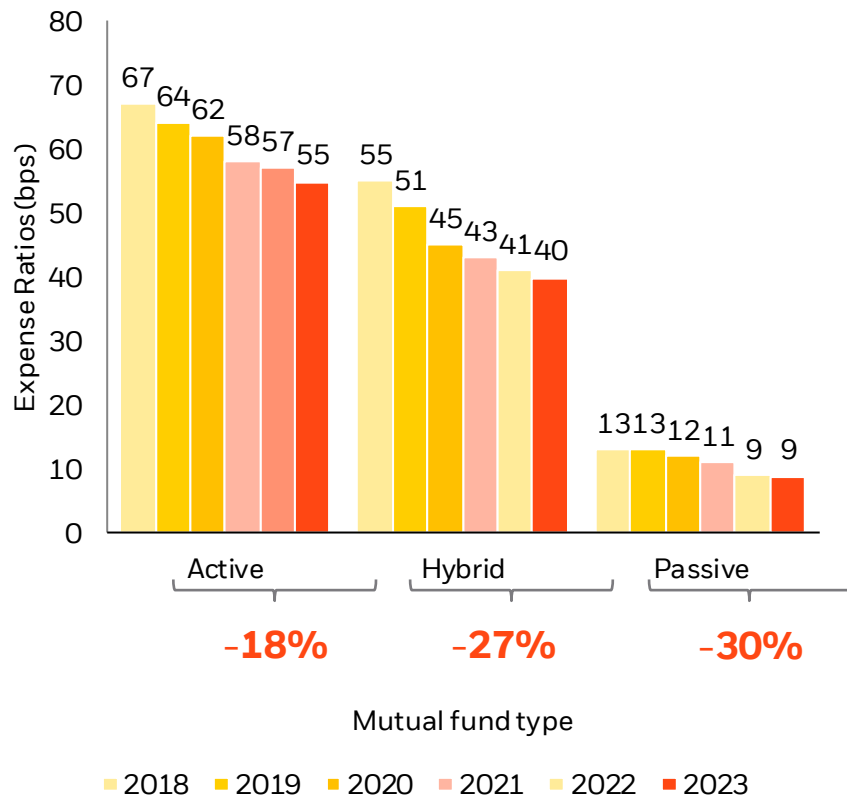
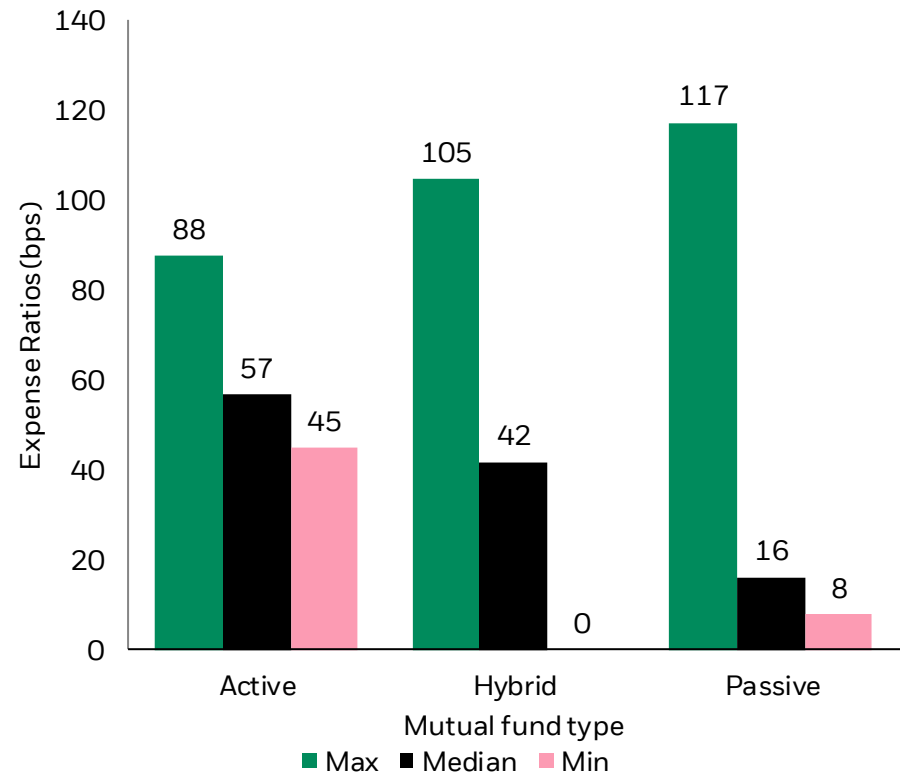


