

RETIREMENT

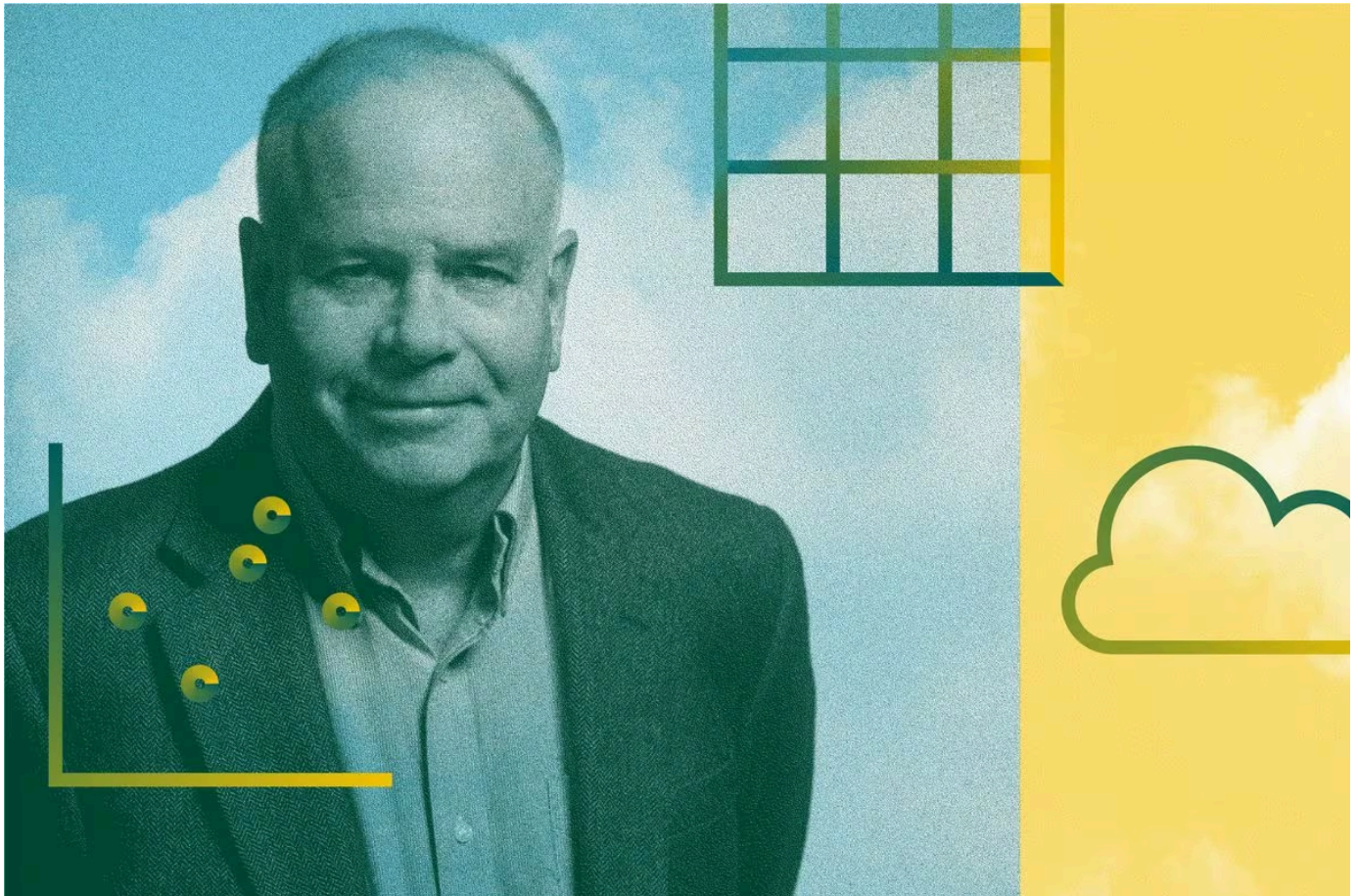
Should Target-Date Funds Allot More to Equities?

What a “reverse glide path” would look like.