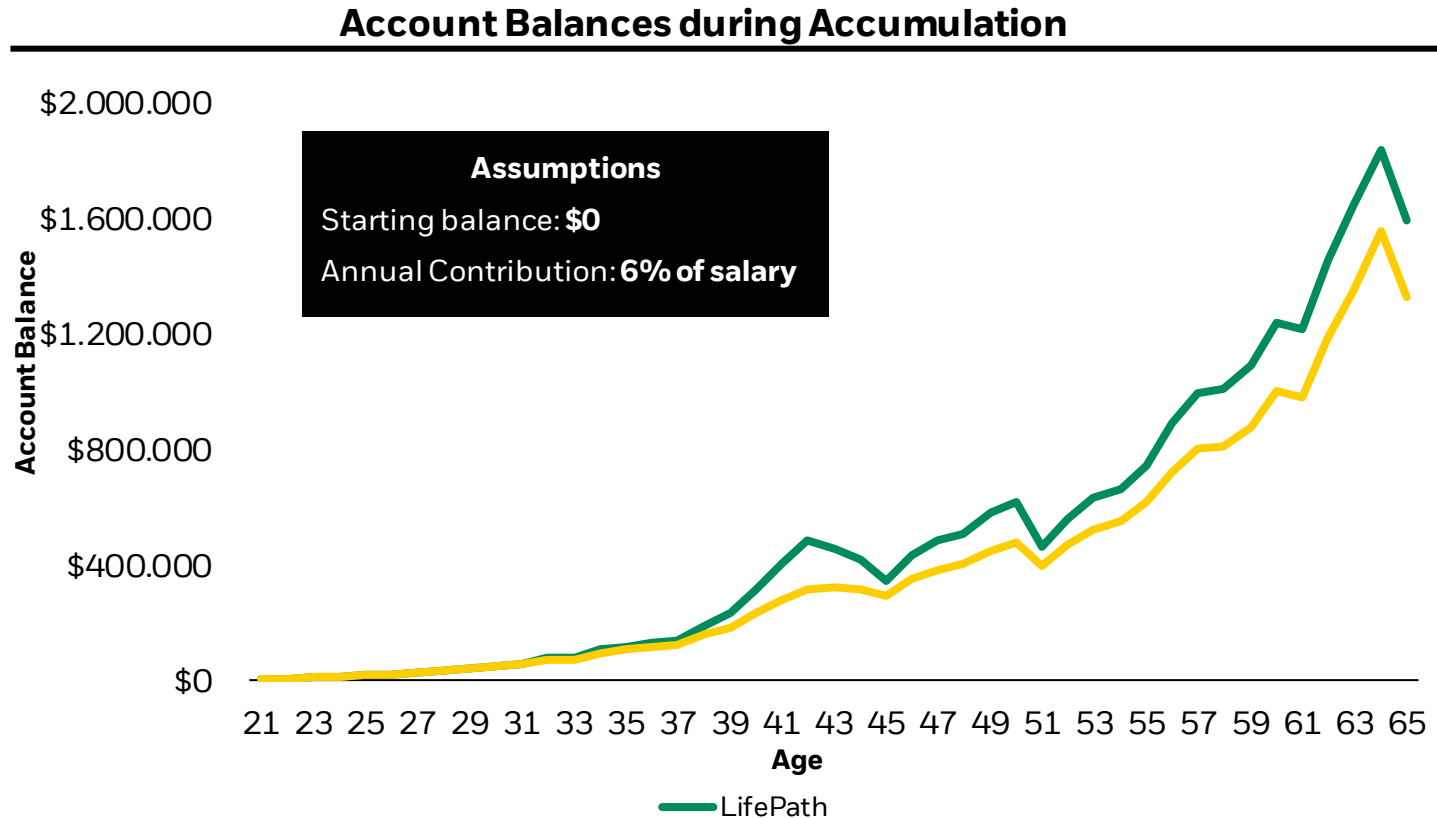
Exhibit 2: Max, min, and median asset-weighted expense ratios of target-date mutual funds



Source: Sway Research, as of December 2023.



Participants may be much better positioned for retirement with lifecycle asset allocation

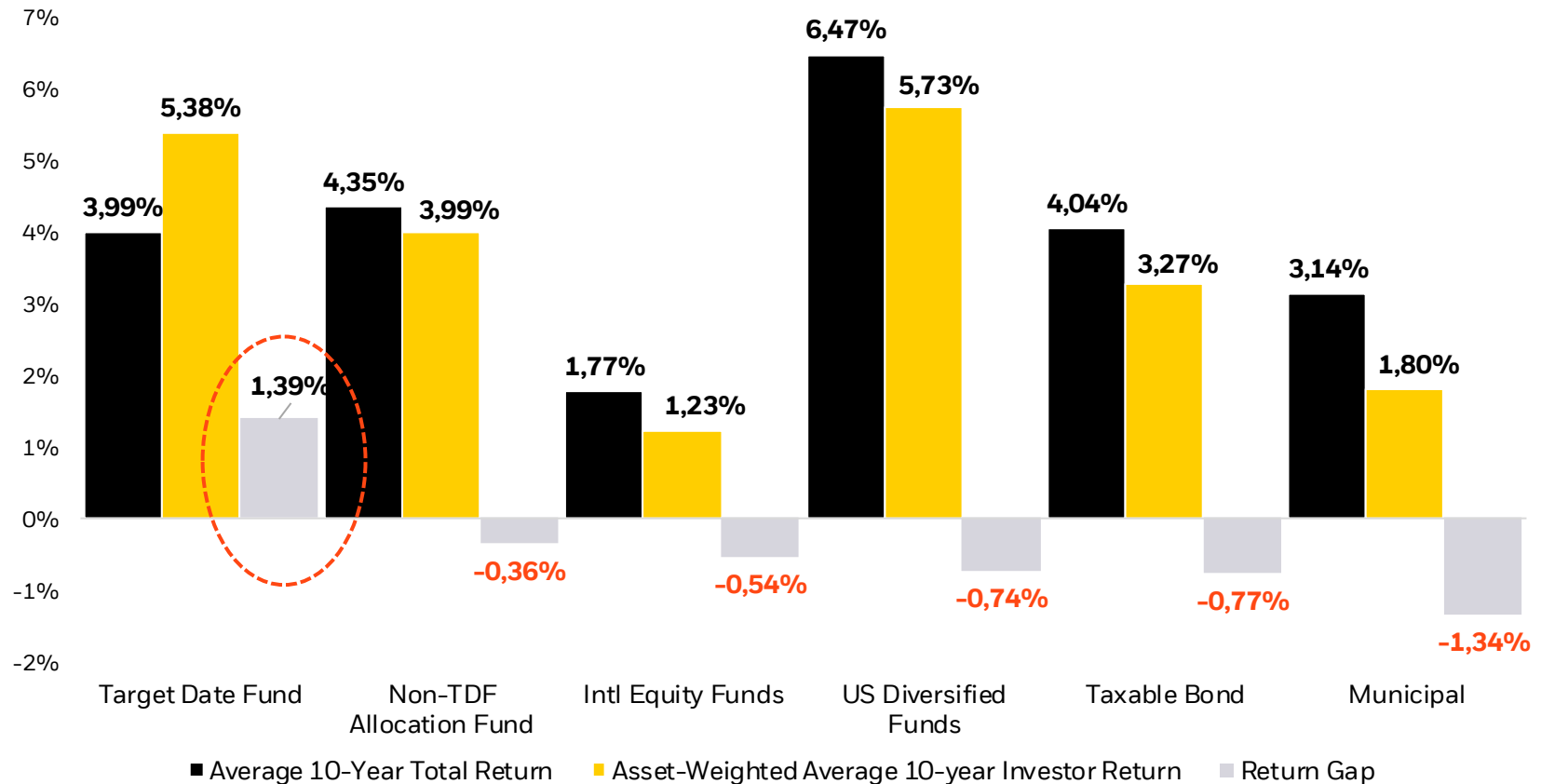


Source: BlackRock, Morningstar Direct, PSID. For illustrative purposes only. The time period of analysis shown above is from 1 January 1978 to 31 December 2022. The analysis assumes that starting balances on 1 January 1978 was \$0. The analysis also assumes a yearly contribution of 6% of the annual salary. The