John Rekenthaler • Mar 4, 2024

Share 



The Gold Standard

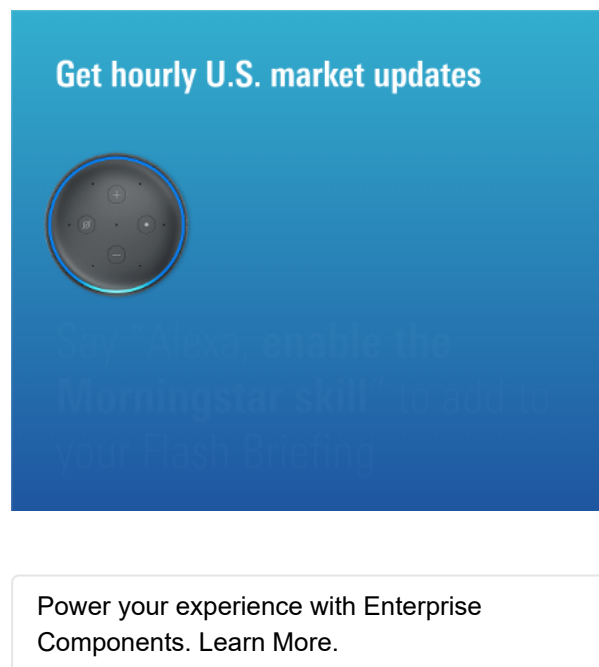
When target-date funds were launched in the 1990s, their marketers explained their strategies. Target-date funds did something different. While conventional balanced funds held steady asset allocations, target-date funds gradually shifted their positions. (In the argot, they were “dynamically” managed.) Prospective customers needed to know why this strategy was better. What were its benefits?

Those days have come and gone. Now that target-date funds have become *the* 401(k) option, they no longer need to justify their approaches. Everybody accepts their thesis that employees should invest heavily in stocks when they first begin working, then

scale back over the years. The question is not why target-date funds use downward-sloping glide paths; it is why their potential rivals do otherwise.

An Investment Test

Let's reexamine that premise. For this exercise, I evaluated a hypothetical 401(k) participant who invests solely into a target-date fund, from ages 25 to 65. Her annual contributions start at \$5,000, double over the next decade to \$10,000, then increase over the ensuing 10 years to \$15,000, at which point they plateau. (All figures in this column are in real terms. That is, I adjust both the contributions and investment performance for the effects of inflation.)