annual salary data is age-based and sourced from PSID. The yearly return calculation is based on the historical return data of S&P 500 TR and Bloomberg U.S. Aggregate Bond TR, with the asset allocation data of the LifePath glidepath and a static 55/45 balanced fund. Past performance is not indicative of future results.



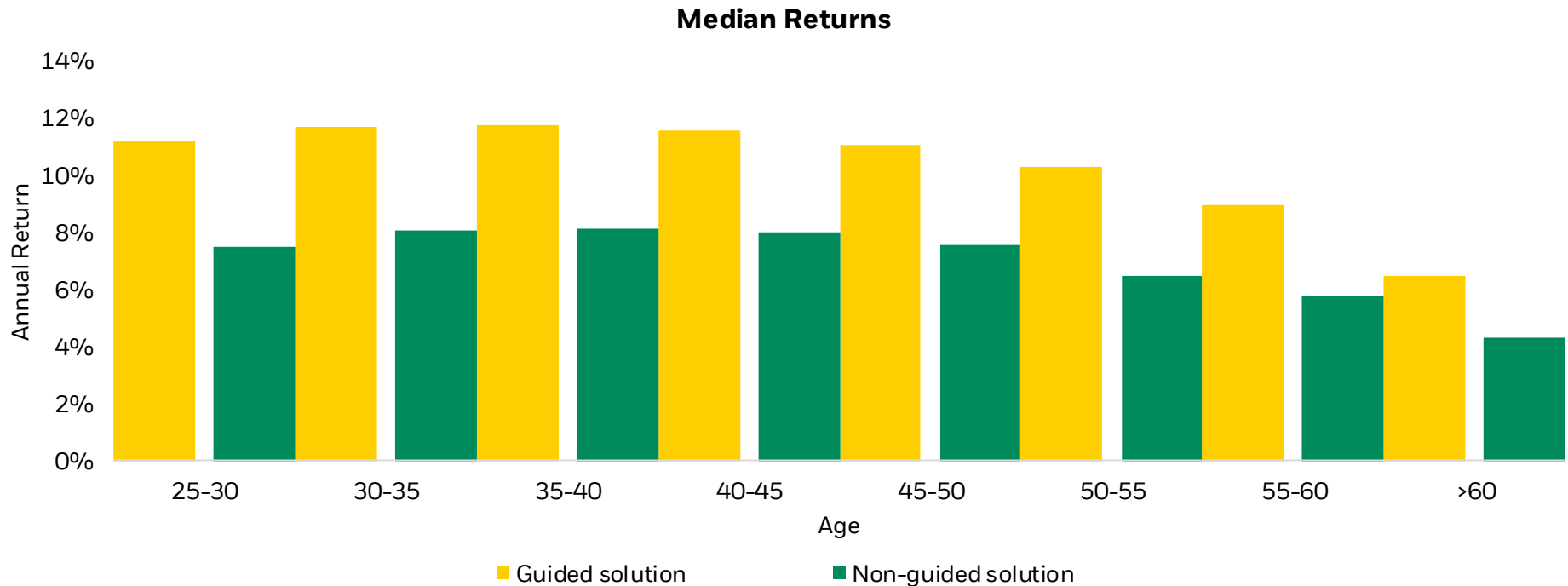
Investor returns, not total returns, are the relevant metric for participant success

Total return and investor return by broad categories





Utilization of guided solutions* has had improved return and reduced risk

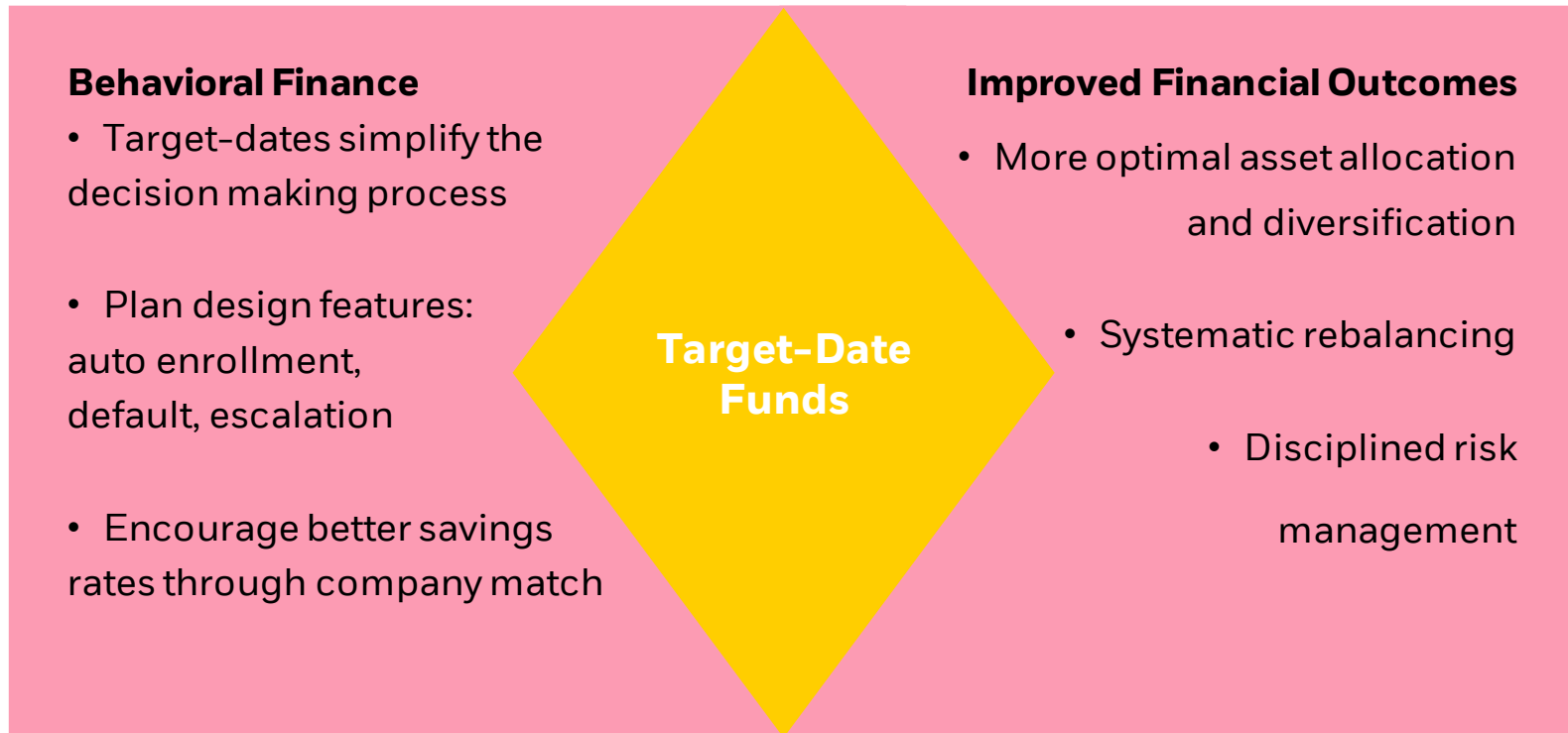


The difference in annual returns for Guided Solutions Participants was 3.32% higher than for Non-guided Solutions Participants.

Source: AON Hewitt 2014 Help Report. *Guided solutions are defined as TDFs, Managed Accounts, Online Advice. Past performance is no guarantee of future results.



Richard Thaler “Nudge Theory” provides support of the rise of TDFs



Source: "Nudge: The Final Edition," by Richard H. Thaler and Cass R. Sunstein.