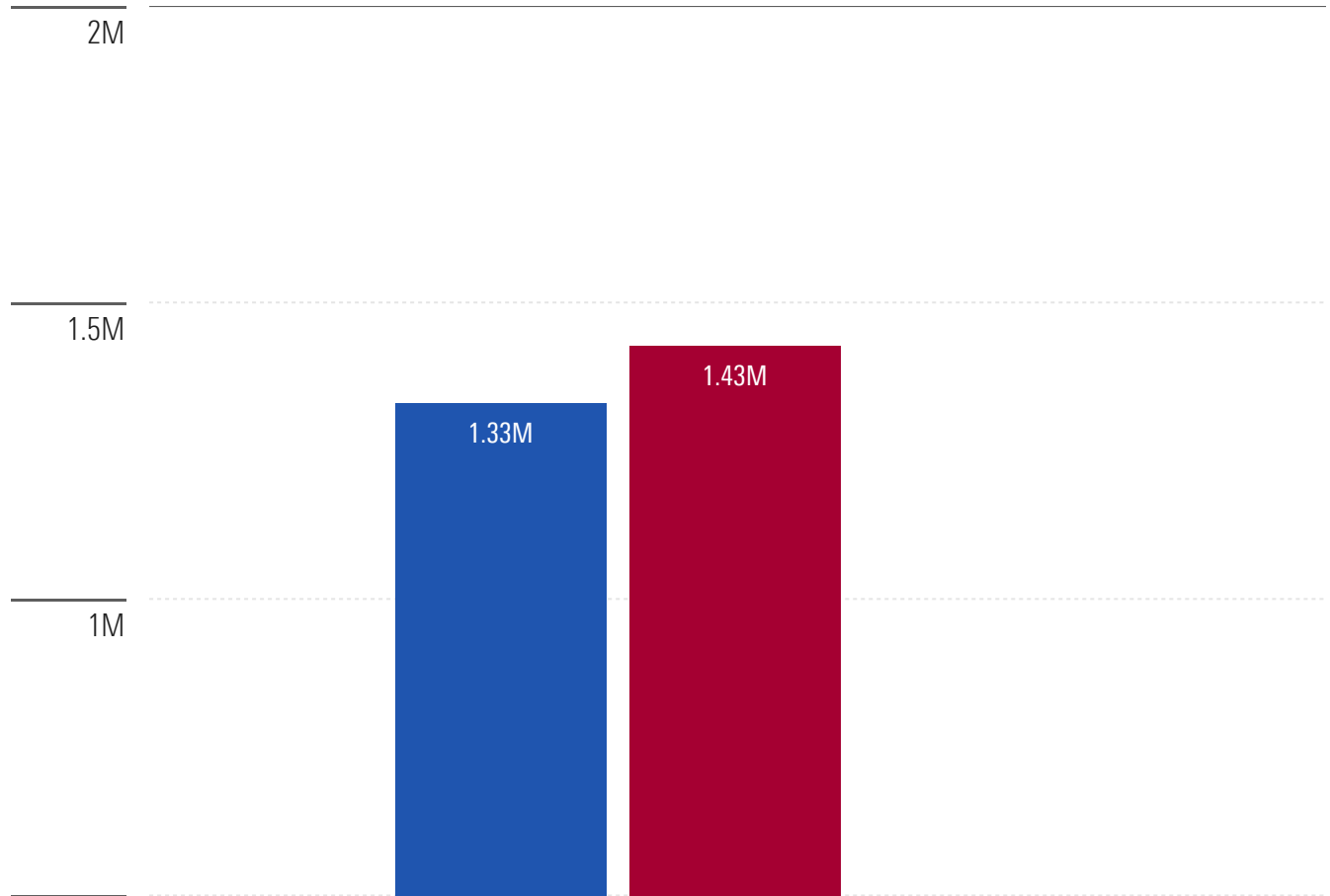


Initially, I devised two sample target-date funds. The first one, labeled "Traditional," emulates current target-date practices, adopting an 85% equity position through age 35. From there, the stock weighting gradually decreases, reaching 48% on her retirement date. On average over her 40-year career, the equity allocation is 70%. The second sample fund, labeled "Flat," invests a fixed 70% of its assets in equities throughout the participant's working life.

I then created 1,000 simulations of 40-year investment returns, using the market forecasts from Morningstar's "State of Retirement Income: 2023" paper. The chart below shows the balances for the two funds on the retirement date, using the above assumptions.

Final Balances

(\$ Value at retirement of Traditional and Flat glide paths.)



Data as of Mar 4, 2024. Author's Calculations

So much for progress! Each version of the fund carries the same average equity exposure and thus has the same long-term rate of return. Yet on most occasions the Traditional fund lags its rival. This occurs because its glide path favors equities at the wrong time. All things being equal, as detailed in my article [“Not All Total Returns Are Created Equal,”](#) retirement plans fare best when the high returns arrive late in a worker’s career, when account balances are larger. However, by reducing their equity stakes over time, target-date funds take the opposite tack.