Present

Ongoing discussion of key trends in the industry without meaningful adoption

Personalization

Emerging appetite for personalization

- \$500bn of \$3.5T TDFs assets we see today are in some type of custom solutions (i.e. managed accounts)¹

Solutions to market are not producing more efficient outcomes versus TDFs

Retirement Income

Need for higher certainty of income

- 89% of participants say having guaranteed retirement income would positively impact their current well-being now²

Solutions don't solve for both investment and education challenges

Alternatives

Private investments may improve outcomes for DC plans

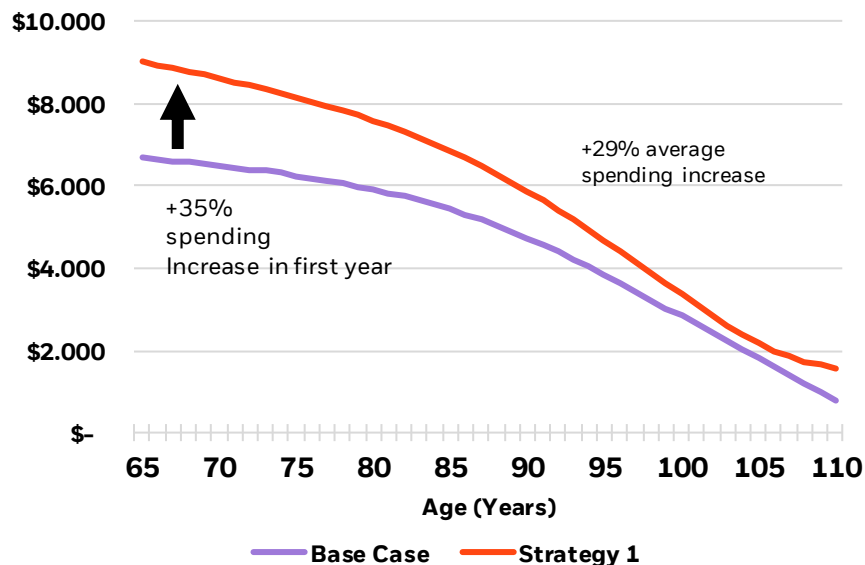
- Evidence show us that institutions with high PI allocations outperform those with more liquid, traditional portfolios³

Only 13% of target-date funds offer alternatives as a part of their asset allocation. Challenges faced with cost and liquidity⁴

Source: 1. NASDAQ, "The Movement to Custom Target Date Fund Investing," November 2023. 2. BlackRock, 2023 Read on Retirement™ Survey, August 2023. 3. Cambridge Associates, "Better Alternatives: Private Investments May Improve Outcomes for Defined Contribution Participants," Hayden Gallary, March 2024. 4. PGIM, "Few Retirement Plans offer Alternatives within Target-Date Funds, PGIM Study Finds," January 2021.

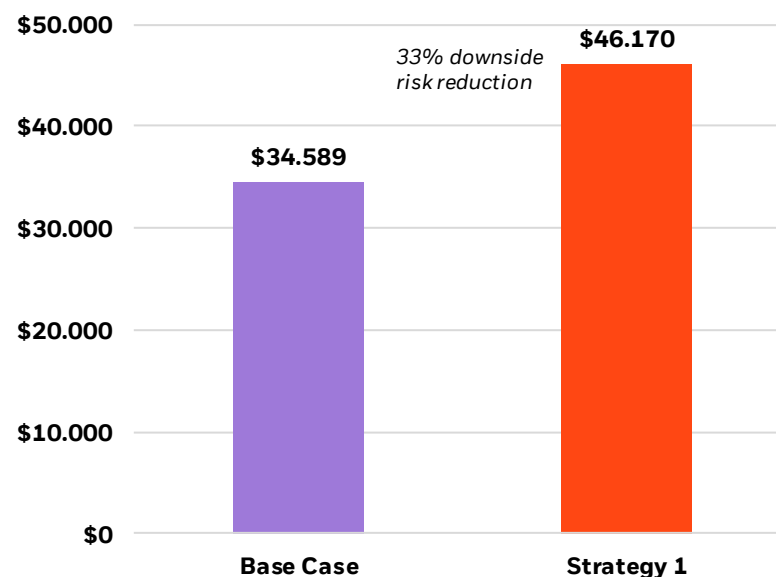
BlackRock and BPC: The impact of the presence of a guarantee in retirement portfolios

Incorporating Guaranteed Lifetime Income Increases Spending from Retirement Savings



Mean annual spending throughout retirement **from retirement savings alone**, excluding SS benefits (undiscounted real dollars)

Adding Guaranteed Lifetime Income Raises the Floor on Retirees' Spending



Cumulative spending **from retirement savings alone**, excluding SS benefits, at the fifth percentile of modeled outcomes over the first 15 years of retirement (undiscounted real dollars)

Source: BlackRock and BPC Paper, "Paving the Way to Optimized Retirement Income" as of June 2023. For illustrative purposes only.