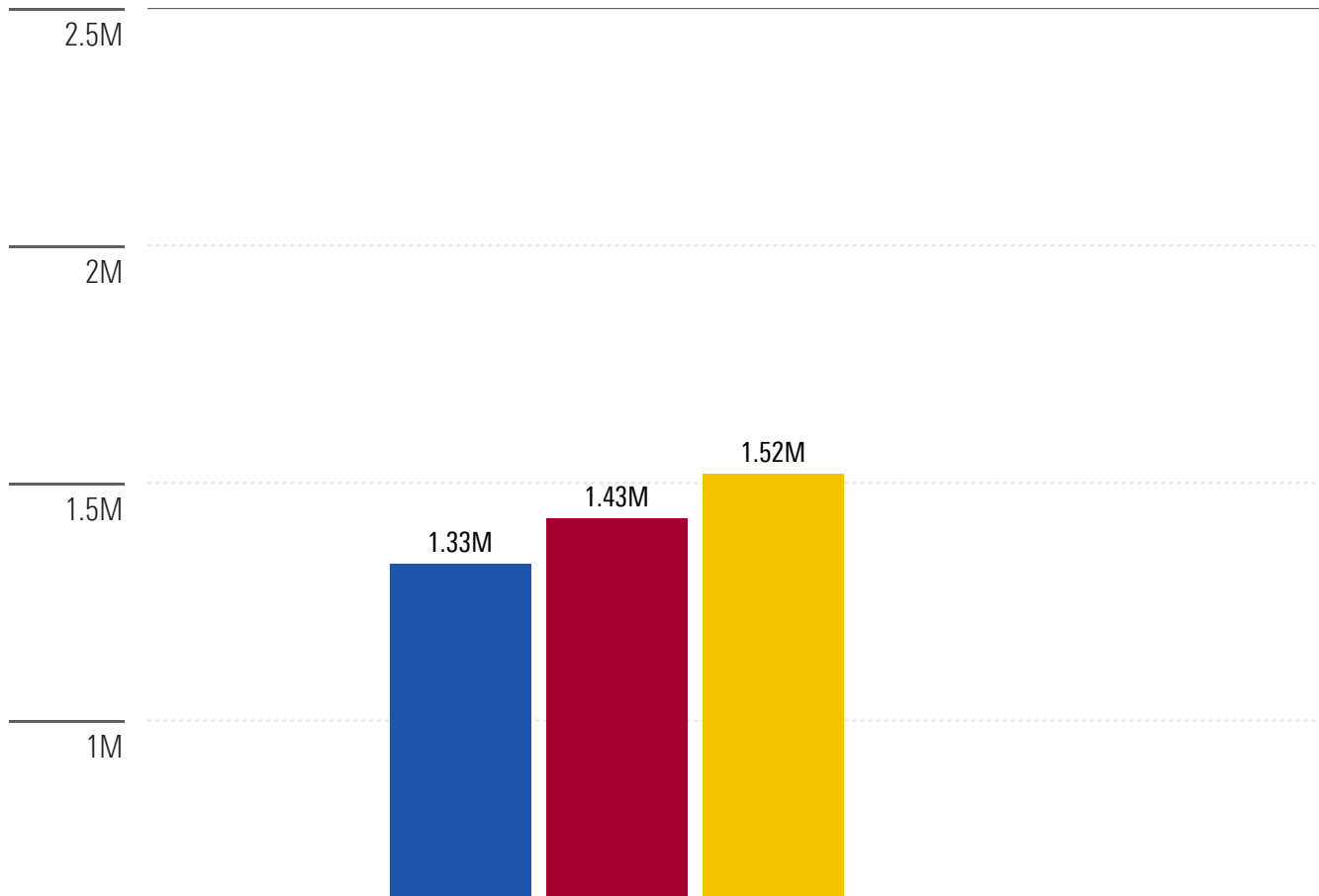
Reversing the Glide Path

If maintaining the same stock allocation through one’s working years leads to higher balances than reducing those positions, then presumably buying *more* equities when approaching retirement would lead to even better results. The next chart tests that thesis by including a third glide path, named “Reverse.” That strategy flips Traditional’s design by using the tameest stock allocation at age 25, then becoming more aggressive

over the years, finishing at 85% for the final decade of employment. Again, the strategy's average equity weighting is 70%.

With the Reverse Path

(\$ Value at retirement of Traditional, Flat, and Reverse glide paths.)



Data as of Mar 4, 0204. Author's Calculations

The logic prevails. Inverting the target-date path leads to even greater average (and median) performance.