Idea is progress: Not “DB” to “DC”

Defined benefit

- All responsibility and liabilities owned by the plan – i.e. accumulation and retirement benefits
- Plan considers factors across market risk, longevity risk, as well as savings and participation
- Opaque

Rise of Professionalization

Key aspects managed by SMEs

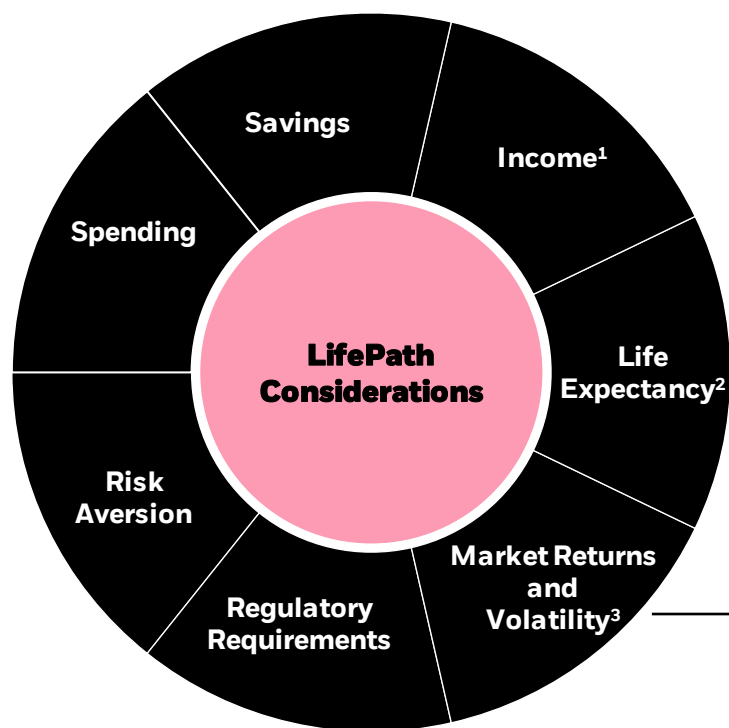
- Imprecise to define as fully hybrid
- Individual owns the ultimate risk; However, with major help from SMEs
- Supers, MTs and TDFs professionalized AA
- Sponsors deliver behavioral nudges
- Government created tailwinds
- Movement toward collectivized longevity in US
- Digital tools to manage multiple assets

Defined contribution

- All responsibility and liabilities owned by the participant
- Entity – usually corporate - only sets up the program
- Participation is voluntary and self-directed

For illustrative purposes only.

Our lifecycle model integrates real-world data with investor preferences



Market Returns & Volatility

Capital market assumptions based on local investor perspective using local currency

Specific considerations for alternatives:

- Glidepath
 - Impact on growth assets equity risk premium (ERP). ERP is a key factor impacting the shape and level of the glidepath
- Asset Allocation
 - Systematic or market factors/returns
 - Idiosyncratic or non-systematic returns

1. University of Michigan Panel Study of Income Dynamics (PSID) dataset
2. Society of Actuaries, Blended Annuity 2000 Mortality Table
3. BlackRock Investment Institute

Conclusion: TDFs are not a standalone solution

Focus on Net Returns

Asset managers bearing costs of underlying funds could lead to suboptimal returns

Complementary Policies

Higher alternative allocations may conflict with the proposed liquidity buffers

Establishment of Risk Guardrails

No risk controls could lead to excessive and unnecessary risks

Suitable Fund-Affiliate Match

Enforce risk-appropriate placements into multifunds for affiliates

Flexibility Around Holding Limits

Existing daily limits may hinder efficient asset allocation



**Better
Outcomes
for
Affiliates**