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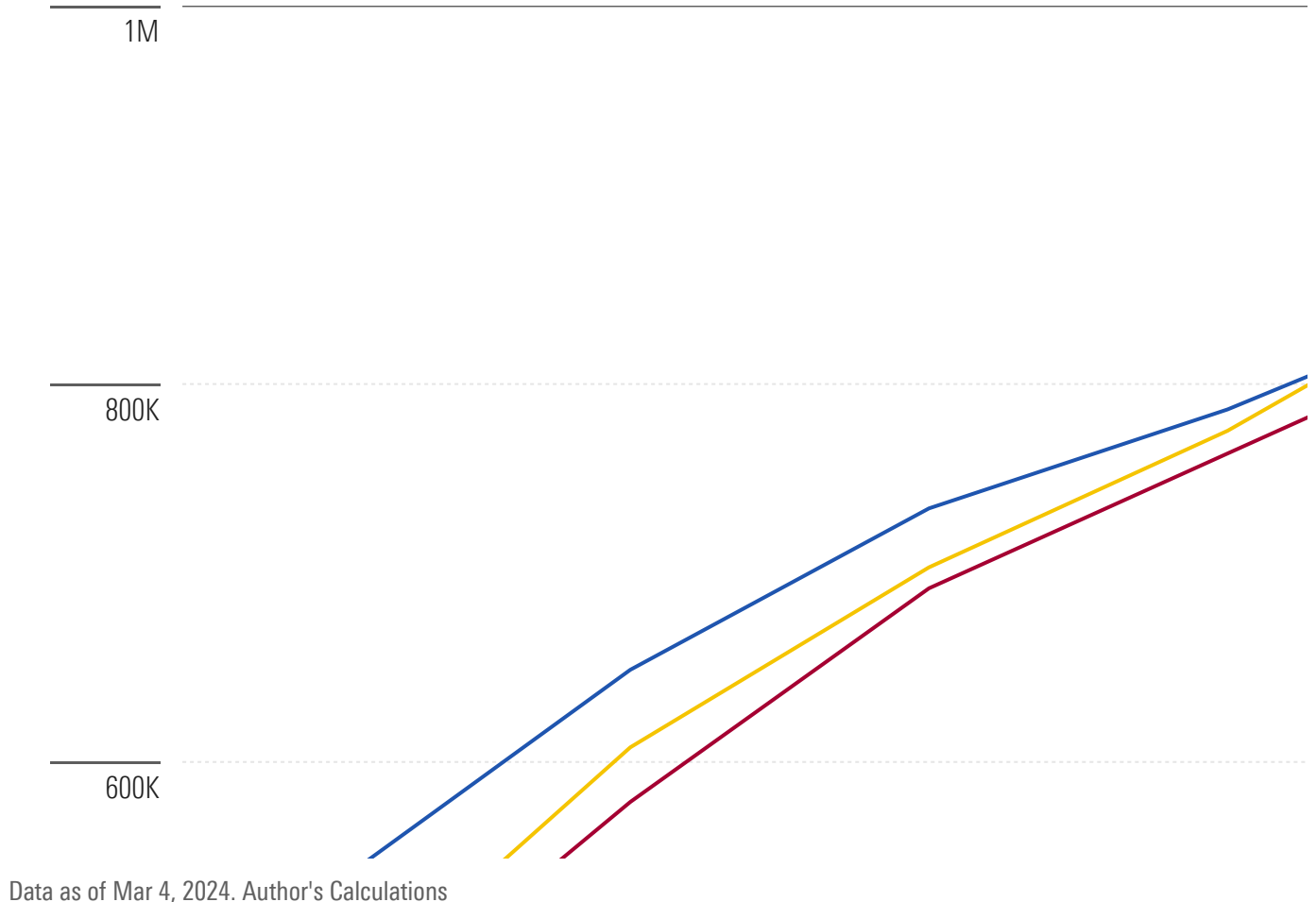
Assessing the Risks of Changing the Glide Path

So far, I have relayed only half the story. Target-date funds were not invented with the lone goal of maximizing their shareholders' average account balances. If so, they would invest their entire assets in equities. Instead, target-date funds pursue two often-conflicting goals: 1) to make the highest feasible profits while 2) avoiding poor results. Thus, one cannot judge target-date tactics solely by evaluating their typical payoffs. Their risks must also be considered.

The next diagram does just that, by showing the ending balances for each of the three glide paths at several percentiles, ranging from the 99th (that is, the 10th lowest result of the 1,000 simulations) to the 75th (the 250th worst).

The Lowest 25%

(\$ Value at retirement of Traditional, Flat, and Reverse glide paths, by percentiles.)



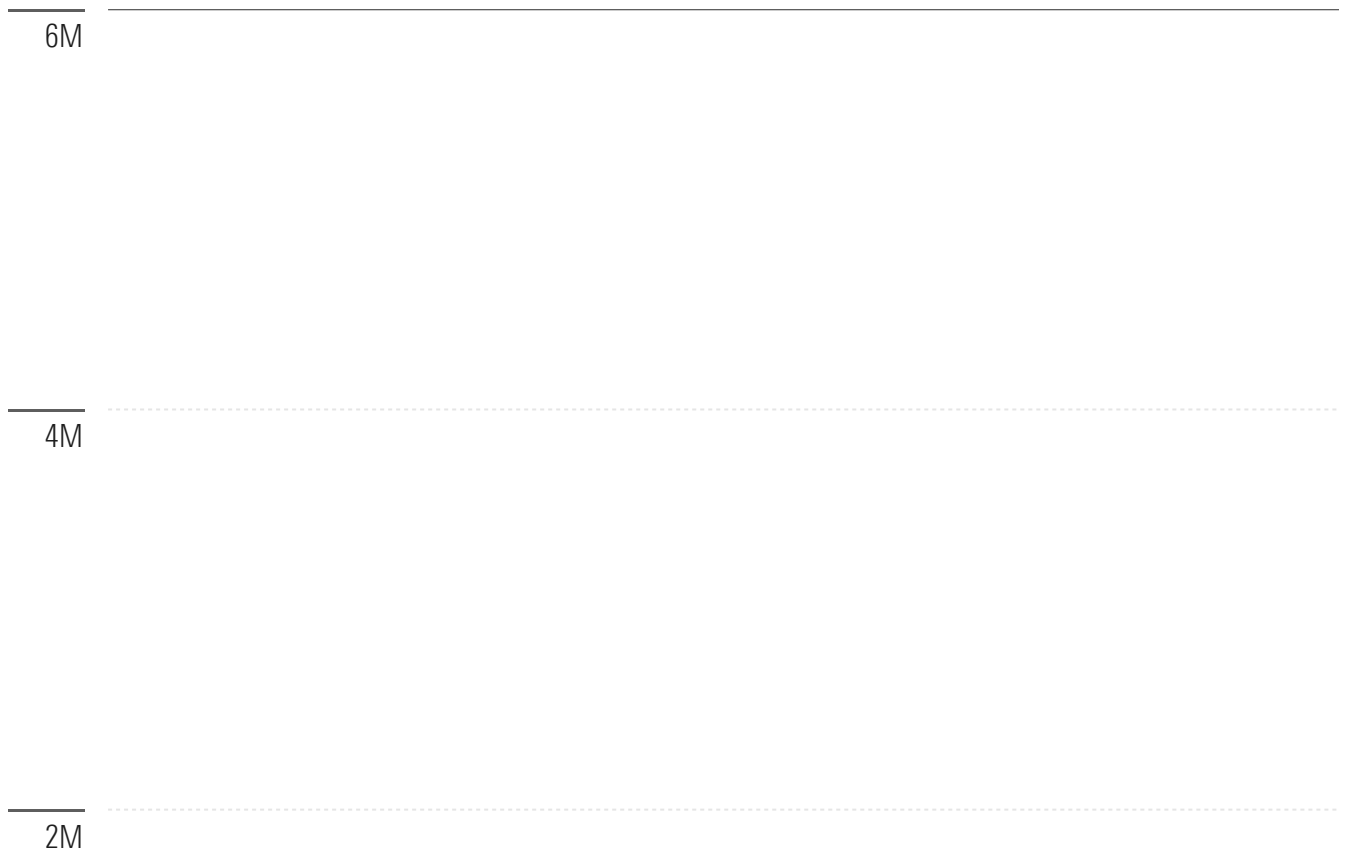
The pattern is clear. For the bottom 15% of outcomes, the asset allocations used by target-date funds are better than the two substitutes. After that point, the scale swings. The Flat allocation overtakes the Traditional approach at the 85th percentile, with the Reverse glide path doing so a few percentiles later.

The Complete Picture

This is how the results look when the analysis is extended over the full range of possibilities.

All Percentiles

(\$ Value at retirement of Traditional, Flat, and Reverse glide paths, by percentiles.)



Data as of Mar 4, 2024. Author's Calculations

As the graph establishes, the trade-offs are not symmetrical. For example, the Traditional glide path provides a 9% improvement on the average of the two rival approaches when the investment performance lands in the 95th percentile, making for a \$55,000 gain. At the fifth percentile, however, wielding the Traditional fund's downward-sloping glide path creates a 16% deficit, which translates to a whopping \$468,000.

Whether that makes for an acceptable exchange is a matter of opinion. Personally, I favor the Flat trajectory. (I modeled the Reverse strategy as an illustration, not as a serious proposal.) Better the tactic that leads to greater retirement wealth four times out of five, with most of its shortfalls being slight, than the scheme that only rarely demonstrates its value. Also, it should be noted, Morningstar's stock market projections are conservative. Had I used historical averages rather than the company's forecasts, the advantage for the Flat approach would be even greater.

That said, I acknowledge the reality: Today's target-date glide path is not going anywhere. For one, nobody except internet columnists and academics dare to question its validity—and who listens to them? Second, whether appropriately or not, the possibility of a truly bad outcome makes bolder target-date glide paths politically unfeasible. After all, following the 2008 global financial crisis, a US Senate subcommittee held a hearing about whether, among other things, target-date funds should be mandated to use more-conservative allocations. Even if some investors are willing to assume more investment risk, the politicians are not.

Final Thoughts

This column is not a call to action. Although not entirely to my taste, target-date fund glide paths are certainly prudent. They also are an immovable object. Thus, there's no point in pounding a metaphorical table. I merely wish to point out that the prevailing strategy has drawbacks as well as advantages, and that 401(k) plan investors who are risk-tolerant might want to consider their alternatives.

As a final note, my friend **Javier Estrada**, finance professor at IESE Business School, has previously made much the same points about the conservative nature of target-date glide paths. As I had only glanced at those papers before writing this article (sorry, Javier!), I arrived at my own numbers and conclusions for this article, but I would be remiss in not granting precedence when precedence is due.

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